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**Origen y evolución de la Cordillera Mexicana a través del
estudio de zircones detríticos en sedimentos recientes**

T E S I S

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JOSÉ GUADALUPE CAVAZOS TOVAR

La velocidad de escritura aunado a la cantidad de publicaciones, no es sinónimo de éxito, recordar que Charles Darwin se tardó en escribir y publicar 28 años su libro sobre "El origen de las especies".

José G. Cavazos Tovar

DEDICATORIA

A Nancy y Diego

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Resumen

Se piensa que los continentes se construyen en márgenes convergentes por aportes máficos provenientes del manto, pero todavía no resulta claro cuáles son los mecanismos que los transforman en materiales más félsicos y duraderos. En ese sentido, la región SW de México preserva en su registro geológico y geoquímico diferentes suites magmáticas y volcánicas que evolucionan temporalmente de un ambiente de arco de islas a un arco continental maduro, haciendo de este lugar, un sitio ejemplar para investigar cómo crecen y evolucionan los continentes a través del tiempo. Aquí se presenta la geocronología U-Pb, elementos traza y composiciones isotópicas de Hf de zircones detríticos recientes, combinados con estudios geoquímicos de roca total del oeste de México, para ilustrar cómo un arco de islas máfico construido sobre una cuenca oceánica, puede transformarse rápidamente en un continente maduro, de composición intermedia a félsica, por efectos combinados de erosión por subducción y *underthrusting* de sedimentos corticales del retro-arco impulsados por el cierre de una cuenca. En el oeste de México, la transferencia de masa más significativa del manto a la corteza ocurrió durante el Cretácico temprano, en el contexto de un arco de islas intraoceánico localmente denominado Alisitos-Guerrero. Posteriormente, el proceso de "continentalización" fue logrado mediante el retrabajo profundo de las litologías recién formadas, una vez que fueron incorporadas dinámicamente a las fuentes de fusión durante el desarrollo del Orógeno Mexicano. Sin embargo, la corteza continental mexicana no solo creció por aportes relacionados al arco, ya que al menos durante el Jurásico, ocurrió un episodio magmático donde el ascenso del manto astenósferico incentivado por la extensión, provocó la fusión de rocas metasedimentarias de la corteza superior.

En esta visión, los arcos de islas máficos y cuencas retro-arco son características geológicas efímeras que pueden fácilmente ser consumidas en las trincheras, pero las evidencias geoquímicas de su existencia, y posiblemente incluso una porción significativa de su masa, pueden ser preservadas en rocas ígneas continentales más jóvenes y félsicas.

Abstract

Continents are thought to be built at convergent margins by mantle-derived mafic inputs, but the processes that transform them into more felsic and long-lasting constituents are still unclear. To this regard, the SW region of Mexico preserves in its geological and geochemical record, different magmatic and volcanic suites that temporarily evolve from an island arc setting to a mature continental arc, making this place an exemplary site to inquire on how continents grow and evolved through time. Here is presented U-Pb geochronology, trace elements and Hf isotopic compositions of modern detrital zircons, integrated with bulk rock geochemical studies from western Mexico, to illustrate how a typical mafic island-arc built on an oceanic basin can be rapidly transformed into an intermediate to felsic composition mature continent by the combined effects of subduction erosion and rear-arc cortical sediment underthrusting, prompted by the closure of back-arc basin. In western Mexico, the most significant mass transfer from mantle to crust occurred during the Early Cretaceous in the context of an intra-oceanic island arc, locally dubbed Alisitos-Guerrero. Subsequently, the process of "continentalization" was achieved by the deep reprocessing of the newly formed lithologies once they were dynamically incorporated into the melting source during the development of the Mexican Orogen. The Mexican continental crust did not only grow by arc-related inputs, however, as there was at least one magmatic episode in the Jurassic where extensional-driven mantle upwellings triggered melting of upper-crustal metasedimentary rocks.

In this view, mafic island arcs and a back-arc basins are ephemeral geologic features that can be easily consumed into trenches, but the geochemical evidence of their existence, and possibly even a significant portion of their mass, can be preserved in younger and more felsic continental igneous rocks.

1. Introducción

Uno de los grandes temas por documentar en la geología moderna es cómo crecen los continentes y cuáles son los procesos petrogenéticos involucrados en su evolución. Se sabe que las zonas de subducción representan las principales vías para la construcción de los continentes a partir del magmatismo de arco, sin embargo, la composición intermedia-félsica de los continentes aún representa una paradoja, pues se requieren algunos mecanismos para que los constituyentes primarios máficos típicos de arcos de islas, evolucionen a una corteza continental de composición promedio andesítica (Rudnick, 1995; Gómez-Tuena *et al.*, 2014). Con base en esta analogía, cabe preguntarse, cuáles son los mecanismos que pueden transformar una corteza esencialmente basáltica en una corteza continental más félsica y duradera como producto final a partir del manto primitivo. Algunas de las alternativas que podrían explicar esta paradoja composicional o proceso de continentalización son: el retrabajo profundo de rocas alteradas de arcos de islas intraoceánicos durante colisiones continentales (Tang *et al.*, 2019), fundidos corticales de la placa en subducción y de mesetas submarinas (*hot spot*) subducidas (Defant y Drummond, 1990; Gazel *et al.*, 2019), diferenciación intracortical (Keller *et al.*, 2015), engrosamiento cortical gradual y maduración termomecánica (De Silva *et al.*, 2006), procesos de erosión por subducción asociados con materiales corticales del *forearc* introducidos al canal de subducción vía erosión tectónica (Jicha y Kay, 2018; Parolari *et al.*, 2018, 2021; Straub *et al.*, 2020) y participación de sedimentos (fusión) provenientes del retro-arco por procesos de *underthrusting* (DeCelles *et al.*, 2009).

En cuanto a los orígenes de la corteza continental, identificar los procesos que la han formado y luego mantenido, así como discernir si su crecimiento fue continuo o episódico, es otro tema de debate abierto a la fecha (Hawkesworth y Kemp, 2006). Atendiendo a esto, la fuerte resistencia del mineral zircón y su capacidad de hospedar información isotópica esencial, hace de este el mejor archivo para entender cómo ha crecido y ha evolucionado la corteza continental (Roberts y Spencer., 2014). De hecho, los zircones constituyen uno de los materiales terrestres más antiguos conocidos, formados apenas 170 millones de años después del nacimiento del sistema solar (zircones detríticos de 4.4 Ga; Wilde *et al.*, 2001), por lo que su simple presencia abre una ventana hacia el pasado.

El zircón ($ZrSiO_4$) es un mineral accesorio común en la naturaleza y ocurre en una amplia variedad de rocas sedimentarias, metamórficas e ígneas. Este mineral cristaliza fácilmente en magmas silicatados de composición intermedia a félsica, siendo común en muchas rocas ígneas. El zircón también puede cristalizar durante el metamorfismo de medio a alto grado (Rubatto, 2002) y, por último, es común también encontrarlo como detritos en rocas sedimentarias, producto de la alteración o erosión de rocas ígneas y metamórficas. En pocas palabras, el mineral zircón se encuentra en una amplia gama de rocas, de ahí su importancia.

Además de su alta resistencia al metamorfismo, así como a la diagénesis (dureza 7.5 en la escala de Mohs), los zircons albergan altas concentraciones de elementos traza que incluyen a los dos sistemas isotópicos de importancia geocronológica y petrogenética, uno el sistema U-Pb y el otro el sistema el sistema Lu-Hf (White, 2000; Kemp y Hawkesworth, 2014). De interés es que la combinación de análisis *in situ* de U-Pb y Lu-Hf en el zircón provee una de las herramientas más poderosas para entender múltiples escenarios geológicos, que van desde unidades geológicas individuales hasta terrenos complejos u orógenos enteros.

La compilación global de edades U-Pb en zircons detríticos de grandes ríos o desembocaduras, quizás representa el mejor acercamiento a los orígenes de la corteza continental, pues los grandes ríos se encargan de muestrear amplias regiones del continente, registrando con esto los principales eventos magmáticos de toda una región (Rino *et al.*, 2004; Wang *et al.*, 2009; He *et al.*, 2013). A pesar de ello, la inmensa cantidad de datos disponibles en la literatura sobre zircons detríticos, hasta la fecha no ha permitido un consenso general sobre sus interpretaciones.

A nivel global y con base en el estudio de zircons detríticos, el espectro de edades U-Pb define una serie de picos los cuales son coincidentes con el ensamble de los supercontinentes (Hawkesworth *et al.*, 2009; Condie y Aster, 2010; Voice *et al.*, 2011) (Figura 1a). Aunque se sabe que esos picos globales están presentes, el origen de esta distribución y cómo estos están relacionados al crecimiento de la corteza continental, aún no es bien entendido (Figura 1a). Actualmente existen varias vertientes para explicarlos: el modelo convencional apoya la idea de que estos picos son un reflejo de

pulsos de generación de nueva corteza continental extraída del manto, es decir, material juvenil (Stein y Hofmann, 1994; Condie, 1998), mientras que trabajos más recientes apoyados con isótopos de Hf han sugerido que la mayor parte de estos picos son producto de retrabajo cortical, interpretados como fundidos de cortezas preexistentes, con poca presencia de picos que representen aportes juveniles (Belousova *et al.*, 2010; Hawkesworth *et al.*, 2018). De manera alternativa a estos modelos, algunos autores han llegado a manejar que estos picos globales podrían ser generados por efectos de preservación cortical durante el ensamble de los supercontinentes; este proceso involucra corteza atrapada en orógenos durante eventos colisionales, y no necesariamente implica un pulso acelerado de generación de nueva corteza o actividad magmática (Hawkesworth *et al.*, 2009).

Mientras los datos U-Pb permiten identificar pulsos magmáticos mayores, los datos isotópicos de Hf, proveen información del magma huésped del cual el zircón cristalizó, dando la pauta para enlazar la edad con la petrogénesis de los magmas. No obstante, aunque los datos isotópicos de Hf pueden servir de guía para identificar entre materiales juveniles y retrabajados (Belousova *et al.*, 2010), caracterizar a ciencia cierta las condiciones bajo las cuales crecen y evolucionan los continentes a partir de estos isótopos, resulta complicado, pues a esta escala, existen muchos parámetros en juego. En la Figura 1b se observa como durante el ensamble de Gondwana las composiciones isotópicas en términos de Hf son más enriquecidas (tendencia hacia valores negativos de ϵ_{Hf}), mientras que, hacia la parte final del rompimiento de Pangea es claro como las compilaciones globales son más empobrecidas (tendencia hacia valores positivos de ϵ_{Hf}). Estas pronunciadas diferencias en las composiciones isotópicas de Hf a lo largo de estos intervalos de tiempo requieren cambios en las características de la fuente magmática, sin embargo, a esta escala, difícilmente podrían ser explicadas en detalle, pues un sinnúmero de procesos tectónicos y petrogenéticos podrían estar involucrados en el registro del zircón.

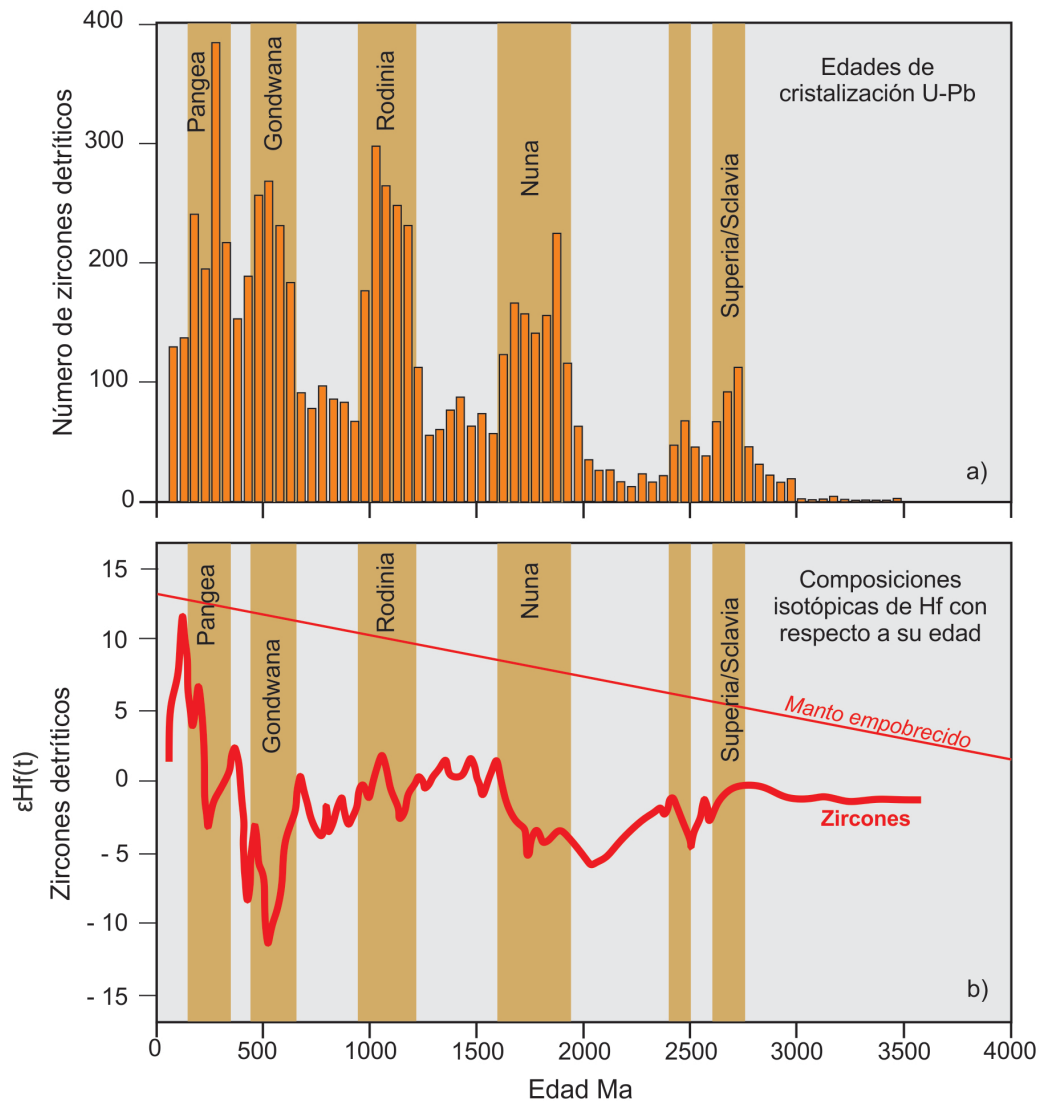


Figura 1. (a) Imagen que muestra los picos de edades de zircones detríticos a nivel global. Nótese cómo los picos de edades son coincidentes con los ensambles de los supercontinentes. Tomada de [Hawkesworth et al., 2009](#). (b) Composiciones isotópicas de Hf en zircones detríticos con respecto a su edad (U-Pb). A resaltar son los amplios rangos en los valores de épsilon Hf ($\epsilon\text{Hf}(t)$), muy evidentes hacia la parte final de estos ensambles. Tomada de [Cawood et al., 2013](#).

1.1 Caso de estudio: el margen convergente mexicano

En esta investigación se considera que una manera de atender los cuestionamientos que se han planteado a nivel global es haciendo estudios más puntuales, pues a escala global existen tantas incertidumbres sobre la procedencia e historia geológica de los zircones detríticos, que obtener una lectura confiable sobre sus interpretaciones resulta complicado. En esta visión, se piensa que una mejor comprensión sobre el estudio de zircones detríticos pueda ser lograda llevando este trabajo a una escala regional. Para esto, en este trabajo se ha tomado al margen convergente mexicano como referencia

(Figura 2), ya que representa un excelente lugar para poner a prueba temas como el crecimiento y la evolución cortical, pues en esta región se han suscitado importantes eventos tectónicos y magmáticos que han permitido la configuración actual del territorio mexicano. En ese sentido, se conoce que la subducción a lo largo del margen oeste de México ha sido continua desde el Jurásico Medio-Superior. Además de esto, existen estudios geológicos, geoquímicos y geocronológicos detallados que documentan la transición temporal de un arco de islas de composición máfica conocido como Terreno Guerrero y Arco Alisitos a un arco maduro de composiciones más evolucionadas (intermedias a félsicas), este último desarrollado en el contexto del Orogeno Mexicano durante la Orogenia Laramide (Fitz-Díaz *et al.*, 2018). Por estas razones, el registro de zircones detríticos sobre el margen convergente mexicano (Figura 2) ofrece un laboratorio natural para identificar y analizar los procesos involucrados en la construcción y evolución de los continentes. Más aún, la geología del margen mexicano en términos cartográficos es en gran medida conocida (Centeno-García *et al.*, 2011; Morán-Zenteno *et al.*, 2018), por lo que el registro de zircones detríticos considerados en este trabajo, fácilmente se puede empatar con el registro geológico, abriendo con esto, una perspectiva sobre la evolución magmática en grandes áreas y rangos temporales más amplios, que los obtenidos a través del estudio en roca total. Es importante mencionar que todos estos alcances mencionados anteriormente, se piensa que, solo pueden ser logrados cuando los procesos petrogenéticos impresos en el registro del zircón a nivel regional son bien entendidos.

En este trabajo se reporta la geocronología U-Pb, elementos traza e isotopía de Hf de 26 muestras de zircones detríticos sustraídos a partir de sedimentos fluviales recientes que drenan hacia la costa pacífica desde Puerto Vallarta, Jalisco, hasta Zihuatanejo, Guerrero (Figura 2). Estos datos de zircones detríticos en conjunto con la geología, geoquímica y petrología del área, permitirán reconocer las mayores contribuciones mantélicas, leer su petrogénesis, además de encontrar su relación con los principales eventos tectónicos que han sido reportados en el suroeste de México.

Cabe aclarar que hay conciencia de que los zircones detríticos contenidos en sedimentos de río pueden conducir a una pérdida de resolución estratigráfica local, sin embargo, una ventaja del muestreo de sedimentos de ríos, y en especial los de rango 2 y 3 (Ingersoll *et al.*, 1993), es que estos se encargan de homogenizar voluminosos cuerpos o

unidades de roca, los cuales y respetando el contorno de sus cuencas hidrográficas definen de manera efectiva la variedad litológica de toda una región.



Figura 2. Imagen de satélite que muestra el margen convergente mexicano asociado a la subducción de la Placas Rivera y Cocos con su expresión volcánica representada por la Faja Volcánica Transmexicana (FVTM) y algunos volcanes asociados S. Sanguanguey, Ce. Ceboruco, Tq. Tequila, C. Colima, T. Tancitaro. También se muestran las principales unidades corticales de basamento y la localización de los sitios de colecta de muestras tomadas sobre el margen Pacífico. Nótese como las muestras de sedimentos recientes de río, donde están contenidos los zircons detríticos, están ubicadas sobre las principales cuencas hidrográficas que drenan hacia la costa Pacífica.

1.2 Objetivos científicos del trabajo

- Contribuir a la comprensión sobre el proceso de continentalización.
- Discernir si el crecimiento de la corteza continental se da de forma gradual o en pulsos y cómo ocurren estos procesos.
- Conocer cuánto de los aportes magmáticos representan adiciones verdaderamente juveniles al continente y cuánto se deriva del retrabajo de rocas corticales preexistentes.
- Reconstruir a través del estudio de zircons detríticos la historia cortical del suroeste de México.

2. Contexto Geológico Regional del SW de México

La conformación del territorio mexicano hacia la parte oeste de México es un tema relevante, debido a que provee uno de los archivos litológicos más variables, evidenciando la evolución de un margen convergente altamente complejo. El marco geológico de esta región, que ocupa aproximadamente una tercera parte del territorio mexicano, ha sido tradicionalmente considerado como parte del terreno Guerrero (Campa y Coney 1983; Centeno-García *et al.*, 1993; Talavera-Mendoza *et al.*, 1995; Centeno-García *et al.*, 2008, 2011) (Figura 3). El terreno Guerrero está constituido esencialmente por sucesiones deformadas de arco intraoceánico y sucesiones volcanosedimentarias asociadas a cuencas extensionales de edad Jurásico Medio-Cretácico Inferior (Centeno-García *et al.*, 2008, 2011). Por su extensión y con fines de simplificar su conocimiento, este terreno ha sido subdividido en varios subterrenos, donde trabajos más recientes dividen al terreno Guerrero en: terreno Teloloapan, Guanajuato, Arcelia, Tahue y Zihuatanejo (Campa y Coney, 1983; Sedlock *et al.*, 1993; Talavera-Mendoza *et al.*, 1995; Centeno-García *et al.*, 2003, 2008, 2011) (Figura 3). El área de estudio en particular se ubicaría dentro del subterreno Zihuatanejo (Figura 3), una de las grandes piezas dentro de las subdivisiones propuestas para el terreno Guerrero (Campa y Coney 1983; Talavera-Mendoza *et al.*, 1995; Centeno-García *et al.*, 2008, 2011).

A escala más local y con base en la geología, se sabe que el área de estudio está enmarcada por unidades sedimentarias, sucesiones volcanosedimentarias y cuerpos batolíticos y volcánicos con edades que van desde el Triásico Superior hasta el Eoceno. A continuación, se detallará la geología del área de estudio asociada a las muestras de sedimentos tomadas sobre el margen (Figura 4a), con fines de conocer las principales litologías, su posición geográfica y los periodos de magmatismo registrados en la región, todo esto desarrollado dentro del contexto del subterreno Zihuatanejo.

Dentro del área de estudio, las rocas más antiguas están representadas por un complejo acrecional (polideformado metamórfico) conocido como Complejo Arteaga (unidad CA en Figuras 4a-b; Campa *et al.*, 1982; Centeno-García *et al.*, 1993), el cual subyace al subterreno Zihuatanejo. Las mejores exposiciones de este complejo se encuentran ubicadas hacia la región SE del área de estudio (Figura 4a), aunque hacia la región NW del área, también han sido reportadas de manera más aislada en rocas metasedimentarias

en el Distrito Minero Cuale y áreas adyacentes en la región del Bloque Jalisco (Centeno-García *et al.*, 2003; Valencia *et al.*, 2013). De manera general, este complejo acrecional está compuesto por bloques de basalto, lava almohadillada, diabasa, gabro, esquisto y caliza (Centeno-García *et al.*, 2011) soportados en una matriz compuesta por turbiditas ricas en cuarzo con una edad determinada del Triásico Superior (Ladinian-Carnian) de acuerdo con un registro fósil (Campa *et al.*, 1982).

En particular, las sucesiones turbidíticas metasedimentarias pertenecientes al Complejo Arteaga (unidad CA en Figura 4a), contienen zircones detríticos cuya procedencia ha sido sustentada a partir de rocas de basamento Precámbricas y Paleozoicas ubicadas en el territorio mexicano (Centeno-García *et al.*, 2011; Valencia *et al.*, 2013) (Figura 3). Dichas sucesiones con patrones de edades similares también han sido reportadas hacia la región NE de México en rocas metasedimentarias contemporáneas del llamado abanico Potosino (Centeno-García, 2005; Barboza-Gudiño *et al.*, 2010; Ortega-Flores *et al.*, 2014). Tanto las sucesiones del Complejo Arteaga como su correspondiente abanico Potosino han sido interpretadas como el resultado de una larga historia de sedimentación, desarrollada a lo largo de la margen W de Pangea durante el Triásico tardío (Centeno-García, 2005; Barboza-Gudiño *et al.*, 2010; Ortega-Flores *et al.*, 2014).

Rocas pertenecientes al Jurásico Medio-Superior intrusionan o descansan discordantemente sobre las sucesiones turbidíticas del Complejo Arteaga (Bissig *et al.*, 2008; Centeno-García *et al.*, 2011; Valencia *et al.*, 2013). Rocas ígneas del Jurásico Superior (154-157 Ma) han sido reportadas en el Distrito Minero Cuale, ubicado al norte del Bloque Jalisco (Bissig *et al.*, 2008). Estas rocas ígneas (riolita Cuale en Figuras 4a-b) forman parte de una sucesión volcanosedimentaria con evidencias marinas someras. Dicha sucesión está constituida por derrames y productos piroclásticos de composición riolítica, intercalados con lutitas, limolitas y areniscas, y algo a resaltar es que esta sucesión no está metamorfizada y presenta poca deformación. Asimismo, al SE del área de estudio, e intrusionando al Complejo Arteaga, han sido reportados pequeños plutones de composición granodiorítica y cuarzo-monzonítica conocidos como Granito Macías (Figuras 4a-b) fechado por U-Pb en 163 Ma (Centeno-García *et al.*, 2011). Como dato adicional, afloramientos del Jurásico Medio cercanos a la región compuestos por rocas migmatíticas y ortogneis de composición granodiorítica y granítica con edades de 163 y 170 Ma han sido reportados en las Islas Mariás (Pompa-Mera *et al.*, 2013).

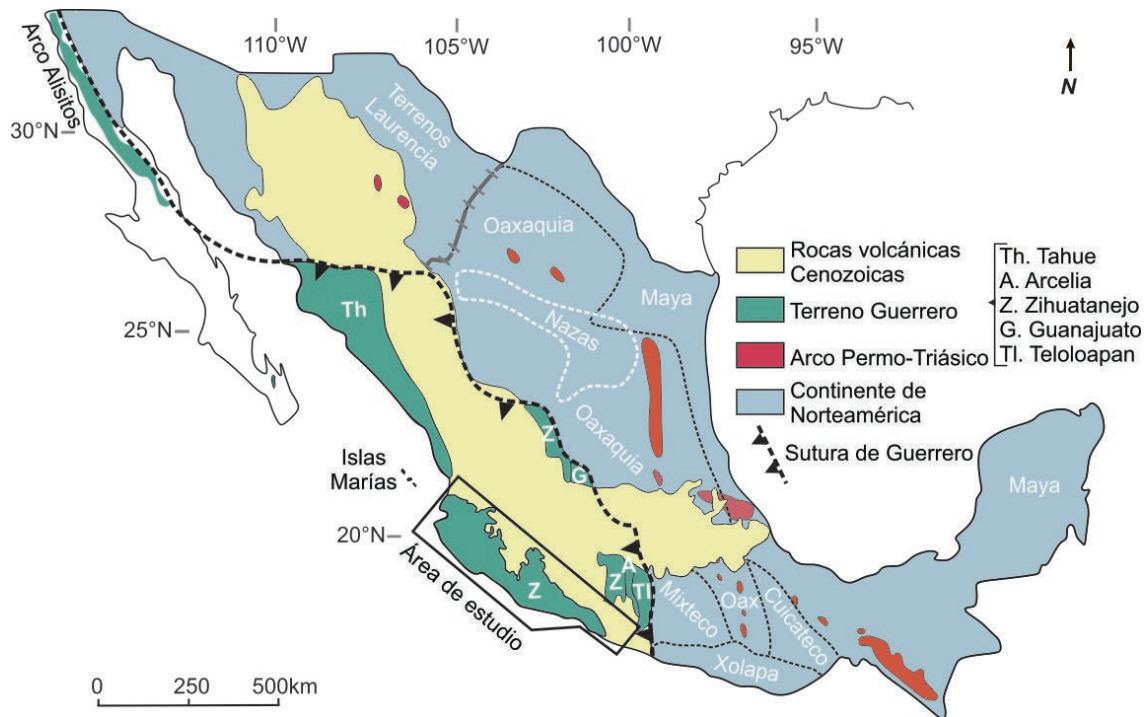


Figura 3. Mapa geológico regional que muestra la localización del área de estudio asociada al subterreno Zihuatanejo, parte del Terreno Guerrero (Centeno-García *et al.*, 2011; Centeno-García, 2017). También se muestra la amplia variedad cortical en el territorio, evidenciada por los distintos terrenos de basamento Precámbricos y Paleozoicos (Norteamérica, Laurencia, Oaxaquia, Maya y Mixteco), pertenecientes al cratón mexicano (Ortega-Gutiérrez *et al.*, 2018). Nótese también, la distribución del Arco Permo-Triásico (Torres *et al.*, 1999; Ortega-Obregón *et al.*, 2013) el terreno Mesozoico Xolapa (Talavera-Mendoza *et al.*, 2013) la provincia Nazas del Jurásico Inferior-Medio (Barboza-Gudiño *et al.*, 2008; Lawton y Garza, 2014; Boschman *et al.*, 2018; Peña-Alonso *et al.*, 2018) y la localización del Arco Alisitos en Baja (Busby *et al.*, 1998; Busby, 2004; Hildebrand y Whalen, 2014; Kimbrough *et al.*, 2015; Morris *et al.*, 2019). Gran parte de estas unidades se encuentra cubiertas por el vulcanismo reciente Cenozoico.

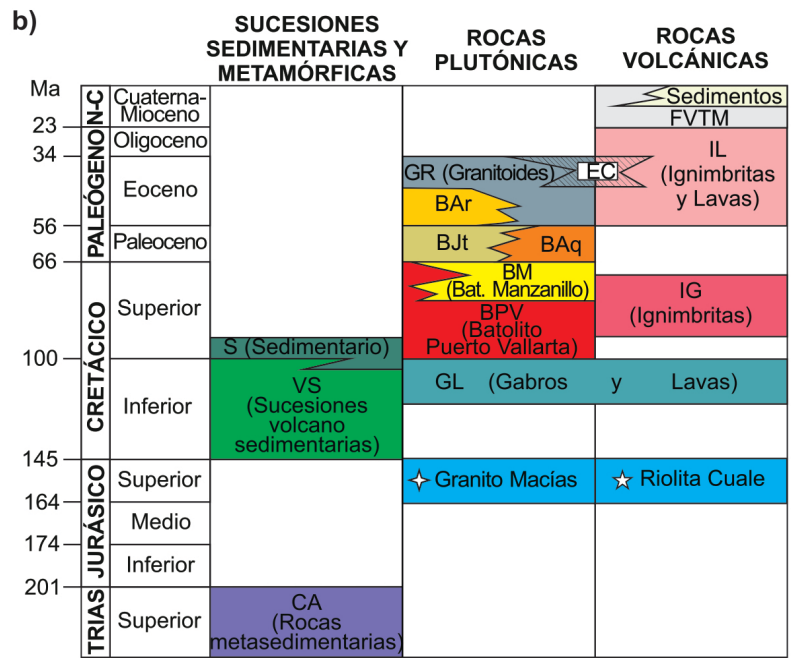
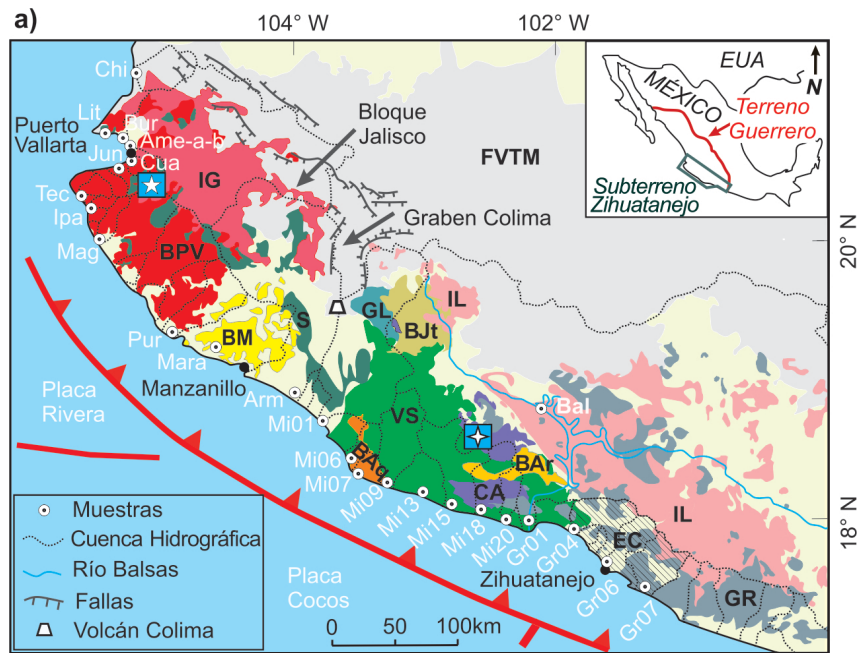


Figura 4. (a) Mapa geológico que muestra la localización de puntos de colecta de muestras y las cuencas de drenaje correspondientes a lo largo del Pacífico entre Puerto Vallarta, Jalisco y Zihuatanejo, Guerrero. Mapa geológico del SW de México compilado de previos estudios (Martini *et al.*, 2010; Centeno-García *et al.*, 2011; Valencia *et al.*, 2013; Ortega-Gutiérrez *et al.*, 2014; Viilanueva-Lascurain *et al.*, 2016; Gómez-Tuena *et al.*, 2018b; Morán-Zenteno *et al.*, 2018; y Geoinfomex platform: <https://www.sgm.gob.mx/GeoInfoMexGobMx/>). El Bloque Jalisco es un elemento estructural limitado por fallas. (b) Tabla de correlación estratigráfica que muestra las principales litologías tales como: batolitos, rocas volcánicas y basamentos desde el Triásico tardío a Cuaternario. La zona sombreada con líneas diagonales (EC) representa la sucesión de ensamblajes volcánicos y plutónicos nombrados El Camalote (Martini y Ferrari, 2011). Abreviaturas de unidades litológicas no definidas en la Tabla: Complejo Arteaga (CA); Batolito Manzanillo (BM); Batolito Jilotlán (BJt); Batolito Aquila (BAq); Batolito Arteaga (BAr); Granitoides no diferenciados (GR); Ensamblaje El Camalote (EC); Faja Volcánica Transmexicana (FVTM).

En general las rocas ígneas jurásicas en México se encuentran distribuidas a lo largo de todo el territorio (Peña-Alonso *et al.*, 2018), y una característica en particular es que se presentan como provincias aisladas e incluso como pequeños afloramientos (Figura 5). A escala más local y dentro del terreno Guerrero, las rocas ígneas jurásicas han sido asociadas con depósitos de sulfuros masivos volcanogénicos (*Volcanogenic Massive Sulfide*, VMS) (Figura 5), sosteniendo con esto el depósito de estas rocas en ambientes submarinos (Bissig *et al.*, 2008; Mortensen *et al.*, 2008; Camprubí *et al.*, 2017). En cuanto a su petrogénesis y régimen tectónico, quizás hagan falta más estudios al respecto, sin embargo, hoy en día, la mayor parte de los trabajos sugieren un régimen de subducción durante este periodo (Lawton y Garza, 2014; Martini y Ortega-Gutiérrez, 2018; Peña-Alonso *et al.*, 2018). En estos trabajos se enmarca el inicio del magmatismo hacia el interior del continente en el llamado Arco Nazas, el cual evoluciona a un arco ligeramente más joven desarrollado sobre el margen, conectando este último a la provincia de Vizcaíno, Islas Marías, entre otras rocas jurásicas (Barboza-Gudiño *et al.*, 2008; Pompa-Mera *et al.*, 2013; Lawton y Garza, 2014; Boschman *et al.*, 2018; Peña-Alonso *et al.*, 2018; Schaaf *et al.*, 2020). De manera alternativa a estos trabajos, Martini y Ortega-Gutiérrez (2018), sugieren dos provincias independientes, en la cual sostienen que las rocas ígneas de Nazas fueron formadas a partir de un escenario híbrido, asociado con cuencas transtensionales producto del rompimiento de Pangea y con influencia de la subducción, mientras que hacia el margen sostienen solo un régimen de subducción.

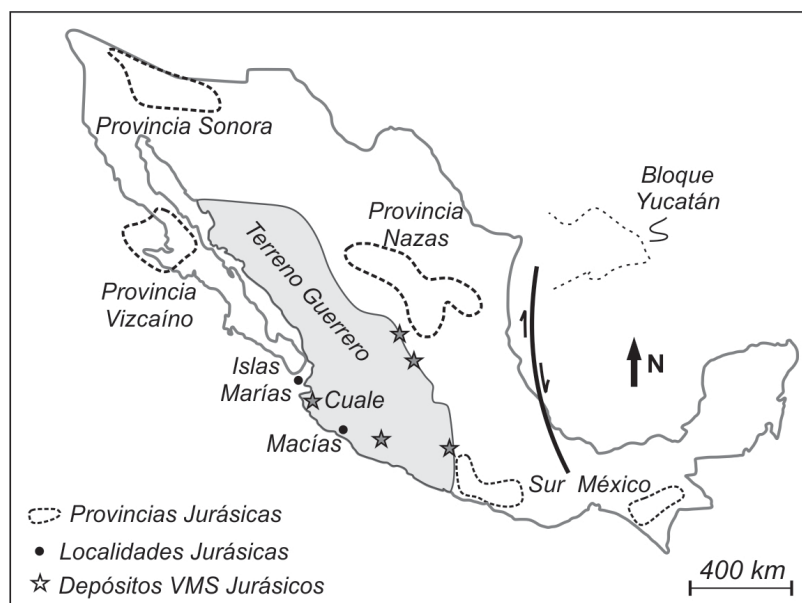


Figura 5. Mapa esquemático de México con la península de Baja California reconstruida, mostrando la distribución de provincias y localidades Jurásicas a lo largo del país, así como los depósitos VMS asociados al terreno Guerrero. Referencias: Bissig *et al.*, 2008; Pompa-Mera *et al.*, 2013; Martini y Ortega-Gutiérrez, 2018; Camprubí *et al.*, 2017; Peña-Alonso *et al.*, 2018.

Sucesiones volcánicas máficas a intermedias y ensambles volcanosedimentarios intercalados con carbonatos marinos someros del Cretácico Inferior están ampliamente expuestos hacia la región central del área de estudio (unidad VS en Figuras 4a-b). Las poblaciones de edades U-Pb en zircones detríticos reportadas en areniscas de estas sucesiones indican contribuciones magmáticas importantes entre 134-120 Ma y 109 Ma (Talavera-Mendoza *et al.*, 2007; Centeno-García *et al.*, 2011; Valencia *et al.*, 2013). Alrededor del batolito Jilotlán han sido reconocidos pequeños afloramientos de diques gabróticos con edades de 112-115 Ma y lavas andesíticas fechadas en 118 Ma (unidad GL en Figuras 4a-b; Villanueva-Lascurain *et al.*, 2016), mientras que ortogneises y anfibolitas fechadas en 128-136 Ma han sido reportadas recientemente en el sector norte del Bloque Jalisco (Schaaf *et al.*, 2020). Todas estas sucesiones de rocas del Cretácico Inferior han sido usualmente interpretadas como ensambles de arco intraoceánico pertenecientes al subterreno Zihuatanejo, parte del Terreno Guerrero (Campa y Coney, 1983; Centeno-García *et al.*, 1993, 2011; Centeno-García, 2017; Schaaf *et al.*, 2020). En este trabajo a todas estas sucesiones ígneas y sedimentarias se les nombró como suite Zihuatanejo.

Al igual que esto, solo que en la porción W de la península de Baja California han sido reportadas sucesiones volcanosedimentarias, gabro y rocas volcánicas que van desde composiciones basálticas y en menor medida riolíticas con edades que oscilan entre 130-100 Ma (Busby *et al.*, 1998; Busby, 2004; Hildebrand y Whalen, 2014; Kimbrough *et al.*, 2015; Morris *et al.*, 2019), contemporáneas al magmatismo reportado para el terreno Guerrero. De acuerdo con lo anterior, en este trabajo se considera que el magmatismo del terreno Guerrero fue parte del contemporáneo y conocido arco Alisitos en Baja California (Figura 3), denominados en conjunto en este estudio como arco Alisitos-Guerrero.

La paleogeografía y evolución geodinámica del terreno Guerrero, así como su relación con el margen cordillerano de Norteamérica, ha estado sujeto a intenso debate durante las últimas tres décadas, en las cuales se manejan al menos dos principales visiones opuestas respecto a su origen (Campa y Coney, 1983; Tardy *et al.*, 1994; Elías-Herrera *et al.*, 2000; Dickinson y Lawton 2001; Talavera-Mendoza *et al.*, 2007; Martini *et al.*, 2009, 2011; Centeno-García *et al.*, 2011). Por un lado, algunos autores apoyan la idea de que estas sucesiones formaron parte de un arco de islas alóctono, el cuál fue

acrecionado al margen mexicano mediante una subducción hacia el W y/o doble subducción, producto del consumo de la placa Mezcalera y la acreción de la Cuenca Arperos (Lapierre *et al.*, 1992; Tardy *et al.*, 1994; Freydier *et al.*, 1998; Dickinson y Lawton; 2001) (Figuras 6a-b). Por otro lado, otros autores están a favor de que el terreno Guerrero está compuesto de sucesiones de arco para-autóctonas, las cuales se piensa, fueron inicialmente desarrolladas sobre el margen continental, después separadas mediante un *rifting* en la zona de tras-arco (Cuenca Arperos) y subsecuentemente acrecionadas al margen cerrando dicha cuenca, todo esto en el contexto de la subducción hacia el E de la placa Farallón (Elías-Herrera y Ortega-Gutiérrez, 1998; Elías-Herrera *et al.*, 2000; Centeno-García *et al.*, 2008; Martini *et al.*, 2011) (Figura 6c).

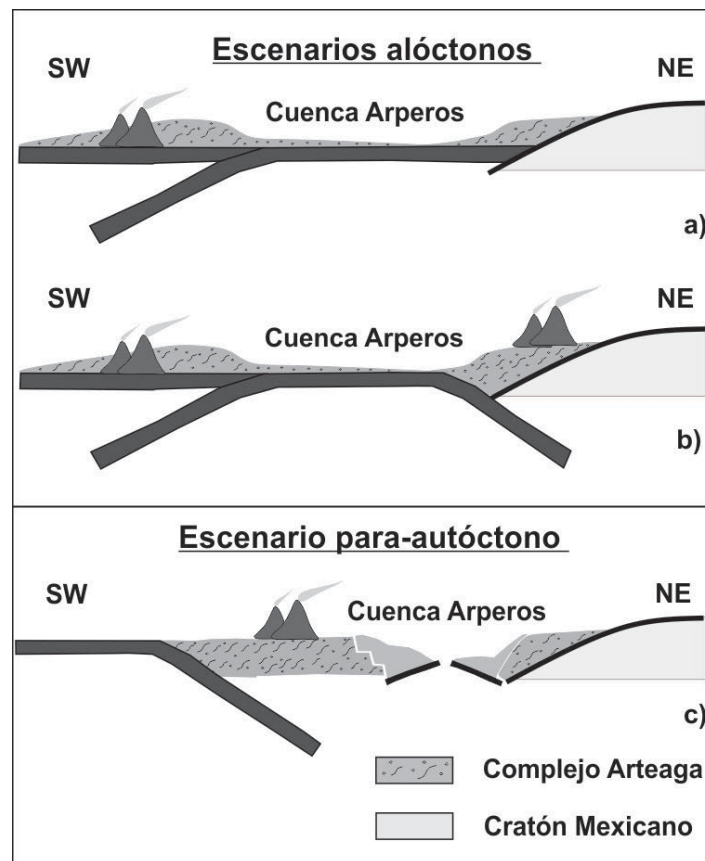


Figura 6. Modelos de evolución sobre el terreno Guerrero. (a) y (b) El escenario alóctono sugiere la acreción de arcos de islas al continente posterior a su construcción. (c) El escenario para-autóctono sugiere la construcción del arco de islas sobre el margen continental asociado con una cuenca tras-arco (Cuenca Arperos). Referencias en texto.

Después de la construcción del arco Alisitos-Guerrero, y durante el Cretácico Superior-Eoceno, a lo largo del área del estudio se emplazaron una serie de intrusiones graníticas,

ignimbritas silíceas y en menor medida cuerpos gabróticos con características típicas de arco continental (Figuras 4a-b). Dentro de estos cuerpos graníticos evolucionados, la manifestación más prominente está representada por el Batolito Puerto Vallarta (BPV) del Cretácico Superior y su principal cubierta volcánica contemporánea (IG) (Figuras 4a-b; 61-92 Ma; Valencia *et al.*, 2013; Schaaf *et al.*, 1995, 2020), seguido por el Batolito Manzanillo (BM) del Cretácico-Paleoceno (BM; 62-74 Ma; Schaaf *et al.*, 1995; Panseri, 2007; Valencia *et al.*, 2013) y el Batolito de Jilotlán (BJt; 55-66 Ma; Villanueva-Lascurain *et al.*, 2016) y Aquila del Paleoceno (BAq; 61-63 Ma; Schaaf *et al.*, 1995). De manera general, los cuerpos ígneos dentro del BPV consisten de granito y granodiorita (Kohler *et al.*, 1988; Schaaf *et al.*, 2020), para el BM abarcan desde granito hasta gabro, el batolito Jilotlán caracterizado por granodiorita y cuarzodiorita, y por último el batolito Aquila con intrusiones granodioríticas (Schaaf *et al.*, 1995). En cuanto al magmatismo eocénico, este se localiza hacia la parte SE del área de estudio (Figura 4a) y está representado por intrusiones félsicas a intermedias correspondientes al Batolito Arteaga (BAr) y ensambles volcánicos y plutónicos pertenecientes al ensamblaje El Camalote (EC; 34-55 Ma; Martini y Ferrari, 2011; Morán-Zenteno *et al.*, 2018). Unidades BPV, IG, BM, BJt, BAq, BAr, EC nombradas en Figuras 4a-b y en este apartado.

Por otro lado, ha sido ampliamente reconocido por numerosos investigadores que las rocas magmáticas del Cretácico Superior al Paleógeno se vuelven más jóvenes al SE de Puerto Vallarta, sustentando con esto un modelo de migración (Schaaf *et al.*, 1995; Ferrari *et al.*, 2018; Morán-Zenteno *et al.*, 2018). De interés en esta aseveración, es que la historia de acortamiento del Orógeno Mexicano durante la Orogenia Laramide abarca prácticamente este mismo periodo (Cretácico tardío al Paleógeno), por lo que este evento pudo jugar un papel importante en la historia magmática de la región (Fitz-Díaz *et al.*, 2018). De hecho, un dato a resaltar en el territorio mexicano es que el magmatismo continental fue un proceso continuo durante la Orogenia Laramide (Fitz-Díaz *et al.*, 2018), a diferencia del magmatismo presente en la región de Estados Unidos, durante esta Orogenia.

Una de las características peculiares del magmatismo en México es su migración episódica hacia el E, llegando a alcanzar los estados de Tamaulipas y Nuevo León (Ferrari *et al.*, 2018). Se piensa que la migración del magmatismo hacia las partes más

internas del continente pudo estar controlada por una disminución en el ángulo de la placa Farallón en subducción (Ferrari *et al.*, 2018), así mismo, se infiere que esta misma placa pudo ser el primer mecanismo conductor del acortamiento del Orógeno Mexicano durante el Cretácico tardío al Paleógeno (Fitz-Díaz *et al.*, 2018).

En relación con lo anterior, al reconstruir la península de Baja California hacia su posición original, quizás este represente el mejor escenario donde se ha documentado esta migración (Figuras 7a-c). En este lugar, la localización del magmatismo migró desde la posición del arco Alisitos (130-100 Ma; Busby, 2004; Hildebrand y Whalen, 2014; Kimbrough *et al.*, 2015; Morris *et al.*, 2019) hacia el E formando el cinturón plutónico llamado La Posta (99 a 92 Ma; Gastil *et al.*, 1975; Hildebrand y Whalen, 2014), y posteriormente hacia la región de Sonora-Sinaloa donde se emplazaron cuerpos batolíticos, este último magmatismo tuvo lugar durante la Orogenia Laramide en el contexto del Orógeno Mexicano entre 90 y 50 Ma (Henry *et al.*, 2003; Valencia-Moreno *et al.*, 2006; González-León *et al.*, 2011) (Figuras 7a-b). Por otro lado, en el área de estudio el registro del magmatismo es más o menos equivalente al observado en la región de Baja California, Sonora y Sinaloa (Ferrari *et al.*, 2014; Morán-Zenteno *et al.*, 2018), sin embargo, este se encuentra fragmentado o truncado por el movimiento lateral izquierdo del Bloque Chortís (Schaaf *et al.*, 1995; Morán-Zenteno *et al.*, 1996, 2018), y por los intensos procesos de erosión por subducción que experimentó el margen, al menos desde el Mioceno temprano (Lépinay *et al.*, 1997; Ducea *et al.*, 2004; Clift *et al.*, 2009; Straub *et al.*, 2015; Parolari *et al.*, 2018, 2021; Straub *et al.*, 2020).

Por último, la región NW del área de estudio se encuentra cubierta por rocas volcánicas de la Faja Volcánica Transmexicana (FVTM), uno de los arcos con mayor diversidad composicional en la Tierra formado a partir del Mioceno temprano y hasta la actualidad (Gómez-Tuena *et al.*, 2018). Hacia el sector W de la FVTM se han descrito rocas de composición muy variable que van desde toleitas máficas a potásicas, basaltos alcalinos sódicos y riolitas hiperalcalinas a hiperaluminosas. Sobre el origen de esta variabilidad composicional existen varias vertientes (ver Gómez-Tuena *et al.*, 2007), sin embargo, estudios recientes sugieren procesos tectónicos tales como, delaminación litosférica, erosión por subducción y relaminación cortical, todo esto operando dentro del contexto de un cambio abrupto en el margen convergente (Gómez-Tuena *et al.*, 2018).

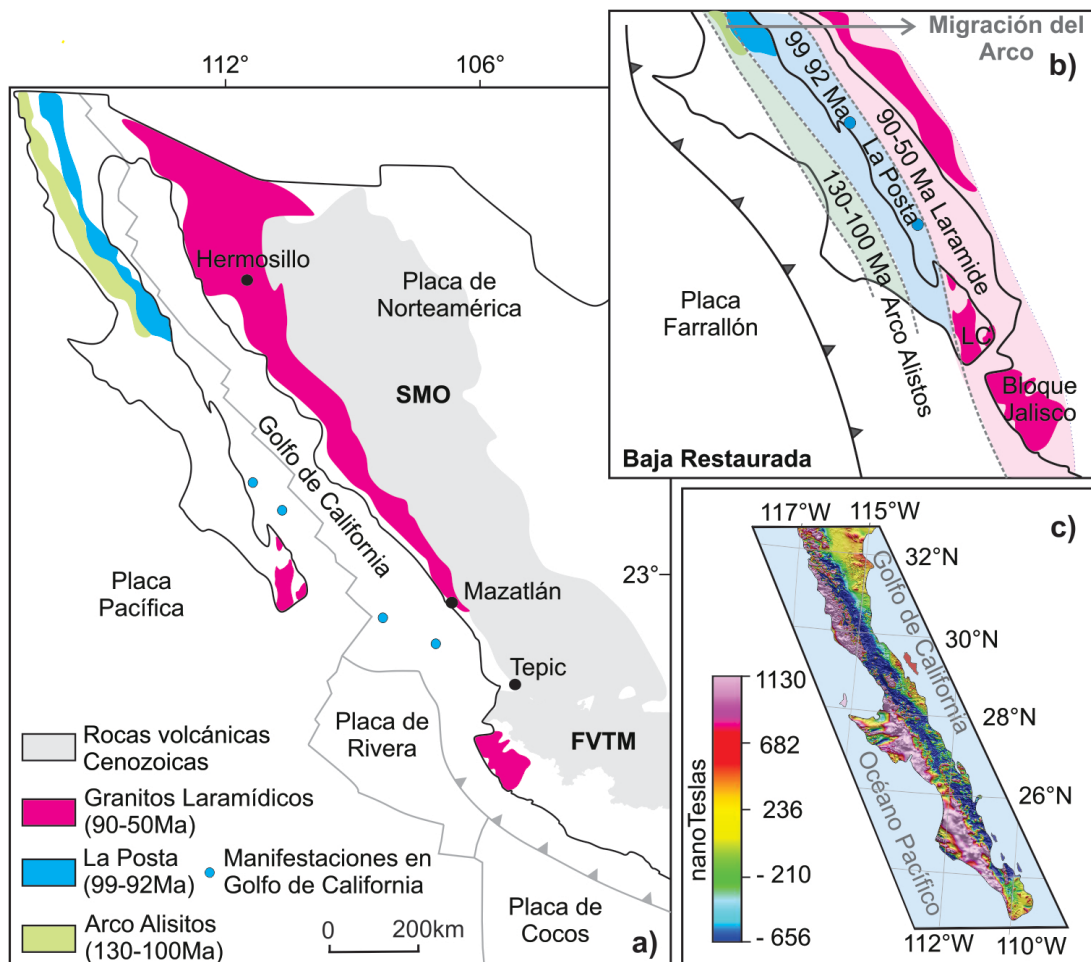


Figura 7. (a) y (b) Evolución tectono-magmática del noroeste de México mostrando la progresiva migración del arco representada por tres cinturones magmáticos discutidos en este trabajo. Aquí la localización del magmatismo migró desde la posición del Arco Alisitos (130-100 Ma), hacia el E a rocas La Posta (99-92 Ma) y a granitoides Laramídicos (90-50 Ma) de Sonora y Sinaloa (Valencia-Moreno *et al.*, 2001, 2003; Duque-Trujillo *et al.*, 2014; Hildebrand y Whalen, 2014; Kimbrough *et al.*, 2015; González-León *et al.*, 2011, 2017). Para una mejor visualización de estos cinturones la Baja fue restaurada a su posición original anterior al Mioceno (Fletcher *et al.*, 2007). (c) Anomalía magnética a lo largo de la península de Baja California (<http://www.sgm.gob.mx/>) que delinea el cinturón más hacia el oeste correspondiente al Arco Alisitos, el cual es coincidente con las altas anomalías magnéticas consistentes con rocas intrusivas máficas (Kimbrough *et al.*, 2015).

3. Contexto Geoquímico del SW de México

La evolución geoquímica y petrológica en la margen SW de México revela una complejidad magmática caracterizada por distintas composiciones de rocas y estilos de emplazamientos asociados a las diferentes suites magmáticas. En ese sentido y a pesar de la gran variabilidad de composiciones (desde basalto-gabro hasta riolita-granito, Figura 8), los productos magmáticos correspondientes al área de estudio grafican en su mayoría en el diagrama de TAS (total de álcalis contra sílice) como magmas subalcalinos (Figura 8).

A continuación, y con el apoyo de datos geoquímicos de la literatura, se tratará de describir las diferentes suites magmáticas de la región en términos geoquímicos y petrológicos.

Siguiendo la evolución en el tiempo, uno de los primeros datos geoquímicos que resalta en el diagrama de TAS es la diferencia contrastante en composición de las rocas jurásicas del Distrito Minero Cuale (Bissig *et al.*, 2008), con respecto a las rocas del Cretácico Inferior de la suite Zihuatanejo, correspondientes al Terreno Guerrero (Mendoza y Suastegui, 2000; Villanueva-Lascrain *et al.*, 2016) (Figura 8). En ese sentido, las rocas jurásicas Cuale en el diagrama de TAS son muy puntuales, graficando gran parte de estas en el campo de las riolitas-granitos (Figura 8), mientras que las rocas de la suite Zihuatanejo grafican en el extremo opuesto como magmas menos evolucionados representados esencialmente por basalto-gabro (Figura 8). Seguido de esto, rocas formadas durante el Cretácico Superior-Paleoceno representadas por el BPV, el BM, el batolito Jilotlán y el batolito Aquila grafican como magmas con composiciones esencialmente granodioríticas a graníticas (Köhler *et al.*, 1988; Schaaf, 1990; Schaaf *et al.*, 1995; Caracciolo, 2010; Valencia *et al.*, 2013; Villanueva-Lascrain *et al.*, 2016; Morán-Zenteno *et al.*, 2018), mientras que las rocas eocénicas correspondientes al ensamblaje El Camalote (Stein *et al.*, 1994; Martini *et al.*, 2010; Martini y Ferrari, 2011), muestran un patrón más variable que va desde basaltos hasta riolitas (Figura 8).

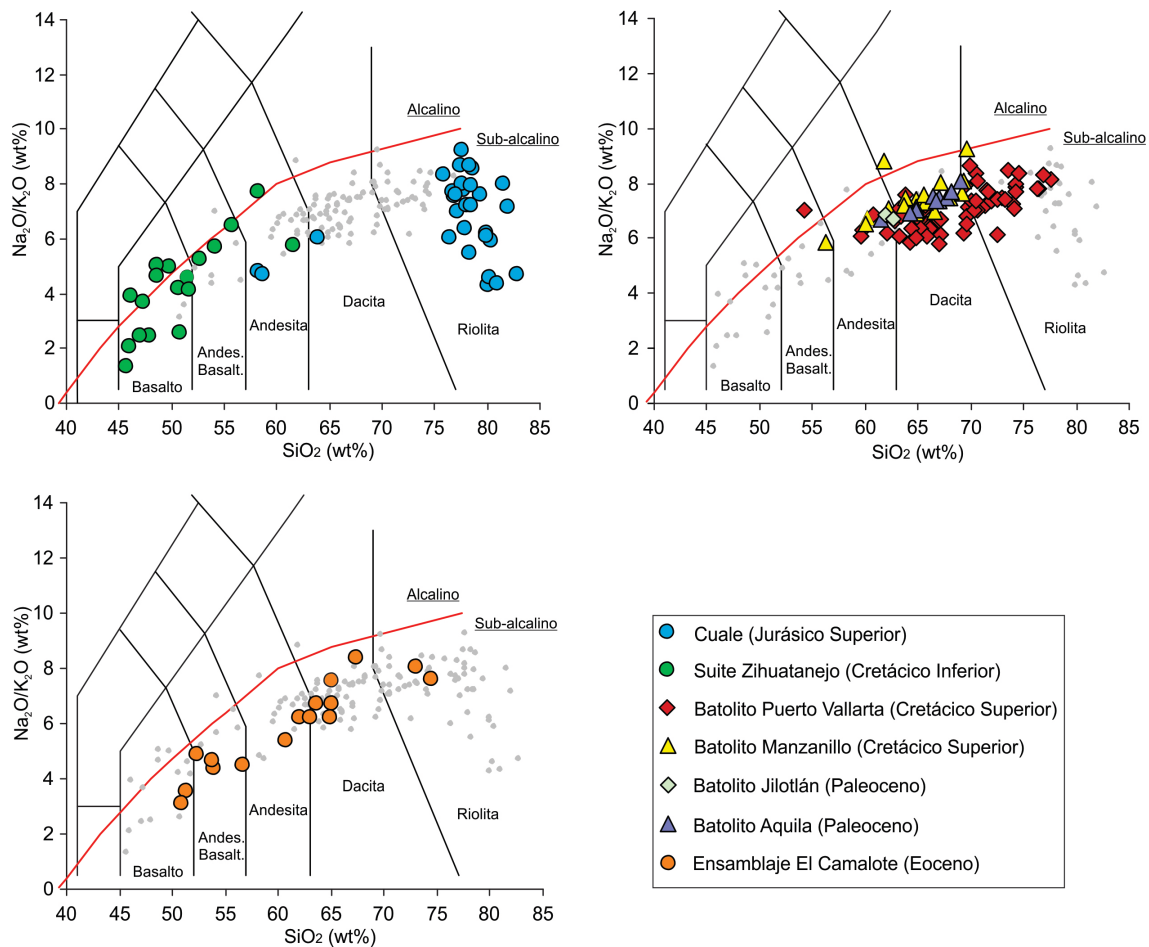


Figura 8. Diagramas de total de álcalis contra sílice (TAS) que muestran la variabilidad composicional hacia la región SW de México. A resaltar es que a pesar de la gran variabilidad, la mayor parte de estos productos grafican como magmas subalcalinos. Diagrama TAS de [Le Bas et al., 1986](#). Referencias citadas en texto.

Por otro lado, en las Figuras 9b, 9e y 9h existe un dato en particular en estos productos magmáticos, que es el carácter hiperaluminoso del magmatismo jurásico Cuale localizado en el margen (rocas del Distrito Minero Cuale, [Bissig et al., 2008](#)) muy distinto al carácter metaluminoso típico de arcos reportados para el Cretácico Inferior, Cretácico Superior, Paleoceno y Eoceno ([Caracciolo et al., 2009](#); [Martini et al., 2010](#); [Valencia et al., 2013](#); [Schaaf et al., 2020](#)) (Figuras 9b, e y h). A resaltar en este punto, es que estos magmas hiperaluminosos, también se encuentran presentes en rocas del Arco Nazas (rocas del Jurásico Inferior a Medio localizadas hacia el interior del continente; [Jones et al., 1995](#); [Barboza-Gudiño et al., 2008](#); [Zavala-Monsiváis et al., 2012](#)), por lo que estos datos, podrían manejarse como una característica común, presente en estas sucesiones jurásicas (Figura 9b).

En el diagrama de SiO_2 vs $\text{Na}_2\text{O}/\text{K}_2\text{O}$ las rocas jurásicas Cuale muestran contenidos mucho menores en la relación $\text{Na}_2\text{O}/\text{K}_2\text{O}$, si se le compara con las rocas de la suite Zihuatanejo (Figura 9a). En cuanto a las rocas del Cretácico Superior al Eoceno sus composiciones en $\text{Na}_2\text{O}/\text{K}_2\text{O}$ prácticamente se sobreponen (Figuras 9d-g), aunque al prestarle atención se pueden observar algunas diferencias notables. En ese sentido, los batolitos de Manzanillo y Aquila muestran valores relativamente más altos en la relación $\text{Na}_2\text{O}/\text{K}_2\text{O}$ a contenido equivalente de SiO_2 , si se le compara con el batolito Puerto Vallarta y batolito de Jilotlán (Figura 9). Para atender estas diferencias composicionales fueron graficados los campos reportados para los granitos La Posta caracterizados por variedades tonalíticas a trondhjemiticas al norte y sur de Baja California (Duque-Trujillo *et al.*, 2014; Gastil *et al.*, 1975, 2014) y el campo de granitoides Laramídicos correspondientes al Orógeno Mexicano de la región de Sonora y Sinaloa, caracterizados por ser ricos en potasio (Henry *et al.*, 2003; Valencia-Moreno *et al.*, 2001, 2003; González-León *et al.*, 2011, 2017). Con base en estas consideraciones, los batolitos de Aquila y Manzanillo caen dentro del campo reportados para granitos La Posta, es decir, muestran características de intrusivos ligeramente trondhjemiticos, mientras que los batolitos Jilotlán y Puerto Vallarta son más consistentes con magmas ricos en potasio típicos del Orógeno Mexicano o granitos Laramídicos. De manera muy general, las relaciones altas y bajas en $\text{Na}_2\text{O}/\text{K}_2\text{O}$ podrían manejarse como un *proxy* de la fuente de los magmas o de las fases mineralógicas cristalizando en un magma.

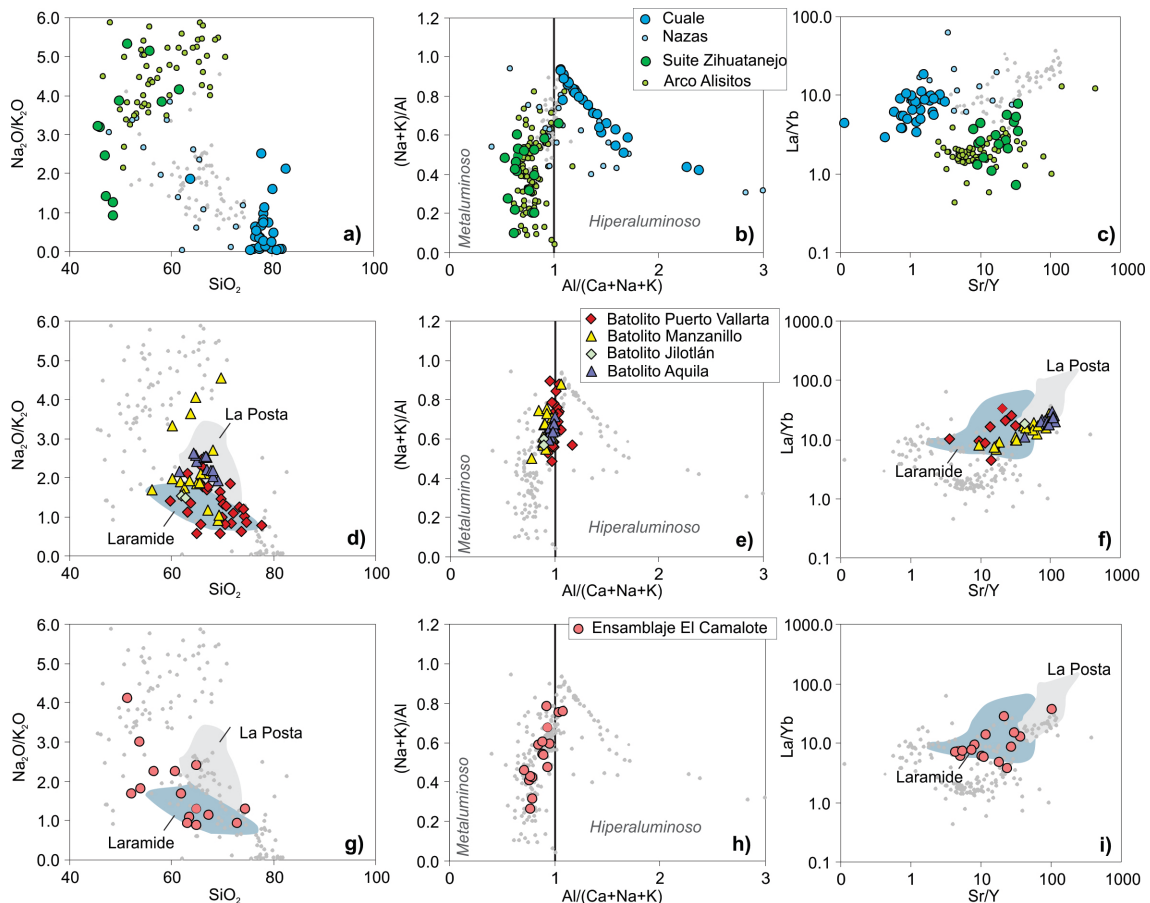


Figura 9. Diagramas que muestran de manera más particular las diferencias entre las distintas suites magmáticas observadas en el área de estudio. (a-c) Las rocas del Distrito Minero Cuale del Jurásico Medio-Superior y la suite Zihuatanejo del Cretácico Inferior muestran diferencias notables en sus elementos mayores y trazas. Con fines comparativos se graficaron los datos geoquímicos de la provincia Nazas del Jurásico (Jones *et al.*, 1995; Barboza-Gudiño *et al.*, 2008; Zavala-Monsiváis *et al.*, 2012) y los datos geoquímicos de rocas del Arco Alisitos (Kimbrough *et al.*, 2015; Morris *et al.*, 2019). (d-f) Los batolitos Puerto Vallarta y Jilotlán son consistentes con el campo de granitoides Laramídicos reportados en la región de Sonora y Sinaloa (ver texto para referencias), mientras que los batolitos de Manzanillo y Aquila son consistentes con los granitoides tipo La Posta reportados por Gastil *et al.* (1975, 2014). (g-i) En cuanto a las rocas graficadas del Ensamblaje El Camalote, estas muestran patrones muy dispersos graficando entre ambos campos.

En cuanto las relaciones de elementos traza, estas también revelan diferencias significativas en los distintos magmas. Siguiendo esto, se graficaron las relaciones La/Yb vs Sr/Y de todos los datos geoquímicos reportados para el área de estudio. Como dato a resaltar sigue siendo el magmatismo hiperluminoso del Jurásico Medio-Superior, ya que este presenta las relaciones Sr/Y más bajas y grafica fuera de los campos que engloban al magmatismo predominante en la región (Figura 9c). Subsecuentemente, la suite del Cretácico Inferior revela las relaciones La/Yb más bajas con respecto a las demás suites (Figura 9c), sugiriendo baja señal de granate y altos

grados de fusión parcial, valores típicos reportados para el arco de islas Alisitos-Guerrero (Morris *et al.*, 2019). Hacia el Cretácico Superior-Paleoceno las suites magmáticas representadas por el BPV y el batolito Jilotlán, muestran patrones La/Yb muy fraccionados, típicos de arco continental, coincidentes con el campo de granitoides Laramídicos reportados en la región de Sonora y Sinaloa (Figura 9f). Por último, tanto el BM como el batolito de Aquila presentan altas relaciones Sr/Y y La/Yb, características típicas de magmas adakíticos, ambos magmas coincidentes con los datos reportados para la suite La Posta. En cuanto a los productos eocénicos correspondientes al ensamblaje El Camalote estos son más difíciles de englobar en términos de elementos traza, debido a que sus composiciones son muy variables, graficando entre el campo de granitoides tipo La Posta y Laramide (Figura 9i).

Otra manera de visualizar las relaciones La/Yb son los diagramas de elementos de las tierras raras (*Rare Earth Elements*, REE), donde los patrones graficados para las distintas suites magmáticas revelan diferencias notables (Figura 10). En ese sentido, el magmatismo Jurásico Medio-Superior representado por Cuale (Bissig *et al.*, 2008) en los diagramas de REE presenta anomalías negativas de Eu y patrones de tierras raras pesadas (*Heavy Rare Earth Elements*, HREE) planos. Subsecuentemente, la suite Zihuatanejo del terreno Guerrero presenta patrones de REE relativamente planos (semejantes a los arcos de islas; Mendoza y Suastegui, 2000; Villanueva-Lascurain *et al.*, 2016), muy similares a las rocas máficas del arco Alisitos (graficadas como comparación), donde se muestran patrones planos, aunque menos fraccionados (Kimbrough *et al.*, 2015). Hacia el Cretácico Superior-Paleoceno las suites magmáticas representadas por el BPV y batolito Jilotlán muestran patrones muy fraccionados, típicos de arco continental, es decir, altas relaciones de tierras raras ligeras (*Light Rare Earth Elements*, LREE) con respecto a las HREE con anomalías de Eu muy marcadas en BPV y en menor medida para el batolito Jilotlán (Köhler *et al.*, 1988; Valencia *et al.*, 2013; Villanueva-Lascurain *et al.*, 2016). Es importante destacar que durante este mismo periodo (Cretácico Superior-Paleoceno) tanto en el BM como en el batolito Aquila se vuelven a observar estos patrones fraccionados, sin embargo, resalta en ambos cuerpos la ausencia de la anomalía de Eu y un empobrecimiento muy marcado de las HREE (características típicas de magmas adakíticos) respecto al BPV y batolito Jilotlán. En los magmas emplazados posteriormente, durante el Eoceno (Ensamblaje El

Camalote), los patrones muestran enriquecimientos de las LREE respecto a las HREE con anomalías muy marcadas de Eu, salvo algunos datos.

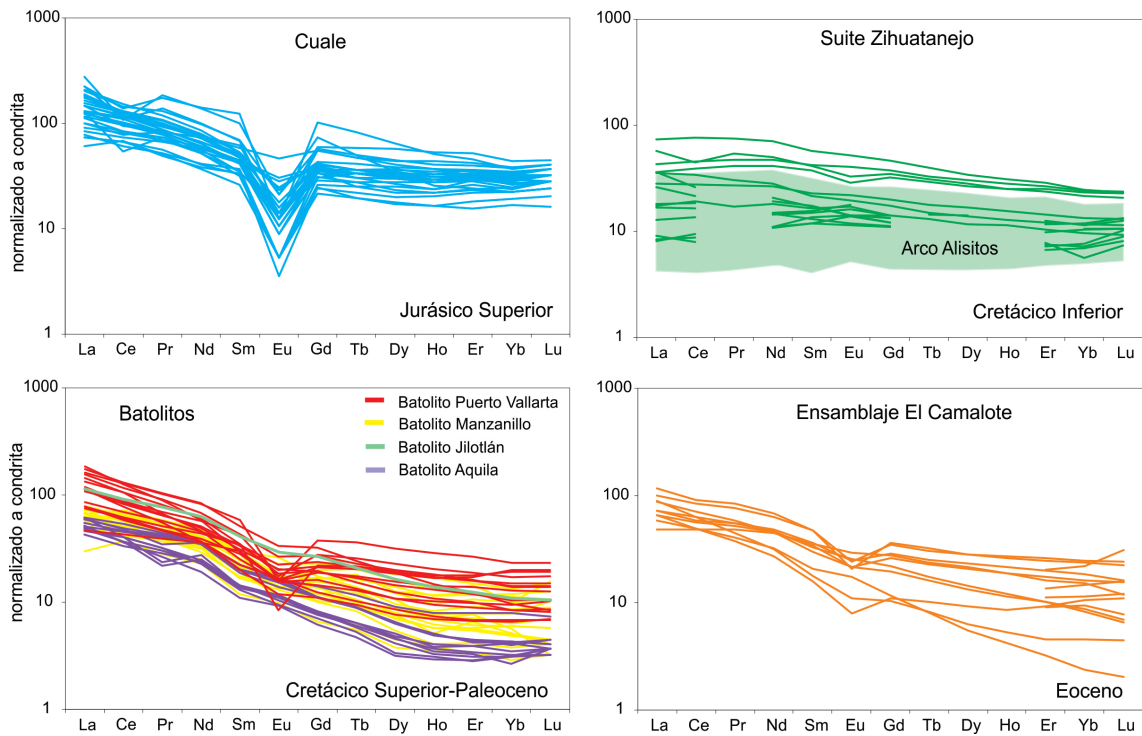


Figura 10. Diagramas de REE que muestran los diferentes patrones y fraccionamientos observados de las distintas suites magmáticas y volcánicas en la región SW de México. Nótese la anomalía de Eu muy marcada en las rocas de Cuale, los patrones planos de la suite Zihuatanejo similares al Arco Alisitos, el fraccionamiento muy marcado en los granitoides Laramídicos, los empobrecimientos de HREE del batolito Manzanillo y Aquila, y el fraccionamiento del Ensamblaje El Camalote con ligeras anomalías de Eu. Referencias citadas en texto.

4. Metodologías analíticas

4.1 Uso y abuso de zircones detríticos

Hoy en día la manera de entender y atender reconstrucciones paleogeográficas a nivel regional y a escala global es un tema que ha escalado considerablemente debido a los avances en la Espectrometría de Masas en las últimas dos décadas. Estos avances tecnológicos han permitido obtener resultados geocronológicos rápidos y de alta precisión, incrementando cada vez más el conjunto de datos a nivel global (p. ej., U-Pb), en minerales accesorios como el zircón, mineral esencial utilizado como indicador potencial de proveniencia sedimentaria y evolución cortical.

Con base en esta información, los estudios de procedencia de sedimentos (zircones detríticos) por lo general se basan en el fechamiento de 100-120 cristales de zircón para cubrir la mayor variedad de poblaciones posibles en una región a partir de muestras individuales (Vermeesch, 2004; Andersen, 2005). Sin embargo, para obtener una muestra representativa en el estudio de procedencia de sedimentos, existen varios factores en juego a considerar. Por un lado, ha sido documentado en el muestreo de sedimentos de río, que variaciones en el tamaño de grano del sedimento en un mismo sistema fluvial pueden influenciar las poblaciones de edades, debido a la dinámica de transporte de sedimentos por corrientes fluviales, donde el tamaño y forma de los cristales de zircón son propiedades físicas primarias que determinan su asentamiento (Ibañez-Mejía *et al.*, 2018). Además de esto, también ha sido registrado que el tamaño del grano del sedimento dominante es correlacionable con el tamaño de granos de zircón transportados en corrientes fluviales, implicando fraccionamiento hidrodinámico (Lawrence *et al.*, 2011). En ese sentido, sedimentos con tamaños de grano mayor (arena media-gruesa) deberían reflejar una mayor proporción de zircones más grandes, mientras que en sedimentos con tamaños de grano menor (limo grueso-arena fina), se debería esperar una mayor cantidad de zircones más pequeños, fraccionamiento hidrodinámico que puede influir en la distribución de edades.

En resumen, aunque la geocronología del zircón en las últimas décadas ha cambiado la manera en la que se enfocan las investigaciones, muchas veces varios parámetros durante la toma de muestra pueden ser ignorados, conduciendo algunas veces a interpretaciones poco sostenidas. Por consiguiente, y aplicando las aseveraciones

mencionadas anteriormente, el muestreo y análisis de múltiples muestras de sedimentos con diferentes tamaños de granos dentro de un mismo sistema fluvial, podría conducir a una mejor estrategia de muestreo en campo. En esta visión se considera que todavía una mejor manera de entender la procedencia de los zircones detríticos y evitar el sesgo en la mayor medida posible, puede ser lograda si se toma en cuenta como etapa primordial la geología del área.

4.2 Metodología de muestreo en campo (zircones detríticos)

Recapitulando, una de las principales incertidumbres con respecto al estudio de zircones detríticos es la representatividad de la muestra, debido a que el sesgo que se pueda tener en las interpretaciones podría generarse en el campo (Lawrence *et al.*, 2011; Ibañez-Mejía *et al.*, 2018) e incluso en el mismo laboratorio al momento de procesar la muestra.

Con base en lo anterior y con la finalidad de minimizar las incertidumbres que se puedan presentar en el estudio de zircones detríticos, en este trabajo, se siguió una metodología minuciosa para cuidar en la mayor medida posible la representatividad de la muestra, que es, cubrir la variedad cortical expuesta en el SW de México a partir del muestreo de sedimentos de río que desembocan en la costa, y por ende, alcanzar a captar la mayor variedad de poblaciones de zircones, de tal forma que reflejen la historia magmática de la región. A continuación, se presentará la metodología seguida en este trabajo.

La selección de zonas de muestreo en campo es uno de los procesos que se tiene que llevar con mucho cuidado desde la oficina. Como primer paso, y para la obtención de datos confiables en campo (zircones detríticos), se realizó una compilación bibliográfica y cartográfica de la información geológica disponible a lo largo del margen (Figura 11). Posteriormente, se consideraron las condiciones morfológicas de la zona para ver las áreas con sedimentación activa (reconocimiento de cuencas hidrográficas y patrones fluviales). Con base en estas consideraciones, se tomó en cuenta el tamaño de las cuencas hidrográficas a muestrear, las litologías que se están erosionando en dicha cuenca y la posible presencia de algunas presas (aguas arriba) que pudieran de alguna forma influenciar la distribución de edades de los zircones. Para dicha información y

con la finalidad de seleccionar puntos estratégicos de muestreo en los ríos que reflejen la variedad litológica expuesta en las cuencas hidrográficas, fue necesario empatar en Google Earth la geología del área con las cuencas hidrográficas (Figura 11), para de esta forma visualizar la procedencia de los materiales que están siendo erosionados y a la vez relacionar las edades de zircones a las unidades o cuerpos específicos que afloran en la cuenca. Es importante mencionar que todas las muestras fueron colectadas en las desembocaduras de los ríos con la salvedad de la muestra Bal (Figura 11). En este último caso, hubo la necesidad de coleccionar la muestra aguas arriba, debido a la extensión del río Balsas, y a la presencia de una presa y zonas de cultivo, las cuales podrían de alguna manera influir en la muestra Gr01, tomada en la desembocadura del río Balsas.

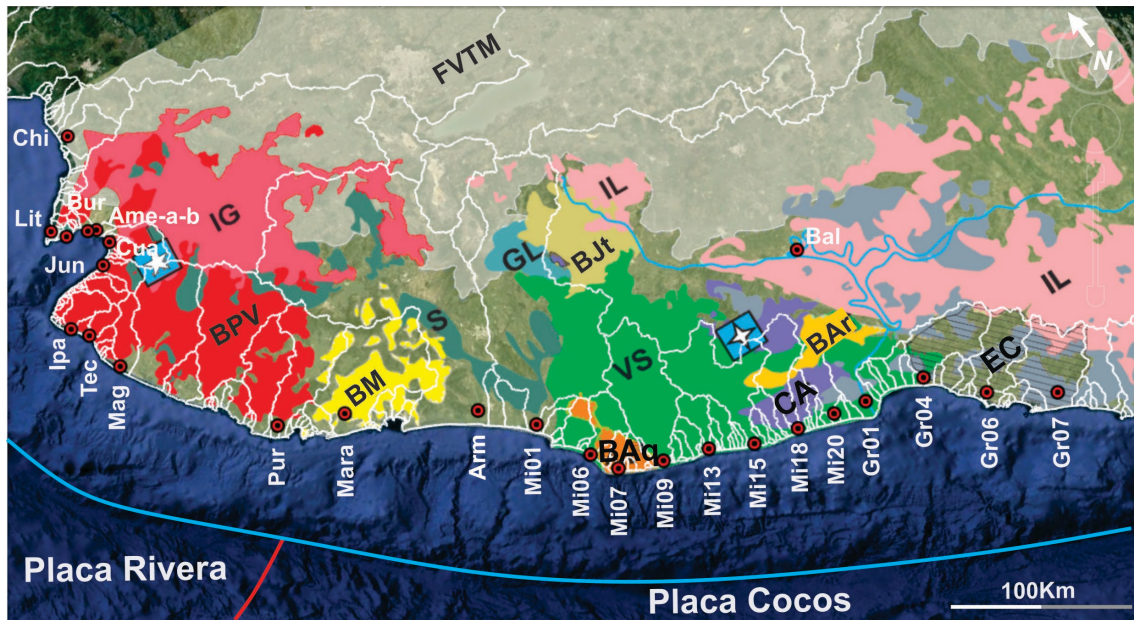


Figura 11. Imagen que muestra la localización de sitios de colecta de muestras (círculos rojos) con sus correspondientes cuencas hidrográficas (líneas blancas) y río Balsas (línea celeste). Aunque este mapa geológico ya se encuentra más detallado, es importante mencionar que antes de la recolección de sedimentos, la geología fue superpuesta a las cuencas hidrográficas, con la finalidad de cubrir mediante el muestreo de sedimentos, la mayor variedad de litologías reportadas sobre el margen mexicano. Complejo Arteaga (CA); Volcanosedimentario (VS); Sedimentario (S); Gabro y Lavas (GL); Batolito Puerto Vallarta (BPV); Ignimbritas (IG); Batolito Manzanillo (BM); Batolito Jilotlán (BJt); Batolito Aquila (BAq); Batolito Arteaga (BAr); Granitoides no diferenciados (GR); Ignimbritas y lavas (IL); Ensamblaje El Camalote (EC); Faja Volcánica Transmexicana (FVTM). Las estrellas dentro del recuadro azul representan rocas ígneas jurásicas. Cuencas hidrográficas definidas por la CONABIO, 2007 (http://www.conabio.gob.mx/informacion/gis/?vns=gis_root/hidro/chidro/uve250k_07gw).

Una vez en campo la metodología de muestreo consistió en seleccionar o localizar lugares propicios de sedimentación, tales como: zonas de meandro, terrazas, canales fluviales y barras (Figuras 12-13). Ubicados estos puntos, la estrategia consistió en coleccionar sedimentos con tamaños de grano que van desde arena fina hasta arena media, con el objetivo de evitar los efectos de reclasificación por tamaño, y con esto alcanzar a cubrir la mayor parte de las poblaciones posibles de zircones (Lawrence *et al.*, 2011; Ibañez-Mejía *et al.*, 2018) (Figuras 12-13). Cabe señalar que durante la recolección del sedimento se trató en la mayor medida posible no hacerlo en un solo punto, sino en varios, cubriendo un área aproximadamente de 200 m², todo esto con la finalidad de evitar el sesgo debido al fraccionamiento hidrodinámico de los zircones (Lawrence *et al.*, 2011).

Siguiendo con la metodología de campo en ocasiones los sedimentos coleccionados pueden provenir de ríos con presencia de agua o de ríos secos (canales fluviales). En el último caso, se retiró aproximadamente 20 cm o más de cobertura de arena para evitar una reclasificación por efectos eólicos en el sedimento. Es importante mencionar que de cada muestra se tomaron aproximadamente cinco kilogramos de sedimento y que todo este proceso se llevó a cabo en temporada de secas.



Figura 12. Fotografías que muestran la recolección de sedimentos recientes en campo. Nótese el canal fluvial activo y el tamaño de grano fino en la muestra de sedimento.



Figura 13. Fotografías que muestran la recolecta de sedimentos en zonas de terrazas y barras. En las terrazas se muestrearon diferentes horizontes con la finalidad de obtener en la mayor medida posible la muestra más representativa de la zona. En las zonas de barras también se muestrearon diferentes puntos con fines de hacer representativo el muestreo de sedimentos.

4.3 Proceso de separación de zircones en laboratorio para análisis geocronológicos e isotópicos

La preparación de la muestra se llevó a cabo en el Taller de Molienda y Separación Mineral del Centro de Geociencias, UNAM.

El primer paso consistió en cuartear la muestra para lograr una completa homogenización de esta. Una vez cuarteadada se consideró el material menor a $500\ \mu\text{m}$ (malla 35) para facilitar el proceso de separación de zircones. Al inicio de este trabajo y con la finalidad de minimizar las incertidumbres que se puedan presentar en el estudio de zircones detríticos, en una muestra de sedimento de río (M-1) fueron aplicadas dos técnicas de separación mineral que normalmente se utilizan: batea y líquidos pesados. De interés en estos resultados es que, para el grueso de los zircones obtenidos por ambas técnicas de separación, se obtuvieron patrones prácticamente idénticos en los diagramas de concordia e histogramas de edades U-Pb (ver Apéndice 1). Por consiguiente, en este trabajo se optó por utilizar la técnica de batea como método de separación, debido a que permite manipular mayor cantidad de muestra (sedimento) durante el proceso de separado, además de representar una técnica de bajo costo.

Durante la separación de zircons mediante la técnica de la batea (Figura 14a), fueron utilizados por cada muestra aproximadamente 200 g de sedimento. La técnica consistió en agregar fracciones de 40-50 g de sedimento a la batea y procesar la muestra hasta obtener un concentrado de minerales pesados, este proceso se repite cuantas veces sea necesario hasta obtener una buena cantidad de esta fracción pesada. Obtenida esta fracción, se limpió la muestra con un imán de forma manual, retirando todos aquellos minerales con una mayor susceptibilidad magnética (Figura 14b). Posteriormente, los minerales pesados fueron procesados en el separador magnético (FRANTZ), llevando el amperaje (Amp) desde 0.25 hasta 1.5 Amp (0.25, 0.50, 1.00, 1.5 Amp) con la finalidad de retirar la mayor parte de los minerales magnéticos (Figura 14c). Hay que tener en cuenta que la susceptibilidad magnética del zircón es mayor a 1.70 Amp.

Procesada la muestra en el FRANTZ, el material resultante fue colocado en una placa petri y observado bajo el microscopio. Los resultados de esta separación son muy buenos, ya que se logró apreciar con mayor facilidad la variedad de zircons presentes en la muestra. Por consiguiente, y bajo un microscopio binocular, fueron seleccionados de forma aleatoria alrededor de 150 granos de zircón, los cuales fueron montados a una resina epóxica y posteriormente desbastados hasta llevarlos a su mitad ecuatorial.

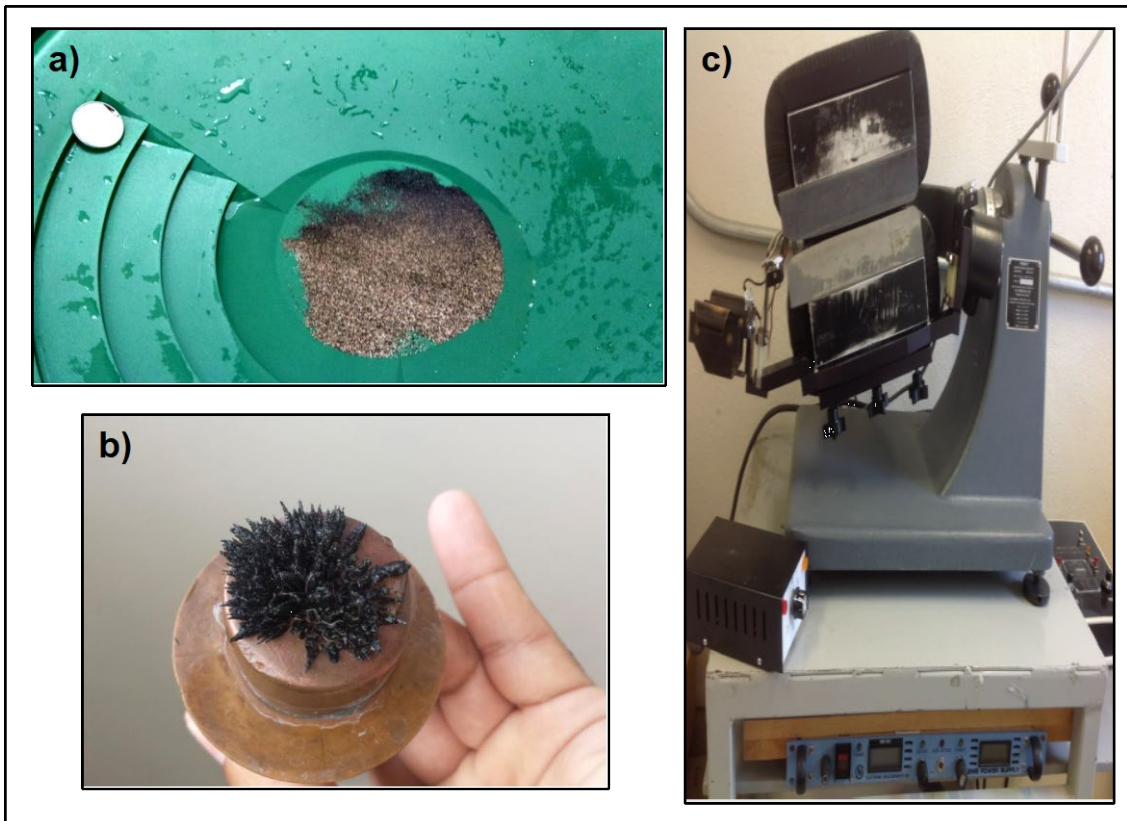


Figura 14. (a) Fotografía que muestra el tamaño de grano de sedimento utilizado para separación en batea, nótese la concentración de minerales magnéticos (colores negros), la cual muchas veces se utiliza de guía para una separación óptima de minerales pesados. (b) Concentrado de minerales magnéticos separados de la fracción pesada con un imán de forma manual. (c) Equipo FRANTZ utilizado para retirar la mayor cantidad de minerales magnéticos.

4.4 Catodoluminiscencia

Las fotos de catodoluminiscencia se realizaron en el Laboratorio de Geoquímica de Fluidos Corticales del Centro de Geociencias, UNAM.

Las fotografías fueron tomadas con un microscopio óptico adaptado a catodoluminiscencia. La finalidad esencial de estas fotos fue evitar en la mayor medida posible el sesgo que se pueda tener a la hora de seleccionar los zircones para analizar. En ese sentido, y con base en la forma, color, tamaño, luminiscencia y estructuras internas del zircón se seleccionaron aproximadamente 105 zircones de cada muestra mediante el software Geostar. Cabe destacar que se realizó un barrido horizontal por toda la foto con la finalidad de cubrir la mayor variedad posible de zircones presentes en la misma (Figura 15).

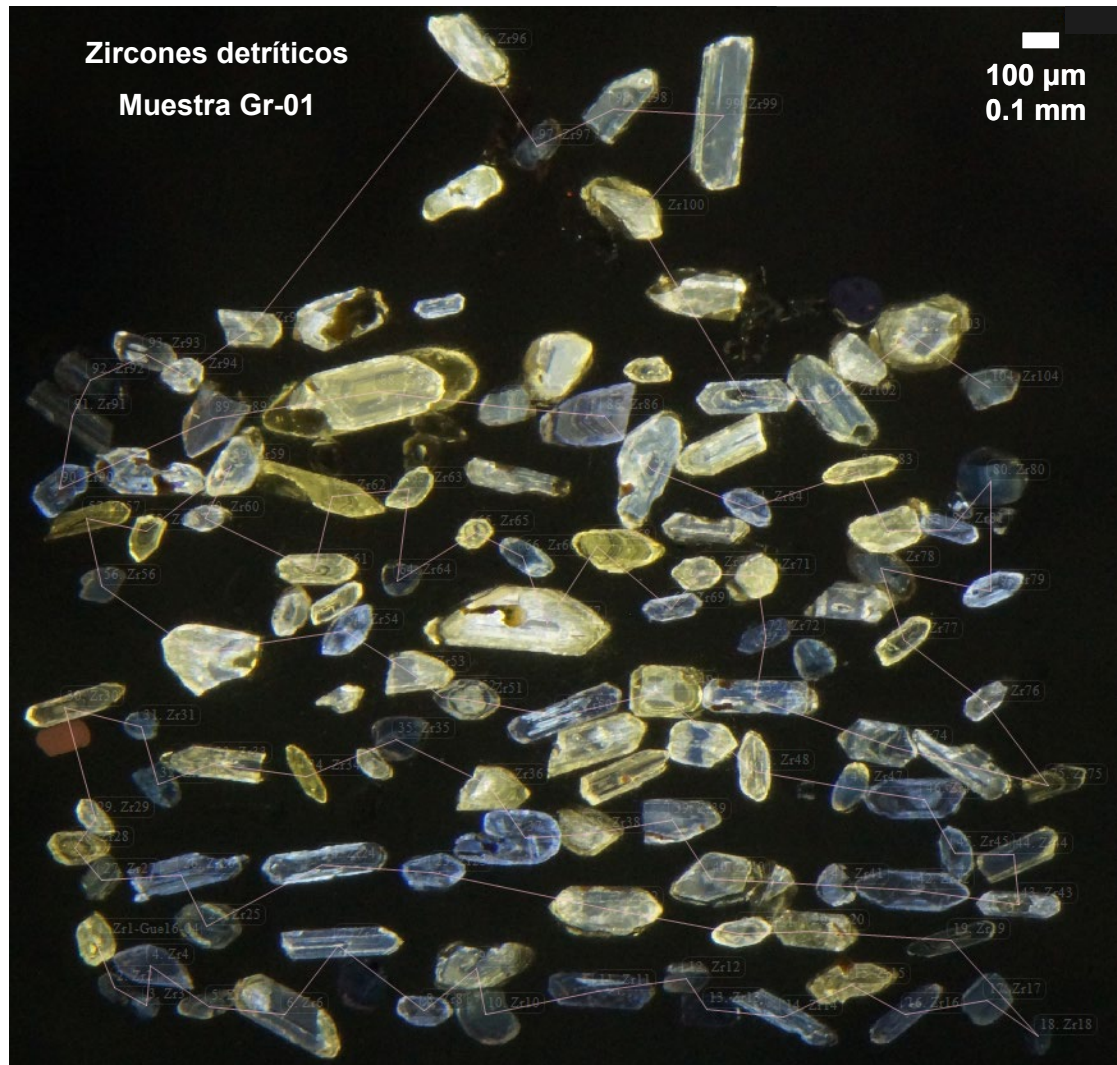


Figura 15. Imagen de catadoluminiscencia de zirrones que muestra sus diferentes formas, tamaños, luminiscencia y estructuras internas. La línea tenue en color rosa representa el barrido de zirrones seleccionados para fechamientos e isótopos con fines de capturar la mayor parte de poblaciones posibles, y con esto, evitar el sesgo.

Todos los procesos mencionados en los apartados anteriores fueron llevados a cabo para cada muestra, con el fin de cubrir la mayor parte de las poblaciones posibles de zirrones detríticos y con esto disminuir el sesgo que se pueda tener desde campo hasta el laboratorio.

4.5 Geocronología U-Pb en zirrones mediante LA-ICPMS

Los análisis isotópicos U-Pb en zirrones de 26 muestras seleccionadas fueron realizados en el Laboratorio de Estudios Isotópicos (LEI) del Centro de Geociencias, UNAM (Figura 16a). Los resultados fueron obtenidos a partir de un Espectrómetro de Masas

con Plasma Acoplado Inductivamente enlazado a sistema de ablación láser (LA-ICPMS). El equipo utilizado para dicha medición consiste en un ICP-MS de tipo cuadrupolo de marca Thermo ICap Qc acoplado con un láser excimer de Modelo Resolution M050.

Previamente al análisis, la superficie de las probetas donde están montados los zircones fueron limpiadas con HNO₃ 1 M para evitar cualquier tipo de contaminación por Pb común. Como siguiente paso, las probetas junto con los estándares fueron colocadas en un porta-muestras y llevadas a una celda para su análisis (Figura 16b). Es importante mencionar que antes de la medición de los zircones y como control de calidad, se analizó un vidrio estándar nombrado NIST SRM610 sobre el cuál se verifica que las condiciones del equipo sean las óptimas para empezar la medición. Una vez verificado este proceso, la técnica de análisis consistió en incidir un haz de luz láser sobre la superficie del zircón, con una densidad de energía (fluencia) de $\sim 6\text{J}/\text{cm}^2$ y a una tasa de repetición de 5 Hz, creando un hoyo (*spot*) en este caso de 23 μm de diámetro (Solari *et al.*, 2010). La ablación se lleva a cabo bajo una atmósfera de He (celda), volatilizando la muestra y generando un aerosol sólido de aproximadamente 30 ng, el cual es evacuado de la celda y transportado al ICP-MS en un flujo con 350 ml de He y 4.5 ml de N₂, mezclado con gas Ar para su análisis. Cabe señalar que este proceso de ablación tiene una duración de 30 segundos con fines de evitar el fraccionamiento elemental producido por la profundidad del hoyo.

Los análisis fueron reducidos mediante su comparación con estándares certificados intercalados entre las muestras. El primer estándar corresponde a un vidrio nombrado NIST-SRM610, el segundo estándar es un zircón natural llamada 91500 y el tercero es otro zircón natural llamada Plešovice. El NIST-SRM610 permite recalculer las concentraciones U-Th, elementos traza y tierras raras en los granos de zircón, utilizando la concentración estequiométrica del silicio en el zircón como elemento estándar interno para la cuantificación. Por otro lado, los estándares naturales 91500 (1065.4 ± 0.6 Ma, Wiedenbeck *et al.*, 1995) y Plešovice (337.13 ± 0.6 Ma, Sláma *et al.*, 2008), estándar primario y secundario respectivamente, fueron usados para recalculer las relaciones isotópicas de U, Pb.

Más aún, las correcciones de los datos isotópicos de interés para fechamientos (^{206}Pb , ^{207}Pb , ^{208}Pb , ^{232}Th y ^{238}U) fueron realizados con el software Iolite 3 (Paton *et al.*, 2011) siguiendo los lineamientos de VizualAge para la reducción de datos propuestos por Petrus y Kamber (2012).

Es importante mencionar que durante el transcurso del estudio, las edades corregidas $^{206}\text{Pb}/^{238}\text{U}$ del estándar 91500 fueron de 1063 ± 15 Ma (2σ , $n = 713$), mientras que las del estándar Plešovice fueron de 339 ± 11 Ma (2σ , $n = 409$), ambas edades dentro del error aceptado para estos estándares de zircón naturales.

Posteriormente, los datos fueron exportados a una tabla Excel para su manipulación, y consecutivamente trabajados en línea (<http://www.ucl.ac.uk/~ucfbpve/isoplotr/>), utilizando Isoplot-R. Los datos geocronológicos (U-Pb) de 26 muestras de sedimentos recientes de río fueron graficados en el diagrama de Concordia tipo Wetherill mostrando todos los granos de zircón analizados (ver Apéndice 2). Estos datos han sido filtrados usando un porcentaje de discordancia $< 30\%$, aunque como control, también se representaron todos los valores con un porcentaje de discordancia $< 10\%$ y los resultados, en cuanto a poblaciones de edades se refiere, son prácticamente los mismos independientemente del filtro que se adopte (ver Apéndice 2, para su comparación). De esta manera se asegura la confiabilidad de los datos con un porcentaje de discordancia $< 30\%$ considerados en este trabajo. Los datos analíticos de U-Pb y de elementos traza en zircones son presentados en el Apéndice 3 y 5.

4.6 Isotopía de Hf en zircones mediante LA-MC-ICPMS

A partir de los fechamientos U-Pb fueron seleccionadas 21 muestras para los análisis isotópicos de Hf, los cuales fueron realizados en el mismo laboratorio (LEI; Figura 16a) empleando la técnica de ablación láser acoplada a un espectrómetro de masas Neptune Plus de tipo multicolector con plasma de acoplamiento inductivo (LA-MC-ICPMS).

Cada ablación consistió en aprovechar el hoyo (*spot*) en el que se realizaron los análisis de U-Pb y sobre el mismo realizar un hoyo de $44 \mu\text{m}$ de diámetro con la finalidad de obtener la lectura real del valor de Hf con respecto a la edad (Figura 16c). La energía y la tasa de repetición utilizada durante este proceso fue la misma que la aplicada para el

análisis del sistema isotópico U-Pb (densidad de energía $\sim 6 \text{ J/cm}^2$ a una tasa de repetición de 5 Hz). En cuanto al material ablacionado, este fue transportado en un flujo de 700 ml de He combinados con 11 ml de N_2 y posteriormente mezclado con gas Ar ($\sim 960 \text{ ml}$) para su subsecuente análisis en el espectrómetro de masas (Ortega-Obregón *et al.*, 2013).

El Neptune Plus está equipado con nueve detectores Faraday y una base con amplificadores, uno de $10^{-10}\Omega$, uno de $10^{-12}\Omega$ y ocho de $10^{-11}\Omega$. Estos últimos fueron utilizados para la colección estática de ^{172}Yb , ^{173}Yb , ^{175}Lu , $^{176}\text{Hf-Lu-Yb}$, ^{177}Hf , ^{178}Hf , ^{179}Hf y ^{180}Hf (Ortega-Obregón *et al.*, 2013).

Una de las consideraciones a cuidar durante la medición isotópica de Hf son los patrones de interferencia generados por ^{176}Lu e ^{176}Yb , ya que ambos están presentes en el zircón y tienen masas muy similares al ^{176}Hf , por lo que sus contenidos deben de ser evaluados y tomados en cuenta. Siguiendo esto, las interferencias isobáricas de Lu e Yb en ^{176}Hf fueron corregidas usando $^{176}\text{Lu}/^{175}\text{Lu} = 0.02656$ e $^{176}\text{Yb}/^{173}\text{Yb} = 0.79618$ ajustadas por fraccionamiento de masas usando $^{176}\text{Yb}/^{173}\text{Yb} = 1.35274$ (Chu *et al.*, 2002). Las composiciones isotópicas medidas fueron ajustadas a $^{176}\text{Hf}/^{177}\text{Hf} = 0.282135$ del estándar sintético MUN (Fisher *et al.*, 2011), las cuales se midieron de forma repetitiva para la calibración durante cada sesión analítica. Además de esto y con fines de cuidar y/o sustentar estas correcciones de interferencias, se analizaron en cada muestra los zircones naturales conocidos, tales como 91500 y Plešovice.

Durante el transcurso del estudio, el promedio medido de $^{176}\text{Hf}/^{177}\text{Hf}$ del estándar MUN fue de 0.282140 ± 0.000013 (2σ , $n = 244$), el cuál esta dentro del error del valor aceptado para este estándar ($^{176}\text{Hf}/^{177}\text{Hf} = 0.282135 \pm 0.000007$; Fisher *et al.*, 2011). Mas aún, la reproducibilidad interna y la precisión de las determinaciones isotópicas de Hf fueron verificadas por mediciones repetitivas durante la sesión analítica en el estándar natural 91500, Plešovice y de un estándar de zircón interno nombrado Panchita. Siguiendo esto, los valores promedio de $^{176}\text{Hf}/^{177}\text{Hf}$ obtenidos para el estándar 91500 fueron de 0.282304 ± 0.000027 (2σ , $n = 90$) y para Plešovice de 0.282488 ± 0.000020 (2σ , $n = 47$), ambos promedios o valores dentro de la incertidumbre analítica aceptada para las composiciones isotópicas de estos estándares (Fisher *et al.*, 2014). Asimismo, el resultado promedio ($^{176}\text{Hf}/^{177}\text{Hf}$) obtenido en el estándar interno Panchita

fue de 0.282143 ± 0.000018 (2σ , $n = 46$), restringiendo la reproducibilidad externa típicas de las mediciones isotópicas de Hf medidas en el LEI a ± 0.6 unidades de ϵHf .

Los resultados obtenidos fueron corregidos en el programa Iolite mediante estándares de calidad medidos e intercalados con las muestras de zircones. Posteriormente, los datos isotópicos de Hf fueron exportados a un archivo Excel para su manipulación. Los datos isotópicos de Lu-Hf en zircones son presentados en el Apéndice 4.

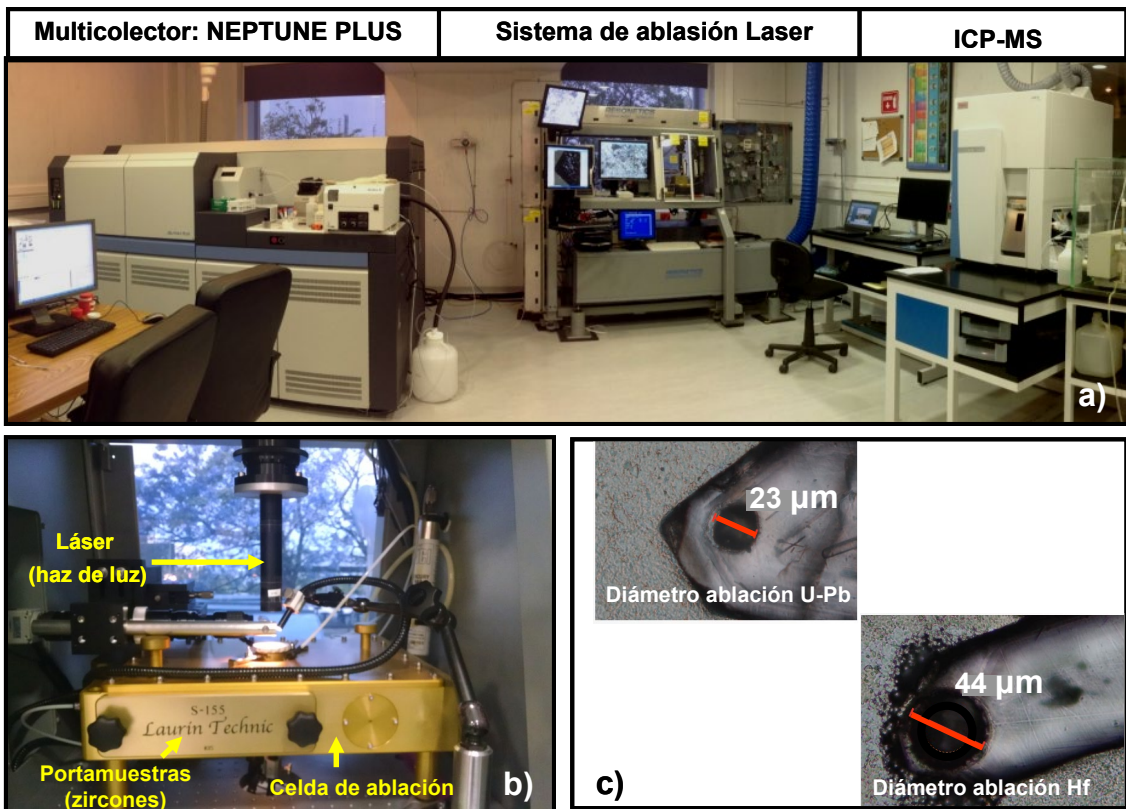


Figura 16. (a) Fotografía del Laboratorio de Estudios Isotópicos (LEI) del Centro de Geociencias, UNAM. Este laboratorio cuenta con un equipo de ablación láser acoplado a un ICP-MS (Espectrómetro de Masas con Plasma Acoplado Inductivamente) donde fueron realizados los análisis de U-Pb, y un Espectrómetro de Masas Multicolector Neptune Plus acoplado al mismo sistema de ablación láser donde fueron medidos los isótopos de Hf. (b) Portamuestras donde son colocados los zircones, y celda bajo atmósfera de He donde se lleva a cabo la ablación láser. (c) Imágenes de zircones donde se muestra el diámetro del hoyo post-ablación para fechamientos U-Pb e isotopía de Hf.

5. Resultados

5.1 Distribución de edades y procedencia de zircones detríticos

El muestreo obtenido a partir de los zircones detríticos a lo largo de la línea de costa es muy representativo, pues los datos de edades U-Pb obtenidos para 26 muestras de sedimentos recientes de río cubren la mayor variedad litológica reportada en la región (Centeno-García *et al.*, 2011; Morán-Zenteno *et al.*, 2018). La Figura 17 muestra la estimación de densidad Kernel (KDE, Vermeesch, 2018) de las edades de zircón en cada muestra de sedimento. Para una mejor visualización, estas fueron ordenadas geográficamente de NW a SE, usando como referencia al graben de Colima (Figura 4a) y limitadas a edades menores a 200 Ma para una mejor comparación (Figura 17). Véase Figura 4a como referencia para la localización de muestras.

En ese sentido, las muestras ubicadas al NW del área de estudio, localizadas en el Bloque Jalisco (Chi, Lit, Bur, Ame, Cua, Jun, Tec, Ipa y Mag) contienen zircones detríticos de edad Cretácico Superior-Paleoceno correspondientes a las edades del BPV (Schaaf *et al.*, 1995; Valencia *et al.*, 2013; Schaaf *et al.*, 2020), mientras que las muestras al flanco sureste del Bloque Jalisco (Pur, Mara y Arm), contienen zircones detríticos de edad similar aunque un poco más recientes correspondientes al BM (Schaaf *et al.*, 1995; Panseri *et al.*, 2007) (Figura 17).

Hacia la parte central del área de estudio, específicamente al SE del graben de Colima, los zircones detríticos de las muestras Mi-01 y Bal (Figura 17) arrojan edades del Paleoceno correspondientes por su posición geográfica y distribución de cuencas a las edades reportadas para el batolito Jilotlán (Schaaf *et al.*, 1995; Villanueva-Lascurain *et al.*, 2016). De igual manera las muestras Mi06 y Mi07 contienen zircones paleocenos, sin embargo, por su posición geográfica las edades de los zircones en los sedimentos corresponden a las reportadas para el batolito Aquila, el cual es drenado por los ríos en los que se colectaron las muestras (Schaaf *et al.*, 1995). Por otra parte, y al SE del batolito Aquila, los zircones detríticos de las muestras Mi09, Mi13, Mi15 y Mi18, contienen abundantes zircones pertenecientes al Cretácico Inferior (Figura 17), coincidentes con las edades reportadas para las sucesiones volcanosedimentarias pertenecientes a la suite Zihuatanejo que aflora en esta región (Centeno-García *et al.*, 2011; Villanueva-Lascurain *et al.*, 2016).

Por último, y más hacia el SE de la región, la distribución de los cuerpos intrusivos y unidades volcánicas es más heterogénea, por lo que fue complicado hacer una separación. En esta región la muestra Mi20 contiene zircones del Eoceno temprano que fueron trazados, por ser coincidentes en edad, al batolito Arteaga (Morán-Zenteno *et al.*, 2018). Asimismo, las muestras de sedimentos Gr01, Gr04, Gr06 y Gr07 contienen esencialmente zircones detríticos con edades eocénicas, en este caso, solo las muestras Gr06 y Gr07 con zircones del Eoceno tardío fueron consideradas como provenientes del ensamblaje El Camalote (Martini *et al.*, 2009; Ferrari *et al.*, 2014; Morán-Zenteno *et al.*, 2018).

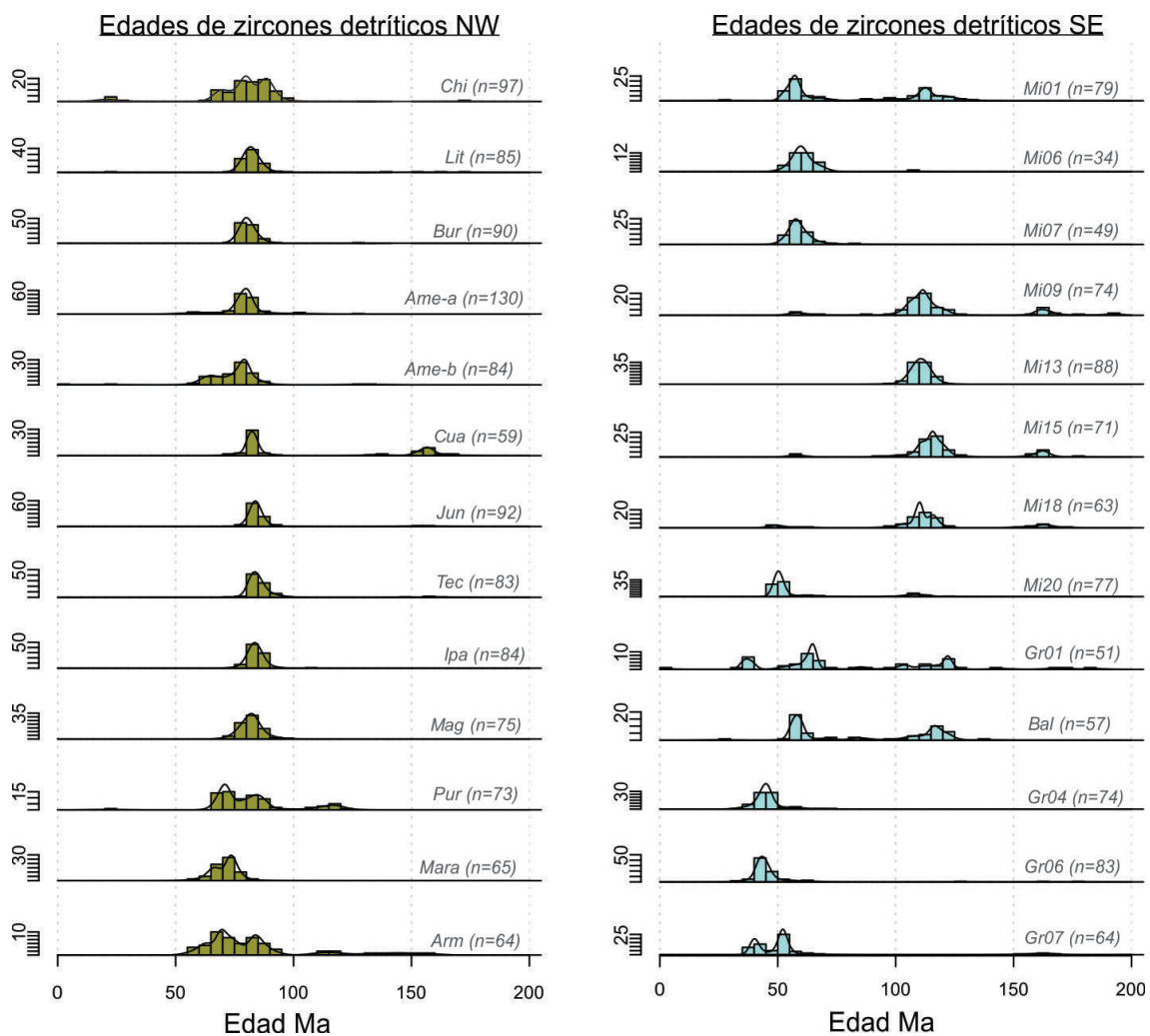


Figura 17. Histograma de edades donde se observan todas las muestras estudiadas de zircones detríticos, ordenadas geográficamente como NW y SE a partir del graben de Colima y limitadas a los últimos 200 Ma para su mejor comparación. Hacia el sector NW las edades de los zircones detríticos son muy homogéneas, salvo algunas muestras como Cua con zircones jurásicos y la muestra Pur y Arm con zircones del Cretácico Inferior. En contraste, hacia el sector SE los zircones detríticos están caracterizados por distribuciones de edades más heterogéneas.

Granos de zircón con edades más viejas que el Cretácico Inferior y menores a 200 Ma son mucho menos abundantes y son encontrados como granos aislados a lo largo de la región. Siguiendo esto, zircones del Jurásico Medio a Superior son encontrados de manera significativa sobre el Bloque Jalisco concentrados esencialmente en la muestra Cua y en menor medida en las muestras Jun y Tec (Figura 17). Geográficamente estas muestras están una enseguida de la otra, y sus productos son derivados de las cuencas hidrográficas a los alrededores y sobre el Distrito Minero Cuale (Figura 4a), región donde han sido reportadas en cuerpos riolíticos estas edades jurásicas (154-157 Ma; [Bissig et al., 2008](#)). Zircones con edades jurásicas (Mi09, Mi15, Mi18) también se encontraron en muestras recolectadas al SE del graben de Colima, los cuales podrían derivar de pequeñas intrusiones jurásicas, tales como el granito Macías (Figura 4a), fechado en 163 Ma y ubicado en los alrededores del Complejo Arteaga ([Centeno-García et al., 2011](#)).

Al igual que los granos jurásicos, los zircones con edades mayores a 200 Ma se encuentran distribuidos en gran parte del área de estudio, siendo comunes en la región del Bloque Jalisco y aún mas evidentes en las cuencas de drenaje al SE del graben de Colima. En la Figura 18 se muestra la estimación de densidad Kernel (KDE, [Vermeesch, 2018](#)) de las edades de zircón en cada muestra de sedimento, en este caso, y ordenada geográficamente como NW y SE (a partir del graben de Colima) fueron representados todos los zircones con edades mayores a 200 Ma. Zircones con edades mayores a 200 Ma son comunes en las cuencas de drenaje de las muestras Lit, Bur, Ame, Cua, Jun, Tec, Ipa, al norte del Bloque Jalisco (Figura 18), y coinciden con las edades de zircones detríticos reportadas en rocas metasedimentarias hacia esta misma región ([Valencia et al., 2013](#)). Hacia el flanco SE del Bloque Jalisco, los zircones detríticos de las muestras Mag, Pur, Mara y Arm no muestran granos de zircón mayores a 200 Ma, quizás por la ausencia de estas ventanas de basamento (rocas metasedimentarias). Por otra parte, granos de zircón con edades mayores a 200 Ma son muy evidentes en las muestras de sedimento al SE del graben de Colima (Mi01, Mi09, Mi13, Mi15, Mi18, Mi20, Gr01, Bal, Gr04, Gr06 y Gr07) (Figura 18), controlado esencialmente por una mayor exposición de rocas pertenecientes al Complejo Arteaga ([Centeno-García et al., 2011](#)). Solo en las muestras Mi06 y Mi07, los granos de zircón con edades mayores a 200 Ma están ausentes, factor que podría estar relacionado al pequeño tamaño de la cuenca hidrográfica.

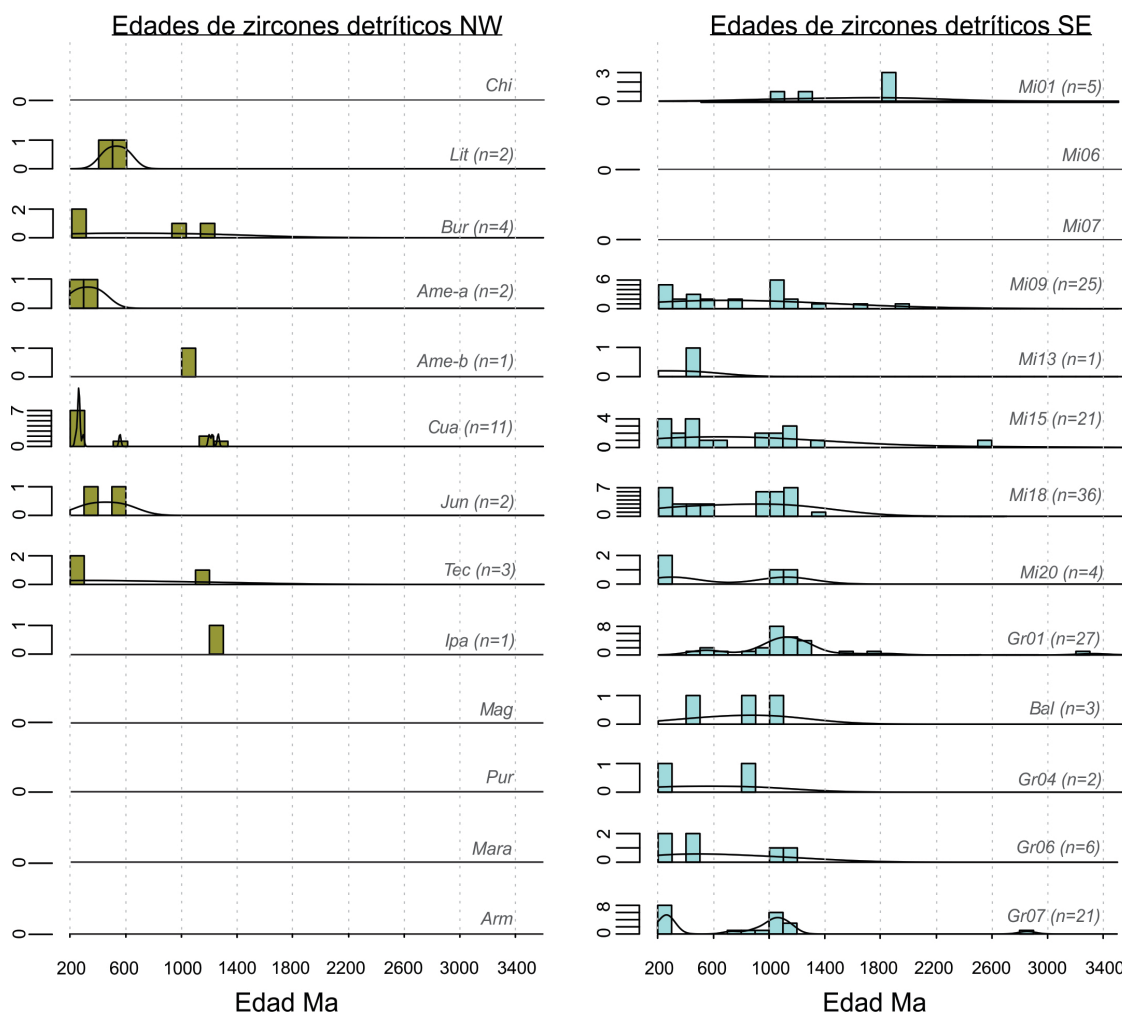


Figura 18. Histograma de edades donde se observan todas las muestras estudiadas de zircones detríticos, ordenadas geográficamente como NW y SE a partir del graben de Colima y representadas por zircones con edades mayores a 200 Ma. Hacia el sector NW, los zircones detríticos con edades mayores a 200 Ma se restringen hacia la parte norte del Bloque Jalisco, mientras que hacia la parte SE del graben de Colima los granos de zircón con edades mayores a 200 Ma son muy consistentes a lo largo del área.

Cabe destacar, que gran parte de los sitios de colecta de muestras comprenden cuencas hidrográficas relativamente pequeñas (Figura 11), por ende, las distribuciones de las edades de los zircones en estas muestras de sedimentos se restringen en gran medida a ciertos cuerpos batolíticos o unidades litológicas en específico (Figura 17). En contraparte, los sitios de colecta de las muestras donde las cuencas hidrográficas son más grandes (p. ej., Arm, Mi01, Gr01 y Bal), la distribución de edades de los zircones tiende a ser más amplia (Figura 17). Por consiguiente, el tamaño tan amplio de la cuenca hidrográfica, así como la presencia de unidades sedimentarias en estas cuencas, son factores que controlan la amplia distribución de edades en las muestras de sedimentos.

5.2 Espectro de edades U-Pb: pulsos magmáticos

Graficando todos los datos de zircones detríticos en su conjunto se puede observar una distribución muy amplia de las edades U-Pb, donde resaltan al menos seis pulsos magmáticos bien definidos (Figura 19). Uno durante el Jurásico Medio-Inferior (pico en ~163 Ma), seguido por el Cretácico Inferior (pico en ~111 Ma), el Cretácico Superior (pico en ~82 Ma), el Paleoceno-Eoceno (pico en ~57 y 52 Ma) y el último durante el Eoceno (pico en ~45 Ma). De interés en estos pulsos magmáticos identificados es que coinciden con las edades reportadas en la literatura para las unidades litológicas que afloran en la región. En ese sentido, el primer pulso magmático es consistente con el emplazamiento de rocas jurásicas reportadas en el Bloque Jalisco hacia la región de Cuale (154-157 Ma; [Bissig et al., 2008](#)) y al SE del graben de Colima con el Granitoide Macías (163 Ma; [Centeno-García et al., 2011](#)), por lo que para fines prácticos se nombró a este pulso magmático como suite Cuale-Macías (pico en ~163 Ma, rango de edades predominantes entre ~172-145 Ma). Es importante mencionar que estas poblaciones de edades muestran una ligera correspondencia con rocas ígneas reportadas en otras regiones del país, tales como el llamado Arco Nazas, y más cercano, con los granitoides en Islas Marías ([Barboza-Gudiño et al., 2008](#); [Pompa-Mera et al., 2013](#); [Lawton y Garza et al., 2014](#); [Boschman et al., 2018](#); [Peña-Alonso et al., 2018](#)). Por otra parte, el pulso del Cretácico Inferior es correspondiente con las edades de las sucesiones volcanosedimentarias de la suite Zihuatanejo del terreno Guerrero (pico en ~111 Ma, rango de edades entre 145-100 Ma), el cual se correlaciona con las edades reportadas para el arco de islas Alisitos que aflora en Baja California ([Busby et al., 1998](#); [Busby, 2004](#); [Centeno-García et al., 1993, 2011](#); [Hildebrand y Whalen, 2014](#); [Morris et al., 2019](#)), mientras que los pulsos del Cretácico Superior, Paleoceno y Eoceno son coincidentes con las edades reportadas para el Orógeno Mexicano (picos en aproximadamente 82, 57, 52 y 45 Ma, rango de edades entre 100-35 Ma) ([Schaff et al., 1995](#); [Fitz-Díaz et al., 2018](#); [Moran-Zenteno et al., 2018](#)).

Partiendo de esto y analizando los zircones detríticos más a detalle, se pudo visualizar como los pulsos magmáticos identificados hacia la región NW y SE a partir del graben de Colima, no parecen mostrar una distribución homogénea. Geográficamente lo que se puede leer al respecto es que las muestras al NW del graben de Colima están caracterizadas por un pico dominante con edades del Cretácico Superior (Figura 19b),

mientras que los picos de edades al SE son más consistentes con granos de zircón pertenecientes predominantemente al Cretácico Inferior y Eoceno (Figura 19b), evidenciando con esto, un registro geológico con diferencias importantes en el espacio. Más aún, picos de edades jurásicas son comunes a ambas regiones, siendo más evidentes al SE. Granos de zircón con una edad mayor a 200 Ma son consistentes a lo largo del área y reflejan al menos tres picos bien definidos, siendo el más prominente de edad Pérmica en ~258 Ma, seguido por un pico más pequeño del Ordovícico Medio en ~462 Ma y picos medianos del Mesoproterozoico en ~1018 y 1171 Ma (Figura 19b). Estos picos de edades mayores a 200 Ma son consistentes con los picos de edades reportados en rocas metasedimentarias para la región del Bloque Jalisco hacia el NW (Valencia *et al.*, 2013) y en areniscas para la región del Complejo Arteaga hacia el SE (Centeno-García *et al.*, 2011), con la salvedad de un pico pequeño en 1883 Ma y algunos granos Arcaicos presentes en las muestras de este estudio. Otro punto por resaltar es que los zircones detríticos menores a ~34 Ma correspondientes a la Sierra Madre Occidental y FVTM, tienden a ser muy escasos a lo largo del área de estudio, esencialmente en el sector W, donde ambas provincias muestran sus mayores expresiones en el área.

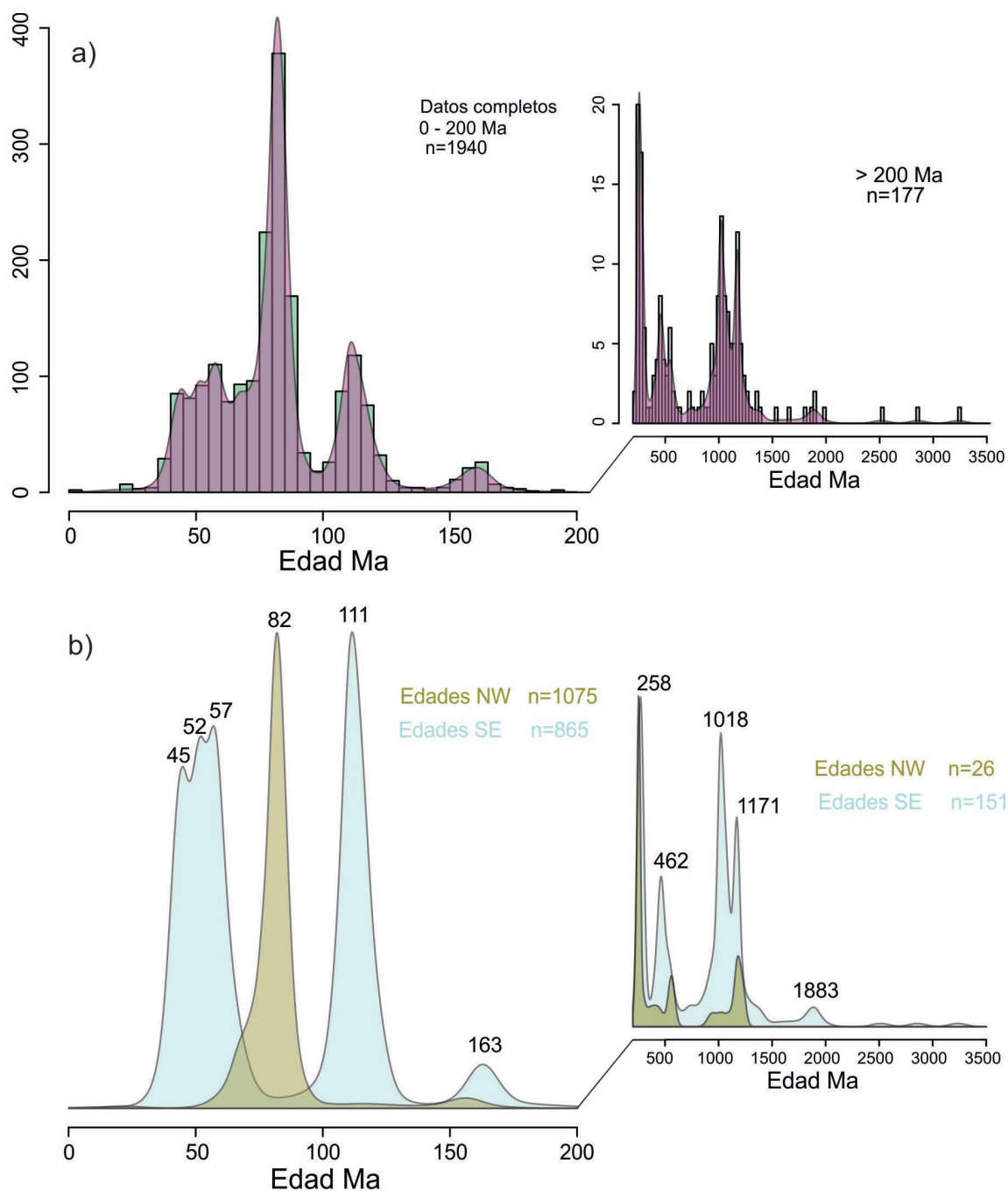


Figura 19. (a) Histogramas de edades y curvas de distribución (KDE) de todo el conjunto de datos de zircones detríticos. Aquí se puede observar cómo el espectro de edades U-Pb define varios picos o pulsos magmáticos importantes. (b) Distribución de edades de todo el conjunto de datos separadas por región NW y SE (con límite en el graben de Colima), donde se observan diferentes picos de edades o pulsos magmáticos consistentes con las diferentes suites magmáticas que han sido reportadas en la región. Nótese como las edades de los zircones detríticos mayores a 200 Ma de la región SE correspondientes al Complejo Arteaga muestran picos de edades Grenvilianas (1171 y 1018 Ma), Panafricanas (462 Ma) y Permo-Triásicas (258 Ma), distribuciones de edades similares a otros trabajos ([Centeno-García et al., 2011](#); [Valencia et al., 2013](#)). A destacar es como los pulsos magmáticos menores a 200 Ma son diferentes en cada área (NW y SE), mientras que los zircones detríticos mayores a 200 Ma tienen distribuciones de edades muy similares independientemente de su localización.

Considerando las dimensiones de los aparatos volcánicos y productos de la FVTM hacia el sector W, los ríos o cauces de la muestra AME deberían estar lavando gran parte de esta área, caracterizada por la presencia de rocas volcánicas de composición riolítica (Gómez-Tuena *et al.*, 2018b), sin embargo, esto no se ve reflejado en las edades de los zircones detríticos analizados (Figura 17). Al igual que la muestra AME, la cuenca hidrográfica de la muestra ARM cubre gran parte del flanco W del volcán de Colima, no obstante, en esta muestra no fueron encontrados zircones del Cuaternario correspondientes a este volcán (Figura 17). Por lo anterior, se puede asumir que la FVTM es un arco que genera muy poca o nula cantidad de zircones, hacia este sector.

Con fines de entender las diferencias en el espacio de la región desde el punto de vista geocronológico y petrogenético, se hizo un esfuerzo por asociar los zircones detríticos a los principales cuerpos batolíticos y fuentes volcánicas locales. Para poder hacer una buena asociación al respecto, en este trabajo se utilizó la geología detallada de la zona a la cual se le sobrepuso los límites de las cuencas hidrográficas (ver detalle en Figura 11). De esta forma y con el apoyo de la posición geográfica de las muestras de sedimentos se pudo asociar los zircones detríticos a los diferentes cuerpos ígneos. Es importante mencionar, que los zircones con ambigua proveniencia no fueron considerados como parte de estas separaciones. Con base en esto, la discusión del presente trabajo está encaminada a los zircones detríticos correspondientes al BPV y BM, ubicados sobre el Bloque Jalisco, los batolitos de Aquila y Jilotlán, ubicados al SE del graben de Colima, las sucesiones correspondientes a la suite Cuale-Macías del Jurásico Medio-Superior y la suite Zihuatanejo del terreno Guerrero del Cretácico Inferior. En cuanto a los zircones eocénicos es difícil hacer una asociación debido a que hay pocos batolitos identificados de manera individual, sin embargo, y de forma cuidadosa fue considerado el batolito Arteaga (Morán-Zenteno *et al.*, 2018) del Eoceno temprano y el ensamblaje El Camalote del Eoceno tardío ubicado a los alrededores de Zihuatanejo (Martini *et al.*, 2010). De manera más general, los zircones detríticos > 200 Ma fueron considerados como detritos depositados inicialmente en la Cuenca Arteaga (cuenca desarrollada en la margen pasiva; Centeno-García *et al.*, 2008). Para fines prácticos, a partir de este apartado, a todos los zircones detríticos > 200 Ma se les nombró como Complejo Arteaga, aquí también se incluyen los datos de zircones detríticos correlativos del Bloque Jalisco.

5.3 Isotopía de Hf en zircones

Se graficaron los datos isotópicos de Hf correspondientes a 19 muestras. Para una mejor lectura, los datos fueron graficados en función de su edad de cristalización, separados por área (Figura 20a) y por pulsos magmáticos asociados a batolitos individuales y suites magmáticas (Figura 20b).

Siguiendo este lineamiento, los zircones detríticos correspondientes en edad al Complejo Arteaga (> 200 Ma) muestran una dispersión isotópica muy amplia (en cuanto a valores de $\epsilon\text{Hf}(t)$ se refiere) tanto en el sector NW como SE (Figura 20a), sugiriendo la participación de una amplia variedad de fuentes continentales. A diferencia de este evento, los pulsos magmáticos más recientes muestran una variación isotópica más restringida indicando una proveniencia más local de sus fuentes. En ese sentido, los zircones detríticos correspondientes a la suite Cuale-Macías (pico en ~163 Ma) presentan arreglos verticales muy variables e isotópicamente enriquecidos (respecto a la línea de evolución del manto empobrecido, Figuras 20a-b), independientemente de la posición geográfica en la cual fueron muestreados (Figuras 20a-b). En contraste, los zircones detríticos del Cretácico Inferior correspondientes a la suite Zihuatanejo (pico en ~111 Ma) son más homogéneos, es decir, grafican como componentes muy empobrecidos en términos de Hf, incluso algunos zircones se acercan a la línea de evolución del manto (Figuras 20a-b).

Hacia la región del Bloque Jalisco (Cretácico Superior-Paleoceno), los zircones detríticos derivados del BPV (pico en ~82 Ma) muestran una disminución importante en términos de Hf con valores de $\epsilon\text{Hf}(t)$ en promedio desde -5 hasta +5, involucrando un componente enriquecido (Figura 20b). A la par de estos magmas y con algunas edades traslapadas, los zircones correspondientes al BM (pico en ~73 Ma), muestran valores de $\epsilon\text{Hf}(t)$ en promedio de +8 a +12, implicando un componente empobrecido (Figura 20b). De interés en estos datos isotópicos de Hf es que ambos batolitos a la misma edad muestran contrastantes valores de $\epsilon\text{Hf}(t)$, involucrando génesis distintas en un mismo periodo de tiempo. De igual manera, solo que al SE del Graben de Colima, el batolito de Jilotlán (pico en ~58 Ma) y el batolito Aquila (pico en ~58 Ma), ambos contemporáneos, muestran distintas composiciones isotópicas, siendo el primero más enriquecido respecto al batolito de Aquila (Figura 20b). Más al SE, los zircones

correspondientes al batolito Arteaga (pico en ~ 50 Ma) y los asignados al ensamblaje El Camalote (pico en ~ 43 Ma), vuelven a mostrar estos contrastes isotópicos, siendo más empobrecido este último (Figura 20b).

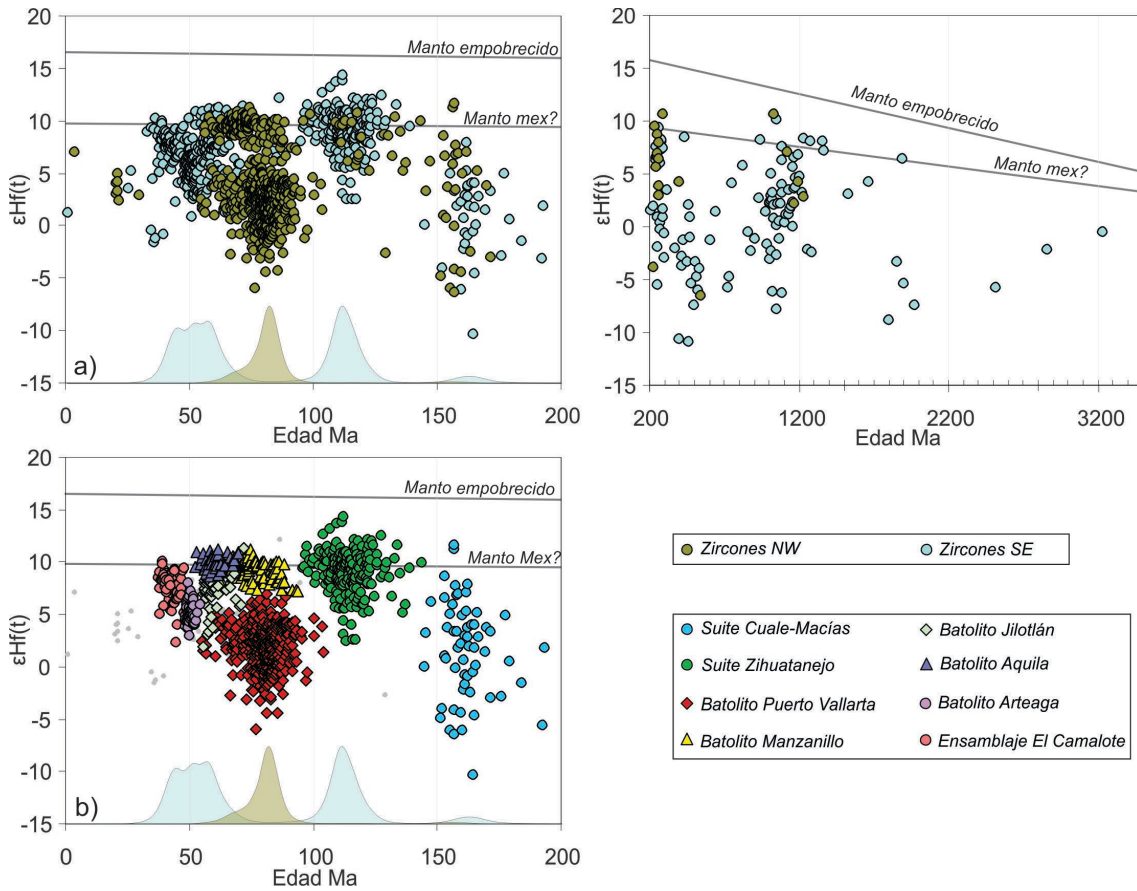


Figura 20. Gráficas que muestran las composiciones isotópicas de Hf con respecto a su edad U-Pb de todos los zircones detríticos. (a) Las composiciones isotópicas de Hf tanto en el sector NW como SE, no muestran un patrón definido que los distinga. (b) Datos separados de fuentes ígneas específicas con base en el mapa geológico de la Figura 4. En la gráfica los datos isotópicos en términos de Hf parecen mostrar un patrón oscilante a través del tiempo, donde los valores de la suite jurásica Cuale-Macías muestran patrones más enriquecidos de Hf, respecto a la suite Zihuatanejo más empobrecida del Cretácico Inferior, y en rocas más jóvenes, vuelve a disminuir hacia valores enriquecidos de Hf en el BPV. Siguiendo la evolución en el tiempo este patrón parece ser muy consistente en los cuerpos ígneos subsiguientes. Por otro lado, los zircones con ambigua proveniencia fueron graficados en gris. La línea del manto empobrecido fue calculada usando $^{176}\text{Hf}/^{177}\text{Hf}_{\text{ME}} = 0.28325$ y $^{176}\text{Lu}/^{177}\text{Hf}_{\text{ME}} = 0.0384$ (Blichert-Toft y Albaredo, 1997) y la evolución hipotética del manto mexicano (Manto Mex) fue graficada usando los valores isotópicos más empobrecidos del magmatismo intraplaca reportados en la FVTM con valores de $^{176}\text{Hf}/^{177}\text{Hf} = 0.283059$ y $^{176}\text{Lu}/^{177}\text{Hf} = 0.0362$ (muestra MCH-06-12, Texcal Flow; Straub *et al.*, 2015).

En resumen, lo que se puede leer de los datos isotópicos de Hf concentrados al NW y SE del graben de Colima es que no parecen mostrar una correspondencia geográfica marcada, es decir, en ambos sectores se tienen tanto valores empobrecidos como enriquecidos de Hf (Figura 20a). En ese sentido, los zircons detríticos correspondientes al BPV son tan variables y enriquecidos en términos de Hf como los observados en la suite jurásica Cuale-Macías (Figura 20b). En contraparte, los batolitos Manzanillo y Aquila y el ensamblaje El Camalote muestran valores isotópicos de Hf más homogéneos y empobrecidos, consistentes con los zircons de la suite Zihuatanejo (Figura 20b). Por otro lado, los zircons del batolito Jilotlán y batolito Arteaga grafican a valores intermedios, respetando los extremos más enriquecidos del BPV y los extremos más empobrecidos del BM (Figura 20b).

5.4 Edades Modelo de Hf en zircons

Un uso común del sistema Hf en un zircón es calcular el tiempo en el que un fundido es separado del manto superior empobrecido para dar lugar a la formación de corteza; esto es conocido como edades modelo de Hf en zircons (Roberts y Spencer, 2014). El fundamento básico de las edades modelo de Hf en zircons consiste en calcular una edad modelo de Hf en una y dos etapas (*single-stage and two-stage Hf model ages*). Las edades modelo de Hf (T_{DM}) en una etapa, conocidas también como "edades modelo del manto empobrecido" son calculadas a partir de la relación $^{176}\text{Lu}/^{177}\text{Hf}$ medida en el zircón, y su resultado representa la edad mínima para la fuente del magma. En cambio, para el cálculo de las edades modelo de Hf (T_{DM}^C) en dos etapas, conocidas también como "edades modelo corticales de Hf", como no se conoce la composición del magma parental (que idealmente es igual a la composición de la fuente del magma), en el cálculo de la edad modelo se asume un valor en la relación $^{176}\text{Lu}/^{177}\text{Hf} = 0.015$, que en este caso representa, el valor promedio de la corteza continental superior (Griffin *et al.*, 2002), dando como resultado edades más antiguas, que las propiamente calculadas para las edades modelo Hf (T_{DM}). Los resultados calculados de ambas edades modelo Hf (T_{DM} y T_{DM}^C) se presentan en el Apéndice 4.

Con base en lo anterior, y con la finalidad de conocer los diferentes componentes corticales involucrados de los distintos pulsos, fueron graficadas las edades modelo corticales de Hf o en dos etapas (T_{DM}^C) de los zircons detríticos (Figura 21).

Lo primero que resalta en cuanto a las edades modelo Hf en dos etapas (T_{DM}^C) es la amplia dispersión de edades modelo para los granos de zircón del Complejo Arteaga (edades paleo-mesoproterozoicas) y las correspondientes a la suite jurásica Cuale-Macías con edades dominantes meso y neoproterozoicas (Figura 21). En contraste, la distribución de edades modelo Hf (T_{DM}^C) observadas en los demás pulsos es más homogénea. Siguiendo esto, los picos mayores de edades modelo observados en los batolitos Puerto Vallarta, Jilotlán y Arteaga, son consistentes con edades meso y neoproterozoicas, mientras que los zircons de la suite Zihuatanejo, batolitos Manzanillo y Aquila están caracterizados por presentar edades relativamente más jóvenes correspondientes al Paleozoico temprano (Figura 21).

De acuerdo con lo anterior, parece existir una sistemática entre los diferentes pulsos (Figura 21), si se asume esto, ninguno de los zircons detríticos estudiados debería indicar adiciones juveniles al continente en cualquier periodo de tiempo geológico. Esto lleva a pensar que realmente las edades modelo calculadas a partir del manto empobrecido por lo general representan mezclas de diferentes componentes corticales, por lo que es necesario algunas veces manejarlas con ciertas reservas. De hecho, [Arndt y Goldstein \(1987\)](#) con base en el sistema isotópico Sm-Nd mostraron que las edades modelo reportadas representan un promedio de las fuentes que alimentan los magmas, es decir, el magma es el producto de materiales de diferente fuente, y, por consiguiente, diferentes edades de extracción mantélica. En el sistema isotópico Lu-Hf la misma complejidad existe, la mezcla de fuentes es casi inevitable, dada la heterogeneidad litológica en la corteza continental, la incorporación común de rocas sedimentarias en los sistemas magmáticos, y la amplia interacción entre corteza y manto en la formación de batolitos graníticos ([Kemp y Hawkesworth, 2014](#)).

Para atender dicho caso fue graficada la línea de evolución del Manto-Mex (Figura 20), obtenida a partir de la composición isotópica de Hf de la muestra de roca total MCH06-12, correspondiente al flujo de lava del volcán monogenético Texcal Flow, ubicado en la Sierra de Chichinautzin ([Straub et al., 2015](#)). Esta muestra representa el magma más primitivo con características intraplaca correspondientes a la FVTM, la cual al igual que en otras regiones, representan el mejor acercamiento sobre las composiciones del manto bajo el territorio mexicano ([Díaz-Bravo et al., 2014](#); [Parolari et al., 2018](#); [Straub et al., 2015](#)).

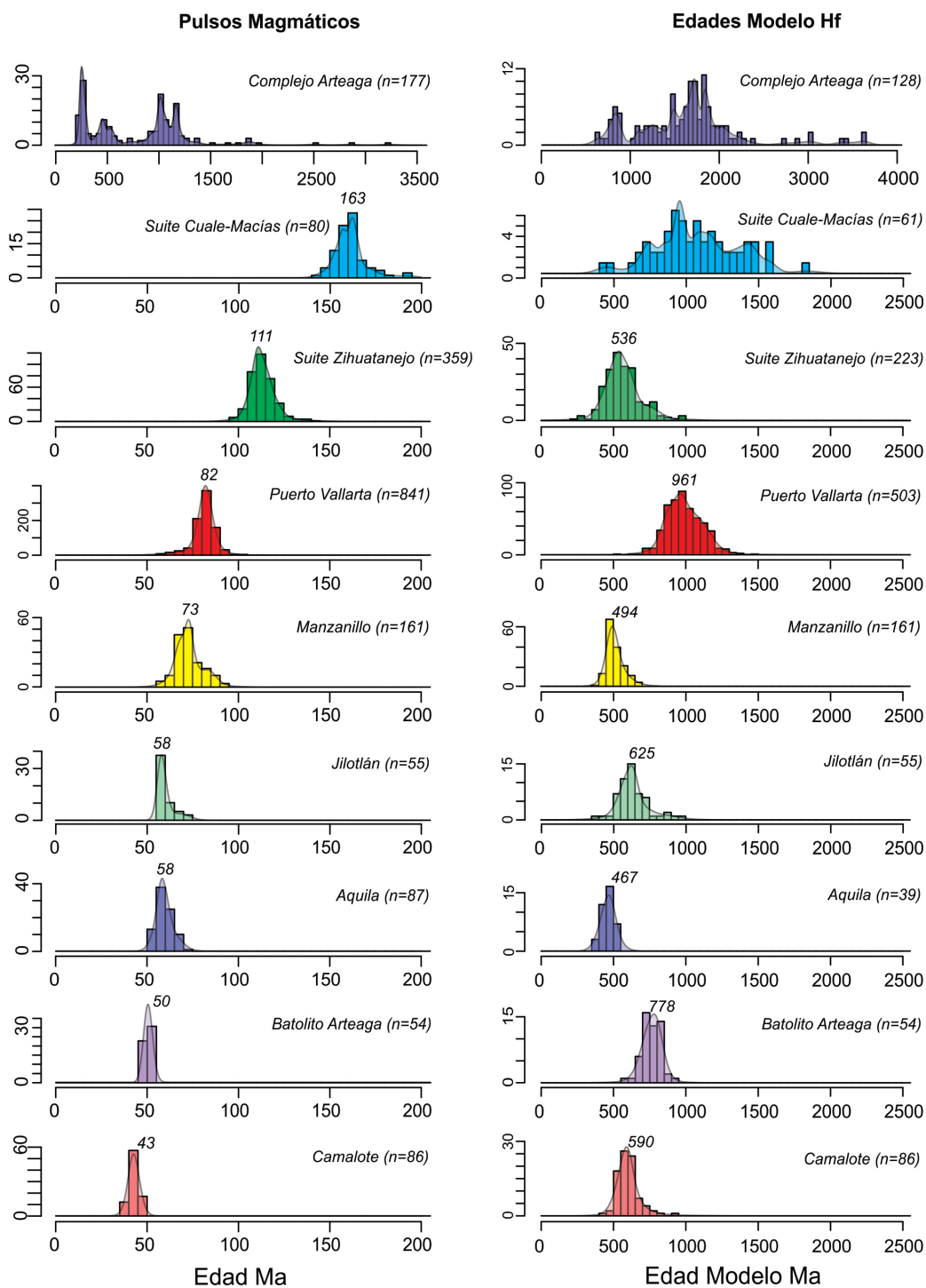


Figura 21. Histogramas que muestran las edades U-Pb y edades modelo Hf en dos etapas (T_{DM}^C) de los zircons detríticos asociados a las suites y cuerpos batolíticos del SW de México. Nótese cómo los pulsos magmáticos indicados por los picos en las edades U-Pb muestran un decremento en edad hacia la región SE (ver mapa geológico como referencia, Figura 4a). En contraste, las edades modelo corticales de Hf (T_{DM}^C) en estos mismos cuerpos ígneos muestran un patrón de zigzag. Las edades modelo corticales de Hf (T_{DM}^C) fueron calculadas usando la relación $^{176}\text{Hf}/^{177}\text{Hf} = 0.28325$, similar al valor promedio del MORB (Blichert-Toft y Albaredo, 1997) y la relación $^{176}\text{Lu}/^{177}\text{Hf} = 0.015$ considerada como un promedio de la corteza continental (Griffin *et al.*, 2002). Para estos mismos cálculos, el valor de la constante de decaimiento de ^{176}Lu utilizado es de 1.867×10^{-11} años propuesta por Söderlund y colaboradores (2004).

Estudios geoquímicos de rocas ígneas recientes de la FVTM han documentado que estos magmas primitivos derivan de la fusión parcial de un manto peridotítico, en la cual, los valores de ϵ_{Hf_0} actuales pueden ser como más bajos +9.7 (Díaz-Bravo *et al.*, 2014; Parolari *et al.*, 2018; Straub *et al.*, 2015). Estos magmas primitivos con insignificante influencia de la corteza o de componentes corticales de la placa subducida, deben de representar inequívocamente contribuciones juveniles al continente, aun cuando estén por debajo 6 unidades de épsilon con respecto a los valores globales reportados para el manto empobrecido ($\epsilon_{\text{Hf}_0}=16.4$; Belousova *et al.*, 2010). Aunque se desconoce si un manto enriquecido como este también estuvo presente por debajo de México en el pasado, si es el caso, entonces un número significativo de los zircones estudiados, y especialmente los que pertenecen al pulso ígneo del Cretácico Inferior podrían ser considerados juveniles también (Figura 20), y sus edades modelo corticales de Hf (T_{DM}^{C}), sería de poco significado en este caso (Figura 21). Con base en estas consideraciones, es necesario utilizar varias herramientas geoquímicas y geológicas para realizar una mejor interpretación de las edades modelos, ya que, si se manejan de manera individual, estas pueden conducir a interpretaciones erróneas. Más adelante se abordará más sobre este tema.

5.5 Elementos traza en zircones

Recientemente el uso de elementos traza en zircones se ha convertido en un criterio importante a considerar para conocer la fuente de los magmas e incluso para discriminar ambientes tectono-magmáticos (Grimes *et al.*, 2015). La escalada que ha tenido el uso de este mineral en cuanto a sus elementos traza para fines petrogenéticos radica en su alto contenido de REE, mostrando patrones positivos de los mismos cuando se normalizan a condrita (altos contenidos de HREE respecto a LREE) con anomalías positivas de Ce comparadas con La y Pr y empobrecimientos en Eu relacionados a Sm y Gd (Figura 22).

Por otra parte, relaciones como Th/U han sido manejadas para discernir entre ambientes magmáticos y metamórficos. En ese sentido relaciones $\text{Th/U} > 0.1$ han sido interpretadas como zircones de origen ígneo, mientras que inferiores a este valor como zircones de origen metamórfico (Rubatto, 2002). De acuerdo con lo anterior, los

zircones detríticos correspondientes a los distintos pulsos magmáticos son consistentes con zircones de origen ígneo interpretado por la relación $Th/U > 0.1$ (Figura 23).

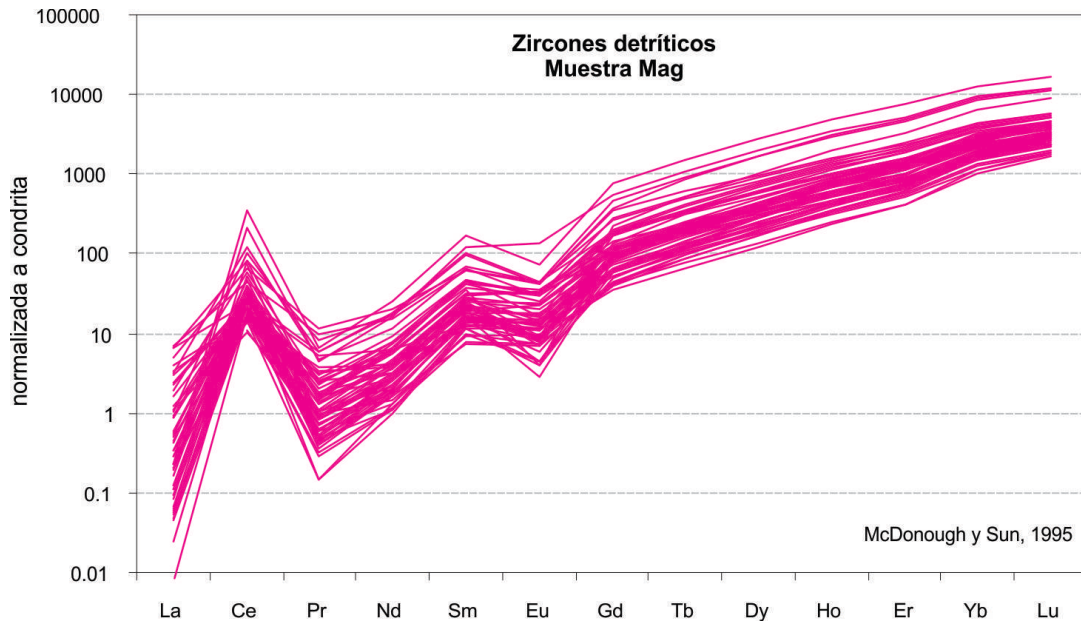


Figura 22. Patrones de los elementos de REE normalizados a condrita de zircones detríticos contenidos en muestra Mag. Nótese los altos contenidos de HREE respecto a las LREE con anomalías positivas de Ce. Normalización de datos a partir de [McDonough y Sun \(1995\)](#).

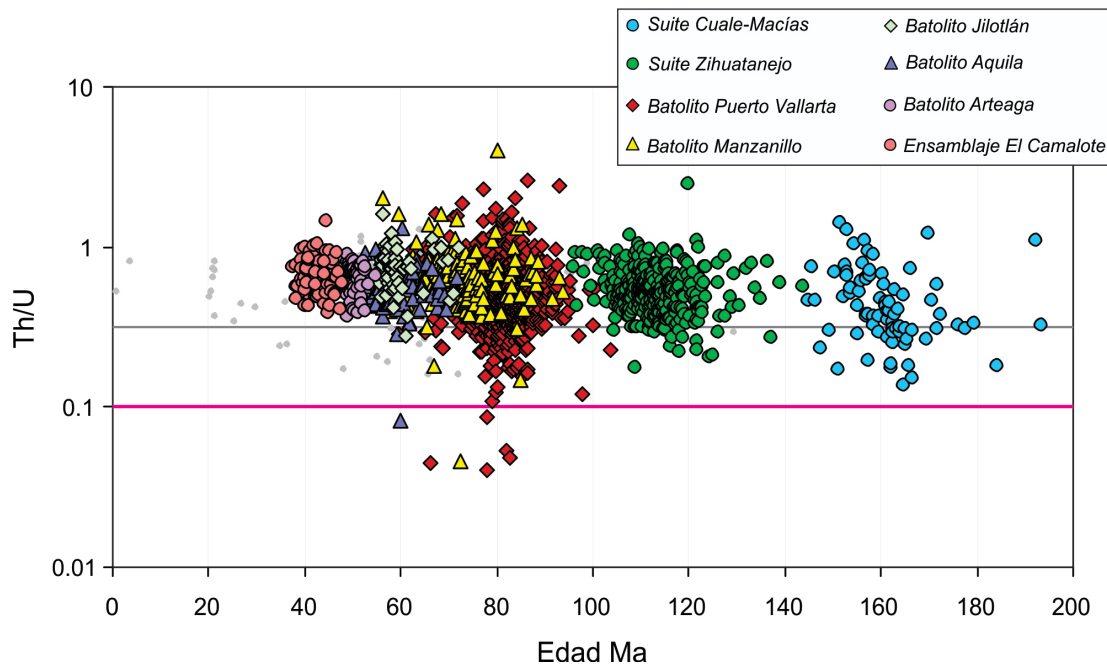


Figura 23. Gráfica que muestra la relación Th/U contra la edad. Los zircones graficados por encima de la línea rosa representan zircones de origen ígneo, mientras que los zircones graficados por debajo de esta misma línea son interpretados como de origen metamórfico ([Rubatto, 2002](#)). Nótese como prácticamente todos los zircones de los pulsos magmáticos son de origen ígneo.

En cuanto a la relación U/Yb en zircones se ha manejado que altas relaciones en estos elementos son consistentes con fuentes enriquecidas (contribuciones corticales), mientras que bajas relaciones U/Yb son indicativas de fuentes más empobrecidas, tipo basaltos de dorsales meso-oceánicas (*mid-ocean ridge basalts*, MORB) (Grimes *et al.*, 2015). Por otro lado, las anomalías de Eu (Eu/Eu*) en zircones son frecuentemente empleadas como trazadores para conocer el estado de oxidación de un magma (Trail *et al.*, 2012). De acuerdo con esto, algunas distinciones y similitudes importantes pueden ser observadas entre los zircones de los diferentes pulsos magmáticos. Por ejemplo, los zircones del Cretácico Inferior de la suite Zihuatanejo tienen relaciones U/Yb más bajas y anomalías negativas de Eu menos prominentes que los zircones de la suite jurásica Cuale-Macías, características que también se correlacionan con sus diferentes composiciones isotópicas de Hf (Figuras 24a-b). Al igual que la suite Zihuatanejo, valores menores de U/Yb y anomalías negativas de Eu menos prominentes, así como valores más positivos de $\epsilon\text{Hf}(t)$ son también observados en los zircones de los batolitos Aquila y Manzanillo, aunque los zircones en este último son en términos composicionales más variables que los del primero. De interés en los zircones de estos cuerpos batolíticos, son los del batolito Aquila, pues se distinguen por sus bajos contenidos de U (< 100 ppm), a diferencia de los zircones isotópicamente enriquecidos del BPV y batolito de Jilotlán, los cuales tienen las relaciones U/Yb más altas a valores equivalentes Eu/Eu* (Figuras 24c-d). Por último, los zircones del Eoceno correspondientes al batolito de Arteaga son similares a los del batolito de Jilotlán, mientras que los zircones del ensamblaje El Camalote son más variables, pero se asemejan más a los del batolito Manzanillo (Figuras 24e-f).

Otro punto por destacar en los zircones presentes en los cuerpos batolíticos en la gráfica de Eu/Eu* contra valores de $\epsilon\text{Hf}(t)$, es que los diferentes pulsos magmáticos no correlacionan entre ellos, sino muestran patrones más bien verticales, observación que será discutida más adelante (Figura 24d).

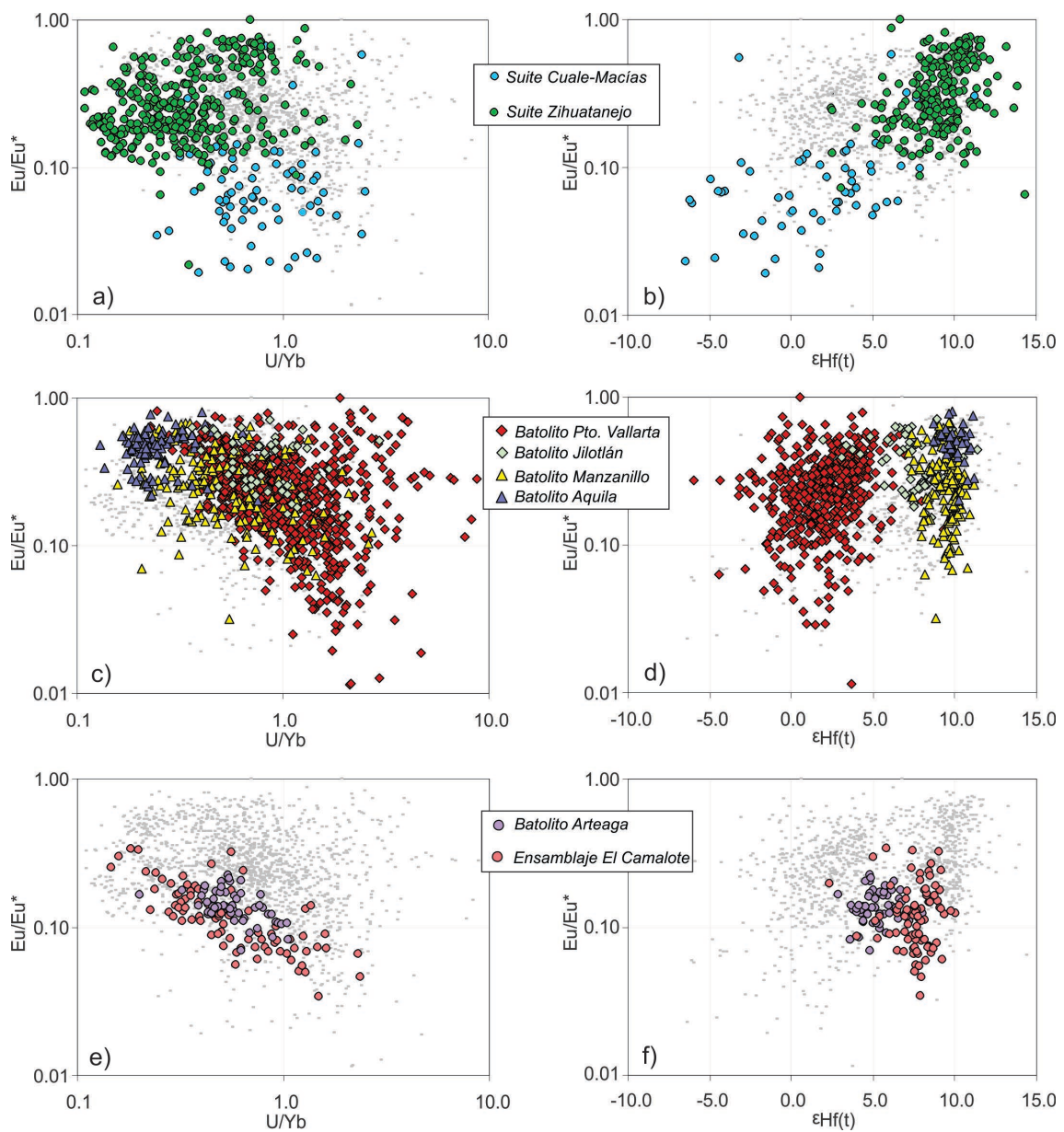


Figura 24. Gráficas que muestran las relaciones de elementos traza en los zircones detríticos de las diferentes suites magmáticas y cuerpos batolíticos. Véase las diferencias marcadas de los distintos pulsos magmáticos en algunos diagramas, los cuales definen diferentes patrones de evolución.

6. Discusión

Como se mencionó anteriormente una de las grandes ventajas del territorio mexicano es que existen numerosos estudios enfocados a entender la evolución paleogeográfica, tectónica y magmática de las diferentes regiones. Con base en esto, se pudo enlazar las diferentes poblaciones de edades obtenidas a partir de zircons detríticos con los distintos periodos magmáticos y geológicos reportados en la región. Con esta información, mediante el registro de zircons detríticos fueron identificados al menos cuatro y hasta siete pulsos magmáticos individuales, los cuales se encuentran distribuidos de manera heterogénea en la amplia región correspondiente al SW de México. A continuación, se discutirá el origen de los diferentes pulsos magmáticos identificados con la finalidad de conocer los periodos de actividad magmática, su petrogénesis y los eventos tectónicos relacionados a cada uno de ellos.

6.1 Historia pre-Jurásica: el margen pasivo Arteaga

Los zircons detríticos con edades mayores a 200 Ma se encuentran distribuidos ampliamente como granos aislados en las muestras de sedimentos, variabilidad de edades que pone en evidencia como fuente primaria a los principales bloques que conforman la columna vertebral del continente Mexicano (Figura 3), tales como: el microcontinente Oaxaquia de edad Grenviliana (Mesoproterozoico; [Ortega-Gutiérrez et al., 1995](#)), el terreno Mixteco del Paleozoico temprano-tardío ([Keppie et al., 2008](#); [Helbig et al., 2012](#)) y el cinturón magmático Permo-Triásico del este de México ([Torres et al., 1999](#); [Ortega-Obregón et al., 2013](#)). Es importante mencionar que afloramientos de rocas con edades mayores a 200 Ma no han sido reportados en el área de estudio, a pesar de ello, los zircons detríticos encontrados en las muestras de sedimentos, muestran distribuciones de edades muy coincidentes con las de turbiditas metasedimentarias del Complejo Arteaga ([Centeno-García et al., 2011](#)) y del abanico Potosino del norte de México ([Centeno-García, 2005](#); [Barboza-Gudiño et al., 2010](#); [Barboza-Gudiño et al., 2014](#); [Ortega-Flores et al., 2014](#)) (Figura 25). Estas observaciones indican que la distribución de edades viejas en las muestras de sedimentos, deben de representar zircons de segunda e incluso de tercera generación, depositados inicialmente como detritos en la Cuenca Arteaga y después transportados y redepositados en sedimentos jóvenes recientes como los muestreados en el presente trabajo. Bajo este esquema, el presente estudio apoya la idea de que la Cuenca Arteaga

pudo representar un margen pasivo sobre la margen oeste de Pangea, la cual recibió detritos continentales por un largo periodo de tiempo que ahora es posible acotar (Figura 26a).

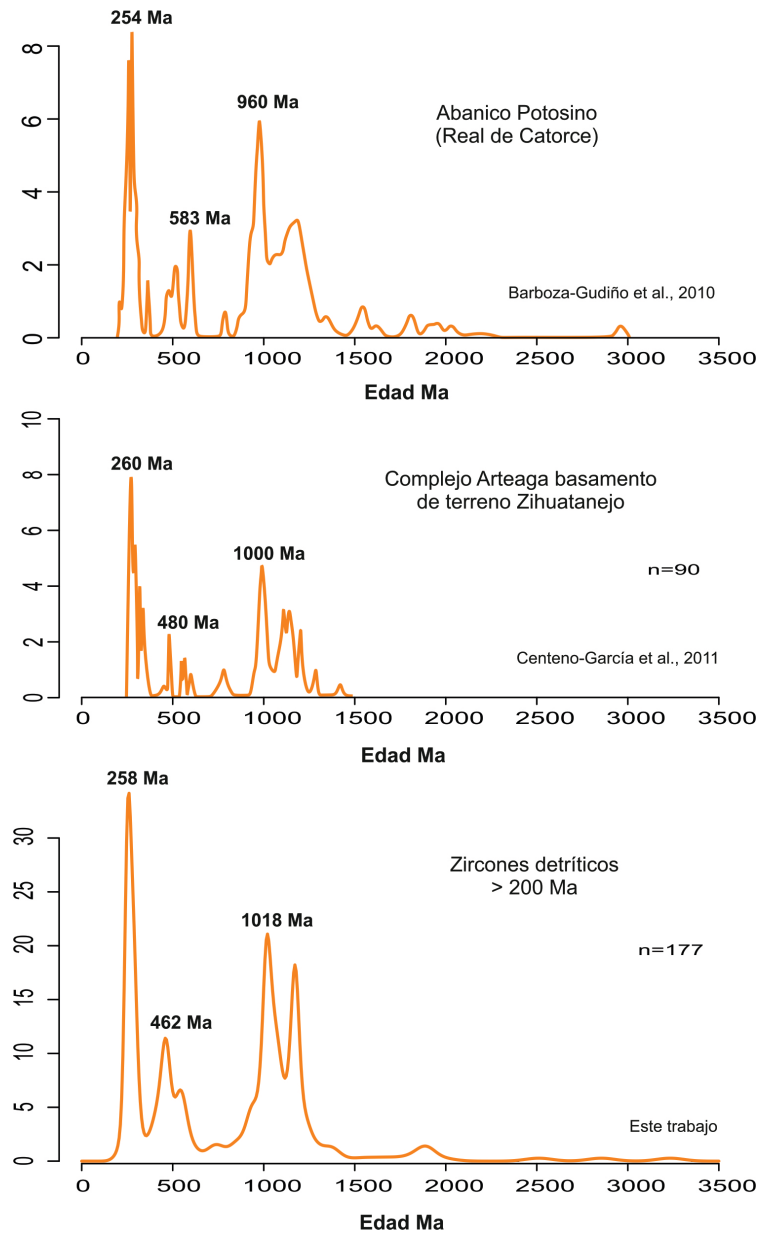


Figura 25. Histogramas que muestran los picos de edades U-Pb de zirrones detríticos en muestras correspondientes al abanico Potosino, Complejo Arteaga y edades mayores a 200 Ma reportadas en el presente trabajo. Nótese los espectros de edades muy similares en todos estos sectores (Barboza-Gudiño *et al.*, 2010; Centeno-García *et al.*, 2011; y este trabajo).

Con base en esto, las edades de los zirrones detríticos obtenidas sustentan que un pulso magmático mayor ocurrió durante el Pérmico tardío a los ~258 Ma (Figura 19b), quizás en respuesta a la etapa final de la subducción hacia el E de la litósfera oceánica de Panthalassa en el contexto de la amalgamación de Pangea (Torres *et al.*, 1999; Ortega

Obregón *et al.*, 2013). Edades Pérmicas y en menor medida Triásicas correspondientes a este arco han sido reportadas en gran parte del E de México, comúnmente intrusionando distintos basamentos reportados en el territorio (Torres *et al.*, 1999; Ortega-Obregón *et al.*, 2013) (Figura 3). Cabe remarcar que este arco se encuentra muy bien definido en el territorio, incluso su distribución va más allá, extendiéndolo algunos autores a lo largo de todo el margen W de Pangea durante el Pérmico y Triásico Medio (Hadlari *et al.*, 2017).

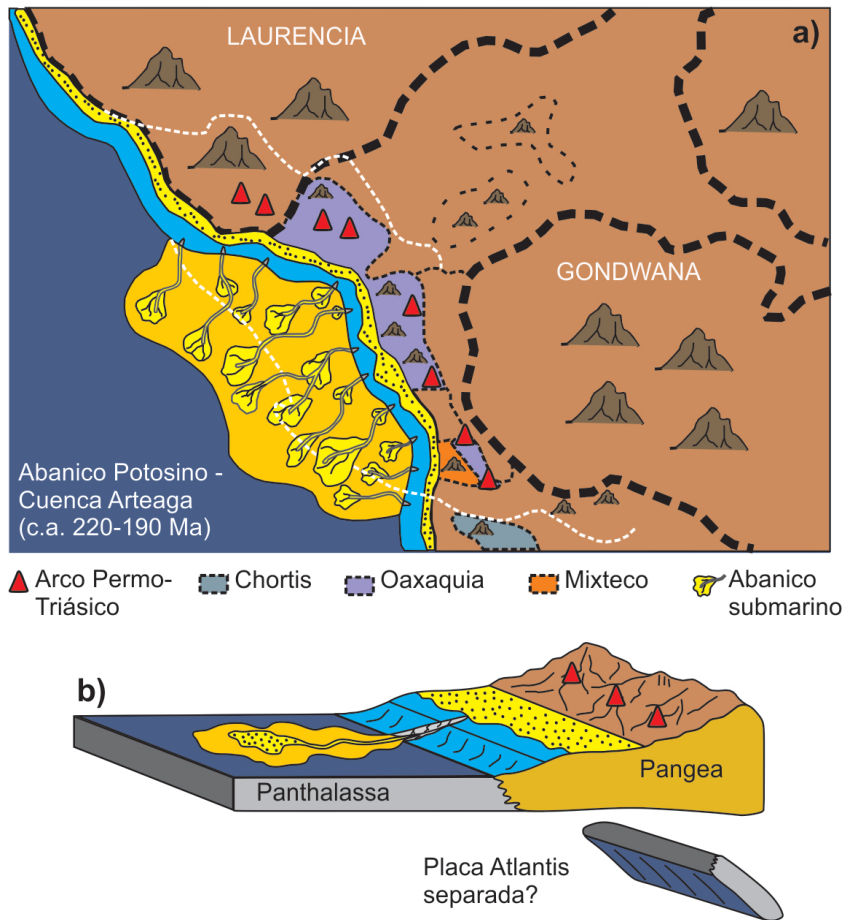


Figura 26. (a) y (b) Reconstrucción paleogeográfica e interpretación tectónica del margen oeste ecuatorial de Pangea en el contexto del terreno Guerrero. Margen pasivo acotado de acuerdo con los datos de zirrones detríticos entre el período Triásico Superior y Jurásico Inferior, periodo donde se observa una disminución de zirrones detríticos entre 220-190 Ma (gap magmático de ~30 Ma). La fuente de estos zirrones detríticos proviene esencialmente de la erosión de bloques continentales tales como, Oaxaquia, Mixteca y Arco Permo-Triásico, los cuales fueron depositados en el abanico Potosino y su correlativa Cuenca Arteaga. Cabe mencionar que la desconexión entre las anomalías sísmicas de Atlantis y Cocos apoya la idea de una pausa en la subducción (van der Meer *et al.*, 2018). Gap magmático obtenido a partir del promedio de los tres granos de zirrones detríticos más jóvenes Triásicos (231, 223 y 207 Ma) y el promedio de los tres granos de zirrones detríticos más antiguos Jurásicos (193, 192 y 184 Ma), ver base de datos en archivo adjunto del artículo Cavazos-Tovar *et al.*, 2020 para ubicar de manera más precisa estos granos triásicos y jurásicos. Reconstrucción adaptada de previas publicaciones (Barboza-Gudiño *et al.*, 2010; Ortega-Flores *et al.*, 2014; Centeno-García, 2017).

Analizando de manera conjunta la gama de zircones detríticos (Figuras 19a-b) se observa una disminución muy importante de granos de zircón con edades del Triásico Superior (~220 Ma) al Jurásico Inferior (~190 Ma), periodo en el cual pudo haber cesado la subducción en la margen ecuatorial de Pangea (~30 Ma) para dar lugar al desarrollo de un margen pasivo activo durante todo este periodo de tiempo (Figura 26). Aunque algunos autores han considerado que la subducción hacia el E de la placa paleo-Pacífica nunca cesó (Fitz-Díaz *et al.*, 2018), una pausa en la subducción durante el Triásico tardío también es consistente con la aparente desconexión entre las anomalías sísmicas de Atlantis y Cocos debajo del actual Océano Atlántico (van der Meer *et al.*, 2018) (Figura 27). En este último argumento, la anomalía Atlantis debió ser parte de la litosfera oceánica Panthalassa, la cual subdujo a lo largo del borde oeste de Pangea, mientras que la anomalía Cocos (ubicada al E de Norteamérica) es parte de un conjunto de anomalías pertenecientes a la placa Farallón (van der Meer *et al.*, 2018) (Figura 27). Es importante mencionar, que los estudios de tomografía sísmica del manto a nivel global permiten rastrear fragmentos de placas antiguas (a partir de velocidades de ondas sísmicas mayores, respecto a un manto de referencia), los cuales y basados en los escenarios geológicos y tectónicos de cada región, permiten reconstruir el comportamiento de las placas tectónicas a nivel global (van der Meer *et al.*, 2018).

En resumen, la gran variabilidad de edades encontradas en los zircones detríticos mayores a 200 Ma permite sugerir la estrecha relación del margen mexicano y la cuenca desarrollada en la margen pasiva (Figura 26). En ese sentido, las poblaciones de zircones detríticos con edades Grenvilianas, Panafricanas y Permotriásicas reportadas en este trabajo y en el Complejo Arteaga (Centeno-García *et al.*, 2011) son consistentes con las poblaciones de edades reportadas en el norte-centro de México en el conocido abanico potosino (Barboza-Gudiño *et al.*, 2010) (Figura 25). Esta aseveración, permite sugerir el carácter autóctono propuesto para el terreno Guerrero (p. ej., Elías-Herrera y Ortega-Gutiérrez, 1998; Elías-Herrera *et al.*, 2000; Centeno-García *et al.*, 2008; Martini *et al.*, 2011), pues la correlación de edades de zircones detríticos del SW de México coincidente con las unidades metasedimentarias en el norte-centro del país (Figura 25), apoyan la idea de un basamento común en toda la región.

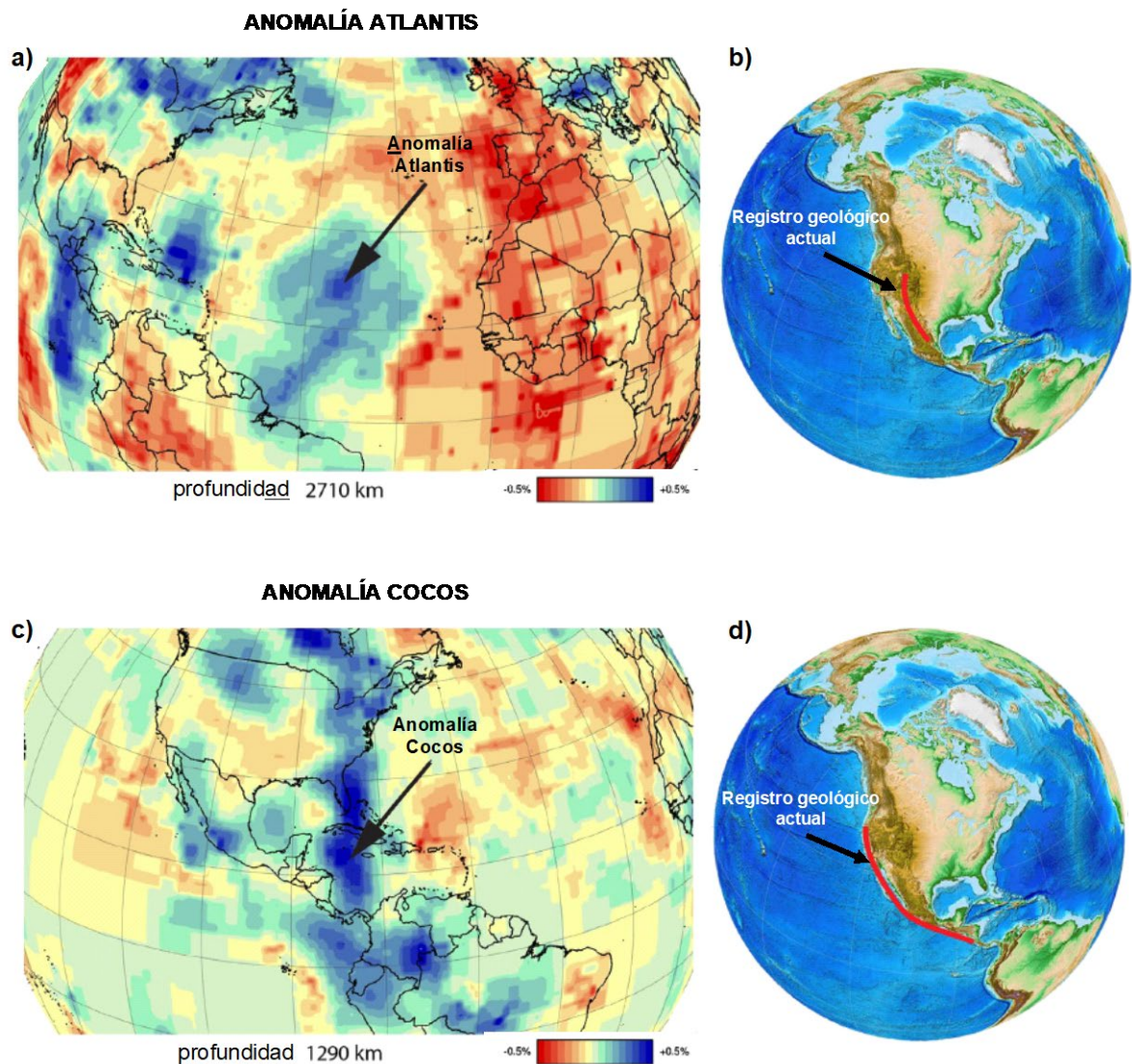


Figura 27. (a) y (c) Imágenes de tomografía sísmica (velocidad de las ondas-P) donde se muestran los remanentes de placas profundas (anomalías), respecto a un manto de referencia. La anomalía Atlantis se encuentra localizada en la parte central del océano Atlántico, mientras que la anomalía Cocos (Farallón) está localizada al E de Norteamérica. La anomalía Atlantis más profunda y más al E respecto a la anomalía Cocos, permite inferir una aparente desconexión entre las antiguas placas subducidas representadas por estas anomalías. (b) y (d) La línea roja muestra la localización del registro geológico actual correspondientes a las anomalías de Atlantis y Cocos. Imágenes tomadas de [van der Meer et al., \(2018\)](#).

6.2 Suite Cuale-Macías: el arco Jurásico?

Los datos de zircones detríticos obtenidos a lo largo de la costa indican que la primera manifestación de magmatismo autóctono en el área de estudio ocurrió en el Jurásico Medio-Superior (pico en ~163 Ma; Figura 21). Los zircones de este pulso están presentes en pocas cuencas de drenaje y son coincidentes con los afloramientos de rocas ígneas félsicas ubicadas alrededor de la región del Distrito Minero Cuale y en el granito Macías (ver mapa geológico en Figura 4 como referencia). Las composiciones isotópicas de Hf en la suite jurásica Cuale-Macías son muy variables, resaltando su enriquecimiento, si se le compara con el resto de las suites magmáticas (Figura 20b). Este enriquecimiento pone en evidencia la participación de componentes corticales antiguos en su petrogénesis, de hecho, esta aseercción se puede leer rápidamente en las edades modelo de Hf (T_{DM}^{C*}) de los zircones correspondientes a la suite Cuale-Macías, las cuales se extienden hasta el Paleoproterozoico, una característica que también es compartida por los zircones detríticos mayores a 200 Ma que fueron depositados en la Cuenca Arteaga (Figura 21). Los zircones jurásicos también tienen altas relaciones U/Yb y anomalías negativas muy marcadas de Eu (Figuras 24a-b), características que indican contribuciones corticales y diferenciación somera, en presencia de feldespato o bajo condiciones altamente reductoras (Trail *et al.*, 2012; Burnham y Berry, 2012, 2014; Grimes *et al.*, 2015).

La amplia distribución de edades del magmatismo Jurásico a lo largo del territorio mexicano no ha permitido esclarecer de manera concreta su contexto geodinámico, debido a que los pequeños afloramientos aislados de rocas volcánicas e intrusivas no siguen un claro patrón que manifieste una migración de edad o alineamiento geográfico (Martini y Ortega-Gutiérrez, 2018; Peña-Alonso *et al.*, 2018) (Figura 28a). Sobre este magmatismo Jurásico se han postulado dos ideas principales, aquellas que asocian el magmatismo del Jurásico Inferior y Medio (provincia Nazas) directamente con la subducción de la placa Farallón con edades dominantes entre 176-178 Ma (Barboza-Gudiño *et al.*, 2008; Lawton y Garza, 2014; Peña-Alonso *et al.*, 2018), y los que relacionan la provincia Nazas del Jurásico Inferior a Medio a un escenario híbrido, asociado a cuencas transtensionales con influencia de la subducción, el cual evoluciona a un arco ligeramente más joven (Jurásico Superior) desarrollado sobre el margen (Martini y Ortega-Gutiérrez *et al.*, 2018). De interés es que ambos escenarios han sido interpretados comúnmente como ambientes de subducción, debido a que sus elementos

traza muestran altas relaciones de elementos litófilos de radio iónico grande (*Large Ion Lithophile Elements*, LILE) con respecto a los elementos de alto potencial iónico (*High Field Strength Elements*, HFSE), características comunes observadas en magmas de arco (Barboza-Gudiño *et al.*, 2008; Bissig *et al.*, 2008).

Con base en lo anterior, los datos geoquímicos recopilados en este trabajo, los cuales engloban a los datos del Arco Nazas, así como los del margen del Pacífico, no apoyan la idea de un magmatismo típico de subducción, pues los datos graficados muestran características típicas de magmas hiperaluminosos (Figura 9), muy distintos a los magmas metaluminosos típicos de subducción observados en los demás pulsos magmáticos relacionados al área de estudio. Este magmatismo hiperaluminoso es muy evidente en rocas del Distrito Minero Cuale (Bissig *et al.*, 2008) y en los ensambles mineralógicos típicos de estos magmas (granate, moscovita) en la región de Islas Marías (Pompa-Mera *et al.*, 2013). Al igual que en esta región, rocas hiperaluminosas también han sido reconocidas en la formación Nazas (Barboza-Gudiño *et al.*, 2008), en rocas preoxfordianas en la Sierra de Catorce, Charcas y Salinas (Barboza-Gudiño *et al.*, 2010; Zavala-Monsiváis *et al.*, 2012), en la Formación Esperanza del Titoniano (Martini *et al.*, 2011), en algunos complejos del Jurásico medio a tardío en la península de Baja California (Shaw *et al.*, 2003) y en el granitoide Tizapa de ~186 Ma (Elías-Herrera, 2000). Como dato en particular, al menos en el contexto del terreno Guerrero estas rocas jurásicas hiperaluminosas se encuentran asociadas frecuentemente a depósitos de sulfuros masivos volcanogénicos (VMS), caracterizados por formarse en ambientes extensionales submarinos comúnmente asociados con sucesiones volcanosedimentarias (Camprubí *et al.*, 2017).

Las composiciones isotópicas de Hf también indican que una contribución significativa de corteza continental antigua fue involucrada en la formación del pulso ígneo jurásico (Figuras 20a-b). Por lo tanto y debido a que no parece existir un basamento antiguo bajo el terreno Guerrero que explique los componentes corticales de los zircones jurásicos de la suite Cuale-Macías, lo único que queda disponible para explicar estos enriquecimientos isotópicos de Hf, son los sedimentos depositados en la Cuenca Arteaga. Por consiguiente, se concluye que la composición isotópica y el carácter hiperaluminoso de los magmas jurásicos en la región (suite Cuale-Macías), fueron adquiridos por fusión y retrabajo de rocas metasedimentarias del Complejo Arteaga

(Figura 28b), probablemente bajo condiciones altamente reductoras, evidenciadas por sus fuertes anomalías de Eu, observadas en los elementos traza de estos zircones (Figura 24a). Tal proceso es más evidente en el contexto local de Cuale. No obstante, la abundancia inusual de magmas hiperaluminosos durante el periodo Jurásico a escala regional, junto con la evidencia metalogenética que involucra sucesiones sedimentarias en los depósitos VMS (Camprubí *et al.*, 2017), sugiere que el retrabajo de rocas metasedimentarias podría haber ocurrido en todo el contexto del terreno Guerrero e incluso en el núcleo continental del territorio mexicano durante el periodo jurásico.

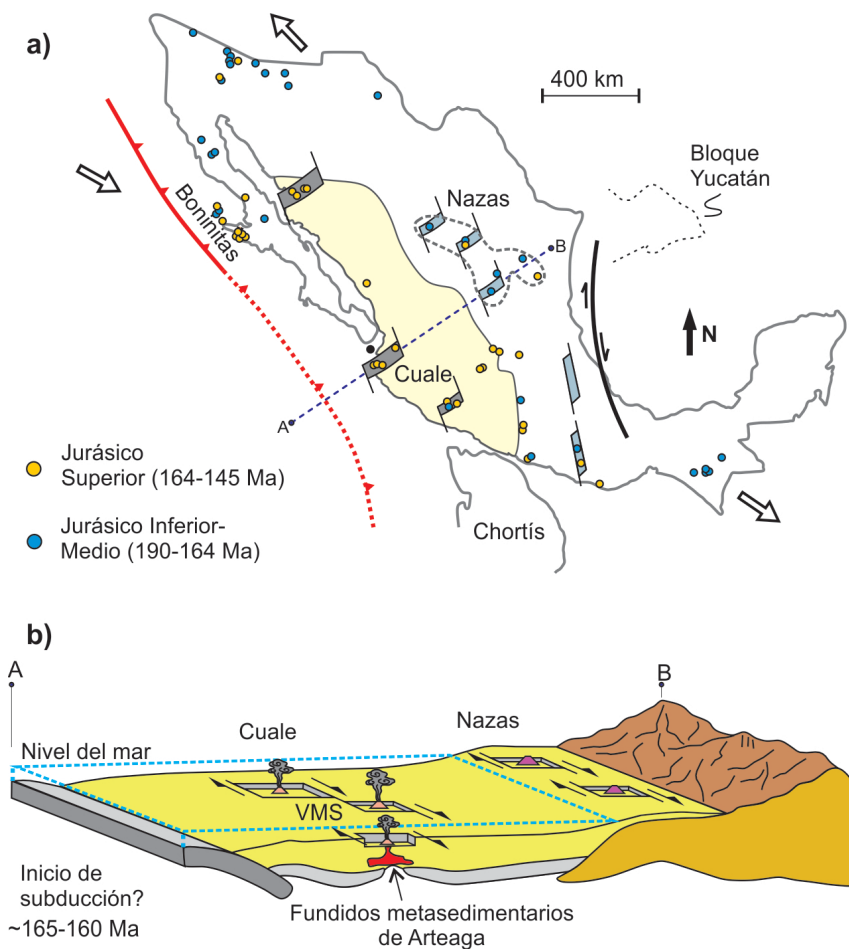


Figura 28. (a) Distribución geográfica de rocas ígneas jurásicas a lo largo del territorio mexicano (compiladas de Peña-Alonso *et al.*, 2018). (b) Posible contexto geodinámico durante el Jurásico medio-tardío. La amplia dispersión y abundancia de rocas félsicas hiperaluminosas y depósitos VMS durante este periodo, son consistentes con el retrabajo de rocas metasedimentarias de la corteza superior correspondientes al abanico Potosino y su correlativa Cuenca Arteaga, ocupando cuencas extensionales que se desarrollaron durante el *rifting* y fragmentación de Pangea (Martini y Ortega-Gutiérrez *et al.*, 2018). El inicio de la subducción aproximadamente a los 160 Ma registrado por la presencia de boninitas en la provincia de Cedros-Vizcaíno tuvo poca influencia en la generación del magmatismo de la suite Cuale-Macías, el cual se piensa fue generado por un ascenso del manto astenosférico propiciando la fusión y el retrabajo de rocas metasedimentarias más someras.

Aunque diversos estudios han tratado de explicar el contexto geodinámico del magmatismo jurásico en México mediante un régimen de subducción (ver amplia discusión en [Martini y Ortega-Gutiérrez, 2018](#)). Desde el punto de vista de este trabajo, las rocas de arco no son consistentes con magmas hiperaluminosos, ni con fundidos sedimentarios a bajas presiones en presencia de feldespatos y/o fundidos en condiciones reductoras ([Kelley y Cottrell, 2009](#); [Burnham y Berry, 2017](#)). Por consiguiente, es muy probable que los enriquecimientos geoquímicos observados de los elementos LILE/HFSE, interpretados por algunos autores como indicadores de ambientes de subducción para las rocas jurásicas ([Barboza-Gudiño et al., 2008](#); [Bissig et al., 2008](#)), sean en realidad heredados de los sedimentos terrígenos de la corteza superior (rocas metasedimentarias de Arteaga), sin la necesidad de involucrar magmatismo de arco.

De hecho, algunas de las rocas ígneas hiperaluminosas más representativas a nivel global, como las reportadas en el cinturón plegado Lachland al sureste de Australia ([Collins y Richards, 2008](#)) y en la formación Ollo de Sapo al noroeste de Iberia ([Bea et al., 2007](#); [García-Arias et al., 2018](#)), han sido explicadas como fundidos sedimentarios someros asociados a cuencas en un ambiente de extensión litosférica (*rift* en retro-arco), propiciados por aportes basálticos astenosféricos. En el caso del cinturón plegado Lachland, los granitoides hiperaluminosos fueron generados en una cuenca retro-arco dominados por contribuciones sedimentarias, en el contexto de una placa en retroceso, la cual daría lugar a un arco de islas. No obstante, y de manera alternativa, algunos autores han tratado de explicar los magmas hiperaluminosos como fundidos de sedimentos siliciclásticos fértiles provenientes de un margen pasivo, los cuales podrían haberse formado en la corteza media a baja, en las etapas iniciales de la subducción, argumento propuesto para otras partes de la Cordillera ([Ducea et al., 2015](#); [Oliveros et al., 2020](#)).

En el oeste de México hay poca evidencia de un arco de islas contemporáneo a las rocas jurásicas hiperaluminosas. A pesar de ello, ha sido sugerido que las rocas volcánicas jurásicas emplazadas cerca de la costa pacífica corresponden a un independiente sistema de subducción hacia el oeste, diferente al que generó la provincia volcánica de Nazas más al este ([Dickinson y Lawton, 2001](#); [Barboza-Gudiño et al., 2008](#); [Godínez-Urban et al., 2011](#)). Sin embargo, este modelo recientemente no es sustentado, debido a que gran parte de las rocas ígneas jurásicas sobre el margen cortan a las unidades sedimentarias

procedentes del núcleo continental mexicano (Centeno-García *et al.*, 2011; Fitz-Díaz *et al.*, 2018; Martini y Ortega-Gutiérrez, 2018), y también debido a que la historia metamórfica del Complejo Franciscan en California registra la subducción hacia el E de la antigua placa Farallón, al menos desde ~165 Ma (Wakabayashi, 2015). No obstante, algunos estudios más recientes en la región de Cedros-Vizcaíno han considerado que la subducción ya estaba operando a partir de ~220 Ma (Boschman *et al.*, 2018), sin embargo, la presencia de boninitas (rocas primitivas que marcan el inicio de la subducción, Stern y Geyra, 2018) no fue registrada hasta ~160 Ma (Kimbrough y Moore, 2003), edad que parece ser más consistente con la historia metamórfica del Complejo Franciscan. Por otro lado, evidencias de extensión tectónica al menos desde el Jurásico Medio, también son registradas por numerosas cuencas transtensionales que se desarrollaron durante el rompimiento del supercontinente Pangea, y que culminaron con la apertura del Golfo de México (Martini y Ortega-Gutiérrez, 2018). En este modelo, estos últimos autores, proponen un escenario tectónico híbrido, donde las rocas jurásicas hacia el interior del continente (provincia Nazas), podrían haber sido generadas en un contexto de deformación transtensional (NW-SE) generador de pequeñas cuencas, influenciadas por una zona de subducción somera (Martini y Ortega-Gutiérrez, 2018). Bajo este esquema, este modelo podría explicar la amplia dispersión de rocas ígneas jurásicas a gran escala, sin embargo, en esta visión, se piensa que al menos dentro del contexto del terreno Guerrero, los efectos de la subducción hacia el Jurásico Medio, podrían incluso no ser requeridos, debido a la fusión de rocas metasedimentarias someras pertenecientes al Complejo Arteaga, y a la consecuente formación de magmas hiperaluminosos esporádicos, los cuales se interpreta fueron generados por un ascenso del manto astenósferico, incentivado durante una fase extensional asociada con el rompimiento de Pangea (Figura 28b).

De acuerdo con lo anterior, en este trabajo se concluye que el inicio de la subducción en la región se dio aproximadamente entre 165-160 Ma. Por consiguiente, este evento que apenas iniciaba no afectó de manera directa a los magmas de la región, los cuales son más consistentes con fundidos someros a bajas presiones, producidos por un ascenso del manto astenosférico afectando pequeñas cuencas extensionales rellenas previamente por sedimentos terrígenos, pertenecientes actualmente al Complejo Arteaga (Figura 28b).

6.3 Suite Zihuatanejo del Cretácico Inferior: arco de islas Alisitos-Guerrero

De manera general, la geología del Cretácico Inferior está dominada esencialmente por magmatismo máfico con características subcalcinas típicas de arco (Figuras 8, 10). Este pulso ígneo correspondiente a la suite Zihuatanejo, se encuentra bien definido en los granos de zircón mostrando un pico en ~111 Ma y con valores de ϵHf_t que abarcan desde +5 hasta +15 (Figura 20b).

Los zircones correspondientes a este rango de edad son reconocidos a lo largo del área de estudio, aunque son más abundantes en las cuencas de drenaje al SE del graben de Colima donde las litologías que predominan son sucesiones volcanosedimentarias correspondientes a la suite Zihuatanejo del terreno Guerrero (Centeno-García *et al.*, 2011) (Figura 4a). Un dato de interés es que sobre la zona existen muy pocos afloramientos reportados de rocas ígneas del Cretácico Inferior, quizás difuminados por las secuencias de rocas marinas someras y fluviales (calizas, lutitas, areniscas) que comprenden las sucesiones volcanosedimentarias, las cuales llegan a alcanzar hasta 2000 m de espesor (Centeno-García *et al.*, 2011). Los pocos afloramientos de rocas ígneas reportados en la región consisten en pequeños diques máficos y de andesitas ubicados alrededor del batolito Jilotlán con edades entre 112-115 y 118 Ma, respectivamente (Villanueva-Lascurain *et al.*, 2016). Debido a la escasez de afloramientos, los estudios geoquímicos de rocas ígneas sobre la región son muy pocos (Mendoza y Suastegui, 2000; Villanueva-Lascurain *et al.*, 2016), sin embargo, lo que se lee de los datos, son patrones de REE planos y composiciones isotópicas empobrecidas, muy similares a los del magmatismo regional máfico reportado en la región del arco Alisitos (Hildebrand y Whalen, 2014; Kimbrough *et al.*, 2015) (Figura 10).

Más aún, los plutones del Cretácico Inferior a lo largo de la margen W de Baja California tienen rangos de edad bien definidos entre 130 y 100 Ma (Kimbrough *et al.*, 2015), prácticamente similares en rango a los zircones detríticos de la suite Zihuatanejo, muestreados sobre el margen convergente (Figura 21). Asimismo, los rangos de datos isotópicos de Hf en zircones reportados en la región de Baja California (Shaw *et al.*, 2014) también se sobreponen a los de zircones detríticos de la suite Zihuatanejo, sugiriendo una fuerte correlación de los mismos, la cual permite trazar el arco Alisitos a lo largo de la región de Baja California, inferirlo sobre el margen e incluso trasladarlo

hacia la región E de Chortís (Figuras 29a-b), donde han sido reportadas rocas correspondientes al Cretácico Inferior (Rogers *et al.*, 2007).

La aseveración anterior permite asumir como parte de un mismo complejo a todos estos cuerpos máficos (arco Alisitos-Guerrero), sin embargo, las sucesiones volcánicas del Cretácico Inferior intercaladas con carbonatos marinos someros pertenecientes a la suite Zihuatanejo, parece ser más consistente con facies de retro-arco distales provenientes del arco Alisitos y depositadas en cuencas marinas someras. Esta hipótesis surge, ya que sobre la región existen muy pocas rocas ígneas en comparación con el arco Alisitos, sobre el cual, el foco del magmatismo es muy evidente manifestado por la presencia de cuerpos de gabro continuos desde Santiago Peak (Sur de California, Estados Unidos) hasta la parte central de Baja California, México e incluso inferidos hasta el sur de la misma mediante anomalías magnéticas (Hildebrand y Whalen, 2014; Langenheim *et al.*, 2014; Kimbrough *et al.*, 2015) (Figura 7c). Para el caso de la suite Zihuatanejo, estas anomalías no son evidentes, además de esto, si se les presta atención a los patrones de REE, la suite Zihuatanejo muestra un fraccionamiento ligeramente mayor comparado a los principales cuerpos gabróticos de la Baja (Figura 10), probablemente indicando menores grados de fusión en el manto en un ambiente transicional de retro-arco (Figura 29d).

Es importante mencionar que el desarrollo del arco Alisitos-Guerrero estuvo enmarcado en sus etapas iniciales (~130 Ma) por el desarrollo de una cuenca *back-arc*, denominada Cuenca Arperos (Figuras 29 a, c), la cual alcanzó etapas de oceanización registradas por rocas ígneas con afinidades de MORB y basaltos de islas oceánicas (*ocean island basalts*, OIB) (Freydier *et al.*, 1998). Este proceso de oceanización dio lugar a la separación continental del territorio mexicano, causando en la cuenca la depositación de sedimentos de origen continental y sedimentos provenientes del arco Alisitos (Martini *et al.*, 2011) (Figuras 29c). Bajo este esquema, el basamento sobre el cual se construiría el arco de islas Alisitos-Guerrero estaría representado por el mismo Complejo Arteaga y algunos cuerpos Jurásicos esporádicos (Figuras 29c). Posterior a esta extensión la Cuenca Arperos se cierra diacrónicamente durante la construcción del mismo arco Alisitos-Guerrero (Figuras 29 b, d).

En la suite Zihuatanejo, los datos isotópicos de Hf empobrecidos con características juveniles y cercanamente homogéneos entre sí (Figura 20b), así como las bajas relaciones U/Yb de los zircones detríticos (Figura 24a), involucran poca o nula participación de sedimentos derivados del continente. Por consiguiente, estos datos descartan la posibilidad de una fuerte asimilación cortical y erosión por subducción proveniente de un componente isotópicamente enriquecido como podría ser las rocas jurásicas o el Complejo Arteaga en la génesis del magmatismo del arco Alisitos-Guerrero. De acuerdo con lo anterior, es posible que estos magmas hayan aprovechado una corteza juvenil adelgazada gobernada por extensión cortical, la cual facilitaría el ascenso rápido y el emplazamiento de estos magmas muy juveniles.

En resumen, los zircones detríticos correspondientes a la suite Zihuatanejo definen claramente un pulso magmático con contribuciones esencialmente juveniles durante el Cretácico Inferior (130-100 Ma). Es importante mencionar que gran parte de los zircones detríticos asociados a la suite Zihuatanejo formarían parte de una cuenca retro-arco en la cual fueron depositados detritos provenientes del arco Alisitos-Guerrero localizado al oeste (Figura 29d). A resaltar en la construcción del arco Alisitos-Guerrero, es que, aunque este fue construido sobre un complejo metasedimentario (Complejo Arteaga), desarrollado durante una fase de margen pasivo con esporádicas rocas ígneas hiperaluminosas jurásicas, no existen los elementos para sugerir la participación de cortezas antiguas o sedimentos durante la construcción del mismo. Por consiguiente, se sugiere que la suite Zihuatanejo se formó por altos grados de fusión parcial que son típicos en arcos de islas con una corteza adelgazada como los observados en el oeste del Pacífico (Turner y Langmuir, 2015). Con base en esto, se concluye que el arco de islas Alisitos-Guerrero marca un periodo de crecimiento cortical durante el Cretácico temprano en la historia geológica del oeste de México.

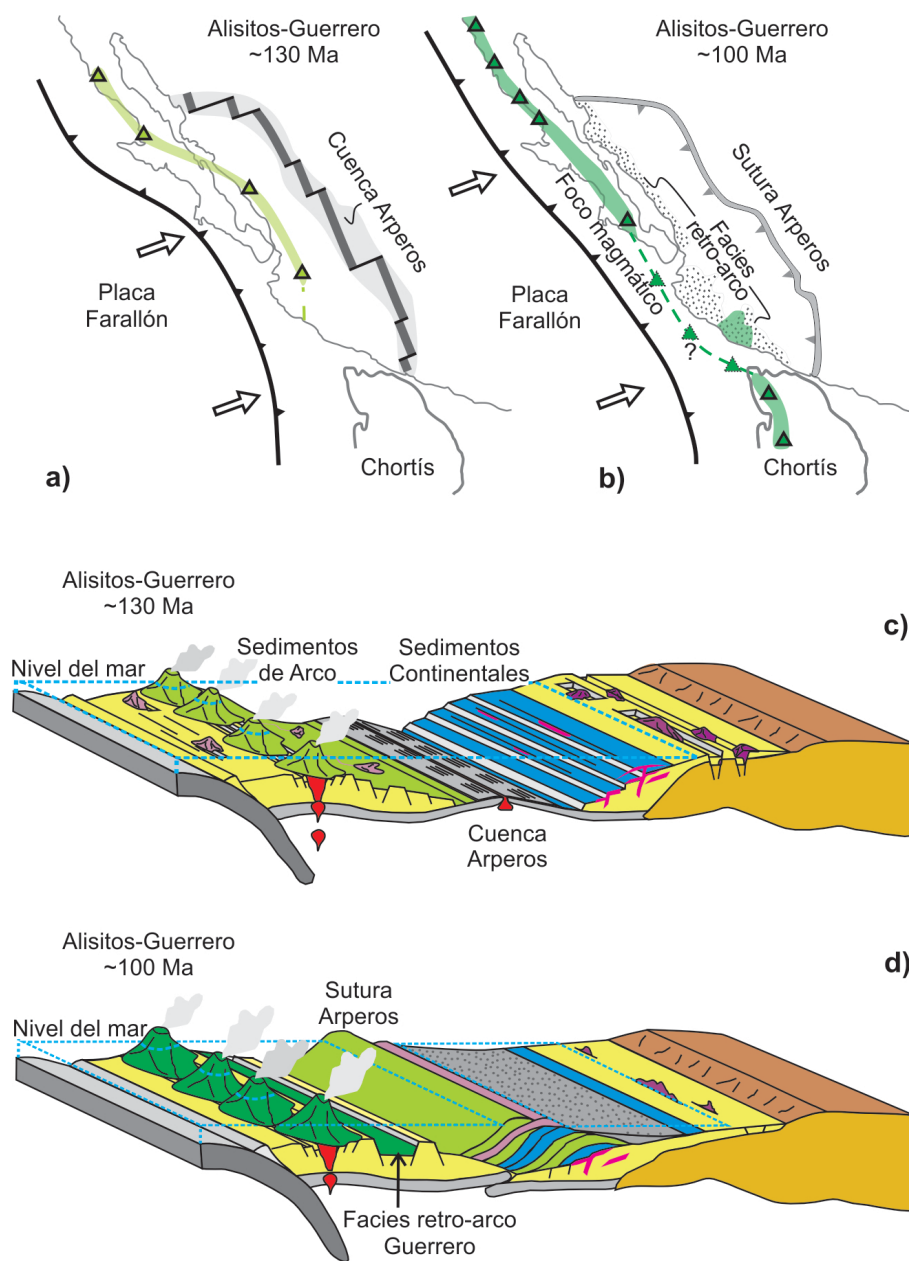


Figura 29. Contexto tectónico del arco de islas Alisitos-Guerrero y la Cuenca Arperos durante el Cretácico temprano. (a-c) El arco de islas fue establecido aproximadamente a los 130 Ma. Aquí sedimentos derivados del arco activo y sedimentos de origen continental fueron depositados y acumulados en la Cuenca Arperos. (d) Posteriormente, y hacia 100 Ma un eventual cambio en la composición del magmatismo fue incentivado por el cierre de la Cuenca Arperos. Adaptado de previas publicaciones ([Centeno-García et al., 2011](#); [Martini et al., 2011](#); [Centeno-García, 2017](#)).

6.4 Cretácico Superior a Paleógeno: continentalización en el contexto del Orógeno Mexicano

La historia de acortamiento relacionada al Orógeno Mexicano abarcó desde el Cretácico tardío al Paleógeno, y se considera que el principal mecanismo conductor del acortamiento fue la subducción de la placa Farallón (Fitz-Díaz *et al.*, 2018). Tal proceso de acortamiento conducido por la Orogenia Laramide daría lugar a cambios geodinámicos importantes en el margen, los cuales impactarían de manera directa en la génesis de los magmas de las diferentes regiones.

Sobre la región del área de estudio y dentro del contexto del Orógeno Mexicano se han identificado al menos seis pulsos magmáticos representados por los distintos batolitos y cuerpos volcánicos identificados a lo largo del margen (Figura 21). En ese sentido, los zircons detríticos del Cretácico Superior se asocian al BPV (pulso en ~82 Ma) y al BM (pulso en ~73 Ma), los del Paleoceno a los batolitos de Aquila y Jilotlán (pulso en ~58 Ma), los del Eoceno temprano al batolito Arteaga (pulso en ~50 Ma) y el Eoceno tardío al ensamblaje El Camalote (pulso en ~43 Ma). Los pulsos registrados en los zircons detríticos asociados a cada cuerpo batolítico, confirman el bien documentado decremento en edad de las rocas ígneas de NW a SE a lo largo del margen continental oeste de México (Figura 21), el cuál ha sido interpretado como el resultado de la interiorización gradual del magmatismo hacia el continente, truncado posteriormente por un evento lateral izquierdo producto de la migración del Bloque Chortís (Schaaf *et al.*, 1995; Ferrari *et al.*, 2014; Morán-Zenteno *et al.*, 2018).

En cuanto a los datos isotópicos de Hf, aquí las cosas se vuelven más complicadas, pues estos datos considerados para cada pulso no parecen mostrar una simple tendencia temporal o geográfica. Lo que se puede leer al respecto son patrones isotópicamente empobrecidos y enriquecidos en un mismo periodo de tiempo. Esto se visualiza en los zircons detríticos del BPV, batolito Jilotlán y batolito Arteaga, los cuales grafican hacia componentes más enriquecidos de Hf, si se le compara con el BM, batolito Aquila y el ensamblaje El Camalote, caracterizados por componentes más empobrecidos (Figura 20b). Estos contrastes petrogenéticos en rocas de edad similar en primera instancia hablan de diferentes fuentes involucradas en la génesis de los magmas del margen mexicano. Al igual que esto, los picos de edades modelo corticales de Hf (T_{DM}^C) consideradas para cada batolito en específico, muestran estos mismos

comportamientos (variación en zigzag; Figura 21), involucrando la contribución de distintos componentes. En particular, los zircones del BPV ($T_{DM}^C \sim 961$ Ma), batolito Jilotlán ($T_{DM}^C \sim 625$ Ma) y batolito Arteaga ($T_{DM}^C \sim 778$ Ma) tienen edades modelo de Hf más viejas que los batolitos de Manzanillo ($T_{DM}^C \sim 494$ Ma), Aquila ($T_{DM}^C \sim 467$ Ma) y El Camalote ($T_{DM}^C \sim 590$ Ma), datos que simplemente no correlacionan con su edad o posición geográfica.

Una de las maneras más sencillas de explicar estas diferencias isotópicas de Hf y sus correspondientes edades modelo de Hf (T_{DM}^C), es que existan diferentes basamentos bajo esta parte del terreno Guerrero. De hecho, las edades modelo Nd de edad Precámbrica registradas en el BPV han permitido sugerir a algunos autores que un basamento muy antiguo bajo la región podría estar involucrado en su petrogénesis (Schaaf *et al.*, 1995). No obstante, esta interpretación resulta complicada, pues la mayoría de los batolitos con contrastantes composiciones isotópicas se encuentran contiguos entre sí (p. ej., BPV-BM; Figuras 4a; 20b), además de no observar límites tectónicos entre ellos que definan los diferentes basamentos, y más aún, es inconsistente con la geología del área y el registro de zircones detríticos, los cuales apoyan la idea de que el Complejo Arteaga constituye el basamento más antiguo bajo la región (Centeno-García *et al.*, 2011). Atendiendo esto, si no es el basamento el que está involucrado, lo único que queda para explicar las diferencias isotópicas observadas en los zircones detríticos, es que existan cambios geodinámicos en el margen durante el Cretácico tardío a Paleógeno, dentro del contexto de acortamiento del Orógeno Mexicano (Fitz-Díaz *et al.*, 2018).

La composición química e isotópica de los batolitos de los cuales los zircones detríticos derivan, indican que no solo las fuentes de los magmas son distintas, sino también su petrogénesis debe ser diferente. Como se mostró en capítulos anteriores y con el apoyo de datos geoquímicos de la literatura, se puede ver una clara correspondencia geoquímica de los magmas reportados en el SW de México con respecto a los magmas con características adakíticas reportadas para la suite La Posta al norte de Baja California (Silver y Chappell, 1988; Gastil *et al.*, 2014) y con los granitos Laramídicos ricos en K de Sonora y Sinaloa correspondientes al Orógeno Mexicano (Henry *et al.*, 2003; Valencia-Moreno *et al.*, 2006; González-León *et al.*, 2011). Bajo este esquema, el BM y batolito de Aquila, ambos correspondientes en composición química con la suite

La Posta (Figuras 9d, f), muestran altas relaciones de Sr/Y y patrones de HREE fraccionados, los cuales son indicativos de condiciones de fusión profunda de litologías máficas en la cual el granate funge como fase residual (Figura 10). Por otro lado, el BPV y batolito Jilotlán, cuerpos magmáticos englobados dentro de los granitoides Laramídicos (Figuras 9d, f), están caracterizados por presentar patrones de REE fraccionados y fuertes anomalías negativas de Eu, sugiriendo condiciones de fraccionamiento someras en presencia de feldespatos (Figura 10). Por consiguiente, se sugiere que la variación geoquímica observada en los batolitos del Cretácico Superior al Paleoceno en el SW de México, tienen mecanismos petrogenéticos similares a los reconocidos en Baja California y más hacia el interior en Sonora y Sinaloa.

En el norte de Baja, el modelo tectónico petrogenético sugiere que la localización del magmatismo representado por el arco Alisitos de composiciones máficas y bajo en K (130-100 Ma), migró al E a rocas adakíticas tipo La Posta (99-92 Ma) y posteriormente a granitos Laramídicos altos en K correspondientes al Orógeno Mexicano (90-50 Ma). Este modelo de migración define una serie de arcos paralelos que evolucionaron en tiempo y espacio, pero también en composición (Figura 7). Como se mencionó anteriormente, rocas de composiciones similares a las descritas en Baja están también presentes en el SW de México, sin embargo, el registro geológico es muy heterogéneo, posiblemente controlado por los procesos que operaron en el margen tales como: traslación lateral de bloques tectónicos (Chortís), intensos procesos de erosión por subducción que afectaron el margen W de México al menos desde el Mioceno temprano, y procesos de *rifting* que dieron lugar a la apertura del Golfo de California (Lépinay *et al.*, 1997; Ducea *et al.*, 2004; Clift *et al.*, 2009; Straub *et al.*, 2015, 2020; Ferrari *et al.*, 2018; Parolari *et al.*, 2018, 2021).

Con fines prácticos y a manera de entender el registro geológico heterogéneo del SW de México, en este trabajo se nombró como cinturón “A” a las rocas esencialmente máficas del arco de islas Alisitos-Guerrero, como cinturón “B” a las rocas con características adakíticas tipo La Posta y como cinturón “C” a los granitos Laramídicos correspondientes al Orógeno Mexicano (Figuras 30-31), todos ellos representando el modelo de migración. De manera muy sintetizada, las rocas del cinturón A y B tienen composiciones isotópicas de Hf empobrecidas muy similares, pero difieren fuertemente en sus ensambles mineralógicos residuales y posiblemente en las profundidades de

fusión. Las rocas del cinturón C están caracterizadas por tener enriquecimientos isotópicos, involucrando materiales corticales antiguos que fueron probablemente retrabajados en profundidades someras.

Bajo este contexto, el BPV debería de representar la última etapa (cinturón C) en el registro de evolución temporal mencionada para el noroeste de México (Figura 30b). Sin embargo, en Puerto Vallarta, Sonora y Sinaloa, no hay vestigios de los primeros dos cinturones al oeste, probablemente porque se quedaron en Baja, una vez que esta fue separada del núcleo continental mexicano mediante un *rift* (Ferrari *et al.*, 2018). De hecho, rocas gabróicas similares a las del arco Alisitos han sido recientemente identificadas en pequeños afloramientos al W del batolito de Los Cabos, las cuales y reconstruyendo la Baja hacia su posición original, debieron haber sido adyacentes al BPV (Schaaf *et al.*, 2000; Fletcher *et al.*, 2007). De igual manera, rocas ígneas similares a La Posta han sido recientemente descubiertas en afloramientos sumergidos al sur del Golfo de California (Duque-Trujillo *et al.*, 2014) (Figura 7). En conclusión, estas evidencias sugieren fuertemente que los cinturones de Alisitos-Guerrero (A) y La Posta (B) ocupaban la posición de *forearc* al momento de la formación del BPV (Figura 30b).

De manera análoga, siendo ligeramente más joven y al sur del BPV, un batolito de composición similar a la suite La Posta (cinturón B) es encontrado en Manzanillo. En este caso su antecesor, el arco Alisitos-Guerrero (cinturón A), debió ocupar la región del *forearc* frente al BM. Sin embargo, el hecho que no se observe al arco Alisitos-Guerrero frente al BM, no quiere decir que no pudo estar allí, ya que podría ser un efecto de la separación de Baja, del movimiento de Chortís o posiblemente debido a que este ha sido consumido por erosión por subducción. Como dato interesante, las cuencas de drenaje que comprenden al BM (sitios Pur, Arm), arrojan algunos zircones del Cretácico Inferior, sugiriendo que los magmas del BM cortan a las sucesiones provenientes del arco Alisitos (Villanueva-Lascrain *et al.*, 2016).

El hecho de que las litologías del BM sean más félsicas y con señales de granate respecto a las rocas del arco Alisitos-Guerrero, pero ambos tengan composiciones isotópicas de Hf similares, alude a la posibilidad que el BM pudo haberse formado por fusión profunda de las litologías máficas de Alisitos-Guerrero, introducida dentro del manto por erosión por subducción (Figuras 31a-b), tal y como ocurriría con el

magmatismo La Posta entre 99-92 Ma (Figuras 30a-c). Esta aseveración permite asumir que el arco Alisitos-Guerrero (cinturón A) ocupaba la porción W respecto al BM (cinturón B). Aunque el argumento anterior explicaría las señales adakíticas del BM, existe también la posibilidad que la corteza oceánica subducida también imprima estas características, sin embargo, si así fuera el caso, las composiciones isotópicas de los zircones deberían graficar muy cerca de la línea del manto empobrecido y no se aprecia, en cambio lo que se observa es que los datos isotópicos de Hf correspondientes al pulso magmático del BM son idénticos a los de zircones de la suite Zihuatanejo (Figura 20b), pertenecientes al arco Alisitos-Guerrero.

Un escenario similar al planteado en este trabajo ha sido propuesto al norte de Baja California donde se involucran rocas subducidas del esquistos Catalina (erosión por subducción) para dar lugar a los granitos tipo La Posta (Grove *et al.*, 2008). Un proceso equivalente hoy en día se ve reflejado en el volcán Colima, donde se ha interpretado que dicho volcán es producto del retrabajo de las litologías del *forearc*, la cual ocupa el BM (Parolari *et al.*, 2018). Esto lleva a pensar que el proceso de materiales corticales introducidos al canal de subducción en el margen convergente mexicano ha sido una constante al menos desde el Cretácico tardío.

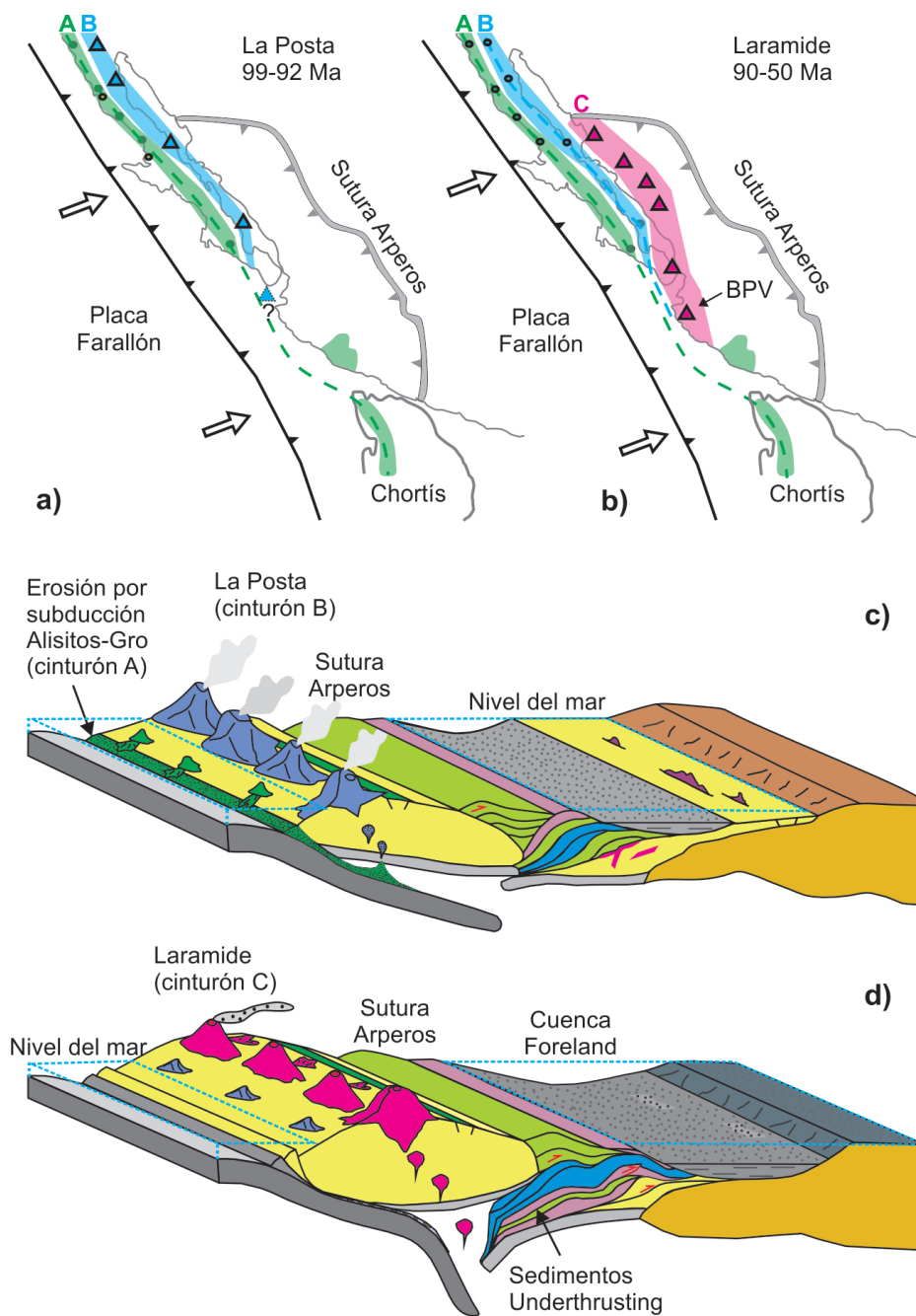


Figura 30. Evolución tectónica del margen convergente mexicano del Cretácico tardío al Paleoceno, posterior al cierre de la Cuenca Arperos. (a-c) Plutones La Posta ligeramente trondhjemiticos (cinturón B), formados por la fusión de detritos provenientes de la erosión de litologías máficas del arco Alisitos-Guerrero (cinturón A). (b-d) Granitoides Laramídicos ricos en K (cinturón C) formados por la fusión de sedimentos derivados del continente, que fueron primero depositados en la Cuenca Arperos y posteriormente incorporados a las fuentes de los magmas hacia el oeste por un proceso de *underthrusting*. Adaptado de previas publicaciones (Centeno-García *et al.*, 2011; Gastil *et al.*, 2014; Kimbrough *et al.*, 2015; Centeno-García, 2017).

Finalmente, la etapa “C” precursora al BM estaría representada por el batolito Jilotlán 15 Ma más joven que el BM y con características típicas de los batolitos del Orógeno Mexicano, es decir, con composiciones isotópicas enriquecidas. Este batolito localizado exactamente al E del BM representa el siguiente paso en la evolución (cinturón C; Figuras 31a-b).

Similar al BM, el batolito Aquila también muestra características geoquímicas e isotópicas afines a los magmas tipo La Posta (cinturón B), y al igual que el BM, este podría haberse formado por el retrabajo de litologías máficas, producto de la erosión por subducción del ya extinto arco Alisitos-Guerrero (cinturón A; Figuras 31a-b). No obstante, el batolito Aquila (~58 Ma), es más joven que el BM (~73 Ma), pero contemporáneo al batolito Jilotlán (Figura 31b). El registro de zircones detríticos al SE de Aquila desafortunadamente no permite reconocer con precisión las fuentes ígneas, sin embargo, los zircones correspondientes al batolito Arteaga del Eoceno temprano (~50 Ma) presentan composiciones isotópicas similares a las del batolito Jilotlán (cinturón C), mientras que los zircones pertenecientes al ensamblaje El Camalote (~43 Ma) del Eoceno tardío son de nuevo isotópicamente empobrecidos y similares al BM y batolito Aquila (cinturón B; Figuras 31a-b).

En resumen, al restaurar la Baja a su posición original permite visualizar de manera muy clara hacia su parte norte su paralelismo temporal y geográfico correspondiente a los tres cinturones magmáticos antes mencionados (A, B, C). Lo interesante de esto es que este mismo efecto de migración se pudo reconocer e incluso reconstruir en el registro geológico heterogéneo del SW de México. Un dato interesante, es que esta migración se puede seguir hasta el Paleoceno e incluso hasta el Eoceno temprano, solo que durante este periodo es posible que haya existido un cambio en el ángulo de subducción de ortogonal a oblicuo, una variación que pudo propiciar el desplazamiento del Bloque Chortís hacia el SE (Ferrari *et al.*, 2014). En cuanto a los pulsos isotópicamente empobrecidos (BM, batolito Aquila) se reconoció que estos no representan materiales netamente mantélicos, sino que involucran el retrabajo de litologías máficas provenientes de la erosión por subducción del arco Alisitos-Guerrero. Con base en esta información, aún se sigue teniendo un cabo suelto, y es ¿de dónde proviene el enriquecimiento isotópico observado en los otros pulsos?

6.4.1 Enriquecimiento isotópico: batolito Puerto Vallarta, batolito Jilotlán, batolito Arteaga

La arquitectura cortical sobre la cual están emplazados los diferentes cinturones magmáticos en la región SW de México está dominada esencialmente por sucesiones turbidíticas metasedimentarias correspondientes al Complejo Arteaga. Al respecto, ha sido documentado rocas volcanoclásticas con señales geoquímicas tipo MORB, mezcladas con sucesiones siliciclásticas del Complejo Arteaga, sugiriendo la depositación de sedimentos clásticos sobre piso oceánico (Centeno-García *et al.*, 2003). Por la tanto, es concebible descartar la presencia de basamentos ocultos como posibles candidatos para explicar los enriquecimientos isotópicos mediante la contaminación o re-fusión de cortezas antiguas. Una posibilidad para explicar estos enriquecimientos isotópicos es la fusión de rocas metasedimentarias de Arteaga, sin embargo, si esto fuera el caso, se deberían generar magmas hiperaluminosos como los registrados en el pulso jurásico, y no granitoides metaluminosos como en el BPV y batolito Jilotlán. La re-fusión de magmas jurásicos emerge como otra posibilidad, solo que, en este caso, no sería posible generar magmas de composiciones más máficas que sus precursores (Figura 9). Más aún, el retrabajo de rocas del *forearc* tectónicamente erosionadas localizadas al oeste de los batolitos del cinturón C, deberían no figurar en este caso, debido a que el retrabajo de Alisitos y granitos tipo La Posta (cinturones A y B), deberían generar composiciones isotópicas similares a la fuente, es decir, magmas empobrecidos. Otra posibilidad es la contaminación cortical de un magma isotópicamente empobrecido como podría ser un magma similar al del BM con sucesiones sedimentarias de Arteaga o rocas jurásicas para formar el BPV, el batolito de Jilotlán o el batolito de Arteaga, sin embargo, si tal proceso estuvo presente, se vería reflejado en las composiciones isotópicas y elementos traza de sus correspondientes zirrones detríticos.

Las Figuras 24c-d muestran como los zirrones detríticos con valores menores de $\epsilon\text{Hf}(t)$, tienden a tener altas relaciones U/Yb, las cuales son indicativas de fuertes contribuciones corticales a sus magmas huésped (Grimes *et al.*, 2015). No obstante, estas contribuciones corticales no siempre se reflejan en una gran anomalía negativa de Eu, las cuales son indicativas de condiciones reductoras (Trail *et al.*, 2012) y utilizadas como un *proxy* indicando diferenciación a bajas presiones o el grado de contaminación en presencia de feldespatos (Keller *et al.*, 2015). Esto puede ser observado claramente si

se comparan los zircones del BPV con los del BM, los cuales tienen diferentes valores isotópicos de $\epsilon\text{Hf}(t)$ y relaciones U/Yb a equivalentes Eu/Eu* (Figuras 24c-d). Estas evidencias indican que los magmas de Manzanillo pueden ser tan diferenciados como los del BPV, y que las contribuciones corticales observadas en los valores isotópicos del BPV, no pueden ser adquiridas por contaminación de magmas isotópicamente empobrecidos como los de el BM, debido a que una correlación positiva entre Eu/Eu* y $\epsilon\text{Hf}(t)$ debería desarrollarse en este caso (Figura 24d). En otras palabras, los magmas huésped de estos dos cuerpos batolitos no son cogenéticos, por consiguiente, sus patrones isotópicos y de elementos traza deben ser en gran medida adquiridos en sus fuentes de fusión.

Con base en lo anterior, la única manera que queda para explicar estas características geoquímicas e isotópicas de los cuerpos batolitos del cinturón C, sería el retrabajo de sedimentos detríticos corticales provenientes del retro-arco transportados a la zona de generación de magmas por procesos de *underthrusting* durante los eventos de acortamiento tectónico, propiciados por el eventual cierre de la Cuenca Arperos (Figuras 30d-31b). En tal modelo de *underthrusting*, sedimentos con una procedencia continental depositados en la Cuenca Arperos durante el Cretácico Inferior, necesitarían ser empujados dinámicamente hacia el margen convergente activo, y finalmente incorporados en las fuentes magmáticas de los batolitos como Puerto Vallarta, Jilotlán y Arteaga. Este magmatismo, generado a partir de una tectónica compresiva causante de engrosamiento cortical, es consistente en edad con el evento de deformación Cenomaniano-Santoniano registrado en pliegues y cabalgaduras en estratos del Cretácico Inferior (Martini *et al.*, 2009; Centeno-García *et al.*, 2011). Además de esto, se ha reconocido que los detritos derivados del continente y depositados en la Cuenca Arperos fueron empujados bajo sucesiones sedimentarias con proveniencia del arco Alisitos-Guerrero durante el cierre de la Cuenca Arperos en el Albiano (Martini *et al.*, 2014). Aunque hasta el momento el cierre de Arperos aún está en debate (Hildebrand y Whalen, 2014; Martini *et al.*, 2016; Fitz-Díaz *et al.*, 2018), todos los autores argumentan que el emplazamiento del BPV a ~82 Ma debió ser posterior al cierre de la Cuenca Arperos, y que un periodo compresivo ocurrió durante el Cenomaniano a Santoniano, elementos importantes a considerar en la génesis de estos magmas enriquecidos (Figura 20b).

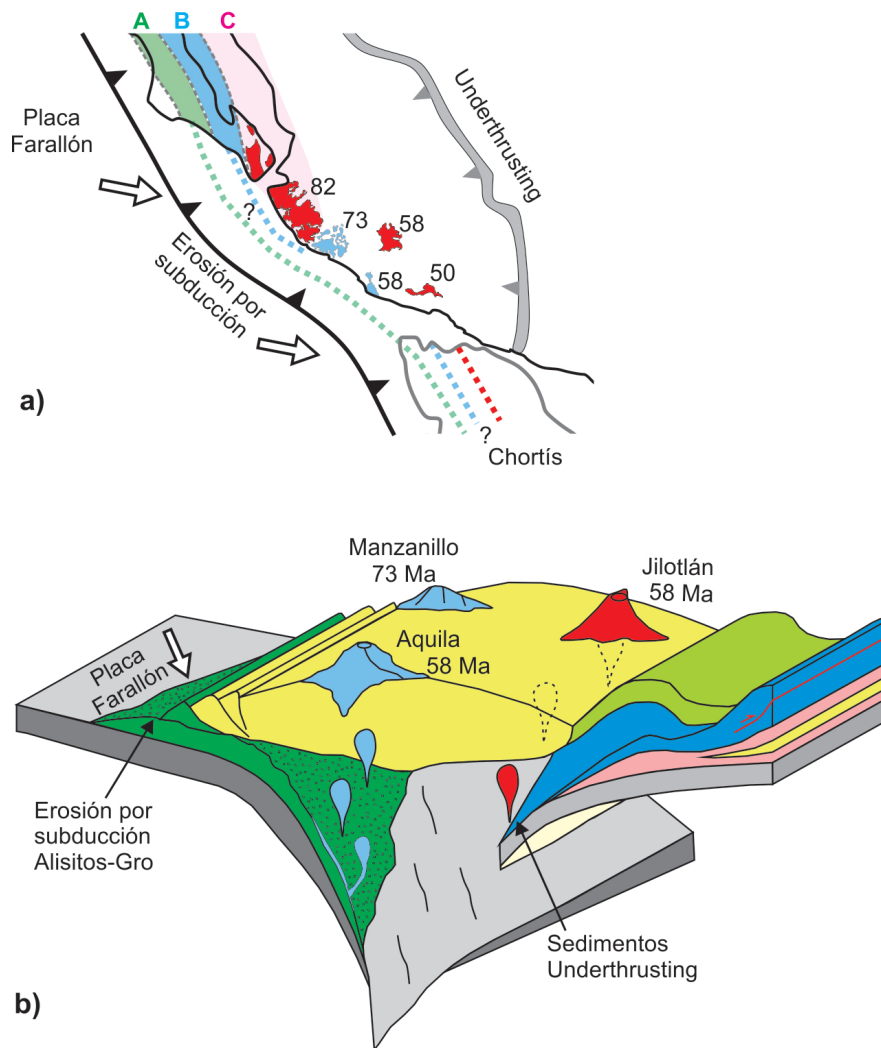


Figura 31. Evolución tectónica hacia la región SW del margen convergente mexicano del Cretácico tardío al Eoceno, donde se muestran los principales pulsos magmáticos asociados a los cuerpos batolíticos. (a) El batolito Manzanillo (~73 Ma) y batolito Aquila (~58 Ma) son interpretados como una extensión al sur del magmatismo La Posta (cinturón B) del norte de Baja, mientras que el batolito Puerto Vallarta (~82 Ma), batolito Jilotlán (~58 Ma) y batolito Arteaga (~50 Ma) representan la continuación más interna hacia el continente de los granitoides Laramídicos (cinturón C) como en Sonora y Sinaloa. Rocas del Eoceno al sur deberían definir una evolución similar, por consiguiente, es posible que estos cinturones se extiendan hacia la región del Bloque Chortís, ahora desplazada a Centroamérica. (b) Sección esquemática que muestra el contexto petrogenético que permitió el proceso de continentalización en la región W y SW de México. Similar a La Posta, el BM y batolito Aquila se formaron por el retrabajo de litologías máficas pertenecientes al arco Alisitos-Guerrero, mientras que los batolitos más hacia el interior tales como, Jilotlán y Arteaga (granitoides Laramídicos, cinturón C), tuvieron una importante contribución de sedimentos detríticos corticales provenientes del retro-arco transportados a la zona de generación de magmas por procesos de *underthrusting*.

De manera general y sintetizando la información presentada en este apartado, el asociar los zircones detríticos a cada batolito en específico construidos durante el Cretácico Superior-Eoceno, permitió reconocer los principales pulsos magmáticos en cada uno de ellos, así como sus características isotópicas. De esta forma y con el apoyo de la geoquímica y geología del área de estudio, se pudo reconocer cómo cada pulso magmático guardaba un archivo geoquímico equivalente al reconocido en Baja California y frente a ella en el cinturón Orogénico de Sonora y Sinaloa (Figuras 30-31). Con base en esta información se pudo reconstruir la evolución magmática del SW de México, caracterizada por un registro geológico heterogéneo en tiempo y espacio. Lo interesante de esta reconstrucción es que al igual que en Baja California, se pudo identificar un eventual cambio en la composición del magmatismo, es decir, de un arco de islas de composiciones máficas a un arco continental maduro. Este proceso de continentalización reconocido en este trabajo fue generado por efectos combinados de erosión por subducción y retrabajo de litologías corticales por procesos de *underthrusting* desarrollados durante la historia de acortamiento del Orógeno Mexicano.

7. Conclusiones

Los zircones detríticos contenidos en sedimentos recientes del suroeste de México representan un archivo de la evolución geológica, en la cual la información geocronológica e isotópica extraída de ellos, adquiere un verdadero significado cuando se combina con el contexto geológico y petrológico de sus litologías de origen. En el suroeste de México, como en otros lugares, se pudieron identificar picos y valles en la distribución de edades de los zircones, sugiriendo fluctuaciones en las tasas de productividad cortical como respuestas a cambios en los mecanismos tectónicos. La subducción pudo haber contribuido en mayor medida al crecimiento cortical y su subsecuente evolución, sin embargo, la corteza continental no solo creció por aportes relacionados al arco, ya que al menos durante el Jurásico Medio-tardío, un régimen extensional incentivado por la ruptura de Pangea propiciaría un ascenso del manto astenosférico, jugando un papel importante en el retrabajo de las litologías corticales pre-existentes en la corteza superior y en la formación de yacimientos minerales tipo VMS.

Lo que se puede leer de los zircones detríticos del SW de México es que gran parte de los pulsos magmáticos (seis de siete) fueron controlados por retrabajo cortical. Estos pulsos se asocian con la fusión de rocas metasedimentarias para generar magmas hiperaluminosos (suite Cuale Macías, ~163 Ma), el retrabajo de litologías máficas mediante erosión por subducción, causante de magmas adakíticos del tipo La Posta (BM ~73 Ma, batolito Aquila ~58 Ma y posiblemente el ensamblaje El Camalote ~43 Ma) y retrabajo de sedimentos detríticos corticales, provenientes del retro-arco y transportados a la zona de generación de magmas por procesos de *underthrusting* (BPV ~82 Ma, batolito Jilotlán ~58 Ma y batolito Arteaga ~50 Ma). En el presente trabajo, solo los zircones de la suite Zihuatanejo (~111 Ma), provenientes de la erosión del arco Alisitos-Guerrero indican generación de nueva corteza continental (material juvenil).

De acuerdo con los resultados obtenidos, no todos los picos de edades implican eventos de crecimiento cortical (adición de material juvenil), como muchas veces se ha especulado a nivel global. Tales aseveraciones podrían haber sido manejadas erróneamente de no conocer sus fuentes y petrogénesis, para el BM y batolito Aquila, los cuales están caracterizados por presentar Hf isotópicamente empobrecidos,

característicos de magmas juveniles. Por consiguiente, el llevar este trabajo a un contexto más regional, abrió un archivo para entender las incertidumbres en la interpretación de los picos magmáticos que se han reportado a nivel global.

En su sentido más amplio, la mayor transferencia del manto a la corteza ocurrió en el Cretácico temprano con la formación del arco de islas intraoceánico Alisitos-Guerrero y sus cuencas asociadas, mientras que los principales eventos de continentalización ocurrieron durante el Cretácico tardío a Paleógeno en el contexto del Orógeno Mexicano. Este evento de continentalización, ocurrió, por un lado, por el retrabajo de litologías de cortezas máficas del arco Alisitos-Guerrero imprimiendo características adakíticas tipo La Posta (BM y batolito Aquila), y, por otro lado, por el retrabajo de detritos corticales provenientes del *back-arc* (Cuenca Arperos) por procesos de *underthrusting* (BPV y batolito Jilotlán y Arteaga). Es importante hacer notar que los enriquecimientos isotópicos generados por procesos de *underthrusting* observados en el BPV, batolito Jilotlán y Arteaga, podrían haber sugerido erróneamente la presencia de un basamento antiguo oculto bajo la región, de no llevar este trabajo a un contexto geológico más local, es decir, de no conocer los componentes que pudieran haber participado en su petrogénesis.

La dinámica que operó en el margen durante la evolución del Orógeno Mexicano estuvo controlada por procesos de erosión por subducción, acortamiento tectónico, engrosamiento cortical, subducción oblicua, subducción subhorizontal y cierre de una cuenca *back-arc* (Arperos), eventos que pudieron influenciar en el retrabajo de las litologías corticales, permitiendo el emplazamiento de magmas causantes de la continentalización.

En cuanto a cómo y en cuánto tiempo puede ser la corteza continental generada, lo que se puede leer del oeste de México, es que un continente maduro puede ser construido rápidamente en ~65 Ma, una vez instaurada la placa en subducción. Iniciando con un arco de islas de composiciones esencialmente máficas, el cual evoluciona a un continente intermedio-félsico, por el consumo de litologías de arco máficas preexistentes, incorporadas mediante la subducción en las fuentes de fusión. Tal argumento manejado en este trabajo sobre el proceso de continentalización, desacredita la necesidad de un continuo aporte mantélico que gradúe a magmas más diferenciados

con el tiempo, engrosando la corteza y eventualmente evolucionando a un continente (Hildreth y Moorbath, 1988; De Silva *et al.*, 2006).

Por último, el potencial de preservación del arco de islas Alisitos-Guerrero debería ser extremadamente bajo, de no ser por su acreción debido al cierre de la cuenca *back-arc* (Arperos), y debido a su separación del núcleo continental mexicano mediante el *rift* del Golfo de California (Ferrari *et al.*, 2018). De hecho, los principales constituyentes del arco de islas Alisitos-Guerrero, ahora han desaparecido por completo a lo largo del margen convergente mexicano, debido a la erosión por subducción. Sin embargo, la identidad petrológica de su existencia aún se encuentra impresa en derivados secundarios retrabajados tales como BM y batolito Aquila, y más aún, pueden ser reconocidos como productos magmáticos de tercera generación en el volcán de Colima actualmente activo (Parolari *et al.*, 2018). En otras palabras, un arco de islas podría potencialmente desaparecer del registro geológico (p. ej., Hawkesworth *et al.*, 2009), sin embargo, una porción significativa de su masa cortical podría no estar realmente ausente, ya que puede estar preservada con una nueva identidad en rocas ígneas continentales más jóvenes.

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APÉNDICE

Apéndice 1. Comparación de técnicas de separación de zircones (batea y líquidos pesados).

Apéndice 2. Filtrados de datos geocronológicos de zircones detríticos usando un porcentaje de discordancia < 30% y <10%.

Apéndice 3. Datos Analíticos de U-Pb en zircón obtenidos por LA-ICPMS

Apéndice 4. Datos Analíticos de Isótopos de Hf en zircón obtenidos por LA-MC-ICPMS

Apéndice 5. Datos Analíticos de Elementos Traza en zircón obtenidos por LA-ICPMS

Apéndice 1. Comparación de técnicas de separación de zircones (batea y líquidos pesados).

Para la realización de dicho trabajo, se tomó una muestra piloto de sedimento de río con la finalidad de ver si existen diferencias significativas en la separación de zircones mediante la técnica de batea y líquidos pesados.

Diagramas de Concordia tipo Wetherill

En los diagramas de concordia se muestra la comparación de los resultados del análisis de los zircones obtenidos por ambas técnicas. Aquí las edades U-Pb en zircones de la muestra de batea y de líquidos pesados muestran una agrupación de edades muy consistente entre 900 y 1300 Ma (Figura A1). Otro dato que salta a la vista en el diagrama de concordia son los pocos granos aislados de zircón de 650 y 1650 Ma para la muestra de batea y de 1400 y 65 Ma para la muestra procesada mediante líquidos pesados.

Curvas de distribución KDE de las edades de zircón

La estimación de densidad Kernel (KDE, [Vermeesch, 2018](#)) de las edades de zircón en ambas muestras procesadas (batea y líquidos pesados), son muy coincidentes, pues ambas arrojan un pico en 1000 Ma y picos menores en 1150 y 1250 Ma (Figura A1), quizás las diferencias existentes, están representadas por dos o tres granos de zircón aislados, los cuales no representan el grueso de las poblaciones. Obtener una gráfica idéntica resulta muy complicado, sin embargo, en el análisis realizado se alcanzó a percibir que las muestras procesadas por ambos métodos tienen mucha similitud, por lo que se concluye que ambas técnicas de separación son del todo confiables.

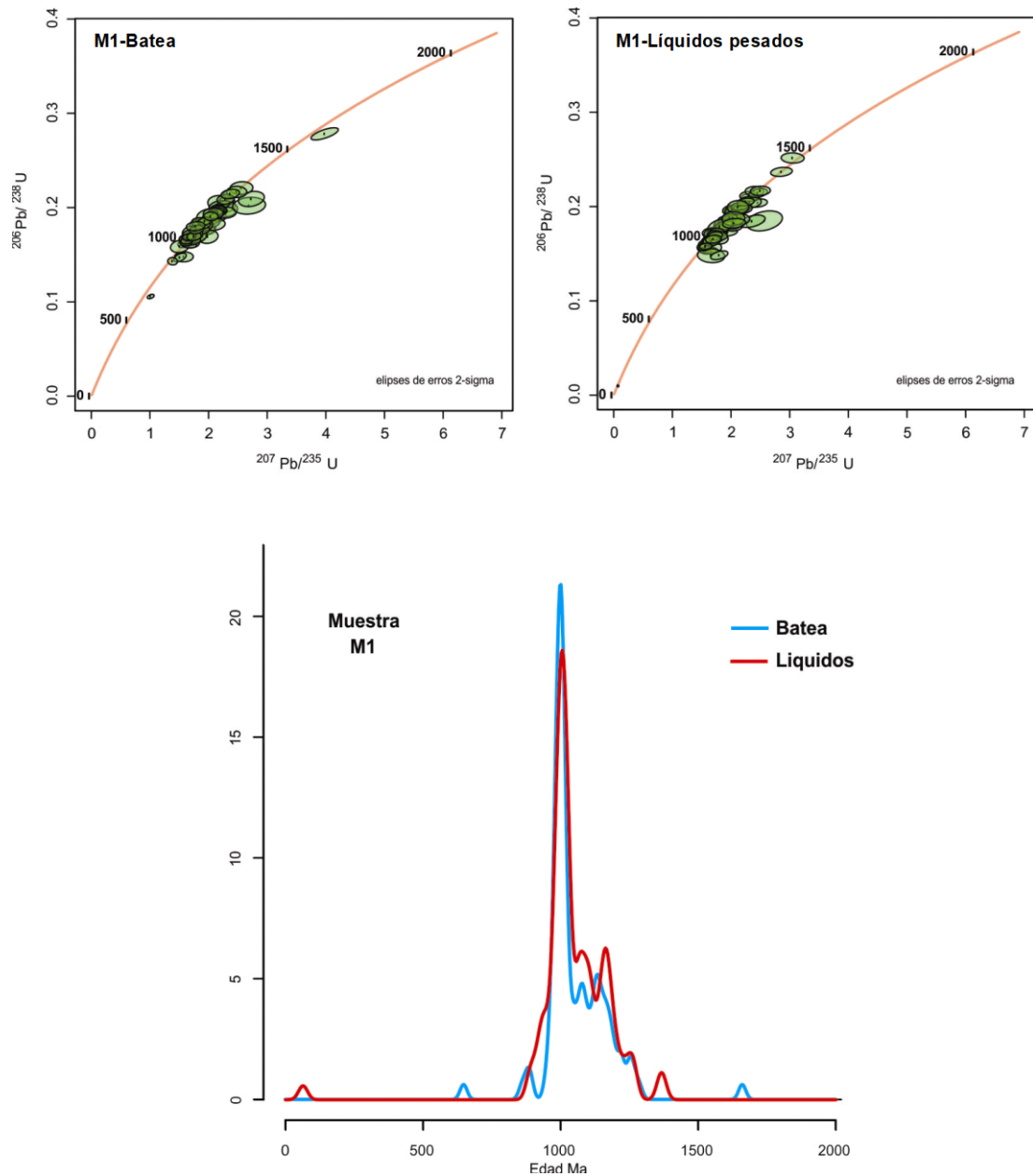


Figura A1. Diagramas de Concordia tipo Wetherill donde se observan agrupaciones de edades muy similares entre la muestra procesada mediante la batea y líquidos pesados. En la gráfica inferior, se muestran las curvas de distribución KDE de las edades de zircones detríticos obtenidas por ambas técnicas. De interés en ambos espectros de edades es su distribución muy homogénea.

Apéndice 2. Filtrados de datos geocronológicos de zircones detríticos usando un porcentaje de discordancia < 30% y < 10%.

Diagramas de Concordia tipo Wetherill que muestran como todos los datos de zircones detríticos grafican sobre y muy cercanos a la curva de Concordia (Figura A2) apoyando la confiabilidad de los datos para su manejo adecuado. De interés, es que los datos geocronológicos a distintas escalas con un porcentaje de discordancia < 30% y < 10%, son virtualmente idénticos, es decir, no se ve que desaparezcan poblaciones de edades independientemente del filtro que se utilice. Esto garantiza la confiabilidad de los datos considerados en el presente trabajo.

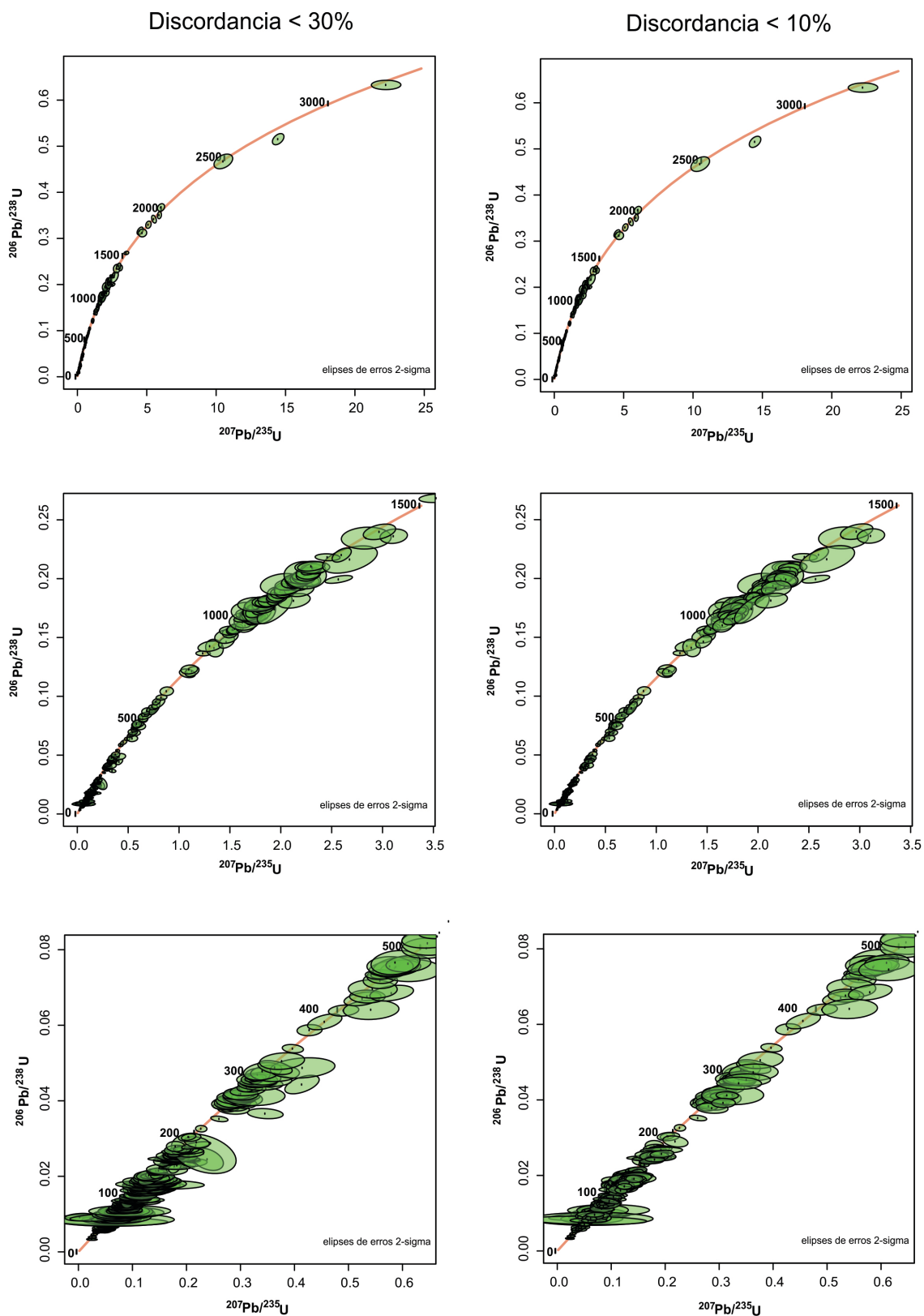


Figura A2. Diagramas de Concordia tipo Wetherill a distintas escalas, mostrando todos los datos de zircón analizados y utilizando un filtro de porcentaje de discordancia < 30% y < 10%. Nótese como en ambos diagramas de comparación, las poblaciones de edades se mantienen, independientemente del filtro que se utilice.

Apéndice 3. Datos Analíticos de U-Pb en zircón obtenidos por LA-ICPMS

SAMPLE	CORRECTED RATIOS ¹									CORRECTED AGES (Ma) ²									
	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ abs	²⁰⁷ Pb/ ²³⁵ U	±2σ abs	²⁰⁶ Pb/ ²³⁸ U	±2σ abs	²⁰⁶ Pb/ ²³² Th	±2σ abs	Rho	²⁰⁶ Pb/ ²³⁸ U	±2σ	²⁰⁷ Pb/ ²³⁵ U	±2σ	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ	Best age (Ma) ³		±2σ	Disc % ⁴
CHI-15-01 (Chi*)	Batolito Puerto Vallarta, Suite Cuale Macías																		
Zircon-002_CHI15-01	0.0475	0.0052	0.0796	0.0081	0.0119	0.0003	0.0036	0.0003	-0.02	76.0	2.2	77.4	7.7	480.0	110.0	76.0	2.20	1.81	
Zircon-003_CHI15-01	0.0459	0.0045	0.0806	0.0088	0.0121	0.0004	0.0037	0.0003	0.07	77.2	2.4	78.4	8.2	261.0	83.0	77.2	2.40	1.53	
Zircon-004_CHI15-01	0.0485	0.0040	0.0975	0.0080	0.0145	0.0003	0.0040	0.0003	0.10	92.7	2.1	94.2	7.3	310.0	100.0	92.7	2.10	1.59	
Zircon-005_CHI15-01	0.0472	0.0041	0.0776	0.0064	0.0116	0.0003	0.0034	0.0003	0.04	74.2	1.7	75.7	6.1	318.0	59.0	74.2	1.70	1.98	
Zircon-006_CHI15-01	0.0499	0.0046	0.0890	0.0100	0.0128	0.0004	0.0041	0.0003	0.11	82.0	2.8	87.9	8.8	360.0	120.0	82.0	2.80	6.71	
Zircon-007_CHI15-01	0.0490	0.0054	0.0725	0.0075	0.0106	0.0003	0.0034	0.0003	-0.31	68.0	1.6	70.8	7.1	430.0	110.0	68.0	1.60	3.95	
Zircon-008_CHI15-01	0.0469	0.0024	0.0782	0.0043	0.0120	0.0002	0.0036	0.0002	0.33	76.9	1.3	76.4	4.0	252.0	87.0	76.9	1.30	-0.65	
Zircon-009_CHI15-01	0.0568	0.0028	0.1137	0.0057	0.0144	0.0002	0.0049	0.0003	0.08	92.4	1.2	109.3	5.2	498.0	70.0	92.4	1.20	15.46	
Zircon-010_CHI15-01	0.0601	0.0035	0.1135	0.0068	0.0140	0.0002	0.0049	0.0004	0.24	89.5	1.5	109.1	6.2	608.0	64.0	89.5	1.50	17.97	
Zircon-011_CHI15-01	0.0552	0.0051	0.1031	0.0090	0.0136	0.0003	0.0055	0.0004	-0.14	87.3	2.2	99.3	8.2	600.0	120.0	87.3	2.20	12.08	
Zircon-012_CHI15-01	0.0645	0.0086	0.0275	0.0034	0.0032	0.0001	0.0013	0.0002	-0.21	20.7	0.5	27.5	3.4	900.0	160.0	20.7	0.50	24.73	
Zircon-014_CHI15-01	0.0511	0.0032	0.0867	0.0059	0.0125	0.0002	0.0047	0.0003	0.23	80.0	1.4	84.4	5.5	325.0	86.0	80.0	1.40	5.21	
Zircon-015_CHI15-01	0.0509	0.0072	0.0910	0.0130	0.0130	0.0004	0.0045	0.0004	0.21	83.0	2.3	89.0	12.0	440.0	130.0	83.0	2.30	6.74	
Zircon-016_CHI15-01	0.0497	0.0028	0.0835	0.0047	0.0121	0.0002	0.0043	0.0003	-0.06	77.8	1.2	81.3	4.4	346.0	72.0	77.8	1.20	4.31	
Zircon-017_CHI15-01	0.0497	0.0066	0.0717	0.0082	0.0108	0.0004	0.0045	0.0004	-0.12	69.4	2.5	69.9	7.8	720.0	140.0	69.4	2.50	0.72	
Zircon-019_CHI15-01	0.0605	0.0085	0.0880	0.0120	0.0104	0.0003	0.0047	0.0006	-0.19	66.8	1.8	86.0	11.0	650.0	140.0	66.8	1.80	22.33	
Zircon-020_CHI15-01	0.0546	0.0032	0.0970	0.0055	0.0126	0.0002	0.0048	0.0003	0.06	80.4	1.4	93.8	5.1	427.0	74.0	80.4	1.40	14.29	
Zircon-021_CHI15-01	0.0506	0.0036	0.0890	0.0061	0.0124	0.0002	0.0042	0.0003	-0.08	79.2	1.4	86.4	5.7	350.0	77.0	79.2	1.40	8.33	
Zircon-022_CHI15-01	0.0487	0.0054	0.0905	0.0095	0.0132	0.0003	0.0040	0.0003	-0.25	84.6	1.9	87.7	8.9	370.0	130.0	84.6	1.90	3.53	
Zircon-023_CHI15-01	0.0458	0.0023	0.0769	0.0040	0.0117	0.0001	0.0036	0.0002	0.30	75.1	0.9	75.1	3.8	173.0	67.0	75.1	0.90		
Zircon-024_CHI15-01	0.0506	0.0047	0.0870	0.0083	0.0125	0.0003	0.0038	0.0003	0.07	80.0	1.8	85.5	7.5	490.0	100.0	80.0	1.80	6.43	
Zircon-027_CHI15-01	0.0491	0.0031	0.0933	0.0056	0.0135	0.0002	0.0043	0.0003	-0.15	86.4	1.5	90.4	5.2	274.0	68.0	86.4	1.50	4.42	
Zircon-028_CHI15-01	0.0433	0.0053	0.0684	0.0081	0.0107	0.0003	0.0033	0.0002	0.07	68.7	2.0	66.9	7.7	460.0	160.0	68.7	2.00	-2.69	
Zircon-029_CHI15-01	0.0515	0.0038	0.0968	0.0073	0.0134	0.0002	0.0044	0.0004	-0.03	85.5	1.5	93.6	6.8	349.0	83.0	85.5	1.50	8.65	
Zircon-030_CHI15-01	0.0495	0.0037	0.0807	0.0059	0.0113	0.0002	0.0038	0.0004	0.10	72.2	1.5	78.6	5.6	356.0	66.0	72.2	1.50	8.14	
Zircon-031_CHI15-01	0.0526	0.0025	0.0748	0.0039	0.0105	0.0002	0.0035	0.0002	0.20	67.4	1.0	73.2	3.7	312.0	65.0	67.4	1.00	7.92	
Zircon-033_CHI15-01	0.0549	0.0050	0.0916	0.0084	0.0125	0.0003	0.0039	0.0003	0.24	80.1	1.9	88.7	7.8	371.0	92.0	80.1	1.90	9.70	
Zircon-034_CHI15-01	0.0489	0.0028	0.0714	0.0042	0.0107	0.0002	0.0035	0.0002	0.14	68.4	1.1	70.0	4.0	225.0	50.0	68.4	1.10	2.29	
Zircon-035_CHI15-01	0.0544	0.0025	0.0925	0.0044	0.0126	0.0001	0.0040	0.0002	0.12	80.9	0.9	89.8	4.1	429.0	69.0	80.9	0.90	9.91	
Zircon-036_CHI15-01	0.0477	0.0057	0.0752	0.0075	0.0116	0.0005	0.0034	0.0003	0.01	74.3	3.0	73.5	7.2	270.0	130.0	74.3	3.00	-1.09	
Zircon-037_CHI15-01	0.0481	0.0080	0.0860	0.0160	0.0132	0.0004	0.0045	0.0007	0.42	84.7	2.7	83.0	14.0	630.0	360.0	84.7	2.70	-2.05	
Zircon-038_CHI15-01	0.0457	0.0046	0.0812	0.0085	0.0128	0.0004	0.0041	0.0004	0.16	82.0	2.3	80.0	7.8	448.0	78.0	82.0	2.30	-2.50	
Zircon-039_CHI15-01	0.0491	0.0028	0.0731	0.0040	0.0112	0.0002	0.0035	0.0002	-0.12	71.5	1.1	72.7	3.6	270.0	74.0	71.5	1.10	1.65	
Zircon-041_CHI15-01	0.0478	0.0036	0.0786	0.0058	0.0122	0.0003	0.0041	0.0003	0.08	77.9	1.6	76.8	5.5	259.0	91.0	77.9	1.60	-1.43	
Zircon-042_CHI15-01	0.0524	0.0028	0.0972	0.0050	0.0136	0.0003	0.0051	0.0004	0.07	87.0	1.6	94.1	4.6	348.0	61.0	87.0	1.60	7.55	
Zircon-043_CHI15-01	0.0494	0.0028	0.0936	0.0056	0.0141	0.0003	0.0052	0.0004	-0.02	90.3	1.8	90.7	5.2	341.0	81.0	90.3	1.80	0.44	
Zircon-044_CHI15-01	0.0527	0.0040	0.0992	0.0071	0.0138	0.0003	0.0052	0.0004	-0.22	88.5	1.7	95.8	6.6	397.0	77.0	88.5	1.70	7.62	
Zircon-046_CHI15-01	0.0540	0.0170	0.1030	0.0180	0.0144	0.0006	0.0063	0.0008	-0.09	92.3	3.8	98.0	18.0	580.0	110.0	92.3	3.80	5.82	
Zircon-047_CHI15-01	0.0438	0.0072	0.0292	0.0048	0.0046	0.0002	0.0016	0.0002	0.05	29.7	1.2	29.1	4.8	570.0	130.0	29.7	1.20	-2.06	
Zircon-048_CHI15-01	0.0504	0.0033	0.1830	0.0110	0.0270	0.0005	0.0082	0.0005	-0.13	171.6	3.1	170.2	9.6	274.0	65.0	171.6	3.10	-0.82	
Zircon-049_CHI15-01	0.0503	0.0025	0.0946	0.0046	0.0137	0.0002	0.0048	0.0003	0.19	87.5	1.3	91.7	4.3	305.0	57.0	87.5	1.30	4.58	
Zircon-050_CHI15-01	0.0466	0.0027	0.0806	0.0046	0.0125	0.0002	0.0042	0.0003	0.05	80.2	1.1	78.7	4.3	243.0	70.0	80.2	1.10	-1.91	
Zircon-051_CHI15-01	0.0613	0.0047	0.0878	0.0063	0.0105	0.0003	0.0042	0.0004	-0.28	67.4	1.7	85.3	5.8	681.0	96.0	67.4	1.70	20.98	
Zircon-052_CHI15-01	0.0555	0.0070	0.1050	0.0120	0.0143	0.0004	0.0047	0.0003	-0.18	91.3	2.7	101.0	11.0	650.0	110.0	91.3	2.70	9.60	
Zircon-053_CHI15-01	0.0457	0.0054	0.0797	0.0090	0.0124	0.0004	0.0042	0.0004	-0.11	79.3	2.3	77.4	8.4	469.0	95.0	79.3	2.30	-2.45	
Zircon-054_CHI15-01	0.0580	0.0120	0.0238	0.0046	0.0033	0.0001	0.0012	0.0001	-0.25	21.1	0.9	23.8	4.6	960.0	180.0	21.1	0.90	11.34	

Zircon-055_CHI15-01	0.0534	0.0037	0.0983	0.0068	0.0134	0.0003	0.0045	0.0003	0.26	85.8	1.8	95.0	6.3	456.0	87.0	85.8	1.80	9.68
Zircon-056_CHI15-01	0.0583	0.0041	0.1217	0.0089	0.0150	0.0003	0.0049	0.0004	0.39	96.1	2.0	116.5	8.1	521.0	99.0	96.1	2.00	17.51
Zircon-057_CHI15-01	0.0503	0.0048	0.0944	0.0082	0.0136	0.0004	0.0044	0.0004	-0.38	87.1	2.7	91.4	7.6	530.0	140.0	87.1	2.70	4.70
Zircon-058_CHI15-01	0.0490	0.0063	0.0890	0.0110	0.0132	0.0004	0.0040	0.0004	-0.11	84.5	2.4	86.0	10.0	370.0	130.0	84.5	2.40	1.74
Zircon-059_CHI15-01	0.0501	0.0032	0.0979	0.0056	0.0141	0.0002	0.0046	0.0003	-0.06	90.3	1.5	94.8	5.1	247.0	69.0	90.3	1.50	4.75
Zircon-060_CHI15-01	0.0480	0.0037	0.0834	0.0061	0.0127	0.0003	0.0045	0.0005	0.19	81.0	2.1	82.1	5.4	322.0	71.0	81.0	2.10	1.34
Zircon-061_CHI15-01	0.0500	0.0043	0.0841	0.0083	0.0124	0.0003	0.0040	0.0003	0.08	79.2	1.7	85.2	7.7	310.0	100.0	79.2	1.70	7.04
Zircon-062_CHI15-01	0.0622	0.0043	0.1288	0.0086	0.0149	0.0004	0.0060	0.0005	0.05	95.1	2.2	122.7	7.7	690.0	80.0	95.1	2.20	22.49
Zircon-063_CHI15-01	0.0512	0.0023	0.0722	0.0033	0.0101	0.0001	0.0034	0.0002	-0.02	65.0	0.9	71.2	3.1	322.0	80.0	65.0	0.90	8.71
Zircon-064_CHI15-01	0.0507	0.0033	0.0946	0.0055	0.0134	0.0002	0.0042	0.0003	-0.03	85.9	1.4	91.7	5.1	277.0	65.0	85.9	1.40	6.32
Zircon-065_CHI15-01	0.0471	0.0030	0.0870	0.0054	0.0132	0.0002	0.0041	0.0003	-0.02	84.2	1.2	84.6	5.0	256.0	84.0	84.2	1.20	0.47
Zircon-066_CHI15-01	0.0496	0.0071	0.0930	0.0130	0.0138	0.0004	0.0050	0.0004	-0.01	88.3	2.3	90.0	12.0	700.0	160.0	88.3	2.30	1.89
Zircon-067_CHI15-01	0.0458	0.0063	0.0820	0.0110	0.0123	0.0004	0.0041	0.0004	0.09	78.9	2.6	80.0	10.0	500.0	140.0	78.9	2.60	1.37
Zircon-069_CHI15-01	0.0470	0.0028	0.0727	0.0044	0.0112	0.0001	0.0036	0.0002	-0.09	71.9	0.8	71.2	4.2	267.0	73.0	71.9	0.80	-0.98
Zircon-070_CHI15-01	0.0535	0.0040	0.0893	0.0065	0.0120	0.0002	0.0041	0.0003	-0.03	77.1	1.3	86.8	6.0	441.0	96.0	77.1	1.30	11.18
Zircon-071_CHI15-01	0.0491	0.0033	0.0954	0.0063	0.0138	0.0003	0.0046	0.0003	0.04	88.4	1.7	92.3	5.8	288.0	65.0	88.4	1.70	4.23
Zircon-072_CHI15-01	0.0505	0.0057	0.1000	0.0110	0.0144	0.0004	0.0048	0.0004	-0.18	91.9	2.7	95.8	9.9	470.0	100.0	91.9	2.70	4.07
Zircon-073_CHI15-01	0.0640	0.0067	0.0918	0.0089	0.0107	0.0003	0.0048	0.0005	-0.20	68.5	2.0	90.6	7.8	800.0	110.0	68.5	2.00	24.39
Zircon-074_CHI15-01	0.0610	0.0180	0.0253	0.0078	0.0033	0.0002	0.0013	0.0004	-0.13	21.5	1.2	25.1	7.7	1070.0	190.0	21.5	1.20	14.34
Zircon-075_CHI15-01	0.0605	0.0031	0.1022	0.0048	0.0122	0.0002	0.0050	0.0003	-0.07	78.2	1.2	98.7	4.4	623.0	73.0	78.2	1.20	20.77
Zircon-076_CHI15-01	0.0525	0.0027	0.0784	0.0035	0.0110	0.0001	0.0039	0.0003	-0.07	70.6	0.8	76.6	3.3	274.0	68.0	70.6	0.80	7.83
Zircon-077_CHI15-01	0.0542	0.0030	0.0860	0.0050	0.0119	0.0002	0.0040	0.0002	0.57	76.4	1.3	83.7	4.7	349.0	81.0	76.4	1.30	8.72
Zircon-078_CHI15-01	0.0530	0.0041	0.0883	0.0064	0.0123	0.0003	0.0050	0.0005	0.06	78.8	1.6	85.8	6.0	398.0	75.0	78.8	1.60	8.16
Zircon-079_CHI15-01	0.0583	0.0088	0.0231	0.0032	0.0032	0.0001	0.0011	0.0001	-0.02	20.4	0.9	23.1	3.2	690.0	120.0	20.4	0.90	11.69
Zircon-080_CHI15-01	0.0483	0.0030	0.0813	0.0050	0.0125	0.0003	0.0042	0.0003	0.07	79.8	1.7	79.2	4.7	308.0	69.0	79.8	1.70	-0.76
Zircon-081_CHI15-01	0.0503	0.0038	0.0934	0.0065	0.0139	0.0003	0.0045	0.0003	0.04	88.7	2.1	92.0	5.3	341.0	92.0	88.7	2.10	3.59
Zircon-082_CHI15-01	0.0481	0.0036	0.0806	0.0056	0.0125	0.0003	0.0038	0.0003	-0.18	80.2	1.6	78.5	5.3	319.0	72.0	80.2	1.60	-2.17
Zircon-083_CHI15-01	0.0508	0.0037	0.0948	0.0071	0.0137	0.0003	0.0041	0.0003	0.16	87.4	1.6	91.8	6.6	331.0	71.0	87.4	1.60	4.79
Zircon-084_CHI15-01	0.0528	0.0037	0.0902	0.0059	0.0128	0.0003	0.0039	0.0003	0.10	82.2	1.8	87.6	5.5	427.0	69.0	82.2	1.80	6.16
Zircon-085_CHI15-01	0.0474	0.0023	0.0729	0.0033	0.0114	0.0001	0.0034	0.0002	-0.27	72.9	0.8	71.4	3.1	148.0	39.0	72.9	0.80	-2.10
Zircon-086_CHI15-01	0.0486	0.0020	0.0841	0.0031	0.0127	0.0002	0.0040	0.0002	-0.04	81.3	1.2	82.0	2.9	195.0	48.0	81.3	1.20	0.85
Zircon-087_CHI15-01	0.0483	0.0028	0.0955	0.0060	0.0143	0.0003	0.0044	0.0003	0.26	91.5	1.9	92.4	5.5	250.0	52.0	91.5	1.90	0.97
Zircon-088_CHI15-01	0.0513	0.0063	0.0950	0.0110	0.0137	0.0004	0.0047	0.0004	0.00	87.8	2.4	92.0	10.0	570.0	130.0	87.8	2.40	4.57
Zircon-089_CHI15-01	0.0496	0.0048	0.0869	0.0085	0.0130	0.0003	0.0042	0.0003	0.11	83.2	2.0	84.2	7.9	466.0	88.0	83.2	2.00	1.19
Zircon-090_CHI15-01	0.0470	0.0023	0.0805	0.0039	0.0126	0.0002	0.0040	0.0003	-0.05	80.9	1.0	78.5	3.6	227.0	47.0	80.9	1.00	-3.06
Zircon-091_CHI15-01	0.0492	0.0050	0.0980	0.0093	0.0141	0.0004	0.0050	0.0004	0.14	90.1	2.3	94.6	8.5	420.0	110.0	90.1	2.30	4.76
Zircon-092_CHI15-01	0.0519	0.0052	0.0980	0.0110	0.0139	0.0004	0.0047	0.0004	0.12	89.2	2.7	94.5	9.9	288.0	77.0	89.2	2.70	5.61
Zircon-093_CHI15-01	0.0517	0.0033	0.0797	0.0050	0.0113	0.0002	0.0041	0.0003	0.05	72.5	1.3	77.7	4.7	365.0	78.0	72.5	1.30	6.69
Zircon-094_CHI15-01	0.0509	0.0062	0.1010	0.0120	0.0141	0.0004	0.0055	0.0006	-0.02	90.0	2.4	98.0	11.0	440.0	150.0	90.0	2.40	8.16
Zircon-095_CHI15-01	0.0599	0.0059	0.1300	0.0120	0.0155	0.0004	0.0065	0.0005	-0.02	98.9	2.4	123.0	11.0	590.0	110.0	98.9	2.40	19.59
Zircon-096_CHI15-01	0.0608	0.0042	0.1188	0.0076	0.0140	0.0003	0.0065	0.0006	0.08	89.5	2.0	113.8	6.9	630.0	110.0	89.5	2.00	21.35
Zircon-097_CHI15-01	0.0527	0.0068	0.0793	0.0085	0.0108	0.0004	0.0039	0.0004	-0.04	69.4	2.5	77.2	8.0	487.0	90.0	69.4	2.50	10.10
Zircon-098_CHI15-01	0.0459	0.0029	0.0689	0.0043	0.0107	0.0002	0.0038	0.0003	0.00	68.8	1.0	67.5	4.1	265.0	81.0	68.8	1.00	-1.93
Zircon-099_CHI15-01	0.0444	0.0031	0.0751	0.0053	0.0119	0.0002	0.0042	0.0003	0.04	76.0	1.0	73.4	5.0	244.0	81.0	76.0	1.00	-3.54
Zircon-100_CHI15-01	0.0472	0.0031	0.0922	0.0060	0.0139	0.0002	0.0048	0.0004	-0.04	88.9	1.5	89.4	5.6	242.0	57.0	88.9	1.50	0.56

CORRECTED RATIOS¹CORRECTED AGES (Ma)²

Best age

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ abs	²⁰⁷ Pb/ ²³⁵ U	±2σ abs	²⁰⁶ Pb/ ²³⁸ U	±2σ abs	²⁰⁶ Pb/ ²³² Th	±2σ abs	Rho	²⁰⁶ Pb/ ²³⁸ U	±2σ	²⁰⁷ Pb/ ²³⁵ U	±2σ	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ	(Ma) ³	±2σ	Disc % ⁴
LIT15-01 (Lit*)	Batolito Puerto Vallarta, Suite Cuale Macias, Complejo Arteaga																	
Zircon-001_LIT15-01	0.0473	0.0030	0.0811	0.0053	0.0124	0.0002	0.0039	0.0003	0.06	79.2	1.4	79.1	5.0	110.0	130.0	79.2	1.40	-0.13
Zircon-002_LIT15-01	0.0565	0.0072	0.0265	0.0033	0.0033	0.0001	0.0011	0.0001	0.09	21.1	0.9	26.5	3.3	520.0	230.0	21.1	0.85	20.57

Zircon-003_LIT15-01	0.0495	0.0033	0.0869	0.0059	0.0128	0.0003	0.0038	0.0003	0.10	81.9	1.8	85.2	5.7	180.0	130.0	81.9	1.80	3.87
Zircon-004_LIT15-01	0.0526	0.0080	0.0880	0.0140	0.0120	0.0006	0.0046	0.0006	0.12	76.8	3.5	85.0	13.0	280.0	300.0	76.8	3.50	9.65
Zircon-005_LIT15-01	0.0489	0.0058	0.0870	0.0100	0.0130	0.0003	0.0043	0.0004	-0.14	83.3	2.0	84.1	9.3	110.0	220.0	83.3	2.00	0.95
Zircon-006_LIT15-01	0.0611	0.0045	0.1072	0.0083	0.0129	0.0003	0.0048	0.0003	0.09	82.9	1.7	103.1	7.6	610.0	150.0	82.9	1.70	19.59
Zircon-007_LIT15-01	0.0502	0.0033	0.0864	0.0058	0.0125	0.0003	0.0036	0.0002	0.46	80.0	1.7	84.0	5.5	190.0	130.0	80.0	1.70	4.76
Zircon-008_LIT15-01	0.0477	0.0033	0.0851	0.0060	0.0131	0.0004	0.0045	0.0003	0.08	83.7	2.2	83.8	5.4	90.0	140.0	83.7	2.20	0.12
Zircon-009_LIT15-01	0.0479	0.0032	0.0790	0.0055	0.0119	0.0002	0.0038	0.0002	0.10	76.5	1.5	77.7	5.0	100.0	130.0	76.5	1.50	1.54
Zircon-010_LIT15-01	0.0475	0.0023	0.0874	0.0044	0.0133	0.0002	0.0043	0.0002	0.14	85.1	1.5	85.0	4.1	82.0	96.0	85.1	1.50	-0.12
Zircon-011_LIT15-01	0.0502	0.0032	0.0853	0.0053	0.0125	0.0003	0.0040	0.0002	0.10	79.8	1.6	83.0	5.0	190.0	130.0	79.8	1.60	3.86
Zircon-012_LIT15-01	0.0485	0.0032	0.0856	0.0059	0.0126	0.0002	0.0041	0.0003	0.01	80.6	1.4	83.2	5.5	160.0	140.0	80.6	1.40	3.13
Zircon-013_LIT15-01	0.0486	0.0057	0.0848	0.0094	0.0128	0.0004	0.0040	0.0003	-0.21	82.2	2.4	82.2	8.8	130.0	220.0	82.2	2.40	
Zircon-014_LIT15-01	0.0495	0.0034	0.0824	0.0059	0.0122	0.0002	0.0040	0.0002	0.19	78.1	1.4	80.4	5.6	170.0	140.0	78.1	1.40	2.86
Zircon-015_LIT15-01	0.0510	0.0037	0.1003	0.0066	0.0144	0.0004	0.0044	0.0004	-0.33	91.9	2.4	96.9	6.1	240.0	150.0	91.9	2.40	5.16
Zircon-016_LIT15-01	0.0490	0.0019	0.0827	0.0036	0.0124	0.0002	0.0041	0.0002	-0.05	79.6	1.2	80.7	3.4	129.0	97.0	79.6	1.20	1.36
Zircon-017_LIT15-01	0.0465	0.0037	0.0784	0.0063	0.0121	0.0003	0.0042	0.0003	0.03	77.3	1.8	76.5	5.9	80.0	160.0	77.3	1.80	-1.05
Zircon-019_LIT15-01	0.0471	0.0021	0.0797	0.0038	0.0121	0.0002	0.0040	0.0002	0.08	77.7	1.2	77.8	3.6	64.0	92.0	77.7	1.20	0.13
Zircon-022_LIT15-01	0.0468	0.0017	0.0853	0.0038	0.0132	0.0002	0.0042	0.0002	0.42	84.3	1.3	83.1	3.5	47.0	76.0	84.3	1.30	-1.44
Zircon-023_LIT15-01	0.0497	0.0038	0.0880	0.0067	0.0128	0.0003	0.0042	0.0003	-0.15	81.8	1.9	85.4	6.2	160.0	150.0	81.8	1.90	4.22
Zircon-024_LIT15-01	0.0474	0.0025	0.0848	0.0045	0.0129	0.0002	0.0042	0.0002	0.03	82.4	1.3	82.6	4.2	80.0	100.0	82.4	1.30	0.24
Zircon-025_LIT15-01	0.0642	0.0031	0.2130	0.0110	0.0241	0.0004	0.0086	0.0004	0.28	153.8	2.5	197.3	9.7	730.0	100.0	153.8	2.50	22.05
Zircon-026_LIT15-01	0.0474	0.0028	0.0834	0.0048	0.0127	0.0002	0.0039	0.0002	-0.02	81.1	1.4	81.2	4.5	80.0	120.0	81.1	1.40	0.12
Zircon-027_LIT15-01	0.0509	0.0031	0.1636	0.0096	0.0234	0.0004	0.0080	0.0005	-0.29	149.1	2.5	153.6	8.4	240.0	130.0	149.1	2.50	2.93
Zircon-029_LIT15-01	0.0457	0.0046	0.0852	0.0079	0.0130	0.0004	0.0041	0.0004	0.13	83.1	2.8	84.4	7.9	10.0	190.0	83.1	2.80	1.54
Zircon-030_LIT15-01	0.0518	0.0049	0.0887	0.0083	0.0125	0.0003	0.0042	0.0002	-0.06	80.1	1.6	86.1	7.7	270.0	190.0	80.1	1.60	6.97
Zircon-031_LIT15-01	0.0458	0.0022	0.0780	0.0040	0.0123	0.0002	0.0041	0.0002	0.05	78.7	1.1	76.3	3.7	12.0	94.0	78.7	1.10	-3.15
Zircon-032_LIT15-01	0.0524	0.0095	0.0930	0.0160	0.0132	0.0003	0.0028	0.0013	-0.15	84.2	1.7	90.0	15.0	280.0	380.0	84.2	1.70	6.44
Zircon-033_LIT15-01	0.0455	0.0026	0.0856	0.0054	0.0135	0.0003	0.0039	0.0004	0.09	86.3	1.9	83.3	5.0	0.0	110.0	86.3	1.90	-3.60
Zircon-034_LIT15-01	0.0477	0.0031	0.0831	0.0056	0.0128	0.0003	0.0039	0.0002	0.04	82.2	1.8	81.8	5.1	90.0	130.0	82.2	1.80	-0.49
Zircon-035_LIT15-01	0.0484	0.0042	0.0840	0.0072	0.0131	0.0003	0.0043	0.0003	-0.04	83.7	1.9	81.7	6.7	110.0	160.0	83.7	1.90	-2.45
Zircon-036_LIT15-01	0.0504	0.0050	0.0862	0.0074	0.0122	0.0003	0.0044	0.0004	-0.06	77.9	2.0	83.8	6.9	300.0	160.0	77.9	2.00	7.04
Zircon-038_LIT15-01	0.0516	0.0043	0.0890	0.0070	0.0129	0.0004	0.0055	0.0007	0.37	82.3	2.3	86.5	6.5	290.0	180.0	82.3	2.30	4.86
Zircon-039_LIT15-01	0.0620	0.0034	0.7960	0.0530	0.0939	0.0035	0.0414	0.0020	0.60	578.0	21.0	594.0	30.0	660.0	120.0	578.0	21.00	2.69
Zircon-040_LIT15-01	0.0494	0.0029	0.0829	0.0050	0.0122	0.0002	0.0042	0.0005	-0.02	78.0	1.3	80.8	4.7	180.0	130.0	78.0	1.30	3.47
Zircon-041_LIT15-01	0.0510	0.0100	0.0970	0.0140	0.0132	0.0006	0.0063	0.0012	-0.57	84.7	3.8	94.0	13.0	260.0	310.0	84.7	3.80	9.89
Zircon-042_LIT15-01	0.0531	0.0049	0.0920	0.0075	0.0127	0.0004	0.0047	0.0004	0.03	81.3	2.6	89.2	7.0	350.0	180.0	81.3	2.60	8.86
Zircon-043_LIT15-01	0.0488	0.0029	0.0899	0.0054	0.0135	0.0002	0.0043	0.0002	-0.14	86.1	1.5	87.4	5.0	140.0	120.0	86.1	1.50	1.49
Zircon-044_LIT15-01	0.0495	0.0040	0.0742	0.0065	0.0111	0.0002	0.0034	0.0002	0.04	71.3	1.5	72.6	6.1	160.0	160.0	71.3	1.50	1.79
Zircon-045_LIT15-01	0.0574	0.0031	0.1009	0.0062	0.0125	0.0002	0.0049	0.0003	0.25	80.0	1.5	97.4	5.7	530.0	120.0	80.0	1.50	17.86
Zircon-046_LIT15-01	0.0633	0.0057	0.1100	0.0100	0.0125	0.0003	0.0047	0.0005	0.34	80.1	1.8	105.5	9.1	660.0	190.0	80.1	1.80	24.08
Zircon-047_LIT15-01	0.0473	0.0063	0.0890	0.0110	0.0134	0.0004	0.0047	0.0006	-0.14	86.0	2.6	86.0	10.0	60.0	240.0	86.0	2.60	
Zircon-048_LIT15-01	0.0490	0.0045	0.0819	0.0086	0.0127	0.0004	0.0042	0.0006	0.26	81.2	2.8	83.8	8.1	150.0	190.0	81.2	2.80	3.10
Zircon-049_LIT15-01	0.0490	0.0031	0.1720	0.0110	0.0258	0.0006	0.0085	0.0005	-0.04	164.1	3.5	160.6	9.4	140.0	130.0	164.1	3.50	-2.18
Zircon-050_LIT15-01	0.0477	0.0029	0.0781	0.0047	0.0119	0.0003	0.0043	0.0003	0.05	76.3	1.8	76.9	4.6	130.0	120.0	76.3	1.80	0.78
Zircon-051_LIT15-01	0.0545	0.0033	0.1180	0.0079	0.0155	0.0004	0.0049	0.0003	0.00	99.1	2.2	114.0	7.4	390.0	140.0	99.1	2.20	13.07
Zircon-052_LIT15-01	0.0530	0.0061	0.1000	0.0110	0.0136	0.0004	0.0048	0.0004	-0.03	87.0	2.6	96.0	10.0	340.0	230.0	87.0	2.60	9.38
Zircon-056_LIT15-01	0.0503	0.0070	0.0940	0.0130	0.0136	0.0005	0.0048	0.0004	0.02	87.0	3.1	91.0	12.0	210.0	260.0	87.0	3.10	4.40
Zircon-057_LIT15-01	0.0474	0.0017	0.0875	0.0035	0.0133	0.0002	0.0042	0.0002	0.15	85.1	1.2	85.2	3.3	74.0	77.0	85.1	1.20	0.12
Zircon-058_LIT15-01	0.0479	0.0036	0.0808	0.0057	0.0125	0.0003	0.0043	0.0003	-0.02	79.8	1.8	78.8	5.3	100.0	140.0	79.8	1.80	-1.27
Zircon-059_LIT15-01	0.0519	0.0064	0.0900	0.0110	0.0133	0.0005	0.0051	0.0005	0.08	85.6	3.2	87.0	10.0	320.0	250.0	85.6	3.20	1.61
Zircon-060_LIT15-01	0.0487	0.0024	0.0810	0.0044	0.0124	0.0002	0.0042	0.0002	0.25	79.4	1.2	79.0	4.1	130.0	100.0	79.4	1.20	-0.51
Zircon-061_LIT15-01	0.0539	0.0069	0.0970	0.0120	0.0133	0.0004	0.0050	0.0004	-0.35	84.9	2.3	94.0	11.0	310.0	260.0	84.9	2.30	9.68
Zircon-062_LIT15-01	0.0496	0.0058	0.0838	0.0089	0.0121	0.0004	0.0038	0.0004	-0.05	77.6	2.3	81.4	8.4	240.0	220.0	77.6	2.30	4.67

Zircon-063_LIT15-01	0.0479	0.0067	0.0850	0.0130	0.0129	0.0005	0.0041	0.0004	0.23	82.4	3.4	84.0	12.0	200.0	240.0	82.4	3.40	1.90
Zircon-064_LIT15-01	0.0516	0.0032	0.0866	0.0064	0.0125	0.0003	0.0042	0.0004	0.28	80.1	1.7	85.1	5.8	250.0	130.0	80.1	1.70	5.88
Zircon-065_LIT15-01	0.0493	0.0042	0.0884	0.0072	0.0131	0.0004	0.0044	0.0004	-0.11	83.7	2.2	85.8	6.7	150.0	160.0	83.7	2.20	2.45
Zircon-066_LIT15-01	0.0498	0.0042	0.0902	0.0074	0.0136	0.0004	0.0044	0.0003	0.07	86.8	2.7	87.5	6.9	190.0	160.0	86.8	2.70	0.80
Zircon-067_LIT15-01	0.0487	0.0020	0.0855	0.0041	0.0128	0.0002	0.0048	0.0003	0.33	82.0	1.1	83.3	3.8	134.0	91.0	82.0	1.10	1.56
Zircon-068_LIT15-01	0.0553	0.0046	0.0927	0.0074	0.0121	0.0003	0.0039	0.0002	0.00	77.6	2.0	91.6	6.5	400.0	170.0	77.6	2.00	15.28
Zircon-069_LIT15-01	0.0466	0.0051	0.0840	0.0110	0.0122	0.0004	0.0041	0.0002	-0.13	78.0	2.5	82.0	10.0	120.0	240.0	78.0	2.50	4.88
Zircon-070_LIT15-01	0.0481	0.0049	0.0830	0.0081	0.0128	0.0004	0.0047	0.0003	-0.15	82.0	2.3	80.7	7.5	100.0	190.0	82.0	2.30	-1.61
Zircon-073_LIT15-01	0.0498	0.0054	0.0840	0.0088	0.0127	0.0003	0.0039	0.0003	-0.02	81.4	2.2	81.7	8.2	160.0	210.0	81.4	2.20	0.37
Zircon-074_LIT15-01	0.0484	0.0021	0.0893	0.0041	0.0135	0.0003	0.0040	0.0002	0.04	86.4	1.8	86.8	3.8	120.0	94.0	86.4	1.80	0.46
Zircon-075_LIT15-01	0.0476	0.0018	0.0898	0.0041	0.0137	0.0002	0.0042	0.0002	0.51	87.6	1.5	87.3	3.8	82.0	82.0	87.6	1.50	-0.34
Zircon-076_LIT15-01	0.0494	0.0029	0.0911	0.0054	0.0136	0.0003	0.0046	0.0003	-0.10	87.2	1.6	88.5	5.0	180.0	120.0	87.2	1.60	1.47
Zircon-077_LIT15-01	0.0495	0.0037	0.0827	0.0064	0.0125	0.0003	0.0040	0.0002	0.03	79.9	1.9	80.5	6.0	160.0	150.0	79.9	1.90	0.75
Zircon-078_LIT15-01	0.0517	0.0038	0.0924	0.0064	0.0131	0.0004	0.0046	0.0004	-0.02	83.7	2.3	89.6	6.0	270.0	140.0	83.7	2.30	6.58
Zircon-079_LIT15-01	0.0494	0.0031	0.0870	0.0053	0.0128	0.0002	0.0041	0.0002	-0.20	82.1	1.4	84.7	4.9	160.0	130.0	82.1	1.40	3.07
Zircon-081_LIT15-01	0.0495	0.0037	0.0854	0.0065	0.0124	0.0002	0.0044	0.0003	0.05	79.6	1.5	83.1	6.1	230.0	160.0	79.6	1.50	4.21
Zircon-083_LIT15-01	0.0529	0.0039	0.1930	0.0160	0.0268	0.0008	0.0096	0.0008	0.36	170.7	4.7	179.0	13.0	300.0	160.0	170.7	4.70	4.64
Zircon-084_LIT15-01	0.0477	0.0019	0.0884	0.0047	0.0137	0.0003	0.0045	0.0002	0.33	87.8	1.6	85.9	4.4	67.0	95.0	87.8	1.60	-2.21
Zircon-085_LIT15-01	0.0552	0.0020	0.5580	0.0220	0.0734	0.0010	0.0220	0.0010	0.01	456.6	5.9	450.0	15.0	416.0	80.0	456.6	5.90	-1.47
Zircon-086_LIT15-01	0.0490	0.0055	0.0980	0.0120	0.0143	0.0005	0.0042	0.0004	0.47	91.6	3.2	95.0	11.0	130.0	210.0	91.6	3.20	3.58
Zircon-087_LIT15-01	0.0480	0.0036	0.0848	0.0067	0.0128	0.0003	0.0039	0.0002	-0.03	82.2	1.8	83.4	6.1	100.0	150.0	82.2	1.80	1.44
Zircon-088_LIT15-01	0.0526	0.0048	0.0855	0.0087	0.0122	0.0004	0.0037	0.0003	0.07	78.0	2.4	83.0	8.1	300.0	190.0	78.0	2.40	6.02
Zircon-089_LIT15-01	0.0488	0.0027	0.0838	0.0045	0.0127	0.0002	0.0040	0.0002	-0.38	81.5	1.3	81.7	4.2	120.0	120.0	81.5	1.30	0.24
Zircon-090_LIT15-01	0.0507	0.0050	0.0898	0.0089	0.0127	0.0004	0.0044	0.0003	0.02	81.6	2.6	87.1	8.2	270.0	200.0	81.6	2.60	6.31
Zircon-091_LIT15-01	0.0475	0.0032	0.0861	0.0057	0.0133	0.0002	0.0043	0.0003	0.06	85.4	1.5	83.8	5.3	80.0	130.0	85.4	1.50	-1.91
Zircon-092_LIT15-01	0.0482	0.0059	0.0869	0.0096	0.0131	0.0005	0.0043	0.0004	0.00	84.0	3.0	84.1	8.9	140.0	210.0	84.0	3.00	0.12
Zircon-093_LIT15-01	0.0501	0.0076	0.0870	0.0130	0.0130	0.0005	0.0044	0.0004	-0.12	83.3	3.4	84.0	12.0	210.0	280.0	83.3	3.40	0.83
Zircon-094_LIT15-01	0.0506	0.0054	0.0899	0.0094	0.0130	0.0003	0.0041	0.0004	-0.10	83.4	2.2	90.9	8.5	280.0	200.0	83.4	2.20	8.25
Zircon-095_LIT15-01	0.0597	0.0067	0.0990	0.0100	0.0125	0.0004	0.0049	0.0006	-0.21	80.2	2.3	95.4	9.7	590.0	220.0	80.2	2.30	15.93
Zircon-096_LIT15-01	0.0501	0.0050	0.0856	0.0088	0.0126	0.0003	0.0039	0.0003	0.15	80.6	1.9	82.9	8.2	160.0	190.0	80.6	1.90	2.77
Zircon-098_LIT15-01	0.0476	0.0047	0.0911	0.0093	0.0138	0.0003	0.0044	0.0002	-0.16	88.5	1.9	88.2	8.5	70.0	180.0	88.5	1.90	-0.34
Zircon-099_LIT15-01	0.0494	0.0027	0.0822	0.0047	0.0122	0.0002	0.0041	0.0004	-0.02	77.8	1.3	80.1	4.4	180.0	110.0	77.8	1.30	2.87
Zircon-100_LIT15-01	0.0479	0.0044	0.0851	0.0077	0.0131	0.0003	0.0042	0.0003	-0.14	83.6	2.0	82.7	7.2	130.0	180.0	83.6	2.00	-1.09

CORRECTED RATIOS¹CORRECTED AGES (Ma)²

Best age

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ abs	²⁰⁷ Pb/ ²³⁵ U	±2σ abs	²⁰⁶ Pb/ ²³⁸ U	±2σ abs	²⁰⁶ Pb/ ²³² Th	±2σ abs	Rho	²⁰⁶ Pb/ ²³⁸ U	±2σ	²⁰⁷ Pb/ ²³⁵ U	±2σ	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ	(Ma) ³	±2σ	Disc % ⁴
BUR-15-01 (Bur*)	Batolito Puerto Vallarta, Suite Zihuatanejo, Complejo Arteaga																	
Zircon-001_BUR15-01	0.0479	0.0035	0.0781	0.0054	0.0119	0.0002	0.0036	0.0002	-0.28	75.9	1.5	76.2	5.1	239.0	70.0	75.9	1.50	0.39
Zircon-002_BUR15-01	0.0480	0.0022	0.0849	0.0043	0.0128	0.0002	0.0043	0.0003	0.20	82.0	1.4	82.7	4.0	255.0	55.0	82.0	1.40	0.85
Zircon-003_BUR15-01	0.0524	0.0045	0.0896	0.0077	0.0128	0.0004	0.0043	0.0005	0.23	81.9	2.6	87.0	7.1	297.0	89.0	81.9	2.60	5.86
Zircon-004_BUR15-01	0.0491	0.0051	0.0795	0.0080	0.0120	0.0003	0.0036	0.0004	0.01	76.7	2.1	77.4	7.5	446.0	92.0	76.7	2.10	0.90
Zircon-005_BUR15-01	0.0511	0.0051	0.0951	0.0087	0.0137	0.0004	0.0045	0.0005	-0.33	87.6	2.5	91.9	8.1	450.0	100.0	87.6	2.50	4.68
Zircon-006_BUR15-01	0.0470	0.0024	0.0845	0.0047	0.0131	0.0002	0.0041	0.0003	0.16	84.0	1.5	82.3	4.4	227.0	57.0	84.0	1.50	-2.07
Zircon-007_BUR15-01	0.0552	0.0033	0.3080	0.0180	0.0392	0.0010	0.0130	0.0011	0.01	247.9	6.2	272.0	14.0	488.0	71.0	247.9	6.20	8.86
Zircon-008_BUR15-01	0.0555	0.0083	0.0950	0.0140	0.0125	0.0006	0.0037	0.0005	-0.18	80.1	3.5	91.0	13.0	600.0	120.0	80.1	3.50	11.98
Zircon-009_BUR15-01	0.0479	0.0011	0.0794	0.0023	0.0120	0.0001	0.0037	0.0002	0.33	77.0	0.9	77.6	2.2	126.0	27.0	77.0	0.90	0.77
Zircon-010_BUR15-01	0.0509	0.0064	0.0870	0.0110	0.0127	0.0006	0.0045	0.0007	0.13	81.6	3.9	87.0	11.0	540.0	170.0	81.6	3.90	6.21
Zircon-011_BUR15-01	0.0460	0.0028	0.0772	0.0045	0.0119	0.0002	0.0039	0.0003	-0.12	76.5	1.1	75.5	4.2	250.0	59.0	76.5	1.10	-1.32
Zircon-012_BUR15-01	0.0520	0.0061	0.1010	0.0110	0.0143	0.0004	0.0049	0.0005	0.04	91.7	2.5	98.0	11.0	480.0	73.0	91.7	2.50	6.43
Zircon-013_BUR15-01	0.0528	0.0058	0.0855	0.0094	0.0121	0.0004	0.0042	0.0004	0.12	77.8	2.3	82.9	8.8	510.0	100.0	77.8	2.30	6.15
Zircon-014_BUR15-01	0.0517	0.0029	0.0901	0.0054	0.0127	0.0002	0.0044	0.0003	0.15	81.1	1.4	87.5	5.0	374.0	79.0	81.1	1.40	7.31
Zircon-016_BUR15-01	0.0535	0.0052	0.0872	0.0086	0.0119	0.0003	0.0047	0.0004	0.15	76.5	1.8	84.6	8.1	470.0	110.0	76.5	1.80	9.57

Zircon-017_BUR15-01	0.0476	0.0014	0.0811	0.0027	0.0123	0.0001	0.0038	0.0003	-0.14	79.1	0.8	79.2	2.5	110.0	29.0	79.1	0.80	0.13
Zircon-018_BUR15-01	0.0521	0.0053	0.0953	0.0097	0.0133	0.0003	0.0048	0.0004	0.05	85.4	1.8	92.1	9.0	460.0	82.0	85.4	1.80	7.27
Zircon-019_BUR15-01	0.0515	0.0066	0.0900	0.0110	0.0128	0.0005	0.0046	0.0006	0.07	82.2	3.0	87.0	11.0	530.0	120.0	82.2	3.00	5.52
Zircon-020_BUR15-01	0.0491	0.0042	0.0899	0.0075	0.0134	0.0003	0.0048	0.0004	-0.15	85.6	1.6	87.1	7.0	485.0	96.0	85.6	1.60	1.72
Zircon-021_BUR15-01	0.0503	0.0030	0.0894	0.0056	0.0129	0.0003	0.0047	0.0004	0.21	82.4	1.8	86.8	5.2	335.0	66.0	82.4	1.80	5.07
Zircon-022_BUR15-01	0.0715	0.0017	1.5240	0.0450	0.1563	0.0025	0.0474	0.0031	0.26	936.0	14.0	939.0	18.0	972.0	30.0	936.0	14.00	0.32
Zircon-023_BUR15-01	0.0464	0.0035	0.0787	0.0055	0.0126	0.0003	0.0042	0.0003	-0.07	80.6	1.7	76.8	5.2	313.0	74.0	80.6	1.70	-4.95
Zircon-024_BUR15-01	0.0539	0.0033	0.0978	0.0061	0.0133	0.0003	0.0050	0.0004	-0.06	85.1	1.7	95.3	5.7	367.0	59.0	85.1	1.70	10.70
Zircon-026_BUR15-01	0.0472	0.0028	0.0841	0.0051	0.0129	0.0002	0.0044	0.0003	0.15	82.7	1.1	81.9	4.8	281.0	68.0	82.7	1.10	-0.98
Zircon-027_BUR15-01	0.0538	0.0047	0.0863	0.0071	0.0118	0.0003	0.0041	0.0004	0.21	75.6	1.8	83.9	6.6	402.0	99.0	75.6	1.80	9.89
Zircon-028_BUR15-01	0.0490	0.0031	0.0840	0.0054	0.0126	0.0003	0.0044	0.0004	0.20	80.8	1.6	81.8	5.0	299.0	60.0	80.8	1.60	1.22
Zircon-029_BUR15-01	0.0463	0.0019	0.0775	0.0037	0.0120	0.0002	0.0039	0.0003	0.24	76.7	1.1	75.7	3.5	244.0	60.0	76.7	1.10	-1.32
Zircon-030_BUR15-01	0.0619	0.0079	0.1000	0.0140	0.0119	0.0004	0.0053	0.0006	0.13	76.1	2.7	97.0	12.0	580.0	160.0	76.1	2.70	21.55
Zircon-031_BUR15-01	0.0582	0.0053	0.1046	0.0097	0.0129	0.0004	0.0045	0.0006	0.09	82.7	2.4	100.6	8.9	620.0	120.0	82.7	2.40	17.79
Zircon-032_BUR15-01	0.0493	0.0031	0.0831	0.0054	0.0123	0.0002	0.0041	0.0004	0.01	78.7	1.3	80.9	5.1	258.0	52.0	78.7	1.30	2.72
Zircon-033_BUR15-01	0.0478	0.0037	0.0838	0.0060	0.0130	0.0003	0.0046	0.0005	-0.04	83.0	2.1	81.6	5.6	291.0	87.0	83.0	2.10	-1.72
Zircon-034_BUR15-01	0.0476	0.0020	0.0834	0.0041	0.0125	0.0002	0.0038	0.0003	0.30	80.4	1.2	81.2	3.8	154.0	44.0	80.4	1.20	0.99
Zircon-035_BUR15-01	0.0539	0.0032	0.0920	0.0053	0.0125	0.0002	0.0042	0.0003	0.17	79.9	1.4	89.3	5.0	449.0	99.0	79.9	1.40	10.53
Zircon-036_BUR15-01	0.0510	0.0049	0.0970	0.0100	0.0131	0.0003	0.0045	0.0004	0.28	83.7	1.7	95.9	9.3	530.0	100.0	83.7	1.70	12.72
Zircon-037_BUR15-01	0.0935	0.0031	2.5700	0.1100	0.1994	0.0027	0.0777	0.0057	0.56	1172.0	14.0	1290.0	30.0	1487.0	27.0	1172.0	14.00	9.15
Zircon-038_BUR15-01	0.0484	0.0022	0.0818	0.0035	0.0123	0.0002	0.0040	0.0003	0.16	79.1	1.3	79.8	3.3	228.0	44.0	79.1	1.30	0.88
Zircon-039_BUR15-01	0.0540	0.0039	0.0961	0.0067	0.0130	0.0003	0.0046	0.0004	0.04	83.2	1.7	94.9	6.6	431.0	65.0	83.2	1.70	12.33
Zircon-040_BUR15-01	0.0497	0.0036	0.0854	0.0061	0.0124	0.0003	0.0041	0.0004	-0.09	79.6	1.9	83.0	5.7	408.0	77.0	79.6	1.90	4.10
Zircon-041_BUR15-01	0.0489	0.0042	0.0883	0.0074	0.0132	0.0003	0.0039	0.0003	-0.11	84.7	2.0	85.6	6.9	406.0	69.0	84.7	2.00	1.05
Zircon-042_BUR15-01	0.0483	0.0038	0.0829	0.0068	0.0125	0.0004	0.0048	0.0005	0.14	79.8	2.2	80.6	6.4	337.0	67.0	79.8	2.20	0.99
Zircon-044_BUR15-01	0.0473	0.0028	0.0850	0.0050	0.0130	0.0002	0.0041	0.0004	0.02	83.3	1.5	82.7	4.7	194.0	50.0	83.3	1.50	-0.73
Zircon-045_BUR15-01	0.0509	0.0048	0.0871	0.0064	0.0129	0.0004	0.0045	0.0004	-0.27	82.8	2.4	84.6	5.9	510.0	110.0	82.8	2.40	2.13
Zircon-046_BUR15-01	0.0497	0.0053	0.0847	0.0091	0.0124	0.0004	0.0039	0.0004	0.12	79.2	2.4	82.2	8.5	490.0	120.0	79.2	2.40	3.65
Zircon-047_BUR15-01	0.0515	0.0055	0.0880	0.0100	0.0122	0.0004	0.0036	0.0004	-0.19	78.0	2.3	85.4	9.3	540.0	120.0	78.0	2.30	8.67
Zircon-048_BUR15-01	0.0492	0.0050	0.0827	0.0081	0.0120	0.0004	0.0038	0.0004	0.09	77.1	2.3	80.3	7.6	485.0	89.0	77.1	2.30	3.99
Zircon-050_BUR15-01	0.0514	0.0024	0.0849	0.0041	0.0121	0.0002	0.0038	0.0003	0.16	77.2	1.4	83.7	3.8	331.0	50.0	77.2	1.40	7.77
Zircon-051_BUR15-01	0.0479	0.0051	0.0839	0.0081	0.0126	0.0004	0.0033	0.0004	-0.05	80.4	2.8	81.5	7.5	420.0	130.0	80.4	2.80	1.35
Zircon-052_BUR15-01	0.0486	0.0020	0.0789	0.0034	0.0119	0.0002	0.0037	0.0003	0.07	76.5	1.1	77.1	3.2	181.0	31.0	76.5	1.10	0.78
Zircon-053_BUR15-01	0.0467	0.0030	0.0816	0.0056	0.0123	0.0003	0.0036	0.0003	0.06	78.7	1.8	79.5	5.2	301.0	61.0	78.7	1.80	1.01
Zircon-054_BUR15-01	0.0468	0.0021	0.0815	0.0040	0.0126	0.0002	0.0036	0.0003	0.05	80.5	1.1	79.5	3.8	246.0	52.0	80.5	1.10	-1.26
Zircon-055_BUR15-01	0.0529	0.0035	0.0947	0.0067	0.0131	0.0003	0.0043	0.0004	0.01	83.6	1.8	91.7	6.2	434.0	72.0	83.6	1.80	8.83
Zircon-056_BUR15-01	0.0495	0.0025	0.0820	0.0044	0.0117	0.0002	0.0037	0.0002	0.19	74.8	1.2	79.9	4.1	208.0	44.0	74.8	1.20	6.38
Zircon-058_BUR15-01	0.0550	0.0057	0.0944	0.0095	0.0128	0.0004	0.0050	0.0006	-0.16	82.2	2.5	91.2	8.8	620.0	130.0	82.2	2.50	9.87
Zircon-059_BUR15-01	0.0514	0.0064	0.0859	0.0092	0.0128	0.0004	0.0035	0.0003	-0.23	81.6	2.7	83.4	8.6	470.0	120.0	81.6	2.70	2.16
Zircon-060_BUR15-01	0.0459	0.0014	0.0824	0.0030	0.0129	0.0002	0.0050	0.0005	0.26	82.7	1.2	80.4	2.8	113.0	35.0	82.7	1.20	-2.86
Zircon-061_BUR15-01	0.0457	0.0053	0.0796	0.0086	0.0123	0.0003	0.0037	0.0003	-0.18	78.5	1.9	77.3	8.0	432.0	94.0	78.5	1.90	-1.55
Zircon-062_BUR15-01	0.0601	0.0099	0.1030	0.0160	0.0135	0.0007	0.0057	0.0012	-0.10	86.3	4.3	102.0	16.0	740.0	180.0	86.3	4.30	15.39
Zircon-064_BUR15-01	0.0486	0.0019	0.0845	0.0036	0.0125	0.0002	0.0040	0.0003	0.20	80.3	1.2	82.3	3.4	188.0	39.0	80.3	1.20	2.43
Zircon-065_BUR15-01	0.0511	0.0057	0.0831	0.0087	0.0121	0.0003	0.0039	0.0004	-0.12	77.6	2.2	82.0	8.4	620.0	110.0	77.6	2.20	5.37
Zircon-066_BUR15-01	0.0466	0.0047	0.0858	0.0082	0.0131	0.0004	0.0046	0.0004	0.14	84.2	2.2	83.3	7.7	399.0	89.0	84.2	2.20	-1.08
Zircon-067_BUR15-01	0.0642	0.0067	0.1110	0.0110	0.0126	0.0004	0.0046	0.0005	0.06	80.6	2.5	107.0	10.0	710.0	130.0	80.6	2.50	24.67
Zircon-068_BUR15-01	0.0538	0.0036	0.0898	0.0058	0.0123	0.0002	0.0044	0.0004	0.01	79.1	1.3	87.1	5.4	424.0	70.0	79.1	1.30	9.18
Zircon-069_BUR15-01	0.0471	0.0068	0.0790	0.0110	0.0125	0.0005	0.0042	0.0006	0.19	80.4	3.0	77.0	10.0	470.0	190.0	80.4	3.00	-4.42
Zircon-070_BUR15-01	0.0520	0.0055	0.0829	0.0098	0.0120	0.0004	0.0037	0.0004	0.20	76.7	2.3	82.1	8.8	460.0	120.0	76.7	2.30	6.58
Zircon-071_BUR15-01	0.0478	0.0043	0.0833	0.0079	0.0129	0.0003	0.0045	0.0004	-0.06	82.5	1.7	81.0	7.4	351.0	87.0	82.5	1.70	-1.85
Zircon-072_BUR15-01	0.0676	0.0067	0.3660	0.0340	0.0383	0.0009	0.0152	0.0020	0.14	242.2	5.7	315.0	25.0	870.0	120.0	242.2	5.70	23.11
Zircon-073_BUR15-01	0.0486	0.0038	0.1350	0.0110	0.0198	0.0006	0.0069	0.0007	-0.02	126.5	3.6	128.0	10.0	360.0	110.0	126.5	3.60	1.17

Zircon-074_BUR15-01	0.0475	0.0070	0.0810	0.0120	0.0120	0.0004	0.0038	0.0004	-0.09	76.7	2.6	79.0	11.0	530.0	150.0	76.7	2.60	2.91
Zircon-075_BUR15-01	0.0489	0.0039	0.0802	0.0062	0.0118	0.0002	0.0038	0.0003	-0.14	75.8	1.3	78.2	5.9	256.0	53.0	75.8	1.30	3.07
Zircon-076_BUR15-01	0.0493	0.0047	0.0846	0.0082	0.0126	0.0003	0.0041	0.0003	0.03	80.9	1.9	83.3	8.0	510.0	120.0	80.9	1.90	2.88
Zircon-077_BUR15-01	0.0500	0.0044	0.0914	0.0070	0.0136	0.0004	0.0041	0.0004	-0.33	86.8	2.4	89.8	6.8	355.0	72.0	86.8	2.40	3.34
Zircon-078_BUR15-01	0.0535	0.0052	0.0922	0.0090	0.0127	0.0003	0.0042	0.0004	0.10	81.3	1.8	89.3	8.3	390.0	100.0	81.3	1.80	8.96
Zircon-079_BUR15-01	0.0510	0.0036	0.0861	0.0061	0.0124	0.0002	0.0039	0.0003	0.03	79.3	1.5	83.7	5.7	367.0	56.0	79.3	1.50	5.26
Zircon-080_BUR15-01	0.0496	0.0024	0.0867	0.0045	0.0127	0.0003	0.0039	0.0003	0.01	81.4	1.8	84.4	4.2	230.0	48.0	81.4	1.80	3.55
Zircon-081_BUR15-01	0.0492	0.0041	0.0821	0.0062	0.0124	0.0003	0.0040	0.0004	-0.37	79.5	1.7	81.0	6.1	339.0	78.0	79.5	1.70	1.85
Zircon-082_BUR15-01	0.0578	0.0053	0.0958	0.0085	0.0119	0.0004	0.0041	0.0004	0.18	76.5	2.3	92.6	7.9	523.0	75.0	76.5	2.30	17.39
Zircon-083_BUR15-01	0.0511	0.0043	0.0884	0.0081	0.0124	0.0003	0.0039	0.0004	0.14	79.6	1.8	85.7	7.5	478.0	93.0	79.6	1.80	7.12
Zircon-084_BUR15-01	0.0493	0.0025	0.0842	0.0044	0.0125	0.0002	0.0041	0.0003	0.00	80.3	1.6	82.0	4.1	206.0	49.0	80.3	1.60	2.07
Zircon-085_BUR15-01	0.0475	0.0024	0.0805	0.0045	0.0123	0.0002	0.0039	0.0003	0.30	79.1	1.1	78.6	4.2	232.0	49.0	79.1	1.10	-0.64
Zircon-086_BUR15-01	0.0521	0.0041	0.0948	0.0073	0.0133	0.0004	0.0045	0.0004	0.25	85.2	2.3	91.7	6.8	365.0	64.0	85.2	2.30	7.09
Zircon-087_BUR15-01	0.0504	0.0060	0.0920	0.0110	0.0128	0.0004	0.0038	0.0004	0.15	81.9	2.5	88.3	9.8	530.0	110.0	81.9	2.50	7.25
Zircon-088_BUR15-01	0.0493	0.0049	0.0837	0.0089	0.0124	0.0003	0.0038	0.0004	0.44	79.2	2.2	81.3	8.3	390.0	120.0	79.2	2.20	2.58
Zircon-089_BUR15-01	0.0480	0.0037	0.0795	0.0055	0.0123	0.0002	0.0040	0.0003	-0.09	78.5	1.5	77.5	5.2	450.0	120.0	78.5	1.50	-1.29
Zircon-090_BUR15-01	0.0520	0.0130	0.0970	0.0250	0.0137	0.0005	0.0046	0.0005	-0.09	87.5	3.3	93.0	23.0	680.0	270.0	87.5	3.30	5.91
Zircon-091_BUR15-01	0.0484	0.0078	0.0860	0.0150	0.0124	0.0004	0.0047	0.0007	0.10	79.5	2.5	83.0	13.0	650.0	170.0	79.5	2.50	4.22
Zircon-092_BUR15-01	0.0467	0.0023	0.0793	0.0038	0.0123	0.0002	0.0039	0.0003	-0.22	78.8	1.1	77.4	3.6	203.0	49.0	78.8	1.10	-1.81
Zircon-093_BUR15-01	0.0498	0.0052	0.0919	0.0085	0.0131	0.0004	0.0041	0.0004	-0.03	83.8	2.4	89.0	7.9	404.0	86.0	83.8	2.40	5.84
Zircon-094_BUR15-01	0.0520	0.0087	0.0910	0.0160	0.0123	0.0004	0.0040	0.0004	0.08	78.9	2.2	88.0	15.0	610.0	150.0	78.9	2.20	10.34
Zircon-095_BUR15-01	0.0500	0.0100	0.0830	0.0170	0.0124	0.0005	0.0043	0.0007	0.31	79.3	3.3	81.0	16.0	720.0	230.0	79.3	3.30	2.10
Zircon-096_BUR15-01	0.0494	0.0058	0.0900	0.0100	0.0131	0.0004	0.0045	0.0005	0.02	83.7	2.8	89.0	10.0	450.0	110.0	83.7	2.80	5.96
Zircon-097_BUR15-01	0.0511	0.0053	0.0856	0.0086	0.0124	0.0004	0.0044	0.0003	0.07	79.3	2.3	83.0	8.1	406.0	90.0	79.3	2.30	4.46
Zircon-098_BUR15-01	0.0492	0.0019	0.0905	0.0041	0.0134	0.0002	0.0046	0.0003	0.07	85.8	1.0	87.9	3.8	247.0	39.0	85.8	1.00	2.39
Zircon-099_BUR15-01	0.0465	0.0039	0.0806	0.0067	0.0124	0.0003	0.0036	0.0003	0.03	79.5	1.9	78.5	6.3	446.0	98.0	79.5	1.90	-1.27
Zircon-100_BUR15-01	0.0492	0.0068	0.0820	0.0120	0.0122	0.0004	0.0039	0.0005	0.28	77.9	2.4	82.0	10.0	420.0	110.0	77.9	2.40	5.00

CORRECTED RATIOS¹CORRECTED AGES (Ma)²

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁶ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ	±2σ		±2σ	±2σ	(Ma) ³	±2σ						
AME-15-01a (Ame-a*)	Batolito Puerto Vallarta, Suite Zihuatanejo, Complejo Arteaga																		
Zircon-001_AME15-01a	0.0577	0.0087	0.0790	0.0120	0.0104	0.0004	0.0040	0.0004	0.49	66.6	2.4	76.0	11.0	870.0	120.0	66.6	2.40	12.37	
Zircon-002_AME15-01a	0.0486	0.0030	0.0848	0.0051	0.0127	0.0003	0.0043	0.0003	0.14	81.6	2.0	82.6	4.8	258.0	66.0	81.6	2.00	1.21	
Zircon-003_AME15-01a	0.0469	0.0064	0.0770	0.0100	0.0123	0.0004	0.0048	0.0005	0.10	78.5	2.2	75.0	9.8	610.0	170.0	78.5	2.20	-4.67	
Zircon-004_AME15-01a	0.0537	0.0086	0.0730	0.0120	0.0099	0.0003	0.0033	0.0003	0.16	63.5	2.2	71.0	11.0	660.0	160.0	63.5	2.20	10.56	
Zircon-005_AME15-01a	0.0473	0.0029	0.0804	0.0050	0.0121	0.0003	0.0038	0.0003	0.01	77.3	1.6	78.4	4.7	324.0	89.0	77.3	1.60	1.40	
Zircon-006_AME15-01a	0.0482	0.0026	0.0760	0.0042	0.0116	0.0002	0.0037	0.0002	0.07	74.3	1.5	74.3	3.9	225.0	46.0	74.3	1.50	5.07	
Zircon-007_AME15-01a	0.0479	0.0063	0.0800	0.0100	0.0124	0.0004	0.0041	0.0003	-0.11	79.7	2.4	78.1	9.6	550.0	190.0	79.7	2.40	-2.05	
Zircon-008_AME15-01a	0.0464	0.0040	0.0776	0.0069	0.0117	0.0003	0.0036	0.0002	0.08	75.2	2.0	75.7	6.5	256.0	69.0	75.2	2.00	0.66	
Zircon-009_AME15-01a	0.0461	0.0046	0.0799	0.0082	0.0126	0.0003	0.0038	0.0003	0.21	80.9	1.9	77.7	7.7	380.0	100.0	80.9	1.90	-4.12	
Zircon-010_AME15-01a	0.0438	0.0032	0.0729	0.0054	0.0120	0.0004	0.0033	0.0002	0.02	76.7	2.3	71.4	5.1	123.0	62.0	76.7	2.30	-7.42	
Zircon-012_AME15-01a	0.0497	0.0025	0.0874	0.0045	0.0128	0.0003	0.0041	0.0002	0.04	82.0	1.6	85.0	4.2	272.0	65.0	82.0	1.60	3.53	
Zircon-013_AME15-01a	0.0469	0.0057	0.0890	0.0110	0.0134	0.0004	0.0045	0.0005	-0.04	85.6	2.7	86.0	10.0	500.0	130.0	85.6	2.70	0.47	
Zircon-014_AME15-01a	0.0501	0.0051	0.0844	0.0079	0.0130	0.0004	0.0042	0.0005	-0.04	83.1	2.6	82.1	7.4	397.0	96.0	83.1	2.60	-1.22	
Zircon-015_AME15-01a	0.0525	0.0043	0.0854	0.0067	0.0121	0.0003	0.0039	0.0003	-0.22	77.6	1.8	83.1	6.3	400.0	100.0	77.6	1.80	6.62	
Zircon-017_AME15-01a	0.0483	0.0038	0.0833	0.0068	0.0126	0.0003	0.0039	0.0003	0.12	80.5	1.7	81.0	6.3	318.0	83.0	80.5	1.70	0.62	
Zircon-018_AME15-01a	0.0456	0.0061	0.0580	0.0077	0.0093	0.0003	0.0032	0.0003	0.19	59.9	1.7	56.9	7.4	490.0	110.0	59.9	1.70	-5.27	
Zircon-019_AME15-01a	0.0584	0.0096	0.0680	0.0120	0.0086	0.0004	0.0036	0.0004	0.11	55.0	2.3	67.0	11.0	660.0	180.0	55.0	2.30	17.91	
Zircon-020_AME15-01a	0.0507	0.0051	0.0960	0.0100	0.0139	0.0004	0.0048	0.0004	0.40	88.6	2.3	92.7	9.5	370.0	100.0	88.6	2.30	4.42	
Zircon-021_AME15-01a	0.0465	0.0027	0.0768	0.0045	0.0120	0.0002	0.0039	0.0002	0.02	76.8	1.5	75.1	4.2	192.0	44.0	76.8	1.50	-2.26	
Zircon-022_AME15-01a	0.0513	0.0041	0.0879	0.0063	0.0127	0.0003	0.0042	0.0003	-0.28	81.6	1.9	85.4	5.9	404.0	71.0	81.6	1.90	4.45	
Zircon-023_AME15-01a	0.0514	0.0037	0.0848	0.0061	0.0124	0.0003	0.0038	0.0002	0.33	79.2	1.9	82.5	5.7	385.0	91.0	79.2	1.90	4.00	

Zircon-024_AME15-01a	0.0501	0.0040	0.0839	0.0063	0.0124	0.0003	0.0041	0.0002	-0.02	79.2	1.8	81.6	5.9	341.0	64.0	79.2	1.80	2.94
Zircon-025_AME15-01a	0.0477	0.0032	0.0790	0.0052	0.0122	0.0002	0.0040	0.0002	-0.11	77.8	1.5	77.8	5.0	266.0	78.0	77.8	1.50	
Zircon-026_AME15-01a	0.0516	0.0099	0.0900	0.0170	0.0129	0.0005	0.0047	0.0008	-0.06	82.9	3.4	88.0	16.0	1100.0	230.0	82.9	3.40	5.80
Zircon-027_AME15-01a	0.0511	0.0050	0.0949	0.0090	0.0139	0.0003	0.0044	0.0003	-0.04	88.7	2.0	91.7	8.4	479.0	89.0	88.7	2.00	3.27
Zircon-028_AME15-01a	0.0516	0.0069	0.0870	0.0120	0.0125	0.0005	0.0050	0.0007	0.27	80.3	2.9	89.0	11.0	710.0	110.0	80.3	2.90	9.78
Zircon-029_AME15-01a	0.0567	0.0026	0.4910	0.0230	0.0639	0.0012	0.0207	0.0011	0.18	399.4	7.5	408.0	16.0	483.0	59.0	399.4	7.50	2.11
Zircon-030_AME15-01a	0.0551	0.0082	0.0840	0.0120	0.0118	0.0005	0.0033	0.0003	0.18	75.4	3.3	81.0	11.0	650.0	130.0	75.4	3.30	6.91
Zircon-031_AME15-01a	0.0466	0.0044	0.0787	0.0073	0.0120	0.0003	0.0044	0.0004	-0.01	77.0	2.1	76.7	6.8	265.0	90.0	77.0	2.10	-0.39
Zircon-032_AME15-01a	0.0438	0.0051	0.0788	0.0086	0.0131	0.0004	0.0049	0.0005	-0.05	84.1	2.7	76.6	8.1	299.0	78.0	84.1	2.70	-9.79
Zircon-033_AME15-01a	0.0575	0.0055	0.1017	0.0095	0.0129	0.0003	0.0048	0.0003	0.15	82.4	2.2	98.0	8.7	570.0	100.0	82.4	2.20	15.92
Zircon-034_AME15-01a	0.0561	0.0089	0.0680	0.0100	0.0089	0.0004	0.0032	0.0003	0.00	56.9	2.5	66.3	9.8	870.0	150.0	56.9	2.50	14.18
Zircon-035_AME15-01a	0.0560	0.0092	0.0950	0.0150	0.0128	0.0005	0.0051	0.0007	-0.02	81.9	3.2	92.0	14.0	600.0	110.0	81.9	3.20	10.98
Zircon-036_AME15-01a	0.0670	0.0120	0.1250	0.0210	0.0139	0.0007	0.0061	0.0009	0.08	89.1	4.5	117.0	19.0	1010.0	160.0	89.1	4.50	23.85
Zircon-037_AME15-01a	0.0489	0.0026	0.0847	0.0046	0.0125	0.0002	0.0040	0.0002	0.33	80.3	1.6	82.5	4.3	251.0	70.0	80.3	1.60	2.67
Zircon-038_AME15-01a	0.0480	0.0067	0.0780	0.0110	0.0122	0.0003	0.0037	0.0003	0.19	78.0	2.0	76.4	9.9	290.0	130.0	78.0	2.00	-2.09
Zircon-039_AME15-01a	0.0520	0.0058	0.0950	0.0100	0.0136	0.0005	0.0054	0.0004	0.16	86.9	2.8	91.9	9.7	455.0	86.0	86.9	2.80	5.44
Zircon-040_AME15-01a	0.0493	0.0059	0.0840	0.0100	0.0124	0.0004	0.0042	0.0003	0.06	79.3	2.4	82.9	9.3	540.0	110.0	79.3	2.40	4.34
Zircon-041_AME15-01a	0.0504	0.0044	0.0784	0.0071	0.0111	0.0003	0.0035	0.0002	-0.03	71.2	1.7	76.4	6.7	387.0	76.0	71.2	1.70	6.81
Zircon-042_AME15-01a	0.0496	0.0034	0.0860	0.0056	0.0125	0.0003	0.0042	0.0003	0.05	80.0	1.7	84.3	5.1	351.0	65.0	80.0	1.70	5.10
Zircon-043_AME15-01a	0.0514	0.0039	0.0853	0.0061	0.0120	0.0003	0.0040	0.0003	-0.14	76.7	1.8	83.0	5.7	334.0	90.0	76.7	1.80	7.59
Zircon-044_AME15-01a	0.0480	0.0039	0.0827	0.0065	0.0126	0.0003	0.0045	0.0004	0.09	81.0	1.8	80.6	6.1	202.0	62.0	81.0	1.80	-0.50
Zircon-045_AME15-01a	0.0580	0.0170	0.0990	0.0260	0.0128	0.0008	0.0037	0.0009	-0.35	81.8	5.1	98.0	23.0	1120.0	250.0	81.8	5.10	16.53
Zircon-046_AME15-01a	0.0510	0.0039	0.0866	0.0065	0.0125	0.0003	0.0045	0.0003	0.06	80.0	1.9	84.1	6.0	405.0	77.0	80.0	1.90	4.88
Zircon-047_AME15-01a	0.0486	0.0021	0.0862	0.0039	0.0130	0.0003	0.0037	0.0002	0.22	83.1	1.7	83.9	3.6	208.0	57.0	83.1	1.70	0.95
Zircon-048_AME15-01a	0.0509	0.0037	0.0851	0.0061	0.0121	0.0003	0.0041	0.0003	0.61	77.2	1.8	82.8	5.7	329.0	55.0	77.2	1.80	6.76
Zircon-049_AME15-01a	0.0501	0.0035	0.0819	0.0057	0.0120	0.0003	0.0044	0.0004	0.02	76.7	1.6	79.9	5.3	251.0	66.0	76.7	1.60	4.01
Zircon-050_AME15-01a	0.0489	0.0031	0.0844	0.0057	0.0126	0.0003	0.0037	0.0002	0.20	80.8	1.9	82.2	5.3	216.0	61.0	80.8	1.90	1.70
Zircon-051_AME15-01a	0.0520	0.0052	0.0921	0.0088	0.0129	0.0003	0.0044	0.0002	-0.04	82.4	2.0	89.0	8.1	450.0	110.0	82.4	2.00	7.42
Zircon-052_AME15-01a	0.0580	0.0110	0.0760	0.0150	0.0092	0.0003	0.0031	0.0005	0.27	59.1	3.4	74.0	14.0	750.0	160.0	59.1	3.40	20.14
Zircon-053_AME15-01a	0.0512	0.0053	0.0831	0.0088	0.0117	0.0003	0.0037	0.0003	0.11	74.8	2.1	80.9	8.3	440.0	100.0	74.8	2.10	7.54
Zircon-054_AME15-01a	0.0506	0.0036	0.0866	0.0062	0.0125	0.0003	0.0041	0.0003	0.09	80.3	1.8	84.2	5.8	376.0	69.0	80.3	1.80	4.63
Zircon-055_AME15-01a	0.0476	0.0067	0.0850	0.0110	0.0127	0.0004	0.0042	0.0004	-0.38	81.0	2.4	83.0	11.0	450.0	150.0	81.0	2.40	2.41
Zircon-057_AME15-01a	0.0501	0.0033	0.0845	0.0055	0.0123	0.0003	0.0039	0.0002	0.06	78.8	1.7	82.9	5.0	315.0	54.0	78.8	1.70	4.95
Zircon-058_AME15-01a	0.0499	0.0031	0.1040	0.0069	0.0152	0.0003	0.0045	0.0004	0.10	97.0	1.9	100.4	6.3	233.0	73.0	97.0	1.90	3.39
Zircon-059_AME15-01a	0.0497	0.0041	0.0825	0.0069	0.0125	0.0004	0.0044	0.0003	0.07	80.3	2.3	80.3	6.4	402.0	79.0	80.3	2.30	
Zircon-060_AME15-01a	0.0507	0.0041	0.0862	0.0065	0.0125	0.0003	0.0043	0.0002	-0.16	80.1	1.9	85.3	6.1	379.0	75.0	80.1	1.90	6.10
Zircon-061_AME15-01a	0.0490	0.0035	0.0850	0.0064	0.0124	0.0003	0.0039	0.0002	0.17	79.4	1.9	83.5	6.1	295.0	78.0	79.4	1.90	4.91
Zircon-062_AME15-01a	0.0518	0.0046	0.0904	0.0077	0.0129	0.0003	0.0040	0.0003	0.05	82.5	2.2	87.6	7.2	490.0	120.0	82.5	2.20	5.82
Zircon-063_AME15-01a	0.0517	0.0054	0.0927	0.0099	0.0129	0.0003	0.0049	0.0005	0.03	82.4	1.8	89.5	9.1	440.0	120.0	82.4	1.80	7.93
Zircon-064_AME15-01a	0.0520	0.0050	0.0879	0.0078	0.0124	0.0004	0.0045	0.0004	0.02	79.1	2.3	86.8	6.8	425.0	87.0	79.1	2.30	8.87
Zircon-065_AME15-01a	0.0480	0.0025	0.0897	0.0044	0.0136	0.0003	0.0041	0.0003	0.17	86.9	2.0	87.2	4.1	162.0	77.0	86.9	2.00	0.34
Zircon-066_AME15-01a	0.0476	0.0024	0.0790	0.0042	0.0121	0.0003	0.0041	0.0003	0.35	77.4	1.7	77.1	3.9	217.0	71.0	77.4	1.70	-0.39
Zircon-067_AME15-01a	0.0490	0.0062	0.0830	0.0110	0.0125	0.0004	0.0039	0.0005	0.38	80.2	2.3	81.0	10.0	471.0	94.0	80.2	2.30	0.99
Zircon-068_AME15-01a	0.0474	0.0025	0.1031	0.0059	0.0157	0.0003	0.0047	0.0003	0.31	100.3	2.0	100.2	5.6	189.0	49.0	100.3	2.00	-0.10
Zircon-069_AME15-01a	0.0459	0.0026	0.0673	0.0041	0.0104	0.0002	0.0034	0.0002	0.11	66.8	1.3	66.1	3.9	243.0	59.0	66.8	1.30	-1.06
Zircon-070_AME15-01a	0.0482	0.0030	0.0809	0.0053	0.0123	0.0003	0.0040	0.0002	0.16	78.7	1.7	78.9	5.0	270.0	78.0	78.7	1.70	0.25
Zircon-071_AME15-01b	0.0492	0.0039	0.0849	0.0070	0.0124	0.0003	0.0043	0.0003	0.15	79.5	2.0	82.5	6.5	320.0	100.0	79.5	2.00	3.64
Zircon-072_AME15-01b	0.0487	0.0025	0.0864	0.0048	0.0129	0.0003	0.0042	0.0002	0.32	82.6	1.6	84.1	4.5	195.0	47.0	82.6	1.60	1.78
Zircon-073_AME15-01b	0.0516	0.0050	0.1380	0.0110	0.0203	0.0007	0.0092	0.0007	-0.02	129.4	4.1	131.5	9.7	359.0	99.0	129.4	4.10	1.60
Zircon-074_AME15-01b	0.0477	0.0060	0.0835	0.0096	0.0127	0.0004	0.0037	0.0005	-0.06	81.4	2.3	82.4	9.3	470.0	140.0	81.4	2.30	1.21
Zircon-075_AME15-01b	0.0560	0.0140	0.0910	0.0230	0.0127	0.0005	0.0063	0.0009	0.02	81.3	3.3	86.0	21.0	960.0	180.0	81.3	3.30	5.47
Zircon-076_AME15-01b	0.0593	0.0096	0.1060	0.0170	0.0130	0.0006	0.0064	0.0014	-0.01	83.3	3.6	101.0	15.0	710.0	140.0	83.3	3.60	17.52

Zircon-077_AME15-01b	0.0483	0.0032	0.0856	0.0053	0.0128	0.0003	0.0041	0.0002	-0.13	82.0	1.7	84.2	4.7	290.0	67.0	82.0	1.70	2.61
Zircon-078_AME15-01b	0.0517	0.0059	0.0865	0.0094	0.0123	0.0004	0.0046	0.0006	0.06	78.7	2.5	83.8	8.8	510.0	110.0	78.7	2.50	6.09
Zircon-079_AME15-01b	0.0468	0.0027	0.0755	0.0040	0.0118	0.0002	0.0039	0.0002	-0.12	75.8	1.5	73.8	3.8	242.0	77.0	75.8	1.50	-2.71
Zircon-080_AME15-01b	0.0481	0.0027	0.1077	0.0066	0.0162	0.0004	0.0049	0.0003	0.47	103.9	2.2	103.7	6.1	198.0	50.0	103.9	2.20	-0.19
Zircon-081_AME15-01b	0.0473	0.0086	0.0650	0.0120	0.0094	0.0003	0.0031	0.0004	-0.06	60.4	2.1	63.0	11.0	680.0	130.0	60.4	2.10	4.13
Zircon-082_AME15-01b	0.0473	0.0057	0.0777	0.0090	0.0123	0.0003	0.0045	0.0005	0.10	79.0	2.0	75.5	8.5	470.0	140.0	79.0	2.00	-4.64
Zircon-085_AME15-01b	0.0579	0.0087	0.0690	0.0100	0.0087	0.0004	0.0027	0.0003	-0.09	55.8	2.5	67.2	9.4	800.0	140.0	55.8	2.50	16.96
Zircon-086_AME15-01b	0.0486	0.0028	0.0855	0.0053	0.0128	0.0004	0.0047	0.0003	0.28	82.1	2.4	83.8	5.0	279.0	64.0	82.1	2.40	2.03
Zircon-087_AME15-01b	0.0581	0.0033	0.0945	0.0053	0.0119	0.0002	0.0041	0.0002	0.25	76.3	1.5	91.6	4.9	476.0	77.0	76.3	1.50	16.70
Zircon-088_AME15-01b	0.0576	0.0076	0.0960	0.0140	0.0132	0.0006	0.0051	0.0007	-0.02	84.4	3.5	93.0	13.0	550.0	180.0	84.4	3.50	9.25
Zircon-089_AME15-01b	0.0470	0.0056	0.0683	0.0082	0.0107	0.0003	0.0035	0.0003	0.01	68.3	2.1	66.8	7.8	433.0	94.0	68.3	2.10	-2.25
Zircon-090_AME15-01b	0.0482	0.0038	0.0844	0.0067	0.0126	0.0003	0.0041	0.0003	-0.12	80.7	1.8	82.1	6.3	400.0	100.0	80.7	1.80	1.71
Zircon-091_AME15-01b	0.0604	0.0054	0.1034	0.0092	0.0128	0.0003	0.0047	0.0004	0.17	81.7	2.1	99.6	8.4	647.0	96.0	81.7	2.10	17.97
Zircon-092_AME15-01b	0.0508	0.0047	0.0818	0.0081	0.0117	0.0003	0.0035	0.0004	0.07	74.9	2.1	79.7	7.6	320.0	72.0	74.9	2.10	6.02
Zircon-093_AME15-01b	0.0484	0.0034	0.0815	0.0056	0.0120	0.0003	0.0038	0.0002	0.08	76.9	1.7	79.4	5.3	293.0	59.0	76.9	1.70	3.15
Zircon-094_AME15-01b	0.0489	0.0047	0.0819	0.0077	0.0124	0.0003	0.0041	0.0003	0.54	79.5	2.0	79.6	7.1	570.0	160.0	79.5	2.00	0.13
Zircon-095_AME15-01b	0.0498	0.0059	0.0830	0.0093	0.0122	0.0004	0.0041	0.0004	-0.14	77.8	2.4	80.6	8.7	450.0	110.0	77.8	2.40	3.47
Zircon-096_AME15-01b	0.0494	0.0084	0.0700	0.0120	0.0101	0.0004	0.0032	0.0003	0.14	64.9	2.2	68.0	11.0	690.0	140.0	64.9	2.20	4.56
Zircon-097_AME15-01b	0.0479	0.0040	0.0773	0.0063	0.0118	0.0003	0.0039	0.0003	0.02	75.4	1.8	75.4	6.0	360.0	110.0	75.4	1.80	
Zircon-098_AME15-01b	0.0549	0.0046	0.0932	0.0081	0.0123	0.0003	0.0045	0.0003	0.17	78.7	2.0	90.2	7.5	520.0	100.0	78.7	2.00	12.75
Zircon-099_AME15-01b	0.0478	0.0027	0.0761	0.0045	0.0115	0.0002	0.0039	0.0003	0.17	73.8	1.6	74.4	4.2	313.0	69.0	73.8	1.60	0.81
Zircon-100_AME15-01b	0.0517	0.0053	0.0817	0.0085	0.0118	0.0003	0.0043	0.0003	0.37	75.4	2.0	79.5	7.9	420.0	120.0	75.4	2.00	5.16
Zircon-101_AME15-01b	0.0619	0.0051	0.0930	0.0071	0.0111	0.0003	0.0045	0.0003	0.16	70.9	2.0	90.1	6.6	770.0	120.0	70.9	2.00	21.31
Zircon-102_AME15-01b	0.0588	0.0073	0.0940	0.0120	0.0127	0.0004	0.0038	0.0004	0.09	81.4	2.5	92.0	11.0	690.0	100.0	81.4	2.50	11.52
Zircon-103_AME15-01b	0.0481	0.0032	0.0820	0.0053	0.0123	0.0003	0.0041	0.0003	-0.04	78.5	1.7	79.9	5.0	237.0	50.0	78.5	1.70	1.75
Zircon-104_AME15-01b	0.0466	0.0026	0.0739	0.0042	0.0114	0.0002	0.0036	0.0002	-0.14	73.1	1.3	72.4	4.0	201.0	45.0	73.1	1.30	-0.97
Zircon-105_AME15-01b	0.0529	0.0043	0.0917	0.0067	0.0125	0.0004	0.0056	0.0004	-0.02	80.0	2.3	89.0	6.2	420.0	100.0	80.0	2.30	10.11
Zircon-107_AME15-01b	0.0472	0.0041	0.0858	0.0078	0.0129	0.0004	0.0046	0.0004	0.20	82.4	2.2	83.3	7.3	370.0	110.0	82.4	2.20	1.08
Zircon-108_AME15-01b	0.0511	0.0034	0.0788	0.0052	0.0113	0.0003	0.0038	0.0002	-0.11	72.1	1.7	76.9	4.9	385.0	87.0	72.1	1.70	6.24
Zircon-109_AME15-01b	0.0483	0.0067	0.0770	0.0100	0.0120	0.0004	0.0034	0.0005	0.04	77.0	2.6	76.5	9.5	570.0	110.0	77.0	2.60	-0.65
Zircon-110_AME15-01b	0.0475	0.0033	0.0761	0.0055	0.0118	0.0003	0.0037	0.0003	0.19	75.5	1.6	74.3	5.1	300.0	100.0	75.5	1.60	-1.62
Zircon-111_AME15-01b	0.0487	0.0036	0.0789	0.0055	0.0119	0.0003	0.0038	0.0002	-0.16	76.0	1.9	77.1	5.2	223.0	59.0	76.0	1.90	1.43
Zircon-112_AME15-01b	0.0482	0.0023	0.0866	0.0042	0.0132	0.0003	0.0038	0.0002	0.29	84.5	1.6	84.3	4.0	174.0	59.0	84.5	1.60	-0.24
Zircon-113_AME15-01b	0.0490	0.0040	0.0800	0.0068	0.0119	0.0003	0.0043	0.0003	0.25	76.4	1.7	77.9	6.4	418.0	90.0	76.4	1.70	1.93
Zircon-114_AME15-01b	0.0463	0.0056	0.0746	0.0084	0.0119	0.0003	0.0042	0.0004	-0.33	76.1	2.2	72.7	7.9	430.0	170.0	76.1	2.20	-4.68
Zircon-115_AME15-01b	0.0467	0.0030	0.0789	0.0055	0.0121	0.0003	0.0040	0.0002	0.08	77.3	1.9	77.0	5.1	295.0	97.0	77.3	1.90	-0.39
Zircon-116_AME15-01b	0.0522	0.0023	0.2800	0.0140	0.0394	0.0007	0.0131	0.0007	0.44	248.8	4.3	251.0	11.0	286.0	57.0	248.8	4.30	0.88
Zircon-117_AME15-01b	0.0508	0.0036	0.0868	0.0063	0.0125	0.0003	0.0043	0.0003	0.07	80.0	2.0	84.4	5.9	266.0	85.0	80.0	2.00	5.21
Zircon-118_AME15-01b	0.0454	0.0052	0.0787	0.0089	0.0125	0.0004	0.0041	0.0004	-0.13	80.3	2.2	76.5	8.3	550.0	130.0	80.3	2.20	-4.97
Zircon-119_AME15-01b	0.0526	0.0057	0.0838	0.0085	0.0121	0.0004	0.0044	0.0004	0.01	77.4	2.3	81.3	8.0	610.0	100.0	77.4	2.30	4.80
Zircon-120_AME15-01b	0.0498	0.0061	0.0839	0.0099	0.0123	0.0004	0.0043	0.0006	-0.25	78.6	2.4	81.5	9.3	520.0	110.0	78.6	2.40	3.56
Zircon-121_AME15-01b	0.0489	0.0025	0.0935	0.0049	0.0140	0.0003	0.0043	0.0002	-0.06	89.7	1.9	90.8	4.6	206.0	55.0	89.7	1.90	1.21
Zircon-122_AME15-01b	0.0467	0.0023	0.1044	0.0048	0.0162	0.0003	0.0047	0.0003	-0.38	103.5	1.9	100.8	4.4	157.0	70.0	103.5	1.90	-2.68
Zircon-123_AME15-01b	0.0461	0.0020	0.1013	0.0048	0.0156	0.0003	0.0046	0.0003	0.05	100.1	1.8	98.4	4.6	125.0	51.0	100.1	1.80	-1.73
Zircon-124_AME15-01b	0.0504	0.0081	0.0593	0.0094	0.0086	0.0004	0.0032	0.0003	0.14	55.5	2.4	58.2	9.0	421.0	90.0	55.5	2.40	4.64
Zircon-125_AME15-01b	0.0471	0.0031	0.0822	0.0054	0.0126	0.0003	0.0040	0.0003	0.14	80.7	1.9	80.1	5.1	257.0	70.0	80.7	1.90	-0.75
Zircon-126_AME15-01b	0.0509	0.0038	0.0837	0.0062	0.0119	0.0003	0.0036	0.0002	0.07	75.9	1.7	81.5	5.8	360.0	87.0	75.9	1.70	6.87
Zircon-127_AME15-01b	0.0508	0.0043	0.0880	0.0073	0.0127	0.0003	0.0043	0.0003	0.04	81.4	2.1	85.4	6.8	450.0	110.0	81.4	2.10	4.68
Zircon-128_AME15-01b	0.0576	0.0081	0.0980	0.0130	0.0127	0.0005	0.0041	0.0005	0.05	81.3	3.1	94.0	12.0	820.0	140.0	81.3	3.10	13.51
Zircon-129_AME15-01b	0.0481	0.0040	0.0826	0.0067	0.0126	0.0003	0.0048	0.0004	0.11	80.6	2.0	80.5	6.3	280.0	71.0	80.6	2.00	-0.12
Zircon-130_AME15-01b	0.0458	0.0083	0.0690	0.0120	0.0107	0.0004	0.0035	0.0003	-0.08	68.8	2.3	67.0	12.0	460.0	120.0	68.8	2.30	-2.69
Zircon-131_AME15-01b	0.0550	0.0065	0.0887	0.0099	0.0123	0.0003	0.0040	0.0004	0.02	78.7	2.1	87.5	9.7	670.0	110.0	78.7	2.10	10.06

Zircon-132_AME15-01b	0.0483	0.0070	0.0860	0.0110	0.0124	0.0004	0.0035	0.0004	-0.13	79.1	2.8	84.0	10.0	510.0	150.0	79.1	2.80	5.83
Zircon-133_AME15-01b	0.0497	0.0026	0.0808	0.0040	0.0120	0.0002	0.0038	0.0002	0.08	76.7	1.4	78.9	3.7	267.0	56.0	76.7	1.40	2.79
Zircon-134_AME15-01b	0.0560	0.0110	0.0740	0.0140	0.0095	0.0004	0.0030	0.0004	-0.11	61.2	2.7	72.0	13.0	750.0	220.0	61.2	2.70	15.00
Zircon-136_AME15-01b	0.0480	0.0031	0.0834	0.0053	0.0125	0.0003	0.0042	0.0003	-0.13	80.3	1.7	81.3	5.0	308.0	71.0	80.3	1.70	1.23
Zircon-137_AME15-01b	0.0486	0.0054	0.0848	0.0095	0.0124	0.0004	0.0042	0.0004	-0.06	79.6	2.7	82.2	8.9	450.0	110.0	79.6	2.70	3.16
Zircon-138_AME15-01b	0.0474	0.0018	0.0960	0.0038	0.0144	0.0003	0.0041	0.0002	0.37	92.4	1.6	93.1	3.6	111.0	41.0	92.4	1.60	0.75
Zircon-140_AME15-01b	0.0493	0.0040	0.0828	0.0069	0.0120	0.0003	0.0043	0.0003	0.24	76.6	1.7	80.6	6.4	240.0	62.0	76.6	1.70	4.96

CORRECTED RATIOS ¹CORRECTED AGES (Ma) ²

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁸ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs		±2σ	±2σ	±2σ	±2σ	(Ma) ³	±2σ				
AME-15-03 (Ame-b*)	Batolito Puerto Vallarta, Suite Zihuatanejo, Complejo Artega																		
Zircon-001_AME15-03	0.0562	0.0039	0.0983	0.0063	0.0124	0.0004	0.0050	0.0003	0.15	79.7	2.6	94.9	5.8	589.0	70.0	79.7	2.60	16.02	
Zircon-002_AME15-03	0.0454	0.0031	0.0787	0.0053	0.0123	0.0003	0.0039	0.0002	-0.05	78.7	1.7	76.8	5.0	285.0	72.0	78.7	1.70	-2.47	
Zircon-003_AME15-03	0.0487	0.0018	0.0745	0.0025	0.0112	0.0002	0.0035	0.0000	-0.14	71.8	1.3	72.9	2.4	155.0	31.0	71.8	1.30	1.51	
Zircon-004_AME15-03	0.0511	0.0028	0.0859	0.0044	0.0120	0.0003	0.0038	0.0002	-0.08	76.6	1.7	83.5	4.1	394.0	59.0	76.6	1.70	8.26	
Zircon-005_AME15-03	0.0480	0.0038	0.0736	0.0057	0.0110	0.0003	0.0035	0.0001	0.00	70.4	1.7	71.9	5.3	365.0	78.0	70.4	1.70	2.09	
Zircon-006_AME15-03	0.0469	0.0023	0.0755	0.0036	0.0117	0.0003	0.0038	0.0002	0.27	74.9	1.8	73.8	3.4	227.0	51.0	74.9	1.80	-1.49	
Zircon-007_AME15-03	0.0508	0.0079	0.0750	0.0110	0.0116	0.0004	0.0034	0.0002	-0.15	74.2	2.7	75.0	11.0	600.0	120.0	74.2	2.70	1.07	
Zircon-009_AME15-03	0.0510	0.0036	0.0923	0.0071	0.0138	0.0005	0.0045	0.0003	0.38	88.3	2.9	89.5	6.5	301.0	75.0	88.3	2.90	1.34	
Zircon-010_AME15-03	0.0490	0.0027	0.0820	0.0038	0.0121	0.0003	0.0037	0.0002	-0.18	77.3	1.7	80.0	3.5	235.0	64.0	77.3	1.70	3.38	
Zircon-012_AME15-03	0.0501	0.0015	0.0711	0.0019	0.0105	0.0002	0.0033	0.0000	-0.16	67.2	1.1	69.7	1.8	214.0	42.0	67.2	1.10	3.59	
Zircon-013_AME15-03	0.0508	0.0035	0.0776	0.0049	0.0113	0.0002	0.0037	0.0002	-0.22	72.2	1.5	75.8	4.6	326.0	66.0	72.2	1.50	4.75	
Zircon-015_AME15-03	0.0486	0.0014	0.0827	0.0020	0.0125	0.0002	0.0038	0.0000	0.22	79.8	1.3	80.7	1.9	140.0	28.0	79.8	1.30	1.12	
Zircon-016_AME15-03	0.0560	0.0091	0.0680	0.0100	0.0088	0.0004	0.0030	0.0002	0.58	56.6	2.6	66.2	9.7	840.0	140.0	56.6	2.60	14.50	
Zircon-017_AME15-03	0.0489	0.0030	0.0749	0.0048	0.0110	0.0003	0.0037	0.0002	0.23	70.7	1.6	73.2	4.5	308.0	67.0	70.7	1.60	3.42	
Zircon-018_AME15-03	0.0461	0.0027	0.0756	0.0043	0.0118	0.0003	0.0039	0.0002	0.32	75.7	1.7	73.9	4.0	241.0	71.0	75.7	1.70	-2.44	
Zircon-019_AME15-03	0.0503	0.0018	0.0854	0.0026	0.0126	0.0002	0.0039	0.0001	-0.17	80.8	1.4	83.2	2.5	252.0	52.0	80.8	1.40	2.88	
Zircon-020_AME15-03	0.0488	0.0027	0.0682	0.0036	0.0102	0.0003	0.0031	0.0001	0.10	65.1	1.7	67.0	3.4	261.0	61.0	65.1	1.70	2.84	
Zircon-021_AME15-03	0.0480	0.0026	0.0756	0.0042	0.0117	0.0003	0.0038	0.0001	0.10	75.0	1.7	73.9	4.0	235.0	64.0	75.0	1.70	-1.49	
Zircon-022_AME15-03	0.0514	0.0023	0.0880	0.0035	0.0126	0.0002	0.0041	0.0001	-0.01	80.7	1.4	85.6	3.2	287.0	48.0	80.7	1.40	5.72	
Zircon-023_AME15-03	0.0494	0.0029	0.0802	0.0043	0.0120	0.0003	0.0041	0.0002	-0.01	77.0	1.9	78.3	4.1	285.0	59.0	77.0	1.90	1.66	
Zircon-024_AME15-03	0.0514	0.0053	0.0901	0.0087	0.0133	0.0007	0.0042	0.0003	0.09	84.9	4.4	87.3	8.1	520.0	110.0	84.9	4.40	2.75	
Zircon-025_AME15-03	0.0459	0.0018	0.0658	0.0023	0.0103	0.0002	0.0035	0.0003	0.17	66.1	1.3	64.7	2.3	132.0	49.0	66.1	1.30	-2.16	
Zircon-026_AME15-03	0.0480	0.0036	0.0872	0.0063	0.0131	0.0004	0.0042	0.0003	-0.03	83.9	2.3	84.7	5.9	439.0	85.0	83.9	2.30	0.94	
Zircon-027_AME15-03	0.0488	0.0060	0.0695	0.0077	0.0101	0.0004	0.0032	0.0002	-0.05	64.7	2.2	67.9	7.3	499.0	93.0	64.7	2.20	4.71	
Zircon-029_AME15-03	0.0485	0.0023	0.0836	0.0037	0.0125	0.0002	0.0041	0.0001	0.08	80.0	1.4	81.4	3.5	289.0	62.0	80.0	1.40	1.72	
Zircon-030_AME15-03	0.0506	0.0033	0.0859	0.0050	0.0124	0.0003	0.0039	0.0002	-0.09	79.4	1.8	83.5	4.8	349.0	76.0	79.4	1.80	4.91	
Zircon-031_AME15-03	0.0475	0.0019	0.0800	0.0026	0.0121	0.0002	0.0038	0.0001	0.09	77.5	1.5	78.2	2.5	185.0	51.0	77.5	1.50	0.90	
Zircon-032_AME15-03	0.0513	0.0047	0.0903	0.0079	0.0130	0.0004	0.0042	0.0002	0.02	82.9	2.4	87.4	7.3	500.0	130.0	82.9	2.40	5.15	
Zircon-033_AME15-03	0.0498	0.0045	0.0759	0.0061	0.0113	0.0003	0.0034	0.0002	-0.05	72.4	2.2	74.1	5.7	351.0	96.0	72.4	2.20	2.29	
Zircon-034_AME15-03	0.0481	0.0028	0.0830	0.0045	0.0125	0.0003	0.0041	0.0002	0.00	80.3	1.6	80.8	4.2	303.0	77.0	80.3	1.60	0.62	
Zircon-035_AME15-03	0.0466	0.0027	0.0814	0.0045	0.0127	0.0003	0.0042	0.0002	-0.06	81.3	1.8	79.4	4.2	258.0	52.0	81.3	1.80	-2.39	
Zircon-036_AME15-03	0.0540	0.0110	0.1030	0.0190	0.0133	0.0004	0.0065	0.0009	0.05	85.0	2.6	98.0	17.0	960.0	220.0	85.0	2.60	13.27	
Zircon-037_AME15-03	0.0469	0.0016	0.0636	0.0019	0.0098	0.0002	0.0030	0.0000	0.30	62.6	1.1	62.6	1.8	103.0	28.0	62.6	1.10		
Zircon-038_AME15-03	0.0510	0.0160	0.0234	0.0067	0.0033	0.0002	0.0011	0.0001	-0.14	21.3	1.4	23.2	6.6	1330.0	300.0	21.3	1.40	8.19	
Zircon-039_AME15-03	0.0483	0.0038	0.0913	0.0058	0.0132	0.0003	0.0042	0.0002	-0.32	84.6	1.9	89.6	5.2	334.0	83.0	84.6	1.90	5.58	
Zircon-042_AME15-03	0.0560	0.0100	0.0750	0.0130	0.0096	0.0005	0.0031	0.0003	0.12	61.6	2.9	73.0	13.0	880.0	140.0	61.6	2.90	15.62	
Zircon-044_AME15-03	0.0504	0.0039	0.0852	0.0061	0.0121	0.0003	0.0038	0.0001	0.00	77.3	1.7	82.7	5.9	315.0	60.0	77.3	1.70	6.53	
Zircon-045_AME15-03	0.0563	0.0066	0.0701	0.0097	0.0094	0.0005	0.0034	0.0003	0.22	60.3	2.9	70.9	9.1	610.0	110.0	60.3	2.90	14.95	
Zircon-046_AME15-03	0.0459	0.0041	0.0770	0.0061	0.0121	0.0003	0.0037	0.0002	-0.03	77.5	2.0	75.1	5.8	390.0	110.0	77.5	2.00	-3.20	
Zircon-047_AME15-03	0.0467	0.0033	0.0638	0.0045	0.0102	0.0002	0.0032	0.0002	0.34	65.3	1.6	62.7	4.3	271.0	45.0	65.3	1.60	-4.15	
Zircon-048_AME15-03	0.0475	0.0031	0.0800	0.0050	0.0125	0.0004	0.0041	0.0003	0.00	80.1	2.3	78.0	4.7	396.0	86.0	80.1	2.30	-2.69	

Zircon-049_AME15-03	0.0503	0.0020	0.0610	0.0023	0.0093	0.0002	0.0031	0.0001	0.29	59.3	1.2	60.1	2.2	236.0	45.0	59.3	1.20	1.33
Zircon-050_AME15-03	0.0486	0.0045	0.0618	0.0053	0.0096	0.0003	0.0032	0.0002	0.12	61.5	2.1	61.7	5.2	410.0	100.0	61.5	2.10	0.32
Zircon-051_AME15-03	0.0676	0.0052	0.1095	0.0097	0.0123	0.0004	0.0050	0.0004	0.11	79.1	2.2	105.2	8.8	780.0	130.0	79.1	2.20	24.81
Zircon-052_AME15-03	0.0486	0.0037	0.0861	0.0063	0.0130	0.0004	0.0045	0.0003	0.07	83.0	2.2	83.7	5.9	266.0	64.0	83.0	2.20	0.84
Zircon-053_AME15-03	0.0506	0.0046	0.0944	0.0081	0.0134	0.0004	0.0046	0.0002	-0.38	86.0	2.2	91.3	7.4	500.0	100.0	86.0	2.20	5.81
Zircon-054_AME15-03	0.0493	0.0036	0.0698	0.0050	0.0103	0.0003	0.0032	0.0001	-0.05	65.7	1.8	68.4	4.7	345.0	64.0	65.7	1.80	3.95
Zircon-055_AME15-03	0.0488	0.0032	0.0762	0.0048	0.0114	0.0003	0.0036	0.0001	0.10	73.0	1.6	74.4	4.5	338.0	81.0	73.0	1.60	1.88
Zircon-056_AME15-03	0.0456	0.0027	0.0625	0.0034	0.0098	0.0002	0.0032	0.0001	-0.20	63.1	1.3	61.5	3.2	224.0	74.0	63.1	1.30	-2.60
Zircon-057_AME15-03	0.0477	0.0022	0.1374	0.0062	0.0209	0.0005	0.0065	0.0002	0.22	133.0	3.1	130.5	5.6	216.0	51.0	133.0	3.10	-1.92
Zircon-058_AME15-03	0.0661	0.0078	0.0880	0.0110	0.0105	0.0005	0.0036	0.0003	-0.01	67.5	2.9	85.2	9.5	800.0	120.0	67.5	2.90	20.77
Zircon-059_AME15-03	0.0508	0.0064	0.0701	0.0084	0.0101	0.0005	0.0028	0.0004	0.15	64.5	3.3	68.5	8.1	580.0	120.0	64.5	3.30	5.84
Zircon-060_AME15-03	0.0500	0.0035	0.0711	0.0046	0.0103	0.0002	0.0038	0.0002	0.00	66.0	1.5	69.7	4.3	406.0	75.0	66.0	1.50	5.31
Zircon-061_AME15-03	0.0459	0.0035	0.0752	0.0050	0.0119	0.0003	0.0036	0.0002	-0.12	76.0	2.0	73.5	4.7	268.0	82.0	76.0	2.00	-3.40
Zircon-062_AME15-03	0.0765	0.0033	1.7900	0.1300	0.1730	0.0094	0.0530	0.0019	0.09	1028.0	50.0	1038.0	58.0	1108.0	59.0	1028.0	50.00	0.96
Zircon-063_AME15-03	0.0490	0.0026	0.0835	0.0042	0.0123	0.0003	0.0041	0.0002	0.18	78.9	1.6	81.3	3.9	236.0	60.0	78.9	1.60	2.95
Zircon-064_AME15-03	0.0583	0.0054	0.0978	0.0077	0.0122	0.0003	0.0050	0.0003	-0.01	77.9	1.9	94.6	7.0	650.0	110.0	77.9	1.90	17.65
Zircon-065_AME15-03	0.0570	0.0240	0.0900	0.0650	0.0116	0.0006	0.0041	0.0014	-0.33	74.4	3.7	88.0	46.0	520.0	280.0	74.4	3.70	15.45
Zircon-067_AME15-03	0.0468	0.0051	0.0623	0.0061	0.0094	0.0002	0.0032	0.0002	-0.22	60.4	1.5	61.1	5.8	360.0	77.0	60.4	1.50	1.15
Zircon-068_AME15-03	0.0538	0.0040	0.0918	0.0067	0.0123	0.0003	0.0043	0.0002	0.13	78.9	1.8	89.1	6.2	380.0	75.0	78.9	1.80	11.45
Zircon-069_AME15-03	0.0553	0.0078	0.0730	0.0096	0.0097	0.0004	0.0034	0.0003	-0.17	62.2	2.6	71.1	9.0	610.0	130.0	62.2	2.60	12.52
Zircon-073_AME15-03	0.0498	0.0041	0.0856	0.0075	0.0123	0.0004	0.0043	0.0003	0.32	78.5	2.3	83.2	7.0	351.0	74.0	78.5	2.30	5.65
Zircon-074_AME15-03	0.0521	0.0057	0.0853	0.0096	0.0119	0.0004	0.0039	0.0003	0.07	76.2	2.3	82.9	8.7	360.0	130.0	76.2	2.30	8.08
Zircon-075_AME15-03	0.0512	0.0056	0.0869	0.0091	0.0123	0.0004	0.0043	0.0002	0.14	79.0	2.4	84.3	8.5	420.0	110.0	79.0	2.40	6.29
Zircon-076_AME15-03	0.0520	0.0028	0.0824	0.0043	0.0120	0.0003	0.0039	0.0001	-0.11	76.9	1.7	80.3	4.0	278.0	64.0	76.9	1.70	4.23
Zircon-077_AME15-03	0.0485	0.0048	0.0825	0.0080	0.0124	0.0004	0.0042	0.0003	-0.03	79.4	2.6	80.2	7.5	600.0	140.0	79.4	2.60	1.00
Zircon-078_AME15-03	0.0475	0.0034	0.0825	0.0052	0.0124	0.0003	0.0042	0.0002	0.03	79.4	1.9	80.4	4.9	212.0	50.0	79.4	1.90	1.24
Zircon-079_AME15-03	0.0470	0.0750	0.0900	0.5400	0.0139	0.0046	0.0040	0.0120	0.03	89.0	29.0	90.0	190.0	1170.0	290.0	89.0	29.00	1.11
Zircon-080_AME15-03	0.0517	0.0056	0.1410	0.0160	0.0202	0.0006	0.0069	0.0005	-0.12	128.6	4.1	133.0	14.0	500.0	100.0	128.6	4.10	3.31
Zircon-081_AME15-03	0.0510	0.0130	0.0780	0.0210	0.0111	0.0003	0.0033	0.0003	0.39	71.1	1.9	76.0	19.0	450.0	230.0	71.1	1.90	6.45
Zircon-082_AME15-03	0.0478	0.0041	0.0834	0.0069	0.0127	0.0003	0.0042	0.0002	0.20	81.3	2.2	81.1	6.5	354.0	83.0	81.3	2.20	-0.25
Zircon-083_AME15-03	0.0558	0.0059	0.0888	0.0078	0.0115	0.0003	0.0042	0.0002	-0.12	73.6	2.2	86.2	7.2	530.0	120.0	73.6	2.20	14.62
Zircon-084_AME15-03	0.0492	0.0054	0.0713	0.0076	0.0107	0.0003	0.0037	0.0002	0.19	68.5	2.2	69.7	7.2	530.0	110.0	68.5	2.20	1.72
Zircon-085_AME15-03	0.0483	0.0023	0.0829	0.0034	0.0125	0.0002	0.0041	0.0001	0.03	79.8	1.4	80.8	3.1	176.0	47.0	79.8	1.40	1.24
Zircon-088_AME15-03	0.0499	0.0027	0.0850	0.0044	0.0124	0.0002	0.0044	0.0002	-0.34	79.2	1.3	82.8	3.9	370.0	67.0	79.2	1.30	4.35
Zircon-089_AME15-03	0.0490	0.0035	0.0834	0.0067	0.0126	0.0003	0.0041	0.0002	-0.03	80.9	2.1	82.7	6.2	306.0	76.0	80.9	2.10	2.18
Zircon-090_AME15-03	0.0532	0.0067	0.0900	0.0110	0.0127	0.0005	0.0039	0.0004	0.21	81.5	3.3	87.0	10.0	540.0	110.0	81.5	3.30	6.32
Zircon-091_AME15-03	0.0598	0.0031	0.1095	0.0057	0.0134	0.0003	0.0047	0.0002	0.22	85.8	1.8	105.3	5.2	604.0	55.0	85.8	1.80	18.52
Zircon-092_AME15-03	0.0496	0.0029	0.0663	0.0034	0.0097	0.0002	0.0031	0.0001	0.02	62.5	1.4	65.1	3.2	322.0	59.0	62.5	1.40	3.99
Zircon-093_AME15-03	0.0550	0.0270	0.0043	0.0024	0.0006	0.0000	0.0002	0.0001	-0.18	3.8	0.3	4.3	2.4	1080.0	340.0	3.8	0.25	10.70
Zircon-094_AME15-03	0.0501	0.0039	0.0832	0.0060	0.0119	0.0003	0.0042	0.0002	-0.04	76.1	1.8	81.0	5.6	307.0	67.0	76.1	1.80	6.05
Zircon-095_AME15-03	0.0489	0.0033	0.0848	0.0050	0.0124	0.0003	0.0040	0.0002	-0.08	79.6	1.9	83.7	4.7	237.0	40.0	79.6	1.90	4.90
Zircon-096_AME15-03	0.0520	0.0130	0.0750	0.0170	0.0104	0.0007	0.0036	0.0004	0.16	66.6	4.5	73.0	16.0	740.0	180.0	66.6	4.50	8.77
Zircon-098_AME15-03	0.0487	0.0019	0.0745	0.0027	0.0112	0.0002	0.0036	0.0001	0.09	71.5	1.3	73.3	2.6	211.0	46.0	71.5	1.30	2.46
Zircon-099_AME15-03	0.0590	0.0120	0.0880	0.0210	0.0108	0.0003	0.0039	0.0005	0.19	68.9	2.1	86.0	18.0	600.0	220.0	68.9	2.10	19.88

CORRECTED RATIOS¹CORRECTED AGES (Ma)⁴

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁸ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs		±2σ abs	±2σ abs	±2σ abs	±2σ abs	(Ma) ³	±2σ				
CUA-15-01 (Cua*)	Batolito Puerto Vallarta, Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																		
Zircon-001_CUA15-01	0.0484	0.0054	0.1650	0.0150	0.0246	0.0008	0.0081	0.0006	0.04	156.9	4.7	157.0	14.0	423.0	95.0	156.9	4.70	0.06	
Zircon-003_CUA15-01	0.0528	0.0039	0.3020	0.0230	0.0409	0.0009	0.0132	0.0008	0.05	258.3	5.5	266.0	18.0	409.0	73.0	258.3	5.50	2.89	
Zircon-006_CUA15-01	0.0600	0.0180	0.1100	0.0410	0.0130	0.0005	0.0049	0.0011	0.18	83.5	3.3	105.0	33.0	590.0	300.0	83.5	3.30	20.48	
Zircon-007_CUA15-01	0.0786	0.0032	2.3000	0.1100	0.2105	0.0033	0.0634	0.0029	0.30	1232.0	17.0	1210.0	33.0	1177.0	46.0	1232.0	17.00	-1.82	

Zircon-009_CUA15-01	0.0537	0.0035	0.0920	0.0063	0.0126	0.0003	0.0041	0.0002	0.22	80.8	1.8	90.9	5.9	403.0	67.0	80.8	1.80	11.11
Zircon-010_CUA15-01	0.0574	0.0087	0.3250	0.0470	0.0413	0.0021	0.0175	0.0017	-0.01	261.0	13.0	279.0	35.0	880.0	150.0	261.0	13.00	6.45
Zircon-011_CUA15-01	0.0527	0.0090	0.0960	0.0180	0.0127	0.0004	0.0049	0.0007	0.20	81.4	2.8	92.0	16.0	410.0	180.0	81.4	2.80	11.52
Zircon-012_CUA15-01	0.0613	0.0069	0.1120	0.0130	0.0132	0.0004	0.0049	0.0006	0.29	84.3	2.7	108.0	12.0	710.0	160.0	84.3	2.70	21.94
Zircon-014_CUA15-01	0.0480	0.0100	0.0850	0.0210	0.0129	0.0004	0.0046	0.0007	-0.25	82.3	2.5	83.0	18.0	410.0	250.0	82.3	2.50	0.84
Zircon-015_CUA15-01	0.0502	0.0039	0.0895	0.0073	0.0131	0.0003	0.0044	0.0002	-0.09	83.6	2.0	86.9	6.8	328.0	67.0	83.6	2.00	3.80
Zircon-017_CUA15-01	0.0798	0.0030	2.2300	0.0950	0.2029	0.0034	0.0649	0.0027	0.26	1191.0	18.0	1190.0	32.0	1183.0	36.0	1191.0	18.00	-0.08
Zircon-019_CUA15-01	0.0641	0.0036	0.1127	0.0068	0.0129	0.0002	0.0043	0.0002	0.23	82.9	1.4	108.3	6.1	762.0	69.0	82.9	1.40	23.45
Zircon-021_CUA15-01	0.0504	0.0052	0.0865	0.0094	0.0126	0.0003	0.0039	0.0002	0.13	80.8	1.7	85.6	8.7	421.0	90.0	80.8	1.70	5.61
Zircon-023_CUA15-01	0.0495	0.0053	0.0880	0.0092	0.0130	0.0004	0.0042	0.0002	0.03	83.2	2.2	85.3	8.6	400.0	99.0	83.2	2.20	2.46
Zircon-027_CUA15-01	0.0511	0.0048	0.1490	0.0140	0.0215	0.0006	0.0075	0.0006	0.06	137.3	3.5	141.0	12.0	489.0	90.0	137.3	3.50	2.62
Zircon-028_CUA15-01	0.0516	0.0041	0.0918	0.0071	0.0132	0.0003	0.0047	0.0004	-0.10	84.8	2.1	89.1	6.6	400.0	110.0	84.8	2.10	4.83
Zircon-029_CUA15-01	0.0545	0.0036	0.1800	0.0130	0.0247	0.0007	0.0088	0.0005	0.21	157.3	4.1	167.0	11.0	531.0	75.0	157.3	4.10	5.81
Zircon-030_CUA15-01	0.0522	0.0044	0.0886	0.0077	0.0128	0.0003	0.0043	0.0003	0.05	82.2	2.1	86.0	6.9	427.0	91.0	82.2	2.10	4.42
Zircon-031_CUA15-01	0.0690	0.0150	0.2360	0.0490	0.0254	0.0012	0.0117	0.0015	-0.10	161.7	7.8	205.0	41.0	1210.0	190.0	161.7	7.80	21.12
Zircon-032_CUA15-01	0.0501	0.0047	0.0867	0.0086	0.0127	0.0003	0.0043	0.0003	0.01	81.1	1.9	84.3	8.0	490.0	130.0	81.1	1.90	3.80
Zircon-033_CUA15-01	0.0536	0.0049	0.0923	0.0094	0.0133	0.0004	0.0047	0.0003	0.21	84.8	2.5	90.8	8.4	450.0	110.0	84.8	2.50	6.61
Zircon-035_CUA15-01	0.0566	0.0055	0.0960	0.0100	0.0130	0.0004	0.0046	0.0005	-0.01	83.2	2.3	92.5	9.3	570.0	140.0	83.2	2.30	10.05
Zircon-036_CUA15-01	0.0540	0.0045	0.0954	0.0077	0.0131	0.0002	0.0047	0.0002	0.42	84.0	1.5	92.4	7.3	360.0	130.0	84.0	1.50	9.09
Zircon-037_CUA15-01	0.0520	0.0040	0.0885	0.0069	0.0126	0.0003	0.0043	0.0003	0.19	80.9	1.9	86.0	6.4	352.0	86.0	80.9	1.90	5.93
Zircon-038_CUA15-01	0.0500	0.0033	0.0873	0.0064	0.0130	0.0003	0.0040	0.0003	-0.01	83.1	2.2	84.9	5.9	297.0	71.0	83.1	2.20	2.12
Zircon-039_CUA15-01	0.0481	0.0026	0.1602	0.0095	0.0246	0.0005	0.0083	0.0004	0.17	156.7	2.9	152.2	8.2	223.0	79.0	156.7	2.90	-2.96
Zircon-041_CUA15-01	0.0546	0.0048	0.2870	0.0240	0.0378	0.0011	0.0131	0.0009	-0.14	239.0	7.1	255.0	20.0	565.0	79.0	239.0	7.10	6.27
Zircon-042_CUA15-01	0.0807	0.0042	2.2300	0.1200	0.1990	0.0040	0.0697	0.0044	-0.24	1169.0	22.0	1192.0	35.0	1243.0	69.0	1169.0	22.00	1.93
Zircon-043_CUA15-01	0.0523	0.0039	0.0863	0.0074	0.0121	0.0003	0.0040	0.0003	0.28	77.5	1.8	85.7	6.9	425.0	91.0	77.5	1.80	9.57
Zircon-044_CUA15-01	0.0508	0.0061	0.0890	0.0110	0.0125	0.0003	0.0046	0.0003	0.17	80.3	2.0	87.0	11.0	500.0	130.0	80.3	2.00	7.70
Zircon-046_CUA15-01	0.0574	0.0065	0.1980	0.0220	0.0247	0.0006	0.0101	0.0008	-0.31	157.1	3.7	182.0	19.0	650.0	140.0	157.1	3.70	13.68
Zircon-049_CUA15-01	0.0570	0.0190	0.1100	0.0400	0.0136	0.0006	0.0050	0.0018	0.17	86.9	3.7	106.0	32.0	540.0	310.0	86.9	3.70	18.02
Zircon-050_CUA15-01	0.0509	0.0071	0.1750	0.0300	0.0245	0.0005	0.0081	0.0009	0.30	156.3	3.0	163.0	24.0	280.0	200.0	156.3	3.00	4.11
Zircon-052_CUA15-01	0.0491	0.0026	0.1439	0.0084	0.0207	0.0004	0.0066	0.0003	0.18	132.1	2.4	136.4	7.5	232.0	54.0	132.1	2.40	3.15
Zircon-053_CUA15-01	0.0588	0.0076	0.1020	0.0140	0.0126	0.0003	0.0045	0.0005	-0.44	80.6	2.0	98.0	12.0	640.0	160.0	80.6	2.00	17.76
Zircon-054_CUA15-01	0.0467	0.0055	0.0910	0.0110	0.0137	0.0005	0.0045	0.0004	0.13	87.7	3.0	88.0	10.0	320.0	130.0	87.7	3.00	0.34
Zircon-056_CUA15-01	0.0535	0.0048	0.0963	0.0089	0.0127	0.0003	0.0043	0.0003	-0.20	81.1	2.1	93.0	8.2	439.0	89.0	81.1	2.10	12.80
Zircon-057_CUA15-01	0.0508	0.0023	0.3280	0.0160	0.0460	0.0008	0.0148	0.0008	0.35	289.9	5.1	288.0	13.0	242.0	58.0	289.9	5.10	-0.66
Zircon-058_CUA15-01	0.0621	0.0043	0.1208	0.0083	0.0138	0.0004	0.0056	0.0005	0.20	88.6	2.2	115.5	7.6	642.0	76.0	88.6	2.20	23.29
Zircon-059_CUA15-01	0.0519	0.0051	0.1750	0.0180	0.0238	0.0006	0.0074	0.0005	0.17	151.6	3.9	165.0	15.0	340.0	130.0	151.6	3.90	8.12
Zircon-060_CUA15-01	0.0558	0.0031	0.3150	0.0170	0.0412	0.0008	0.0140	0.0007	-0.09	260.2	4.8	279.0	13.0	420.0	58.0	260.2	4.80	6.74
Zircon-061_CUA15-01	0.0531	0.0041	0.1820	0.0140	0.0244	0.0005	0.0090	0.0008	-0.02	155.3	3.3	169.0	12.0	510.0	120.0	155.3	3.30	8.11
Zircon-062_CUA15-01	0.0517	0.0061	0.1000	0.0120	0.0141	0.0006	0.0054	0.0006	0.02	90.2	3.5	98.0	11.0	540.0	120.0	90.2	3.50	7.96
Zircon-063_CUA15-01	0.0527	0.0048	0.0967	0.0085	0.0127	0.0003	0.0043	0.0003	0.21	81.2	2.0	93.4	7.9	443.0	70.0	81.2	2.00	13.06
Zircon-064_CUA15-01	0.0503	0.0036	0.0923	0.0065	0.0133	0.0003	0.0045	0.0003	-0.24	85.0	1.7	89.5	6.0	351.0	78.0	85.0	1.70	5.03
Zircon-065_CUA15-01	0.0492	0.0043	0.1440	0.0120	0.0214	0.0005	0.0066	0.0004	-0.25	136.3	3.4	136.0	11.0	342.0	75.0	136.3	3.40	-0.22
Zircon-069_CUA15-01	0.0539	0.0043	0.2990	0.0240	0.0409	0.0011	0.0130	0.0008	-0.15	258.5	6.8	264.0	19.0	450.0	110.0	258.5	6.80	2.08
Zircon-070_CUA15-01	0.0570	0.0380	0.0900	0.1100	0.0117	0.0010	0.0042	0.0042	0.52	75.0	6.5	88.0	19.0	520.0	400.0	75.0	6.50	14.77
Zircon-072_CUA15-01	0.0499	0.0024	0.1640	0.0087	0.0240	0.0004	0.0077	0.0004	0.27	153.0	2.7	154.0	7.6	200.0	42.0	153.0	2.70	0.65
Zircon-074_CUA15-01	0.0541	0.0034	0.3090	0.0210	0.0410	0.0009	0.0135	0.0008	0.01	258.9	5.3	275.0	16.0	453.0	95.0	258.9	5.30	5.85
Zircon-075_CUA15-01	0.0553	0.0027	0.2100	0.0110	0.0267	0.0005	0.0088	0.0004	0.63	169.9	2.9	193.0	8.8	482.0	68.0	169.9	2.90	11.97
Zircon-076_CUA15-01	0.0515	0.0028	0.1790	0.0110	0.0252	0.0005	0.0082	0.0005	-0.09	160.2	3.2	167.1	9.1	305.0	76.0	160.2	3.20	4.13
Zircon-080_CUA15-01	0.0497	0.0046	0.0869	0.0079	0.0127	0.0003	0.0044	0.0003	-0.06	81.1	2.0	85.5	7.3	337.0	80.0	81.1	2.00	5.15
Zircon-081_CUA15-01	0.0509	0.0040	0.0938	0.0076	0.0127	0.0003	0.0050	0.0003	0.06	81.6	2.1	90.8	7.0	506.0	98.0	81.6	2.10	10.13
Zircon-082_CUA15-01	0.0638	0.0051	0.1030	0.0120	0.0118	0.0004	0.0039	0.0004	0.46	75.5	2.2	99.0	10.0	790.0	120.0	75.5	2.20	23.74
Zircon-083_CUA15-01	0.0498	0.0039	0.0843	0.0070	0.0124	0.0003	0.0043	0.0002	0.08	79.2	1.7	82.0	6.5	333.0	90.0	79.2	1.70	3.41

Zircon-084_CUA15-01	0.0540	0.0043	0.0965	0.0072	0.0129	0.0003	0.0045	0.0003	-0.16	82.7	2.0	93.4	6.7	453.0	88.0	82.7	2.00	11.46
Zircon-087_CUA15-01	0.0524	0.0051	0.0885	0.0078	0.0131	0.0004	0.0043	0.0003	0.07	84.0	2.5	85.9	7.3	424.0	71.0	84.0	2.50	2.21
Zircon-088_CUA15-01	0.0501	0.0025	0.1788	0.0089	0.0261	0.0004	0.0085	0.0004	0.10	166.1	2.6	166.9	7.7	245.0	41.0	166.1	2.60	0.48
Zircon-089_CUA15-01	0.0514	0.0039	0.1720	0.0130	0.0240	0.0005	0.0080	0.0004	0.11	152.9	3.4	160.0	11.0	415.0	74.0	152.9	3.40	4.44
Zircon-090_CUA15-01	0.0602	0.0028	0.7290	0.0390	0.0885	0.0016	0.0282	0.0013	0.10	546.6	9.6	555.0	23.0	625.0	56.0	546.6	9.60	1.51
Zircon-091_CUA15-01	0.0541	0.0041	0.1810	0.0150	0.0242	0.0005	0.0081	0.0005	-0.03	153.8	2.9	168.0	12.0	437.0	89.0	153.8	2.90	8.45
Zircon-092_CUA15-01	0.0512	0.0032	0.1740	0.0110	0.0248	0.0005	0.0083	0.0005	0.03	157.8	3.4	162.5	9.3	244.0	82.0	157.8	3.40	2.89
Zircon-093_CUA15-01	0.0546	0.0046	0.0939	0.0078	0.0127	0.0003	0.0047	0.0003	0.07	81.1	2.2	90.9	7.3	452.0	93.0	81.1	2.20	10.78
Zircon-094_CUA15-01	0.0524	0.0037	0.0897	0.0072	0.0130	0.0003	0.0043	0.0003	0.10	83.1	1.9	87.1	6.7	312.0	59.0	83.1	1.90	4.59
Zircon-095_CUA15-01	0.0533	0.0029	0.1800	0.0110	0.0249	0.0005	0.0082	0.0004	0.18	158.5	3.0	169.2	9.8	344.0	60.0	158.5	3.00	6.32
Zircon-096_CUA15-01	0.0515	0.0096	0.1740	0.0370	0.0247	0.0005	0.0084	0.0006	0.14	157.5	3.1	163.0	29.0	330.0	230.0	157.5	3.10	3.37
Zircon-097_CUA15-01	0.0561	0.0044	0.0878	0.0069	0.0115	0.0003	0.0039	0.0002	-0.09	73.4	1.7	85.4	6.6	525.0	98.0	73.4	1.70	14.05
Zircon-099_CUA15-01	0.0599	0.0070	0.1100	0.0120	0.0131	0.0003	0.0051	0.0005	-0.09	83.8	2.1	105.0	11.0	680.0	120.0	83.8	2.10	20.19
Zircon-100_CUA15-01	0.0518	0.0039	0.1730	0.0120	0.0240	0.0006	0.0077	0.0004	-0.12	152.9	3.7	162.0	10.0	367.0	84.0	152.9	3.70	5.62

CORRECTED RATIOS¹CORRECTED AGES (Ma)²

Best age

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ abs	²⁰⁷ Pb/ ²³⁵ U	±2σ abs	²⁰⁶ Pb/ ²³⁸ U	±2σ abs	²⁰⁶ Pb/ ²³² Th	±2σ abs	Rho	²⁰⁶ Pb/ ²³⁸ U	±2σ	²⁰⁷ Pb/ ²³⁵ U	±2σ	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ	(Ma) ³	±2σ	Disc % ⁴
JUN-15-01 (Jun*) Batolito Puerto Vallarta, Suite Cuale-Macias, Complejo Arteaga																		
Zircon-001_JUN15-01	0.0504	0.0041	0.0875	0.0084	0.0127	0.0003	0.0040	0.0008	0.13	81.6	2.0	85.1	7.7	190.0	170.0	81.6	2.00	4.11
Zircon-002_JUN15-01	0.0507	0.0039	0.0890	0.0074	0.0129	0.0003	0.0046	0.0007	0.07	82.6	2.1	86.4	6.9	240.0	170.0	82.6	2.10	4.40
Zircon-003_JUN15-01	0.0527	0.0037	0.0994	0.0067	0.0138	0.0004	0.0043	0.0007	0.11	88.1	2.3	96.0	6.2	310.0	150.0	88.1	2.30	8.23
Zircon-004_JUN15-01	0.0536	0.0028	0.1726	0.0086	0.0240	0.0005	0.0077	0.0011	0.12	152.6	2.8	161.5	7.0	330.0	100.0	152.6	2.80	5.51
Zircon-005_JUN15-01	0.0469	0.0034	0.0830	0.0056	0.0130	0.0003	0.0042	0.0007	0.05	83.0	2.0	80.9	5.2	50.0	150.0	83.0	2.00	-2.60
Zircon-006_JUN15-01	0.0489	0.0036	0.0868	0.0065	0.0128	0.0003	0.0043	0.0007	0.32	81.8	2.1	84.3	6.1	110.0	150.0	81.8	2.10	2.97
Zircon-007_JUN15-01	0.0502	0.0038	0.0886	0.0059	0.0129	0.0003	0.0038	0.0006	-0.04	82.3	2.2	86.1	5.5	190.0	160.0	82.3	2.20	4.41
Zircon-008_JUN15-01	0.0491	0.0020	0.0899	0.0046	0.0133	0.0005	0.0042	0.0007	-0.18	85.1	3.2	87.4	4.2	144.0	95.0	85.1	3.20	2.63
Zircon-009_JUN15-01	0.0485	0.0017	0.0878	0.0029	0.0132	0.0002	0.0042	0.0006	0.15	84.7	1.2	85.4	2.7	120.0	84.0	84.7	1.20	0.82
Zircon-010_JUN15-01	0.0485	0.0020	0.0853	0.0031	0.0130	0.0002	0.0041	0.0006	0.23	83.1	1.3	83.0	2.9	117.0	90.0	83.1	1.30	-0.12
Zircon-011_JUN15-01	0.0486	0.0070	0.0900	0.0160	0.0135	0.0004	0.0040	0.0010	0.25	86.1	2.8	87.0	14.0	100.0	230.0	86.1	2.80	1.03
Zircon-013_JUN15-01	0.0490	0.0022	0.0868	0.0034	0.0128	0.0002	0.0043	0.0007	-0.04	82.1	1.3	84.5	3.1	136.0	94.0	82.1	1.30	2.84
Zircon-014_JUN15-01	0.0487	0.0020	0.0864	0.0034	0.0131	0.0002	0.0043	0.0007	-0.10	84.0	1.3	84.1	3.1	127.0	92.0	84.0	1.30	0.12
Zircon-015_JUN15-01	0.0521	0.0071	0.0920	0.0140	0.0129	0.0004	0.0045	0.0009	0.00	82.6	2.3	89.0	12.0	220.0	250.0	82.6	2.30	7.19
Zircon-016_JUN15-01	0.0499	0.0031	0.1770	0.0110	0.0256	0.0006	0.0083	0.0013	0.08	162.9	3.5	165.1	9.3	160.0	130.0	162.9	3.50	1.33
Zircon-017_JUN15-01	0.0511	0.0021	0.0948	0.0034	0.0135	0.0002	0.0044	0.0007	0.28	86.3	1.3	92.0	3.2	236.0	92.0	86.3	1.30	6.20
Zircon-018_JUN15-01	0.0490	0.0018	0.0879	0.0028	0.0130	0.0002	0.0041	0.0006	0.21	83.4	1.3	85.5	2.6	143.0	83.0	83.4	1.30	2.46
Zircon-019_JUN15-01	0.0516	0.0038	0.0937	0.0067	0.0132	0.0003	0.0043	0.0007	0.09	84.4	2.0	92.4	6.2	300.0	150.0	84.4	2.00	8.66
Zircon-020_JUN15-01	0.0502	0.0042	0.1730	0.0120	0.0249	0.0006	0.0076	0.0012	-0.26	158.3	3.8	161.0	10.0	210.0	160.0	158.3	3.80	1.68
Zircon-021_JUN15-01	0.0545	0.0043	0.0967	0.0076	0.0130	0.0004	0.0050	0.0008	0.13	83.2	2.2	93.5	7.1	320.0	170.0	83.2	2.20	11.02
Zircon-022_JUN15-01	0.0471	0.0032	0.0825	0.0052	0.0128	0.0003	0.0043	0.0007	-0.05	81.9	1.8	80.4	4.9	60.0	140.0	81.9	1.80	-1.87
Zircon-023_JUN15-01	0.0556	0.0066	0.1830	0.0280	0.0229	0.0009	0.0083	0.0027	0.02	146.2	5.7	170.0	22.0	490.0	160.0	146.2	5.70	14.00
Zircon-024_JUN15-01	0.0499	0.0022	0.0877	0.0037	0.0130	0.0002	0.0043	0.0007	-0.01	83.1	1.3	85.3	3.4	256.0	98.0	83.1	1.30	2.58
Zircon-025_JUN15-01	0.0549	0.0045	0.1010	0.0100	0.0133	0.0003	0.0047	0.0012	0.12	85.1	2.0	97.3	9.1	400.0	130.0	85.1	2.00	12.54
Zircon-026_JUN15-01	0.0471	0.0037	0.0809	0.0065	0.0124	0.0003	0.0040	0.0007	0.25	79.6	1.8	79.0	6.0	60.0	150.0	79.6	1.80	-0.76
Zircon-027_JUN15-01	0.0523	0.0085	0.0950	0.0140	0.0131	0.0003	0.0044	0.0009	-0.42	84.1	2.1	91.0	13.0	240.0	250.0	84.1	2.10	7.58
Zircon-028_JUN15-01	0.0463	0.0030	0.0859	0.0056	0.0133	0.0003	0.0046	0.0008	0.14	85.2	1.8	83.5	5.2	10.0	130.0	85.2	1.80	-2.04
Zircon-029_JUN15-01	0.0472	0.0023	0.0857	0.0038	0.0131	0.0002	0.0045	0.0007	-0.07	83.6	1.4	83.5	3.5	80.0	110.0	83.6	1.40	-0.12
Zircon-030_JUN15-01	0.0487	0.0029	0.0822	0.0046	0.0123	0.0002	0.0041	0.0007	0.07	78.5	1.4	80.1	4.2	120.0	120.0	78.5	1.40	2.00
Zircon-031_JUN15-01	0.0556	0.0056	0.0996	0.0097	0.0131	0.0004	0.0044	0.0007	0.00	83.7	2.3	96.0	8.9	330.0	210.0	83.7	2.30	12.81
Zircon-034_JUN15-01	0.0488	0.0046	0.0857	0.0080	0.0129	0.0003	0.0045	0.0008	-0.26	82.7	1.8	85.5	7.2	200.0	180.0	82.7	1.80	3.27
Zircon-035_JUN15-01	0.0511	0.0037	0.0942	0.0057	0.0136	0.0003	0.0048	0.0008	-0.18	87.2	2.1	91.3	5.2	250.0	140.0	87.2	2.10	4.49
Zircon-036_JUN15-01	0.0494	0.0036	0.0886	0.0060	0.0130	0.0003	0.0043	0.0007	-0.11	83.2	1.8	86.1	5.5	140.0	140.0	83.2	1.80	3.37
Zircon-037_JUN15-01	0.0520	0.0030	0.0922	0.0047	0.0126	0.0003	0.0042	0.0006	0.21	80.7	1.6	89.5	4.3	290.0	130.0	80.7	1.60	9.83

Zircon-038_JUN15-01	0.0497	0.0039	0.0936	0.0072	0.0136	0.0004	0.0047	0.0008	0.05	87.3	2.2	90.6	6.6	140.0	150.0	87.3	2.20	3.64
Zircon-039_JUN15-01	0.0670	0.0053	0.2150	0.0190	0.0236	0.0008	0.0092	0.0016	0.18	150.5	4.8	197.0	16.0	830.0	170.0	150.5	4.80	23.60
Zircon-040_JUN15-01	0.0470	0.0032	0.0865	0.0068	0.0133	0.0004	0.0043	0.0008	0.35	85.4	2.3	84.2	6.3	70.0	130.0	85.4	2.30	-1.43
Zircon-041_JUN15-01	0.0478	0.0039	0.0863	0.0067	0.0132	0.0003	0.0044	0.0009	0.02	84.8	2.1	83.9	6.2	60.0	160.0	84.8	2.10	-1.07
Zircon-042_JUN15-01	0.0483	0.0034	0.0854	0.0055	0.0128	0.0003	0.0042	0.0006	0.01	82.2	1.9	83.1	5.1	110.0	150.0	82.2	1.90	1.08
Zircon-043_JUN15-01	0.0486	0.0020	0.0890	0.0032	0.0133	0.0002	0.0045	0.0007	0.21	85.1	1.5	86.5	3.0	122.0	90.0	85.1	1.50	1.62
Zircon-044_JUN15-01	0.0485	0.0021	0.0872	0.0035	0.0130	0.0002	0.0041	0.0007	0.01	83.4	1.4	84.9	3.3	131.0	97.0	83.4	1.40	1.77
Zircon-045_JUN15-01	0.0520	0.0046	0.0867	0.0074	0.0126	0.0003	0.0050	0.0008	-0.23	80.7	1.7	87.4	6.9	360.0	160.0	80.7	1.70	7.67
Zircon-047_JUN15-01	0.0505	0.0031	0.0919	0.0054	0.0133	0.0003	0.0046	0.0007	0.29	85.0	2.2	89.2	5.0	240.0	140.0	85.0	2.20	4.71
Zircon-048_JUN15-01	0.0630	0.0042	0.1164	0.0074	0.0135	0.0003	0.0055	0.0009	0.35	86.5	2.0	111.7	6.7	760.0	140.0	86.5	2.00	22.56
Zircon-049_JUN15-01	0.0510	0.0039	0.0909	0.0065	0.0130	0.0003	0.0042	0.0007	-0.03	83.4	1.8	88.2	6.0	200.0	150.0	83.4	1.80	5.44
Zircon-050_JUN15-01	0.0586	0.0046	0.1037	0.0073	0.0130	0.0003	0.0047	0.0008	-0.21	83.5	2.1	100.0	6.6	570.0	150.0	83.5	2.10	16.50
Zircon-051_JUN15-01	0.0485	0.0022	0.0852	0.0033	0.0129	0.0002	0.0043	0.0007	-0.08	82.5	1.3	83.0	3.1	116.0	97.0	82.5	1.30	0.60
Zircon-052_JUN15-01	0.0493	0.0082	0.0930	0.0110	0.0136	0.0005	0.0049	0.0008	-0.08	86.8	3.2	89.8	9.6	180.0	230.0	86.8	3.20	3.34
Zircon-053_JUN15-01	0.0572	0.0037	0.1000	0.0064	0.0127	0.0003	0.0044	0.0007	-0.04	81.3	1.9	96.7	5.9	490.0	150.0	81.3	1.90	15.93
Zircon-054_JUN15-01	0.0524	0.0039	0.0929	0.0067	0.0129	0.0003	0.0041	0.0007	0.00	82.7	1.9	89.9	6.3	310.0	160.0	82.7	1.90	8.01
Zircon-055_JUN15-01	0.0522	0.0046	0.0885	0.0068	0.0128	0.0003	0.0044	0.0007	0.00	81.8	2.1	85.9	6.1	220.0	170.0	81.8	2.10	4.77
Zircon-056_JUN15-01	0.0484	0.0019	0.0871	0.0032	0.0131	0.0002	0.0042	0.0007	0.33	84.1	1.2	84.8	3.0	113.0	88.0	84.1	1.20	0.83
Zircon-057_JUN15-01	0.0505	0.0037	0.0875	0.0056	0.0129	0.0003	0.0044	0.0007	-0.04	82.5	1.8	85.0	5.2	180.0	150.0	82.5	1.80	2.94
Zircon-058_JUN15-01	0.0561	0.0033	0.1051	0.0059	0.0136	0.0003	0.0046	0.0007	0.11	87.1	1.7	101.3	5.4	410.0	130.0	87.1	1.70	14.02
Zircon-059_JUN15-01	0.0502	0.0024	0.0911	0.0043	0.0131	0.0002	0.0046	0.0007	0.14	84.1	1.4	88.5	3.9	200.0	110.0	84.1	1.40	4.97
Zircon-060_JUN15-01	0.0506	0.0056	0.0926	0.0088	0.0133	0.0004	0.0046	0.0008	0.07	85.0	2.8	91.2	8.1	260.0	200.0	85.0	2.80	6.80
Zircon-061_JUN15-01	0.0580	0.0360	0.1000	0.1400	0.0130	0.0015	0.0043	0.0054	0.12	83.2	9.4	101.0	84.0	650.0	320.0	83.2	9.40	17.62
Zircon-062_JUN15-01	0.0507	0.0043	0.0955	0.0080	0.0137	0.0003	0.0044	0.0007	-0.08	87.6	2.0	92.3	7.4	240.0	180.0	87.6	2.00	5.09
Zircon-063_JUN15-01	0.0497	0.0037	0.0885	0.0070	0.0130	0.0003	0.0041	0.0006	0.20	83.0	2.1	86.0	6.3	180.0	150.0	83.0	2.10	3.49
Zircon-064_JUN15-01	0.0510	0.0029	0.0927	0.0047	0.0132	0.0003	0.0039	0.0007	0.08	84.5	1.9	89.9	4.4	250.0	130.0	84.5	1.90	6.01
Zircon-065_JUN15-01	0.0551	0.0034	0.0954	0.0059	0.0126	0.0003	0.0040	0.0007	0.34	80.6	1.8	92.3	5.5	460.0	130.0	80.6	1.80	12.68
Zircon-066_JUN15-01	0.0515	0.0047	0.0901	0.0078	0.0127	0.0004	0.0043	0.0007	0.07	81.3	2.2	87.2	7.2	190.0	190.0	81.3	2.20	6.77
Zircon-067_JUN15-01	0.0506	0.0035	0.0903	0.0056	0.0131	0.0003	0.0045	0.0007	0.30	83.8	1.6	87.7	5.4	210.0	140.0	83.8	1.60	4.45
Zircon-068_JUN15-01	0.0559	0.0040	0.1036	0.0078	0.0136	0.0003	0.0046	0.0009	0.48	87.2	1.8	99.9	7.1	420.0	140.0	87.2	1.80	12.71
Zircon-069_JUN15-01	0.0543	0.0039	0.0993	0.0070	0.0132	0.0003	0.0047	0.0008	0.26	84.3	1.7	95.8	6.4	330.0	160.0	84.3	1.70	12.00
Zircon-070_JUN15-01	0.0490	0.0026	0.0909	0.0048	0.0134	0.0003	0.0050	0.0008	-0.31	86.1	1.7	88.2	4.4	130.0	110.0	86.1	1.70	2.38
Zircon-071_JUN15-01	0.0515	0.0051	0.0961	0.0086	0.0138	0.0004	0.0046	0.0008	-0.15	88.3	2.3	92.8	7.9	230.0	200.0	88.3	2.30	4.85
Zircon-072_JUN15-01	0.0506	0.0023	0.0939	0.0038	0.0134	0.0002	0.0047	0.0008	-0.06	85.6	1.3	91.1	3.5	230.0	100.0	85.6	1.30	6.04
Zircon-073_JUN15-01	0.0493	0.0023	0.0899	0.0038	0.0133	0.0003	0.0044	0.0007	0.13	85.3	1.6	87.4	3.6	150.0	100.0	85.3	1.60	2.40
Zircon-074_JUN15-01	0.0509	0.0035	0.0965	0.0061	0.0139	0.0003	0.0047	0.0007	-0.05	88.6	2.1	94.8	5.7	200.0	140.0	88.6	2.10	6.54
Zircon-075_JUN15-01	0.0499	0.0038	0.1690	0.0150	0.0244	0.0005	0.0075	0.0013	0.21	155.5	2.9	158.0	12.0	180.0	100.0	155.5	2.90	1.58
Zircon-076_JUN15-01	0.0504	0.0079	0.1030	0.0220	0.0148	0.0005	0.0049	0.0012	-0.09	94.8	2.8	99.0	16.0	190.0	270.0	94.8	2.80	4.24
Zircon-077_JUN15-01	0.0484	0.0026	0.0908	0.0042	0.0136	0.0002	0.0042	0.0007	0.19	86.9	1.4	88.2	3.9	120.0	110.0	86.9	1.40	1.47
Zircon-078_JUN15-01	0.0498	0.0044	0.0866	0.0070	0.0128	0.0003	0.0040	0.0007	-0.12	82.2	2.0	84.1	6.5	180.0	180.0	82.2	2.00	2.26
Zircon-080_JUN15-01	0.0552	0.0061	0.0960	0.0100	0.0129	0.0004	0.0043	0.0007	-0.05	82.3	2.6	92.5	9.6	370.0	220.0	82.3	2.60	11.03
Zircon-081_JUN15-01	0.0482	0.0025	0.0875	0.0044	0.0132	0.0002	0.0043	0.0007	0.03	84.6	1.4	85.1	4.1	100.0	110.0	84.6	1.40	0.59
Zircon-082_JUN15-01	0.0593	0.0030	0.7460	0.0360	0.0907	0.0018	0.0279	0.0043	-0.02	560.0	10.0	567.0	20.0	580.0	100.0	560.0	10.00	1.23
Zircon-083_JUN15-01	0.0544	0.0018	0.0948	0.0033	0.0126	0.0003	0.0022	0.0004	0.47	80.6	1.7	91.9	3.0	381.0	74.0	80.6	1.70	12.30
Zircon-084_JUN15-01	0.0528	0.0039	0.0953	0.0071	0.0132	0.0003	0.0049	0.0008	-0.06	84.3	1.9	92.2	6.5	300.0	160.0	84.3	1.90	8.57
Zircon-085_JUN15-01	0.0568	0.0030	0.0887	0.0030	0.0113	0.0003	0.0021	0.0003	0.34	72.7	2.0	86.2	2.8	470.0	100.0	72.7	2.00	15.66
Zircon-086_JUN15-01	0.0490	0.0026	0.0887	0.0054	0.0131	0.0002	0.0044	0.0007	0.31	84.1	1.5	86.2	5.0	140.0	110.0	84.1	1.50	2.44
Zircon-087_JUN15-01	0.0629	0.0020	0.1082	0.0031	0.0124	0.0003	0.0017	0.0003	0.47	79.7	1.7	104.3	2.9	701.0	66.0	79.7	1.70	23.59
Zircon-088_JUN15-01	0.0494	0.0030	0.0824	0.0046	0.0124	0.0003	0.0040	0.0006	-0.03	79.1	1.6	80.3	4.3	150.0	130.0	79.1	1.60	1.49
Zircon-089_JUN15-01	0.0514	0.0042	0.0939	0.0081	0.0133	0.0004	0.0052	0.0009	-0.07	85.0	2.3	92.9	7.4	290.0	180.0	85.0	2.30	8.50
Zircon-090_JUN15-01	0.0505	0.0022	0.0877	0.0035	0.0126	0.0002	0.0042	0.0007	0.27	80.9	1.3	85.3	3.2	203.0	98.0	80.9	1.30	5.16
Zircon-091_JUN15-01	0.0535	0.0022	0.1056	0.0034	0.0144	0.0003	0.0028	0.0004	0.39	92.2	1.8	101.9	3.1	340.0	87.0	92.2	1.80	9.52

Zircon-092_JUN15-01	0.0526	0.0039	0.0958	0.0066	0.0134	0.0004	0.0049	0.0008	0.00	85.8	2.2	92.7	6.1	260.0	150.0	85.8	2.20	7.44
Zircon-093_JUN15-01	0.0473	0.0036	0.0855	0.0063	0.0132	0.0003	0.0047	0.0007	0.13	84.6	2.0	83.1	5.9	70.0	160.0	84.6	2.00	-1.81
Zircon-095_JUN15-01	0.0484	0.0031	0.0910	0.0052	0.0135	0.0003	0.0052	0.0008	0.12	86.3	1.6	88.3	4.8	140.0	130.0	86.3	1.60	2.27
Zircon-096_JUN15-01	0.0507	0.0037	0.0970	0.0064	0.0142	0.0004	0.0056	0.0009	-0.02	90.8	2.5	93.8	6.2	210.0	160.0	90.8	2.50	3.20
Zircon-097_JUN15-01	0.0530	0.0170	0.0990	0.0420	0.0132	0.0005	0.0048	0.0028	0.53	84.6	3.4	96.0	34.0	380.0	330.0	84.6	3.40	11.88
Zircon-098_JUN15-01	0.0485	0.0025	0.0852	0.0042	0.0127	0.0002	0.0039	0.0006	0.01	81.0	1.5	83.0	3.9	130.0	110.0	81.0	1.50	2.41
Zircon-099_JUN15-01	0.0501	0.0030	0.1013	0.0054	0.0147	0.0003	0.0056	0.0008	-0.21	94.2	2.1	97.8	5.0	170.0	130.0	94.2	2.10	3.68
Zircon-100_JUN15-01	0.0542	0.0027	0.3970	0.0160	0.0538	0.0009	0.0167	0.0026	-0.20	337.9	5.3	341.0	12.0	370.0	110.0	337.9	5.30	0.91

CORRECTED RATIOS ¹CORRECTED AGES (Ma) ⁴

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁸ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs		±2σ abs		±2σ abs		±2σ abs			±2σ		±2σ		±2σ		(Ma) ³	±2σ		
TEC-15-01 (Tec²)	Batolito Puerto Vallarta, Suite Cuale-Macias, Complejo Arteaga																		
Zircon-001_TEC15-01	0.0483	0.0038	0.0878	0.0077	0.0131	0.0003	0.0046	0.0004	0.41	84.0	1.6	85.1	7.1	433.0	99.0	84.0	1.60	1.29	
Zircon-002_TEC15-01	0.0508	0.0047	0.0905	0.0079	0.0129	0.0003	0.0042	0.0003	-0.06	82.7	2.0	87.6	7.4	439.0	81.0	82.7	2.00	5.59	
Zircon-003_TEC15-01	0.0563	0.0034	0.1081	0.0068	0.0140	0.0002	0.0050	0.0002	0.21	89.5	1.4	104.0	6.2	455.0	59.0	89.5	1.40	13.94	
Zircon-004_TEC15-01	0.0484	0.0026	0.0890	0.0052	0.0132	0.0003	0.0045	0.0003	0.28	84.2	1.6	86.5	4.8	339.0	61.0	84.2	1.60	2.66	
Zircon-005_TEC15-01	0.0556	0.0061	0.1070	0.0120	0.0136	0.0003	0.0052	0.0004	-0.07	86.9	1.7	103.0	11.0	600.0	160.0	86.9	1.70	15.63	
Zircon-006_TEC15-01	0.0527	0.0027	0.1825	0.0089	0.0251	0.0004	0.0086	0.0004	0.18	159.7	2.7	169.9	7.6	377.0	88.0	159.7	2.70	6.00	
Zircon-007_TEC15-01	0.0627	0.0064	0.1110	0.0110	0.0133	0.0005	0.0057	0.0005	0.09	85.2	2.8	107.0	10.0	680.0	120.0	85.2	2.80	20.37	
Zircon-008_TEC15-01	0.0598	0.0049	0.1057	0.0086	0.0129	0.0003	0.0048	0.0003	0.03	82.3	2.1	101.7	7.9	620.0	100.0	82.3	2.10	19.08	
Zircon-009_TEC15-01	0.0508	0.0018	0.0876	0.0030	0.0127	0.0001	0.0041	0.0001	-0.04	81.4	0.8	85.2	2.8	223.0	45.0	81.4	0.80	4.46	
Zircon-011_TEC15-01	0.0491	0.0028	0.0886	0.0051	0.0129	0.0002	0.0046	0.0003	0.29	82.6	1.6	86.1	4.8	255.0	68.0	82.6	1.60	4.07	
Zircon-012_TEC15-01	0.0488	0.0037	0.0916	0.0063	0.0136	0.0002	0.0045	0.0002	-0.22	86.9	1.5	88.8	5.9	296.0	70.0	86.9	1.50	2.14	
Zircon-014_TEC15-01	0.0567	0.0034	0.1055	0.0069	0.0134	0.0002	0.0045	0.0002	0.08	85.8	1.3	101.8	6.3	508.0	74.0	85.8	1.30	15.72	
Zircon-015_TEC15-01	0.0482	0.0043	0.0909	0.0072	0.0137	0.0003	0.0045	0.0003	-0.07	87.4	2.1	88.1	6.7	391.0	87.0	87.4	2.10	0.79	
Zircon-016_TEC15-01	0.0494	0.0024	0.0905	0.0053	0.0133	0.0002	0.0042	0.0002	0.59	85.2	1.3	87.9	4.9	221.0	41.0	85.2	1.30	3.07	
Zircon-019_TEC15-01	0.0582	0.0047	0.1023	0.0079	0.0132	0.0004	0.0041	0.0003	0.29	84.6	2.4	98.8	7.3	561.0	77.0	84.6	2.40	14.37	
Zircon-020_TEC15-01	0.0626	0.0040	0.1188	0.0079	0.0140	0.0003	0.0060	0.0004	0.26	89.3	2.1	113.6	7.1	679.0	90.0	89.3	2.10	21.39	
Zircon-021_TEC15-01	0.0596	0.0054	0.1106	0.0098	0.0137	0.0004	0.0053	0.0004	0.04	87.9	2.5	106.2	9.0	689.0	84.0	87.9	2.50	17.23	
Zircon-022_TEC15-01	0.0503	0.0032	0.0935	0.0054	0.0136	0.0002	0.0040	0.0002	-0.32	87.3	1.3	90.7	5.0	317.0	67.0	87.3	1.30	3.75	
Zircon-023_TEC15-01	0.0471	0.0020	0.0853	0.0041	0.0132	0.0002	0.0040	0.0001	0.22	84.3	1.3	83.0	3.8	145.0	45.0	84.3	1.30	-1.57	
Zircon-024_TEC15-01	0.0524	0.0021	0.0957	0.0041	0.0133	0.0002	0.0042	0.0002	0.20	85.2	1.2	92.7	3.8	319.0	59.0	85.2	1.20	8.09	
Zircon-025_TEC15-01	0.0527	0.0019	0.0904	0.0035	0.0126	0.0002	0.0039	0.0001	-0.16	80.9	1.1	87.8	3.3	358.0	48.0	80.9	1.10	7.86	
Zircon-026_TEC15-01	0.0496	0.0024	0.0882	0.0045	0.0129	0.0001	0.0038	0.0001	0.10	82.7	0.9	85.7	4.2	280.0	54.0	82.7	0.90	3.50	
Zircon-027_TEC15-01	0.0529	0.0061	0.1010	0.0110	0.0141	0.0005	0.0052	0.0004	-0.05	90.0	3.2	98.0	10.0	492.0	91.0	90.0	3.20	8.16	
Zircon-028_TEC15-01	0.0547	0.0060	0.0936	0.0097	0.0127	0.0003	0.0045	0.0002	-0.06	81.3	2.0	90.5	9.0	630.0	140.0	81.3	2.00	10.17	
Zircon-029_TEC15-01	0.0563	0.0021	0.0997	0.0032	0.0130	0.0002	0.0034	0.0003	0.06	83.4	1.2	96.5	2.9	439.0	60.0	83.4	1.20	13.58	
Zircon-030_TEC15-01	0.0514	0.0017	0.1600	0.0073	0.0232	0.0006	0.0049	0.0008	0.41	147.5	3.9	150.6	6.4	244.0	58.0	147.5	3.90	2.06	
Zircon-031_TEC15-01	0.0501	0.0026	0.0870	0.0049	0.0127	0.0002	0.0042	0.0002	0.26	81.2	1.1	84.6	4.6	289.0	73.0	81.2	1.10	4.02	
Zircon-032_TEC15-01	0.0533	0.0035	0.0937	0.0063	0.0131	0.0003	0.0044	0.0003	0.19	83.8	1.7	90.8	5.8	430.0	80.0	83.8	1.70	7.71	
Zircon-033_TEC15-01	0.0501	0.0038	0.0977	0.0072	0.0144	0.0004	0.0045	0.0003	0.01	92.0	2.6	94.4	6.7	419.0	70.0	92.0	2.60	2.54	
Zircon-034_TEC15-01	0.0521	0.0023	0.0921	0.0042	0.0129	0.0002	0.0045	0.0002	0.20	82.3	1.0	89.4	3.9	275.0	54.0	82.3	1.00	7.94	
Zircon-035_TEC15-01	0.0493	0.0040	0.0899	0.0072	0.0132	0.0003	0.0042	0.0002	-0.03	84.3	2.0	88.2	6.5	361.0	63.0	84.3	2.00	4.42	
Zircon-036_TEC15-01	0.0604	0.0065	0.1110	0.0110	0.0134	0.0004	0.0053	0.0003	-0.27	85.6	2.6	107.0	10.0	720.0	120.0	85.6	2.60	20.00	
Zircon-038_TEC15-01	0.0486	0.0047	0.0887	0.0086	0.0135	0.0003	0.0043	0.0003	0.12	86.5	2.0	85.9	8.0	319.0	64.0	86.5	2.00	-0.70	
Zircon-039_TEC15-01	0.0499	0.0024	0.0905	0.0045	0.0131	0.0001	0.0044	0.0001	0.14	84.1	0.9	87.9	4.2	241.0	47.0	84.1	0.90	4.32	
Zircon-040_TEC15-01	0.0540	0.0047	0.0971	0.0079	0.0134	0.0003	0.0044	0.0003	0.01	85.8	1.7	96.1	7.4	485.0	85.0	85.8	1.70	10.72	
Zircon-041_TEC15-01	0.0808	0.0022	2.0790	0.0740	0.1897	0.0020	0.0576	0.0026	0.40	1120.0	11.0	1145.0	23.0	1199.0	36.0	1120.0	11.00	2.18	
Zircon-042_TEC15-01	0.0622	0.0052	0.1211	0.0091	0.0146	0.0003	0.0064	0.0004	-0.08	93.2	1.6	115.8	8.2	680.0	120.0	93.2	1.60	19.52	
Zircon-043_TEC15-01	0.0510	0.0024	0.0876	0.0040	0.0127	0.0003	0.0042	0.0002	0.27	81.4	1.7	85.2	3.7	271.0	51.0	81.4	1.70	4.46	
Zircon-044_TEC15-01	0.0517	0.0012	0.0973	0.0027	0.0138	0.0001	0.0045	0.0001	0.27	88.5	0.8	94.2	2.5	291.0	42.0	88.5	0.80	6.05	
Zircon-046_TEC15-01	0.0495	0.0043	0.0879	0.0078	0.0128	0.0003	0.0043	0.0002	0.25	82.0	2.0	85.4	7.3	390.0	100.0	82.0	2.00	3.98	

Zircon-047_TEC15-01	0.0493	0.0016	0.0874	0.0031	0.0129	0.0001	0.0045	0.0002	0.26	82.8	0.8	85.0	2.9	168.0	34.0	82.8	0.80	2.59
Zircon-048_TEC15-01	0.0528	0.0050	0.0946	0.0090	0.0131	0.0002	0.0045	0.0003	-0.03	84.0	1.5	91.5	8.3	453.0	85.0	84.0	1.50	8.20
Zircon-049_TEC15-01	0.0478	0.0034	0.0859	0.0060	0.0131	0.0002	0.0043	0.0002	-0.03	83.6	1.3	83.5	5.6	399.0	75.0	83.6	1.30	-0.12
Zircon-051_TEC15-01	0.0564	0.0048	0.0968	0.0078	0.0127	0.0003	0.0043	0.0003	0.01	81.1	2.0	94.9	7.0	579.0	78.0	81.1	2.00	14.54
Zircon-053_TEC15-01	0.0498	0.0015	0.1686	0.0043	0.0247	0.0004	0.0080	0.0003	0.10	156.9	2.4	158.2	3.8	218.0	44.0	156.9	2.40	0.82
Zircon-054_TEC15-01	0.0563	0.0050	0.1002	0.0091	0.0129	0.0004	0.0043	0.0002	-0.11	82.3	2.6	96.7	8.4	660.0	87.0	82.3	2.60	14.89
Zircon-055_TEC15-01	0.0613	0.0058	0.1210	0.0110	0.0143	0.0004	0.0058	0.0005	-0.04	91.5	2.7	115.1	9.7	750.0	150.0	91.5	2.70	20.50
Zircon-056_TEC15-01	0.0553	0.0020	0.3120	0.0130	0.0410	0.0007	0.0147	0.0006	0.32	258.9	4.4	275.0	10.0	414.0	43.0	258.9	4.40	5.85
Zircon-057_TEC15-01	0.0548	0.0036	0.1910	0.0120	0.0257	0.0005	0.0086	0.0005	-0.25	163.7	3.0	177.0	10.0	514.0	74.0	163.7	3.00	7.51
Zircon-058_TEC15-01	0.0560	0.0023	0.0991	0.0045	0.0130	0.0002	0.0047	0.0002	0.09	83.0	1.3	95.8	4.1	461.0	69.0	83.0	1.30	13.36
Zircon-060_TEC15-01	0.0560	0.0030	0.0956	0.0052	0.0123	0.0002	0.0043	0.0002	0.26	79.1	1.1	92.7	4.9	479.0	72.0	79.1	1.10	14.67
Zircon-061_TEC15-01	0.0578	0.0025	0.1001	0.0046	0.0127	0.0001	0.0053	0.0003	0.38	81.1	0.7	96.8	4.2	499.0	64.0	81.1	0.70	16.22
Zircon-062_TEC15-01	0.0509	0.0030	0.0895	0.0057	0.0130	0.0004	0.0042	0.0002	0.30	83.2	2.4	87.0	5.3	303.0	66.0	83.2	2.40	4.37
Zircon-063_TEC15-01	0.0535	0.0031	0.2610	0.0130	0.0352	0.0006	0.0117	0.0005	-0.36	223.1	3.7	235.0	10.0	356.0	84.0	223.1	3.70	5.06
Zircon-064_TEC15-01	0.0582	0.0037	0.1054	0.0067	0.0129	0.0003	0.0047	0.0003	0.07	82.6	1.8	101.6	6.1	650.0	100.0	82.6	1.80	18.70
Zircon-065_TEC15-01	0.0488	0.0018	0.0786	0.0029	0.0117	0.0002	0.0038	0.0002	0.02	74.9	1.1	76.9	2.7	131.0	40.0	74.9	1.10	2.60
Zircon-066_TEC15-01	0.0554	0.0045	0.1020	0.0085	0.0134	0.0003	0.0051	0.0004	0.03	85.5	2.0	98.4	7.8	503.0	72.0	85.5	2.00	13.11
Zircon-067_TEC15-01	0.0479	0.0028	0.0871	0.0044	0.0131	0.0002	0.0043	0.0002	-0.20	83.7	1.1	84.7	4.1	231.0	53.0	83.7	1.10	1.18
Zircon-068_TEC15-01	0.0536	0.0025	0.0935	0.0043	0.0126	0.0002	0.0048	0.0002	-0.05	80.7	1.4	90.7	4.0	399.0	52.0	80.7	1.40	11.03
Zircon-069_TEC15-01	0.0507	0.0023	0.0946	0.0046	0.0135	0.0002	0.0043	0.0001	0.18	86.3	1.0	91.7	4.3	218.0	36.0	86.3	1.00	5.89
Zircon-070_TEC15-01	0.0527	0.0026	0.0976	0.0051	0.0134	0.0002	0.0043	0.0002	0.20	85.7	1.4	94.5	4.7	324.0	49.0	85.7	1.40	9.31
Zircon-071_TEC15-01	0.0615	0.0072	0.1170	0.0130	0.0138	0.0004	0.0051	0.0004	0.14	88.0	2.6	112.0	12.0	690.0	160.0	88.0	2.60	21.43
Zircon-072_TEC15-01	0.0560	0.0023	0.1174	0.0051	0.0153	0.0002	0.0074	0.0005	0.09	97.7	1.2	112.6	4.6	479.0	52.0	97.7	1.20	13.23
Zircon-073_TEC15-01	0.0489	0.0009	0.0915	0.0021	0.0135	0.0001	0.0042	0.0001	0.14	86.3	0.6	88.9	2.0	153.0	27.0	86.3	0.60	2.92
Zircon-075_TEC15-01	0.0508	0.0026	0.0870	0.0045	0.0126	0.0003	0.0040	0.0002	0.30	80.9	1.8	84.7	4.2	286.0	63.0	80.9	1.80	4.49
Zircon-076_TEC15-01	0.0493	0.0028	0.0905	0.0055	0.0132	0.0003	0.0043	0.0003	0.21	84.3	1.6	87.8	5.1	296.0	65.0	84.3	1.60	3.99
Zircon-077_TEC15-01	0.0590	0.0036	0.1088	0.0064	0.0134	0.0002	0.0050	0.0002	0.02	85.7	1.4	104.7	5.9	570.0	67.0	85.7	1.40	18.15
Zircon-078_TEC15-01	0.0504	0.0034	0.0903	0.0061	0.0130	0.0002	0.0043	0.0002	0.11	83.3	1.3	87.6	5.7	391.0	94.0	83.3	1.30	4.91
Zircon-079_TEC15-01	0.0500	0.0027	0.0933	0.0050	0.0136	0.0003	0.0049	0.0002	0.02	87.2	1.8	90.5	4.6	307.0	39.0	87.2	1.80	3.65
Zircon-080_TEC15-01	0.0506	0.0023	0.0864	0.0044	0.0125	0.0003	0.0042	0.0002	0.37	80.0	1.6	84.9	4.3	310.0	69.0	80.0	1.60	5.77
Zircon-082_TEC15-01	0.0523	0.0031	0.0961	0.0052	0.0134	0.0002	0.0048	0.0003	0.03	85.9	1.6	94.0	4.5	358.0	55.0	85.9	1.60	8.62
Zircon-083_TEC15-01	0.0483	0.0021	0.0848	0.0039	0.0127	0.0002	0.0041	0.0003	0.23	81.0	1.3	82.6	3.6	164.0	52.0	81.0	1.30	1.94
Zircon-084_TEC15-01	0.0462	0.0022	0.0824	0.0041	0.0128	0.0002	0.0041	0.0002	0.36	82.0	1.2	80.4	3.8	226.0	49.0	82.0	1.20	-1.99
Zircon-085_TEC15-01	0.0498	0.0030	0.0886	0.0051	0.0131	0.0001	0.0041	0.0001	-0.27	83.6	0.9	86.1	4.8	306.0	67.0	83.6	0.90	2.90
Zircon-086_TEC15-01	0.0467	0.0068	0.0920	0.0130	0.0144	0.0006	0.0055	0.0005	-0.02	92.3	3.5	88.0	12.0	500.0	110.0	92.3	3.50	-4.89
Zircon-087_TEC15-01	0.0606	0.0046	0.1058	0.0072	0.0128	0.0003	0.0041	0.0002	-0.04	82.2	2.0	101.9	6.6	620.0	110.0	82.2	2.00	19.33
Zircon-089_TEC15-01	0.0489	0.0043	0.0985	0.0078	0.0148	0.0005	0.0049	0.0003	-0.20	94.7	2.9	95.2	7.2	361.0	76.0	94.7	2.90	0.53
Zircon-090_TEC15-01	0.0478	0.0018	0.0850	0.0035	0.0130	0.0002	0.0042	0.0002	0.31	83.2	1.3	82.8	3.3	179.0	40.0	83.2	1.30	-0.48
Zircon-091_TEC15-01	0.0501	0.0014	0.0859	0.0029	0.0125	0.0001	0.0041	0.0001	0.22	80.2	0.8	83.7	2.7	237.0	43.0	80.2	0.80	4.18
Zircon-092_TEC15-01	0.0586	0.0053	0.1027	0.0091	0.0128	0.0005	0.0041	0.0003	-0.01	81.9	2.8	99.0	8.3	600.0	150.0	81.9	2.80	17.27
Zircon-094_TEC15-01	0.0617	0.0052	0.1260	0.0110	0.0146	0.0004	0.0017	0.0004	-0.01	93.1	2.2	121.0	10.0	746.0	91.0	93.1	2.20	23.06
Zircon-095_TEC15-01	0.0495	0.0022	0.0964	0.0042	0.0142	0.0002	0.0046	0.0002	-0.34	90.7	1.0	93.4	3.9	281.0	64.0	90.7	1.00	2.89
Zircon-096_TEC15-01	0.0524	0.0029	0.0961	0.0058	0.0134	0.0002	0.0046	0.0002	0.26	85.7	1.5	93.1	5.4	351.0	67.0	85.7	1.50	7.95
Zircon-097_TEC15-01	0.0547	0.0015	0.0949	0.0038	0.0126	0.0001	0.0041	0.0001	0.48	80.9	0.9	92.1	3.5	375.0	57.0	80.9	0.90	12.16
Zircon-099_TEC15-01	0.0501	0.0015	0.0878	0.0031	0.0129	0.0001	0.0040	0.0001	0.22	82.6	0.9	85.4	2.9	218.0	43.0	82.6	0.90	3.28
Zircon-100_TEC15-01	0.0493	0.0028	0.0935	0.0053	0.0137	0.0002	0.0047	0.0002	-0.12	87.7	1.5	90.7	4.9	277.0	67.0	87.7	1.50	3.31

CORRECTED RATIOS¹CORRECTED AGES (Ma)⁴

Best age

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ abs	²⁰⁷ Pb/ ²³⁵ U	±2σ abs	²⁰⁶ Pb/ ²³⁸ U	±2σ abs	²⁰⁶ Pb/ ²³² Th	±2σ abs	Rho	²⁰⁶ Pb/ ²³⁸ U	±2σ	²⁰⁷ Pb/ ²³⁵ U	±2σ	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ	Best age (Ma) ³	±2σ	Disc % ⁴
IPA-15-01 (Ipa*) Batolito Puerto Vallarta, Suite Zihuatanejo, Complejo Arteaga																		
Zircon-001_IPA15-01	0.0561	0.0072	0.0970	0.0110	0.0130	0.0005	0.0041	0.0004	-0.23	83.2	3.3	94.0	10.0	620.0	110.0	83.2	3.30	11.49
Zircon-002_IPA15-01	0.0479	0.0055	0.0890	0.0110	0.0130	0.0005	0.0045	0.0004	0.19	84.0	3.1	87.6	9.9	440.0	110.0	84.0	3.10	4.11

Zircon-003_IPA15-01	0.0492	0.0029	0.0876	0.0050	0.0129	0.0003	0.0040	0.0002	-0.06	82.5	1.8	85.2	4.7	254.0	53.0	82.5	1.80	3.17
Zircon-004_IPA15-01	0.0559	0.0071	0.1010	0.0120	0.0135	0.0005	0.0054	0.0005	0.11	86.2	3.2	97.0	11.0	830.0	190.0	86.2	3.20	11.13
Zircon-005_IPA15-01	0.0483	0.0028	0.0861	0.0049	0.0129	0.0004	0.0041	0.0002	0.16	82.6	2.2	83.8	4.6	270.0	67.0	82.6	2.20	1.43
Zircon-006_IPA15-01	0.0479	0.0032	0.0825	0.0062	0.0123	0.0004	0.0040	0.0002	-0.06	79.0	2.5	80.4	5.8	320.0	110.0	79.0	2.50	1.74
Zircon-007_IPA15-01	0.0588	0.0078	0.1060	0.0140	0.0132	0.0006	0.0044	0.0004	0.14	84.4	3.6	103.0	13.0	810.0	100.0	84.4	3.60	18.06
Zircon-008_IPA15-01	0.0476	0.0023	0.0857	0.0042	0.0131	0.0003	0.0040	0.0002	-0.03	83.7	1.9	83.5	3.9	153.0	38.0	83.7	1.90	-0.24
Zircon-009_IPA15-01	0.0491	0.0056	0.0920	0.0110	0.0136	0.0005	0.0042	0.0004	0.19	86.7	2.9	90.0	10.0	559.0	99.0	86.7	2.90	3.67
Zircon-010_IPA15-01	0.0613	0.0069	0.1130	0.0120	0.0131	0.0005	0.0047	0.0006	-0.15	83.7	2.9	108.0	11.0	790.0	110.0	83.7	2.90	22.50
Zircon-012_IPA15-01	0.0533	0.0070	0.0970	0.0130	0.0133	0.0004	0.0048	0.0004	0.11	85.1	2.7	95.0	13.0	710.0	100.0	85.1	2.70	10.42
Zircon-013_IPA15-01	0.0495	0.0035	0.0877	0.0060	0.0131	0.0003	0.0042	0.0002	0.02	83.7	2.0	85.2	5.6	290.0	88.0	83.7	2.00	1.76
Zircon-014_IPA15-01	0.0584	0.0064	0.1090	0.0120	0.0134	0.0005	0.0050	0.0004	0.17	85.8	3.3	108.0	11.0	740.0	110.0	85.8	3.30	20.56
Zircon-015_IPA15-01	0.0553	0.0066	0.0970	0.0110	0.0129	0.0005	0.0045	0.0004	0.27	82.5	3.3	93.0	10.0	820.0	190.0	82.5	3.30	11.29
Zircon-016_IPA15-01	0.0809	0.0028	2.3120	0.0920	0.2086	0.0044	0.0600	0.0028	0.52	1221.0	23.0	1217.0	29.0	1208.0	45.0	1221.0	23.00	-0.33
Zircon-018_IPA15-01	0.0472	0.0047	0.0904	0.0090	0.0137	0.0004	0.0046	0.0004	-0.18	87.5	2.7	87.6	8.4	428.0	88.0	87.5	2.70	0.11
Zircon-019_IPA15-01	0.0568	0.0046	0.1023	0.0082	0.0130	0.0004	0.0039	0.0003	-0.22	83.4	2.5	98.8	7.6	542.0	93.0	83.4	2.50	15.59
Zircon-021_IPA15-01	0.0535	0.0041	0.0971	0.0079	0.0128	0.0004	0.0044	0.0004	0.01	81.6	2.3	93.8	7.3	500.0	100.0	81.6	2.30	13.01
Zircon-022_IPA15-01	0.0590	0.0150	0.1270	0.0320	0.0145	0.0008	0.0057	0.0007	0.02	92.5	5.0	119.0	28.0	1090.0	270.0	92.5	5.00	22.27
Zircon-024_IPA15-01	0.0509	0.0041	0.0941	0.0067	0.0133	0.0004	0.0042	0.0003	-0.29	85.3	2.7	91.2	6.2	390.0	75.0	85.3	2.70	6.47
Zircon-025_IPA15-01	0.0494	0.0075	0.0840	0.0120	0.0129	0.0006	0.0050	0.0007	0.07	82.3	3.7	81.0	12.0	600.0	170.0	82.3	3.70	-1.60
Zircon-026_IPA15-01	0.0545	0.0082	0.0980	0.0140	0.0135	0.0006	0.0054	0.0010	-0.01	86.4	3.8	97.0	14.0	680.0	130.0	86.4	3.80	10.93
Zircon-027_IPA15-01	0.0620	0.0056	0.1180	0.0100	0.0140	0.0004	0.0054	0.0004	0.14	89.6	2.8	113.1	9.4	689.0	91.0	89.6	2.80	20.78
Zircon-028_IPA15-01	0.0527	0.0077	0.0910	0.0130	0.0130	0.0005	0.0042	0.0003	0.21	83.2	3.4	90.0	11.0	610.0	150.0	83.2	3.40	7.56
Zircon-029_IPA15-01	0.0615	0.0038	0.1150	0.0069	0.0133	0.0003	0.0047	0.0003	0.01	85.4	2.1	110.4	6.2	681.0	63.0	85.4	2.10	22.64
Zircon-030_IPA15-01	0.0585	0.0047	0.1400	0.0100	0.0168	0.0006	0.0056	0.0004	0.34	107.4	3.5	133.0	8.9	567.0	74.0	107.4	3.50	19.25
Zircon-031_IPA15-01	0.0481	0.0038	0.0953	0.0071	0.0141	0.0004	0.0048	0.0003	0.05	90.0	2.4	92.3	6.6	249.0	65.0	90.0	2.40	2.49
Zircon-032_IPA15-01	0.0463	0.0029	0.0845	0.0052	0.0130	0.0004	0.0041	0.0003	0.28	83.3	2.8	82.3	4.8	229.0	73.0	83.3	2.80	-1.22
Zircon-033_IPA15-01	0.0568	0.0043	0.1061	0.0076	0.0134	0.0004	0.0044	0.0003	-0.08	86.0	2.3	103.2	6.8	570.0	77.0	86.0	2.30	16.67
Zircon-034_IPA15-01	0.0513	0.0041	0.0939	0.0075	0.0130	0.0004	0.0044	0.0004	-0.08	83.5	2.5	90.9	6.9	510.0	100.0	83.5	2.50	8.14
Zircon-035_IPA15-01	0.0613	0.0040	0.1093	0.0063	0.0129	0.0004	0.0046	0.0003	-0.09	82.8	2.4	105.2	5.8	648.0	78.0	82.8	2.40	21.29
Zircon-036_IPA15-01	0.0543	0.0050	0.1030	0.0096	0.0135	0.0004	0.0040	0.0005	0.24	86.4	2.7	99.2	8.8	404.0	80.0	86.4	2.70	12.90
Zircon-037_IPA15-01	0.0481	0.0058	0.0930	0.0110	0.0140	0.0005	0.0043	0.0004	0.18	89.5	3.1	91.0	10.0	560.0	140.0	89.5	3.10	1.65
Zircon-039_IPA15-01	0.0485	0.0051	0.0848	0.0084	0.0127	0.0005	0.0038	0.0003	-0.03	81.2	3.0	82.4	7.9	438.0	99.0	81.2	3.00	1.46
Zircon-040_IPA15-01	0.0483	0.0072	0.0880	0.0120	0.0126	0.0004	0.0044	0.0005	-0.07	80.6	2.8	85.0	11.0	460.0	120.0	80.6	2.80	5.18
Zircon-042_IPA15-01	0.0542	0.0044	0.1002	0.0074	0.0132	0.0005	0.0043	0.0003	-0.06	84.4	3.0	96.8	6.9	514.0	97.0	84.4	3.00	12.81
Zircon-043_IPA15-01	0.0533	0.0073	0.1000	0.0130	0.0134	0.0005	0.0043	0.0004	-0.19	85.5	3.3	100.0	12.0	570.0	130.0	85.5	3.30	14.50
Zircon-045_IPA15-01	0.0491	0.0031	0.0872	0.0064	0.0127	0.0004	0.0039	0.0002	0.12	81.1	2.3	85.7	5.8	400.0	110.0	81.1	2.30	5.37
Zircon-047_IPA15-01	0.0503	0.0062	0.0930	0.0120	0.0131	0.0005	0.0044	0.0003	-0.05	84.1	3.0	90.0	11.0	616.0	99.0	84.1	3.00	6.56
Zircon-048_IPA15-01	0.0485	0.0038	0.0890	0.0066	0.0130	0.0004	0.0042	0.0003	-0.08	83.3	2.6	86.4	6.1	341.0	79.0	83.3	2.60	3.59
Zircon-049_IPA15-01	0.0503	0.0050	0.0904	0.0076	0.0130	0.0004	0.0047	0.0004	-0.38	83.4	2.4	87.6	7.1	347.0	87.0	83.4	2.40	4.79
Zircon-050_IPA15-01	0.0558	0.0053	0.0922	0.0085	0.0120	0.0004	0.0045	0.0004	-0.02	76.9	2.5	89.2	7.9	556.0	90.0	76.9	2.50	13.79
Zircon-051_IPA15-01	0.0477	0.0032	0.0916	0.0062	0.0138	0.0004	0.0047	0.0003	0.07	88.3	2.3	88.9	5.8	329.0	78.0	88.3	2.30	0.67
Zircon-052_IPA15-01	0.0507	0.0031	0.0904	0.0048	0.0130	0.0004	0.0045	0.0003	0.02	83.4	2.4	87.8	4.5	270.0	57.0	83.4	2.40	5.01
Zircon-053_IPA15-01	0.0510	0.0031	0.0931	0.0053	0.0134	0.0004	0.0043	0.0003	-0.06	85.8	2.3	90.3	4.9	274.0	79.0	85.8	2.30	4.98
Zircon-054_IPA15-01	0.0511	0.0036	0.0970	0.0068	0.0139	0.0004	0.0044	0.0003	0.13	88.9	2.4	93.8	6.3	322.0	68.0	88.9	2.40	5.22
Zircon-055_IPA15-01	0.0456	0.0050	0.0761	0.0082	0.0120	0.0003	0.0038	0.0002	-0.07	77.1	2.1	74.2	7.7	330.0	110.0	77.1	2.10	-3.91
Zircon-056_IPA15-01	0.0552	0.0065	0.0846	0.0093	0.0118	0.0005	0.0039	0.0003	0.27	75.6	3.0	82.1	8.7	490.0	120.0	75.6	3.00	7.92
Zircon-057_IPA15-01	0.0489	0.0047	0.0857	0.0083	0.0132	0.0004	0.0041	0.0003	0.17	84.6	2.7	87.2	8.2	306.0	85.0	84.6	2.70	2.98
Zircon-058_IPA15-01	0.0594	0.0060	0.1050	0.0100	0.0126	0.0005	0.0040	0.0003	0.00	80.6	2.9	100.9	9.4	710.0	110.0	80.6	2.90	20.12
Zircon-059_IPA15-01	0.0484	0.0045	0.0878	0.0071	0.0133	0.0004	0.0040	0.0003	0.00	85.2	2.6	85.2	6.7	412.0	95.0	85.2	2.60	
Zircon-060_IPA15-01	0.0519	0.0081	0.0880	0.0150	0.0123	0.0006	0.0039	0.0003	0.30	79.0	3.9	85.0	14.0	700.0	130.0	79.0	3.90	7.06
Zircon-062_IPA15-01	0.0530	0.0055	0.1010	0.0120	0.0140	0.0005	0.0048	0.0003	0.29	89.4	2.9	100.0	11.0	570.0	140.0	89.4	2.90	10.60
Zircon-063_IPA15-01	0.0529	0.0043	0.0914	0.0076	0.0129	0.0004	0.0045	0.0003	0.19	82.4	2.8	88.7	7.1	400.0	100.0	82.4	2.80	7.10

Zircon-065_IPA15-01	0.0573	0.0032	0.0992	0.0057	0.0124	0.0003	0.0047	0.0003	0.01	79.7	1.9	96.0	5.2	538.0	93.0	79.7	1.90	16.98
Zircon-066_IPA15-01	0.0503	0.0040	0.0861	0.0066	0.0127	0.0004	0.0041	0.0003	0.06	81.1	2.6	84.7	6.4	403.0	88.0	81.1	2.60	4.25
Zircon-067_IPA15-01	0.0513	0.0051	0.0877	0.0088	0.0126	0.0005	0.0040	0.0003	-0.02	80.6	2.9	85.1	8.2	354.0	81.0	80.6	2.90	5.29
Zircon-068_IPA15-01	0.0503	0.0032	0.0930	0.0060	0.0134	0.0003	0.0042	0.0002	-0.07	85.6	2.0	90.2	5.5	371.0	82.0	85.6	2.00	5.10
Zircon-069_IPA15-01	0.0512	0.0040	0.0900	0.0073	0.0128	0.0004	0.0042	0.0003	-0.27	81.7	2.4	87.2	6.8	355.0	64.0	81.7	2.40	6.31
Zircon-070_IPA15-01	0.0490	0.0031	0.0881	0.0055	0.0132	0.0003	0.0045	0.0002	-0.02	84.5	2.1	85.7	5.1	195.0	62.0	84.5	2.10	1.40
Zircon-073_IPA15-01	0.0557	0.0036	0.0998	0.0069	0.0128	0.0003	0.0042	0.0002	0.24	82.1	2.1	96.5	6.4	431.0	65.0	82.1	2.10	14.92
Zircon-074_IPA15-01	0.0532	0.0042	0.0919	0.0072	0.0129	0.0003	0.0039	0.0003	-0.01	82.3	2.0	89.0	6.6	465.0	93.0	82.3	2.00	7.53
Zircon-075_IPA15-01	0.0490	0.0042	0.0911	0.0073	0.0137	0.0005	0.0045	0.0003	-0.07	87.4	2.8	88.4	6.8	290.0	110.0	87.4	2.80	1.13
Zircon-076_IPA15-01	0.0533	0.0044	0.0924	0.0077	0.0126	0.0004	0.0042	0.0003	0.16	80.6	2.4	90.5	7.4	391.0	75.0	80.6	2.40	10.94
Zircon-077_IPA15-01	0.0501	0.0056	0.0837	0.0098	0.0127	0.0005	0.0038	0.0004	0.14	81.3	3.0	84.1	9.2	335.0	81.0	81.3	3.00	3.33
Zircon-078_IPA15-01	0.0473	0.0057	0.0808	0.0078	0.0123	0.0004	0.0042	0.0002	-0.46	78.6	2.8	78.8	7.3	300.0	150.0	78.6	2.80	0.25
Zircon-079_IPA15-01	0.0547	0.0038	0.0918	0.0060	0.0126	0.0004	0.0041	0.0003	-0.09	80.5	2.4	89.9	5.8	431.0	78.0	80.5	2.40	10.46
Zircon-080_IPA15-01	0.0514	0.0040	0.0876	0.0070	0.0127	0.0003	0.0041	0.0003	0.18	81.1	2.1	85.1	6.5	381.0	79.0	81.1	2.10	4.70
Zircon-081_IPA15-01	0.0526	0.0019	0.0982	0.0040	0.0135	0.0003	0.0044	0.0002	0.30	86.3	1.7	95.1	3.7	314.0	54.0	86.3	1.70	9.25
Zircon-082_IPA15-01	0.0479	0.0033	0.0870	0.0060	0.0134	0.0004	0.0040	0.0003	0.26	85.6	2.5	84.6	5.6	220.0	74.0	85.6	2.50	-1.18
Zircon-083_IPA15-01	0.0543	0.0036	0.0926	0.0059	0.0129	0.0003	0.0040	0.0002	0.12	82.3	2.0	90.7	5.8	459.0	91.0	82.3	2.00	9.26
Zircon-085_IPA15-01	0.0487	0.0038	0.0867	0.0066	0.0127	0.0003	0.0045	0.0003	-0.09	81.6	2.1	84.2	6.2	358.0	77.0	81.6	2.10	3.09
Zircon-086_IPA15-01	0.0519	0.0054	0.0920	0.0100	0.0132	0.0005	0.0038	0.0003	0.02	84.3	2.9	90.2	9.7	444.0	89.0	84.3	2.90	6.54
Zircon-088_IPA15-01	0.0477	0.0061	0.0880	0.0110	0.0130	0.0005	0.0041	0.0003	-0.13	83.3	3.0	87.1	9.4	385.0	71.0	83.3	3.00	4.36
Zircon-089_IPA15-01	0.0540	0.0110	0.1050	0.0210	0.0135	0.0008	0.0055	0.0009	0.09	86.2	5.3	100.0	19.0	1000.0	210.0	86.2	5.30	13.80
Zircon-090_IPA15-01	0.0594	0.0055	0.1022	0.0095	0.0128	0.0004	0.0044	0.0004	0.19	82.0	2.5	98.6	8.8	538.0	98.0	82.0	2.50	16.84
Zircon-091_IPA15-01	0.0469	0.0035	0.0855	0.0060	0.0134	0.0004	0.0041	0.0002	0.01	85.6	2.3	83.2	5.6	287.0	66.0	85.6	2.30	-2.88
Zircon-093_IPA15-01	0.0487	0.0041	0.0869	0.0075	0.0126	0.0004	0.0042	0.0003	-0.02	80.7	2.2	84.4	7.0	443.0	92.0	80.7	2.20	4.38
Zircon-094_IPA15-01	0.0540	0.0062	0.0910	0.0100	0.0126	0.0004	0.0040	0.0003	0.14	80.5	2.6	88.3	9.5	488.0	95.0	80.5	2.60	8.83
Zircon-095_IPA15-01	0.0483	0.0050	0.0907	0.0096	0.0134	0.0004	0.0045	0.0004	0.02	86.0	2.6	87.7	8.8	450.0	130.0	86.0	2.60	1.94
Zircon-096_IPA15-01	0.0511	0.0042	0.0966	0.0074	0.0134	0.0005	0.0042	0.0002	-0.18	86.0	2.9	93.5	6.9	441.0	83.0	86.0	2.90	8.02
Zircon-097_IPA15-01	0.0501	0.0038	0.0927	0.0064	0.0135	0.0004	0.0048	0.0003	-0.18	86.3	2.4	89.8	6.0	410.0	110.0	86.3	2.40	3.90
Zircon-098_IPA15-01	0.0491	0.0020	0.0869	0.0038	0.0128	0.0003	0.0040	0.0002	0.12	82.0	1.7	84.6	3.6	166.0	43.0	82.0	1.70	3.07
Zircon-099_IPA15-01	0.0509	0.0060	0.0920	0.0120	0.0129	0.0005	0.0046	0.0003	0.08	82.6	2.8	89.0	11.0	600.0	150.0	82.6	2.80	7.19
Zircon-100_IPA15-01	0.0481	0.0028	0.0887	0.0048	0.0133	0.0004	0.0042	0.0002	-0.08	85.4	2.2	86.2	4.4	176.0	78.0	85.4	2.20	0.93

CORRECTED RATIOS¹CORRECTED AGES (Ma)⁴

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁸ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ	±2σ		±2σ	±2σ	(Ma) ³	±2σ						
MAG-15-01 (Mag*)	Batolito Puerto Vallarta																		
Zircon-001_MAG15-01	0.0470	0.0088	0.0750	0.0160	0.0117	0.0004	0.0038	0.0005	0.22	74.7	2.7	73.0	15.0	630.0	130.0	74.7	2.70	-2.33	
Zircon-002_MAG15-01	0.0561	0.0045	0.0977	0.0080	0.0122	0.0003	0.0042	0.0002	0.14	78.1	1.7	94.3	7.3	508.0	97.0	78.1	1.70	17.18	
Zircon-003_MAG15-01	0.0492	0.0069	0.0790	0.0120	0.0119	0.0004	0.0042	0.0003	0.08	76.5	2.5	77.0	11.0	640.0	120.0	76.5	2.50	0.65	
Zircon-005_MAG15-01	0.0494	0.0050	0.0972	0.0092	0.0143	0.0004	0.0051	0.0003	0.10	91.7	2.2	93.9	8.4	393.0	91.0	91.7	2.20	2.34	
Zircon-006_MAG15-01	0.0620	0.0180	0.1080	0.0530	0.0135	0.0009	0.0048	0.0028	0.12	86.4	5.7	103.0	43.0	610.0	300.0	86.4	5.70	16.12	
Zircon-007_MAG15-01	0.0477	0.0063	0.0840	0.0110	0.0127	0.0004	0.0048	0.0003	0.02	81.0	2.3	81.0	10.0	620.0	120.0	81.0	2.30		
Zircon-008_MAG15-01	0.0523	0.0060	0.0960	0.0100	0.0131	0.0004	0.0049	0.0003	-0.18	83.6	2.3	92.4	9.6	494.0	95.0	83.6	2.30	9.52	
Zircon-009_MAG15-01	0.0630	0.0110	0.1070	0.0220	0.0121	0.0004	0.0069	0.0012	-0.01	77.4	2.6	103.0	19.0	770.0	190.0	77.4	2.60	24.85	
Zircon-010_MAG15-01	0.0510	0.0044	0.0912	0.0075	0.0133	0.0003	0.0045	0.0003	0.06	85.2	1.9	88.4	6.9	386.0	66.0	85.2	1.90	3.62	
Zircon-011_MAG15-01	0.0510	0.0120	0.0900	0.0240	0.0127	0.0005	0.0044	0.0006	0.04	81.5	3.0	87.0	21.0	520.0	230.0	81.5	3.00	6.32	
Zircon-012_MAG15-01	0.0590	0.0035	0.1132	0.0072	0.0137	0.0003	0.0048	0.0002	0.12	88.0	1.6	108.8	6.1	605.0	77.0	88.0	1.60	19.12	
Zircon-013_MAG15-01	0.0508	0.0031	0.0948	0.0059	0.0140	0.0003	0.0046	0.0002	0.33	89.3	1.9	93.4	5.4	292.0	70.0	89.3	1.90	4.39	
Zircon-014_MAG15-01	0.0498	0.0038	0.0892	0.0067	0.0130	0.0002	0.0042	0.0002	0.14	83.1	1.4	87.5	6.2	430.0	100.0	83.1	1.40	5.03	
Zircon-015_MAG15-01	0.0508	0.0052	0.0925	0.0087	0.0134	0.0004	0.0045	0.0004	-0.04	85.8	2.6	89.5	8.1	520.0	120.0	85.8	2.60	4.13	
Zircon-016_MAG15-01	0.0544	0.0052	0.0935	0.0097	0.0121	0.0004	0.0040	0.0003	0.09	77.7	2.2	90.6	8.9	592.0	95.0	77.7	2.20	14.24	
Zircon-017_MAG15-01	0.0505	0.0030	0.0967	0.0056	0.0141	0.0003	0.0048	0.0002	0.12	90.0	1.7	93.6	5.2	338.0	70.0	90.0	1.70	3.85	
Zircon-018_MAG15-01	0.0579	0.0072	0.1050	0.0130	0.0132	0.0006	0.0065	0.0009	-0.13	84.4	3.9	100.0	12.0	680.0	110.0	84.4	3.90	15.60	

Zircon-019_MAG15-01	0.0531	0.0061	0.0890	0.0100	0.0131	0.0004	0.0045	0.0004	-0.10	83.7	2.6	86.1	9.6	490.0	110.0	83.7	2.60	2.79
Zircon-020_MAG15-01	0.0498	0.0031	0.0902	0.0057	0.0132	0.0003	0.0042	0.0003	0.16	84.5	1.7	87.5	5.3	303.0	76.0	84.5	1.70	3.43
Zircon-023_MAG15-01	0.0507	0.0051	0.0906	0.0089	0.0134	0.0003	0.0044	0.0003	0.04	85.5	2.1	87.9	8.1	450.0	110.0	85.5	2.10	2.73
Zircon-024_MAG15-01	0.0577	0.0054	0.1001	0.0087	0.0127	0.0003	0.0043	0.0003	-0.14	81.5	2.1	96.7	8.0	578.0	90.0	81.5	2.10	15.72
Zircon-025_MAG15-01	0.0639	0.0058	0.1025	0.0092	0.0121	0.0003	0.0051	0.0004	-0.17	77.6	1.6	98.8	8.5	784.0	90.0	77.6	1.60	21.46
Zircon-026_MAG15-01	0.0491	0.0022	0.0858	0.0039	0.0128	0.0002	0.0041	0.0002	-0.04	81.9	1.2	83.6	3.6	215.0	58.0	81.9	1.20	2.03
Zircon-027_MAG15-01	0.0500	0.0170	0.0910	0.0099	0.0134	0.0015	0.0045	0.0006	0.12	85.6	9.3	88.4	9.2	290.0	320.0	85.6	9.30	3.17
Zircon-031_MAG15-01	0.0588	0.0040	0.1028	0.0072	0.0128	0.0003	0.0042	0.0002	0.00	81.7	1.7	100.9	6.6	618.0	71.0	81.7	1.70	19.03
Zircon-033_MAG15-01	0.0542	0.0035	0.0971	0.0069	0.0130	0.0002	0.0043	0.0002	0.11	83.1	1.5	94.0	6.3	370.0	100.0	83.1	1.50	11.60
Zircon-034_MAG15-01	0.0510	0.0071	0.0830	0.0110	0.0118	0.0004	0.0045	0.0003	-0.18	75.8	2.3	80.0	10.0	760.0	130.0	75.8	2.30	5.25
Zircon-036_MAG15-01	0.0573	0.0050	0.1155	0.0093	0.0144	0.0004	0.0047	0.0003	0.12	91.8	2.3	110.8	8.4	550.0	120.0	91.8	2.30	17.15
Zircon-038_MAG15-01	0.0463	0.0047	0.0906	0.0089	0.0133	0.0003	0.0043	0.0003	-0.21	85.0	1.8	87.6	8.3	397.0	79.0	85.0	1.80	2.97
Zircon-039_MAG15-01	0.0521	0.0047	0.0921	0.0084	0.0128	0.0003	0.0043	0.0002	0.26	81.8	2.1	89.1	7.8	420.0	82.0	81.8	2.10	8.19
Zircon-040_MAG15-01	0.0582	0.0054	0.0953	0.0084	0.0124	0.0004	0.0047	0.0003	0.13	79.3	2.2	92.1	7.9	528.0	82.0	79.3	2.20	13.90
Zircon-041_MAG15-01	0.0524	0.0050	0.0909	0.0082	0.0127	0.0003	0.0041	0.0002	-0.09	81.5	2.1	88.0	7.3	500.0	100.0	81.5	2.10	7.39
Zircon-042_MAG15-01	0.0594	0.0068	0.0970	0.0110	0.0124	0.0004	0.0047	0.0003	0.08	79.4	2.6	93.7	9.9	690.0	150.0	79.4	2.60	15.26
Zircon-043_MAG15-01	0.0480	0.0037	0.0841	0.0064	0.0128	0.0003	0.0041	0.0002	0.12	82.2	2.0	81.8	6.0	266.0	66.0	82.2	2.00	-0.49
Zircon-045_MAG15-01	0.0532	0.0065	0.0920	0.0130	0.0130	0.0003	0.0045	0.0004	0.10	83.5	1.8	90.0	11.0	500.0	160.0	83.5	1.80	7.22
Zircon-047_MAG15-01	0.0587	0.0051	0.1029	0.0092	0.0124	0.0004	0.0050	0.0005	-0.02	79.6	2.3	99.2	8.6	690.0	130.0	79.6	2.30	19.76
Zircon-048_MAG15-01	0.0517	0.0035	0.0945	0.0071	0.0138	0.0003	0.0048	0.0002	0.73	88.1	1.6	91.5	6.5	279.0	83.0	88.1	1.60	3.72
Zircon-049_MAG15-01	0.0499	0.0022	0.0895	0.0039	0.0130	0.0002	0.0041	0.0002	0.04	83.4	1.2	87.1	3.6	191.0	61.0	83.4	1.20	4.25
Zircon-050_MAG15-01	0.0567	0.0099	0.0940	0.0180	0.0124	0.0006	0.0051	0.0006	0.24	79.3	3.6	91.0	16.0	530.0	160.0	79.3	3.60	12.86
Zircon-052_MAG15-01	0.0567	0.0063	0.1000	0.0110	0.0130	0.0004	0.0049	0.0003	-0.03	83.1	2.7	96.6	9.4	640.0	120.0	83.1	2.70	13.98
Zircon-053_MAG15-01	0.0487	0.0031	0.0897	0.0059	0.0134	0.0003	0.0048	0.0002	0.20	85.7	1.9	87.9	5.7	277.0	73.0	85.7	1.90	2.50
Zircon-054_MAG15-01	0.0510	0.0039	0.0925	0.0067	0.0132	0.0003	0.0041	0.0002	0.01	84.2	1.9	89.7	6.4	298.0	72.0	84.2	1.90	6.13
Zircon-055_MAG15-01	0.0477	0.0052	0.0839	0.0079	0.0123	0.0004	0.0042	0.0003	-0.18	78.7	2.5	81.6	7.4	436.0	98.0	78.7	2.50	3.55
Zircon-056_MAG15-01	0.0485	0.0030	0.0835	0.0054	0.0124	0.0002	0.0044	0.0002	-0.01	79.6	1.5	81.3	5.0	270.0	110.0	79.6	1.50	2.09
Zircon-058_MAG15-01	0.0578	0.0096	0.1010	0.0160	0.0123	0.0005	0.0046	0.0005	-0.01	79.1	2.9	97.0	14.0	910.0	140.0	79.1	2.90	18.45
Zircon-059_MAG15-01	0.0550	0.0130	0.0870	0.0220	0.0120	0.0005	0.0040	0.0004	0.25	76.9	3.1	88.0	19.0	830.0	200.0	76.9	3.10	12.61
Zircon-061_MAG15-01	0.0551	0.0036	0.0976	0.0059	0.0128	0.0003	0.0043	0.0002	0.00	81.9	1.8	95.6	5.5	451.0	90.0	81.9	1.80	14.33
Zircon-062_MAG15-01	0.0516	0.0046	0.0998	0.0080	0.0141	0.0004	0.0048	0.0003	0.01	90.0	2.3	96.4	7.4	500.0	110.0	90.0	2.30	6.64
Zircon-063_MAG15-01	0.0620	0.0130	0.1050	0.0210	0.0122	0.0005	0.0047	0.0006	0.13	78.1	3.3	101.0	19.0	920.0	190.0	78.1	3.30	22.67
Zircon-064_MAG15-01	0.0478	0.0020	0.0806	0.0037	0.0123	0.0002	0.0039	0.0001	0.34	78.9	1.3	78.7	3.4	131.0	51.0	78.9	1.30	-0.25
Zircon-066_MAG15-01	0.0569	0.0079	0.0920	0.0170	0.0118	0.0005	0.0038	0.0007	-0.08	75.4	3.0	88.0	15.0	820.0	170.0	75.4	3.00	14.32
Zircon-067_MAG15-01	0.0516	0.0047	0.0845	0.0079	0.0123	0.0002	0.0043	0.0002	0.05	78.6	1.5	84.2	7.4	364.0	67.0	78.6	1.50	6.65
Zircon-069_MAG15-01	0.0531	0.0072	0.0920	0.0120	0.0124	0.0004	0.0043	0.0004	-0.11	79.3	2.6	88.0	11.0	550.0	150.0	79.3	2.60	9.89
Zircon-072_MAG15-01	0.0477	0.0031	0.0773	0.0053	0.0116	0.0002	0.0036	0.0002	0.01	74.0	1.5	75.5	5.0	316.0	66.0	74.0	1.50	1.99
Zircon-073_MAG15-01	0.0597	0.0056	0.1270	0.0120	0.0149	0.0003	0.0054	0.0004	-0.16	95.3	1.7	121.0	10.0	620.0	130.0	95.3	1.70	21.24
Zircon-074_MAG15-01	0.0572	0.0060	0.0904	0.0096	0.0113	0.0003	0.0042	0.0003	-0.16	72.2	2.2	87.5	8.8	620.0	140.0	72.2	2.20	17.49
Zircon-076_MAG15-01	0.0564	0.0048	0.0984	0.0082	0.0129	0.0003	0.0050	0.0004	0.20	82.4	2.1	95.0	7.5	430.0	130.0	82.4	2.10	13.26
Zircon-077_MAG15-01	0.0492	0.0047	0.0917	0.0078	0.0133	0.0004	0.0040	0.0003	-0.19	85.0	2.2	88.8	7.2	430.0	100.0	85.0	2.20	4.28
Zircon-080_MAG15-01	0.0479	0.0057	0.0860	0.0098	0.0131	0.0004	0.0043	0.0003	-0.01	83.6	2.2	83.3	9.2	439.0	83.0	83.6	2.20	-0.36
Zircon-081_MAG15-01	0.0461	0.0057	0.0792	0.0089	0.0119	0.0004	0.0039	0.0003	-0.16	76.3	2.5	78.4	8.3	400.0	110.0	76.3	2.50	2.68
Zircon-082_MAG15-01	0.0513	0.0023	0.0951	0.0042	0.0136	0.0002	0.0046	0.0002	-0.16	86.9	1.3	92.2	3.8	291.0	50.0	86.9	1.30	5.75
Zircon-083_MAG15-01	0.0518	0.0044	0.0887	0.0079	0.0128	0.0003	0.0044	0.0003	0.20	81.8	1.9	86.0	7.3	429.0	86.0	81.8	1.90	4.88
Zircon-084_MAG15-01	0.0506	0.0030	0.0919	0.0053	0.0129	0.0003	0.0044	0.0003	0.47	82.5	1.7	89.1	5.0	293.0	63.0	82.5	1.70	7.41
Zircon-085_MAG15-01	0.0499	0.0038	0.0902	0.0071	0.0133	0.0003	0.0041	0.0003	0.15	85.2	2.1	87.5	6.6	361.0	80.0	85.2	2.10	2.63
Zircon-086_MAG15-01	0.0624	0.0057	0.1044	0.0098	0.0125	0.0003	0.0046	0.0003	0.10	80.2	2.1	100.5	8.9	740.0	120.0	80.2	2.10	20.20
Zircon-087_MAG15-01	0.0494	0.0039	0.0810	0.0066	0.0118	0.0003	0.0040	0.0002	-0.03	75.8	1.6	78.9	6.2	383.0	74.0	75.8	1.60	3.93
Zircon-088_MAG15-01	0.0482	0.0047	0.0735	0.0087	0.0114	0.0004	0.0033	0.0003	-0.46	73.1	2.4	75.9	8.0	610.0	130.0	73.1	2.40	3.69
Zircon-090_MAG15-01	0.0562	0.0049	0.0878	0.0077	0.0117	0.0003	0.0040	0.0003	0.01	75.2	2.2	85.2	7.2	550.0	100.0	75.2	2.20	11.74
Zircon-091_MAG15-01	0.0540	0.0071	0.0930	0.0130	0.0128	0.0005	0.0042	0.0005	0.42	82.1	2.9	93.0	12.0	430.0	160.0	82.1	2.90	11.72

Zircon-092_MAG15-01	0.0582	0.0041	0.1094	0.0079	0.0137	0.0003	0.0043	0.0003	0.28	88.0	2.1	105.3	7.2	547.0	70.0	88.0	2.10	16.43
Zircon-094_MAG15-01	0.0489	0.0033	0.0880	0.0055	0.0131	0.0003	0.0041	0.0002	-0.12	83.7	1.6	86.2	5.2	318.0	48.0	83.7	1.60	2.90
Zircon-096_MAG15-01	0.0604	0.0048	0.1051	0.0079	0.0126	0.0003	0.0050	0.0004	-0.10	80.9	2.0	101.2	7.0	725.0	83.0	80.9	2.00	20.06
Zircon-097_MAG15-01	0.0510	0.0044	0.0902	0.0074	0.0128	0.0004	0.0042	0.0002	0.08	81.8	2.3	87.5	6.8	430.0	110.0	81.8	2.30	6.51
Zircon-099_MAG15-01	0.0525	0.0046	0.0911	0.0077	0.0127	0.0003	0.0045	0.0002	0.04	81.4	1.7	88.0	7.1	624.0	88.0	81.4	1.70	7.50
Zircon-100_MAG15-01	0.0490	0.0029	0.0860	0.0053	0.0127	0.0002	0.0041	0.0002	0.13	81.2	1.5	83.7	4.9	278.0	65.0	81.2	1.50	2.99

CORRECTED RATIOS¹CORRECTED AGES (Ma)²

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁶ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ	±2σ		±2σ	±2σ	(Ma) ³	±2σ					
PUR-15-01 (Pur*) Batolito Manzanillo, Suite Zihuatanejo																		
Zircon-003_PUR15-01	0.0520	0.0150	0.0800	0.0230	0.0107	0.0008	0.0046	0.0006	-0.07	68.7	4.9	80.0	22.0	980.0	210.0	68.7	4.90	14.13
Zircon-004_PUR15-01	0.0530	0.0110	0.0840	0.0170	0.0118	0.0005	0.0038	0.0005	-0.08	75.4	3.5	80.0	15.0	850.0	180.0	75.4	3.50	5.75
Zircon-005_PUR15-01	0.0550	0.0120	0.0920	0.0200	0.0123	0.0009	0.0040	0.0009	0.15	78.6	5.4	87.0	18.0	1090.0	180.0	78.6	5.40	9.66
Zircon-006_PUR15-01	0.0537	0.0058	0.0783	0.0081	0.0105	0.0003	0.0036	0.0002	0.13	67.5	2.0	77.9	8.2	580.0	120.0	67.5	2.00	13.35
Zircon-007_PUR15-01	0.0510	0.0060	0.0910	0.0100	0.0129	0.0003	0.0043	0.0003	-0.08	82.9	2.0	87.8	9.3	460.0	120.0	82.9	2.00	5.58
Zircon-009_PUR15-01	0.0549	0.0051	0.1038	0.0092	0.0136	0.0003	0.0043	0.0002	-0.26	87.2	1.8	100.1	8.5	460.0	110.0	87.2	1.80	12.89
Zircon-011_PUR15-01	0.0507	0.0065	0.1290	0.0150	0.0187	0.0004	0.0057	0.0004	-0.33	119.5	2.7	124.0	13.0	460.0	150.0	119.5	2.70	3.63
Zircon-012_PUR15-01	0.0561	0.0070	0.1040	0.0120	0.0138	0.0004	0.0051	0.0002	-0.07	88.5	2.7	101.0	11.0	600.0	110.0	88.5	2.70	12.38
Zircon-013_PUR15-01	0.0620	0.0120	0.0880	0.0170	0.0103	0.0006	0.0031	0.0003	0.21	65.9	3.5	85.0	16.0	760.0	100.0	65.9	3.50	22.47
Zircon-014_PUR15-01	0.0483	0.0037	0.1234	0.0093	0.0184	0.0003	0.0060	0.0004	0.30	117.5	2.1	117.9	8.4	332.0	88.0	117.5	2.10	0.34
Zircon-015_PUR15-01	0.0593	0.0088	0.0890	0.0140	0.0111	0.0004	0.0041	0.0004	0.42	71.0	2.4	86.0	13.0	700.0	170.0	71.0	2.40	17.44
Zircon-016_PUR15-01	0.0520	0.0150	0.0780	0.0230	0.0109	0.0005	0.0036	0.0006	0.15	69.5	3.2	75.0	21.0	810.0	290.0	69.5	3.20	7.33
Zircon-020_PUR15-01	0.0610	0.0063	0.0950	0.0110	0.0111	0.0002	0.0039	0.0002	0.20	71.4	1.1	91.8	9.8	660.0	150.0	71.4	1.10	22.22
Zircon-021_PUR15-01	0.0471	0.0067	0.0675	0.0091	0.0106	0.0003	0.0031	0.0002	-0.17	67.6	1.9	65.8	8.6	680.0	130.0	67.6	1.90	-2.74
Zircon-022_PUR15-01	0.0610	0.0140	0.0950	0.0230	0.0110	0.0006	0.0037	0.0004	0.29	70.6	4.0	91.0	21.0	930.0	230.0	70.6	4.00	22.42
Zircon-023_PUR15-01	0.0508	0.0054	0.0898	0.0086	0.0129	0.0003	0.0044	0.0003	-0.24	82.9	2.1	87.1	8.1	439.0	90.0	82.9	2.10	4.82
Zircon-024_PUR15-01	0.0542	0.0084	0.0830	0.0130	0.0112	0.0005	0.0040	0.0004	0.18	71.5	3.1	80.0	12.0	630.0	210.0	71.5	3.10	10.63
Zircon-025_PUR15-01	0.0535	0.0089	0.0850	0.0140	0.0117	0.0007	0.0041	0.0005	0.13	75.2	4.2	82.0	13.0	680.0	140.0	75.2	4.20	8.29
Zircon-026_PUR15-01	0.0670	0.0110	0.1550	0.0240	0.0171	0.0007	0.0055	0.0005	-0.14	109.1	4.6	145.0	21.0	840.0	170.0	109.1	4.60	24.76
Zircon-027_PUR15-01	0.0608	0.0067	0.1380	0.0130	0.0164	0.0006	0.0070	0.0008	-0.09	105.1	3.8	131.0	11.0	720.0	160.0	105.1	3.80	19.77
Zircon-030_PUR15-01	0.0554	0.0069	0.0940	0.0110	0.0123	0.0003	0.0039	0.0002	0.02	79.1	2.1	90.0	10.0	550.0	130.0	79.1	2.10	12.11
Zircon-031_PUR15-01	0.0577	0.0098	0.0970	0.0150	0.0125	0.0007	0.0046	0.0003	0.03	80.3	4.4	93.0	14.0	740.0	180.0	80.3	4.40	13.66
Zircon-032_PUR15-01	0.0501	0.0043	0.1350	0.0110	0.0192	0.0006	0.0067	0.0004	0.15	122.6	3.9	129.0	10.0	389.0	90.0	122.6	3.90	4.96
Zircon-033_PUR15-01	0.0620	0.0130	0.0870	0.0180	0.0102	0.0007	0.0038	0.0005	-0.01	65.4	4.4	84.0	17.0	1120.0	250.0	65.4	4.40	22.14
Zircon-034_PUR15-01	0.0510	0.0054	0.0860	0.0084	0.0128	0.0004	0.0042	0.0003	0.05	82.1	2.2	83.5	7.8	390.0	110.0	82.1	2.20	1.68
Zircon-037_PUR15-01	0.0487	0.0076	0.0760	0.0100	0.0115	0.0004	0.0038	0.0003	-0.14	73.9	2.6	75.0	9.5	610.0	150.0	73.9	2.60	1.47
Zircon-038_PUR15-01	0.0590	0.0110	0.1410	0.0260	0.0182	0.0009	0.0066	0.0007	0.29	116.0	5.5	132.0	23.0	660.0	140.0	116.0	5.50	12.12
Zircon-039_PUR15-01	0.0517	0.0098	0.0880	0.0220	0.0124	0.0008	0.0046	0.0005	0.62	79.7	5.4	85.0	21.0	640.0	220.0	79.7	5.40	6.24
Zircon-040_PUR15-01	0.0500	0.0140	0.0730	0.0180	0.0108	0.0006	0.0030	0.0004	-0.38	69.2	4.0	71.0	17.0	410.0	140.0	69.2	4.00	2.54
Zircon-041_PUR15-01	0.0516	0.0048	0.0938	0.0086	0.0136	0.0003	0.0048	0.0004	-0.03	87.0	1.9	90.8	8.0	364.0	62.0	87.0	1.90	4.19
Zircon-043_PUR15-01	0.0505	0.0060	0.1280	0.0140	0.0186	0.0006	0.0061	0.0005	-0.03	118.7	3.6	122.0	13.0	440.0	110.0	118.7	3.60	2.70
Zircon-044_PUR15-01	0.0496	0.0033	0.0874	0.0055	0.0131	0.0002	0.0044	0.0002	0.03	83.6	1.2	85.0	5.1	231.0	75.0	83.6	1.20	1.65
Zircon-045_PUR15-01	0.0590	0.0110	0.1040	0.0180	0.0132	0.0005	0.0059	0.0007	-0.30	84.2	2.9	100.0	16.0	660.0	210.0	84.2	2.90	15.80
Zircon-046_PUR15-01	0.0540	0.0100	0.0800	0.0130	0.0111	0.0006	0.0043	0.0005	-0.06	71.4	4.0	78.0	12.0	710.0	190.0	71.4	4.00	8.46
Zircon-048_PUR15-01	0.0600	0.0140	0.0850	0.0190	0.0113	0.0009	0.0040	0.0006	-0.13	72.1	6.0	88.0	20.0	970.0	210.0	72.1	6.00	18.07
Zircon-049_PUR15-01	0.0493	0.0052	0.0892	0.0081	0.0133	0.0003	0.0040	0.0003	-0.05	84.9	2.0	86.5	7.6	440.0	100.0	84.9	2.00	1.85
Zircon-050_PUR15-01	0.0560	0.0120	0.0820	0.0150	0.0106	0.0006	0.0038	0.0004	0.01	67.9	3.8	79.0	14.0	900.0	160.0	67.9	3.80	14.05
Zircon-051_PUR15-01	0.0464	0.0089	0.0720	0.0130	0.0109	0.0006	0.0042	0.0004	0.03	69.9	3.7	71.0	13.0	770.0	130.0	69.9	3.70	1.55
Zircon-052_PUR15-01	0.0590	0.0110	0.0880	0.0160	0.0108	0.0006	0.0038	0.0003	0.08	69.3	3.8	85.0	15.0	720.0	190.0	69.3	3.80	18.47
Zircon-053_PUR15-01	0.0606	0.0043	0.1509	0.0097	0.0178	0.0003	0.0078	0.0005	-0.39	114.0	2.0	142.6	8.5	648.0	82.0	114.0	2.00	20.06
Zircon-054_PUR15-01	0.0570	0.0140	0.0870	0.0210	0.0109	0.0007	0.0039	0.0004	0.19	69.6	4.2	84.0	19.0	1030.0	320.0	69.6	4.20	17.14
Zircon-056_PUR15-01	0.0556	0.0075	0.1120	0.0140	0.0136	0.0007	0.0048	0.0005	-0.02	86.9	4.2	108.0	13.0	660.0	150.0	86.9	4.20	19.54

Zircon-058_PUR15-01	0.0540	0.0120	0.0830	0.0180	0.0112	0.0008	0.0036	0.0005	0.06	71.5	5.1	79.0	17.0	680.0	220.0	71.5	5.10	9.49
Zircon-059_PUR15-01	0.0610	0.0150	0.0960	0.0250	0.0115	0.0007	0.0039	0.0008	0.01	73.7	4.3	90.0	23.0	1140.0	220.0	73.7	4.30	18.11
Zircon-060_PUR15-01	0.0690	0.0160	0.0910	0.0150	0.0114	0.0006	0.0036	0.0005	-0.14	73.2	3.7	90.0	14.0	880.0	180.0	73.2	3.70	18.67
Zircon-061_PUR15-01	0.0600	0.0150	0.1220	0.0310	0.0147	0.0007	0.0068	0.0011	0.19	93.7	4.2	116.0	28.0	860.0	230.0	93.7	4.20	19.22
Zircon-062_PUR15-01	0.0508	0.0049	0.0881	0.0090	0.0125	0.0003	0.0042	0.0002	0.42	79.8	2.2	85.6	8.4	320.0	88.0	79.8	2.20	6.78
Zircon-063_PUR15-01	0.0522	0.0062	0.0924	0.0093	0.0134	0.0004	0.0043	0.0003	-0.43	86.0	2.6	89.6	8.7	350.0	100.0	86.0	2.60	4.02
Zircon-064_PUR15-01	0.0528	0.0078	0.0767	0.0097	0.0112	0.0007	0.0040	0.0003	0.49	71.8	4.5	74.8	9.2	490.0	130.0	71.8	4.50	4.01
Zircon-065_PUR15-01	0.0620	0.0057	0.1137	0.0096	0.0132	0.0004	0.0057	0.0005	-0.14	84.3	2.4	108.9	8.8	690.0	110.0	84.3	2.40	22.59
Zircon-066_PUR15-01	0.0610	0.0110	0.0910	0.0150	0.0112	0.0006	0.0043	0.0004	0.19	71.6	3.9	91.0	16.0	840.0	170.0	71.6	3.90	21.32
Zircon-069_PUR15-01	0.0540	0.0180	0.0740	0.0230	0.0104	0.0007	0.0038	0.0005	-0.27	66.8	4.7	72.0	22.0	520.0	150.0	66.8	4.70	7.22
Zircon-072_PUR15-01	0.0520	0.0083	0.0760	0.0100	0.0109	0.0004	0.0035	0.0003	-0.18	69.7	2.5	76.0	10.0	650.0	130.0	69.7	2.50	8.29
Zircon-073_PUR15-01	0.0570	0.0110	0.0930	0.0160	0.0114	0.0007	0.0049	0.0007	-0.12	72.8	4.4	89.0	15.0	980.0	180.0	72.8	4.40	18.20
Zircon-074_PUR15-01	0.0481	0.0058	0.0834	0.0092	0.0125	0.0004	0.0042	0.0003	-0.09	80.2	2.3	81.0	8.7	419.0	96.0	80.2	2.30	0.99
Zircon-075_PUR15-01	0.0620	0.0150	0.1410	0.0300	0.0185	0.0011	0.0078	0.0010	-0.13	118.3	7.1	140.0	29.0	1010.0	210.0	118.3	7.10	15.50
Zircon-077_PUR15-01	0.0479	0.0057	0.0890	0.0100	0.0137	0.0004	0.0044	0.0003	-0.03	87.4	2.6	86.5	9.5	530.0	150.0	87.4	2.60	-1.04
Zircon-078_PUR15-01	0.0485	0.0059	0.0910	0.0110	0.0134	0.0004	0.0042	0.0003	0.23	85.6	2.5	87.7	9.8	427.0	79.0	85.6	2.50	2.39
Zircon-079_PUR15-01	0.0484	0.0049	0.0797	0.0079	0.0120	0.0003	0.0039	0.0002	0.07	77.0	1.8	77.7	7.4	350.0	140.0	77.0	1.80	0.90
Zircon-080_PUR15-01	0.0560	0.0120	0.0980	0.0180	0.0138	0.0007	0.0052	0.0005	0.26	88.1	4.2	94.0	17.0	710.0	210.0	88.1	4.20	6.28
Zircon-085_PUR15-01	0.0503	0.0048	0.0764	0.0072	0.0112	0.0003	0.0034	0.0002	0.21	71.8	1.7	74.5	6.8	443.0	81.0	71.8	1.70	3.62
Zircon-086_PUR15-01	0.0524	0.0067	0.0920	0.0110	0.0126	0.0004	0.0036	0.0004	0.12	80.7	2.5	93.2	9.6	550.0	110.0	80.7	2.50	13.41
Zircon-088_PUR15-01	0.0574	0.0063	0.1020	0.0120	0.0131	0.0004	0.0041	0.0003	0.46	84.1	2.6	98.0	11.0	640.0	120.0	84.1	2.60	14.18
Zircon-089_PUR15-01	0.0518	0.0072	0.1240	0.0180	0.0175	0.0007	0.0062	0.0006	-0.08	111.8	4.1	121.0	17.0	530.0	130.0	111.8	4.10	7.60
Zircon-090_PUR15-01	0.0550	0.0130	0.0830	0.0190	0.0106	0.0006	0.0039	0.0003	0.16	68.1	4.0	80.0	18.0	720.0	280.0	68.1	4.00	14.88
Zircon-092_PUR15-01	0.0498	0.0069	0.1020	0.0120	0.0146	0.0006	0.0061	0.0005	-0.21	93.1	3.6	98.0	11.0	430.0	120.0	93.1	3.60	5.00
Zircon-093_PUR15-01	0.0526	0.0049	0.0993	0.0085	0.0138	0.0003	0.0045	0.0003	-0.09	88.2	1.9	96.0	7.9	370.0	130.0	88.2	1.90	8.13
Zircon-095_PUR15-01	0.0489	0.0048	0.0883	0.0081	0.0130	0.0003	0.0039	0.0002	-0.12	83.3	2.2	85.8	7.6	240.0	110.0	83.3	2.20	2.91
Zircon-096_PUR15-01	0.0527	0.0086	0.0232	0.0035	0.0033	0.0001	0.0011	0.0001	-0.66	21.2	0.6	23.3	3.5	470.0	150.0	21.2	0.60	9.01
Zircon-097_PUR15-01	0.0485	0.0076	0.0780	0.0120	0.0111	0.0005	0.0037	0.0003	0.13	71.4	2.9	75.0	12.0	630.0	150.0	71.4	2.90	4.80
Zircon-098_PUR15-01	0.0538	0.0086	0.1290	0.0200	0.0177	0.0008	0.0060	0.0005	0.11	113.1	4.8	123.0	18.0	620.0	200.0	113.1	4.80	8.05
Zircon-099_PUR15-01	0.0481	0.0042	0.0798	0.0066	0.0121	0.0003	0.0040	0.0002	0.06	77.2	1.9	80.0	6.4	360.0	110.0	77.2	1.90	3.50
Zircon-100_PUR15-01	0.0493	0.0043	0.0787	0.0063	0.0118	0.0002	0.0039	0.0002	-0.02	75.3	1.1	76.9	6.0	292.0	98.0	75.3	1.10	2.08

CORRECTED RATIOS¹CORRECTED AGES (Ma)²

SAMPLE	CORRECTED RATIOS ¹									CORRECTED AGES (Ma) ²						Best age		
	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ abs	²⁰⁷ Pb/ ²³⁵ U	±2σ abs	²⁰⁶ Pb/ ²³⁸ U	±2σ abs	²⁰⁸ Pb/ ²³² Th	±2σ abs	R/σ	²⁰⁶ Pb/ ²³⁸ U	±2σ	²⁰⁷ Pb/ ²³⁵ U	±2σ	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ	(Ma) ³	±2σ	Disc % ⁴
MARA-15-01 (Mara*)	Batolito Manzanillo																	
Zircon-002_MARA15-01	0.0492	0.0086	0.0710	0.0110	0.0105	0.0005	0.0031	0.0003	-0.01	67.4	3.3	69.0	10.0	870.0	240.0	67.4	3.30	2.32
Zircon-003_MARA15-01	0.0462	0.0061	0.0718	0.0098	0.0113	0.0005	0.0033	0.0003	0.09	72.6	3.1	69.9	9.3	470.0	150.0	72.6	3.10	-3.86
Zircon-004_MARA15-01	0.0447	0.0040	0.0740	0.0074	0.0115	0.0003	0.0040	0.0004	0.34	73.6	2.0	72.2	7.0	309.0	91.0	73.6	2.00	-1.94
Zircon-005_MARA15-01	0.0634	0.0097	0.0920	0.0140	0.0106	0.0006	0.0045	0.0006	-0.11	68.5	3.8	88.0	13.0	830.0	120.0	68.5	3.80	22.16
Zircon-009_MARA15-01	0.0567	0.0093	0.0780	0.0120	0.0104	0.0005	0.0036	0.0003	0.10	66.4	3.0	76.0	12.0	570.0	140.0	66.4	3.00	12.63
Zircon-010_MARA15-01	0.0523	0.0063	0.0824	0.0097	0.0113	0.0003	0.0038	0.0003	-0.02	72.7	1.9	79.9	9.0	409.0	86.0	72.7	1.90	9.01
Zircon-011_MARA15-01	0.0616	0.0098	0.1010	0.0150	0.0119	0.0006	0.0044	0.0005	0.17	76.3	3.5	96.0	14.0	890.0	140.0	76.3	3.50	20.52
Zircon-013_MARA15-01	0.0680	0.0140	0.0790	0.0150	0.0096	0.0008	0.0038	0.0007	-0.08	61.3	5.4	78.0	15.0	1000.0	150.0	61.3	5.40	21.41
Zircon-014_MARA15-01	0.0490	0.0047	0.0691	0.0074	0.0103	0.0003	0.0034	0.0003	0.23	66.3	1.6	69.8	7.0	375.0	86.0	66.3	1.60	5.01
Zircon-015_MARA15-01	0.0535	0.0034	0.0830	0.0047	0.0108	0.0003	0.0036	0.0003	0.26	68.9	2.0	80.9	4.7	379.0	86.0	68.9	2.00	14.83
Zircon-018_MARA15-01	0.0488	0.0025	0.0787	0.0042	0.0115	0.0002	0.0037	0.0002	-0.06	73.8	1.3	76.8	3.9	323.0	62.0	73.8	1.30	3.91
Zircon-019_MARA15-01	0.0509	0.0047	0.0727	0.0070	0.0104	0.0003	0.0033	0.0002	0.12	66.5	1.7	71.0	6.6	460.0	110.0	66.5	1.70	6.34
Zircon-020_MARA15-01	0.0495	0.0038	0.0773	0.0059	0.0114	0.0002	0.0036	0.0002	-0.04	73.3	1.4	75.4	5.5	360.0	84.0	73.3	1.40	2.79
Zircon-021_MARA15-01	0.0440	0.0110	0.0750	0.0150	0.0113	0.0008	0.0045	0.0008	0.25	72.6	4.9	71.0	15.0	980.0	320.0	72.6	4.90	-2.25
Zircon-022_MARA15-01	0.0540	0.0090	0.0830	0.0140	0.0114	0.0005	0.0041	0.0005	-0.01	72.9	2.9	80.0	13.0	610.0	210.0	72.9	2.90	8.87
Zircon-023_MARA15-01	0.0500	0.0024	0.0777	0.0034	0.0116	0.0002	0.0037	0.0002	0.01	74.2	1.4	75.9	3.2	252.0	52.0	74.2	1.40	2.24
Zircon-024_MARA15-01	0.0590	0.0120	0.0720	0.0150	0.0093	0.0007	0.0032	0.0008	-0.14	59.6	4.2	72.0	14.0	960.0	210.0	59.6	4.20	17.22

Zircon-026_MARA15-01	0.0550	0.0100	0.0860	0.0160	0.0111	0.0007	0.0033	0.0003	-0.01	71.4	4.5	82.0	15.0	750.0	160.0	71.4	4.50	12.93
Zircon-029_MARA15-01	0.0610	0.0180	0.0910	0.0250	0.0105	0.0006	0.0034	0.0006	0.21	67.6	3.6	87.0	22.0	990.0	260.0	67.6	3.60	22.30
Zircon-031_MARA15-01	0.0487	0.0045	0.0762	0.0062	0.0116	0.0004	0.0035	0.0003	0.09	74.3	2.3	74.4	6.4	423.0	87.0	74.3	2.30	0.13
Zircon-032_MARA15-01	0.0580	0.0100	0.0800	0.0130	0.0102	0.0005	0.0034	0.0004	-0.04	65.2	3.4	79.0	13.0	930.0	150.0	65.2	3.40	17.47
Zircon-033_MARA15-01	0.0420	0.0120	0.0600	0.0150	0.0090	0.0007	0.0036	0.0007	0.10	57.9	4.3	58.0	14.0	1040.0	300.0	57.9	4.30	0.17
Zircon-036_MARA15-01	0.0497	0.0020	0.0710	0.0029	0.0105	0.0002	0.0033	0.0002	0.17	67.1	1.3	69.6	2.8	217.0	38.0	67.1	1.30	3.59
Zircon-037_MARA15-01	0.0491	0.0046	0.0820	0.0072	0.0118	0.0003	0.0040	0.0004	-0.16	75.8	2.1	80.8	6.8	392.0	83.0	75.8	2.10	6.19
Zircon-038_MARA15-01	0.0490	0.0110	0.0740	0.0180	0.0109	0.0007	0.0044	0.0008	0.28	69.8	4.4	71.0	16.0	1000.0	210.0	69.8	4.40	1.69
Zircon-039_MARA15-01	0.0493	0.0036	0.0778	0.0059	0.0115	0.0003	0.0036	0.0002	0.01	73.4	1.7	75.9	5.5	279.0	61.0	73.4	1.70	3.29
Zircon-040_MARA15-01	0.0520	0.0110	0.0800	0.0180	0.0114	0.0007	0.0035	0.0006	-0.08	73.1	4.3	77.0	16.0	920.0	230.0	73.1	4.30	5.06
Zircon-043_MARA15-01	0.0527	0.0061	0.0720	0.0080	0.0102	0.0003	0.0037	0.0004	-0.10	65.3	1.7	70.3	7.6	493.0	96.0	65.3	1.70	7.11
Zircon-044_MARA15-01	0.0515	0.0051	0.0862	0.0082	0.0120	0.0003	0.0042	0.0004	0.10	77.0	2.1	83.6	7.6	510.0	140.0	77.0	2.10	7.89
Zircon-045_MARA15-01	0.0512	0.0069	0.0790	0.0110	0.0115	0.0004	0.0037	0.0004	-0.04	73.8	2.4	77.0	9.9	476.0	98.0	73.8	2.40	4.16
Zircon-047_MARA15-01	0.0603	0.0053	0.1027	0.0084	0.0124	0.0003	0.0045	0.0004	0.05	79.2	2.1	99.1	7.7	680.0	110.0	79.2	2.10	20.08
Zircon-049_MARA15-01	0.0519	0.0049	0.0830	0.0086	0.0113	0.0002	0.0064	0.0030	-0.06	72.6	1.5	80.9	7.8	350.0	170.0	72.6	1.50	10.26
Zircon-050_MARA15-01	0.0527	0.0078	0.0720	0.0100	0.0102	0.0005	0.0035	0.0004	0.11	65.2	3.4	69.7	9.5	740.0	130.0	65.2	3.40	6.46
Zircon-052_MARA15-01	0.0546	0.0028	0.0829	0.0049	0.0115	0.0003	0.0039	0.0002	0.19	73.5	1.8	80.8	4.6	429.0	58.0	73.5	1.80	9.03
Zircon-054_MARA15-01	0.0503	0.0064	0.0781	0.0097	0.0115	0.0004	0.0036	0.0003	0.01	73.5	2.4	75.9	8.8	620.0	130.0	73.5	2.40	3.16
Zircon-055_MARA15-01	0.0550	0.0100	0.0750	0.0140	0.0099	0.0007	0.0031	0.0005	-0.08	63.7	4.3	73.0	13.0	980.0	160.0	63.7	4.30	12.74
Zircon-056_MARA15-01	0.0660	0.0110	0.1000	0.0150	0.0112	0.0006	0.0039	0.0005	-0.15	72.0	3.6	95.0	14.0	1110.0	120.0	72.0	3.60	24.21
Zircon-057_MARA15-01	0.0574	0.0066	0.0878	0.0098	0.0117	0.0003	0.0038	0.0003	-0.17	74.6	1.9	84.9	8.7	810.0	130.0	74.6	1.90	12.13
Zircon-058_MARA15-01	0.0510	0.0130	0.0680	0.0160	0.0097	0.0005	0.0035	0.0006	-0.06	62.3	3.1	66.0	15.0	980.0	300.0	62.3	3.10	5.61
Zircon-060_MARA15-01	0.0577	0.0056	0.0786	0.0075	0.0104	0.0004	0.0039	0.0003	0.31	66.5	2.5	78.2	7.1	632.0	84.0	66.5	2.50	14.96
Zircon-062_MARA15-01	0.0532	0.0087	0.0900	0.0160	0.0119	0.0005	0.0046	0.0005	0.25	76.4	3.1	86.0	14.0	690.0	180.0	76.4	3.10	11.16
Zircon-063_MARA15-01	0.0550	0.0100	0.0730	0.0140	0.0095	0.0006	0.0028	0.0004	0.02	60.7	3.8	71.0	13.0	990.0	180.0	60.7	3.80	14.51
Zircon-064_MARA15-01	0.0530	0.0100	0.0710	0.0130	0.0101	0.0005	0.0025	0.0004	0.13	64.4	2.9	69.0	13.0	760.0	150.0	64.4	2.90	6.67
Zircon-065_MARA15-01	0.0510	0.0100	0.0810	0.0160	0.0120	0.0007	0.0045	0.0008	-0.10	76.8	4.7	78.0	15.0	820.0	170.0	76.8	4.70	1.54
Zircon-067_MARA15-01	0.0516	0.0057	0.0870	0.0100	0.0121	0.0003	0.0045	0.0004	0.22	77.3	2.1	85.7	9.4	430.0	110.0	77.3	2.10	9.80
Zircon-068_MARA15-01	0.0610	0.0140	0.0840	0.0180	0.0106	0.0007	0.0039	0.0007	0.20	68.2	4.2	80.0	17.0	1080.0	180.0	68.2	4.20	14.75
Zircon-070_MARA15-01	0.0584	0.0079	0.0960	0.0110	0.0119	0.0006	0.0043	0.0004	-0.13	76.0	4.0	92.5	9.8	840.0	150.0	76.0	4.00	17.84
Zircon-071_MARA15-01	0.0507	0.0026	0.0808	0.0042	0.0117	0.0002	0.0038	0.0002	-0.08	74.7	1.1	78.8	3.9	258.0	58.0	74.7	1.10	5.20
Zircon-072_MARA15-01	0.0517	0.0060	0.0815	0.0096	0.0116	0.0004	0.0043	0.0005	0.22	74.0	2.5	79.1	8.3	530.0	100.0	74.0	2.50	6.45
Zircon-073_MARA15-01	0.0484	0.0039	0.0686	0.0050	0.0102	0.0003	0.0032	0.0002	0.05	65.6	1.6	67.2	4.7	306.0	79.0	65.6	1.60	2.38
Zircon-074_MARA15-01	0.0584	0.0083	0.1040	0.0200	0.0133	0.0004	0.0055	0.0031	0.10	84.9	2.5	100.0	17.0	650.0	140.0	84.9	2.50	15.10
Zircon-077_MARA15-01	0.0519	0.0063	0.0858	0.0098	0.0120	0.0004	0.0047	0.0005	0.13	77.0	2.6	85.4	9.1	560.0	110.0	77.0	2.60	9.84
Zircon-080_MARA15-01	0.0556	0.0083	0.0900	0.0140	0.0115	0.0005	0.0051	0.0006	0.15	73.6	3.1	89.0	13.0	750.0	130.0	73.6	3.10	17.30
Zircon-081_MARA15-01	0.0700	0.0180	0.0920	0.0220	0.0106	0.0008	0.0043	0.0007	0.00	67.8	5.0	87.0	20.0	1320.0	260.0	67.8	5.00	22.07
Zircon-082_MARA15-01	0.0611	0.0040	0.0973	0.0068	0.0116	0.0003	0.0043	0.0004	0.02	74.2	2.1	94.1	6.2	683.0	59.0	74.2	2.10	21.15
Zircon-084_MARA15-01	0.0497	0.0057	0.0765	0.0080	0.0115	0.0004	0.0035	0.0003	-0.03	73.9	2.3	74.5	7.5	600.0	120.0	73.9	2.30	0.81
Zircon-086_MARA15-01	0.0490	0.0130	0.0760	0.0200	0.0102	0.0006	0.0033	0.0005	0.20	65.2	4.0	72.0	19.0	840.0	180.0	65.2	4.00	9.44
Zircon-087_MARA15-01	0.0600	0.0130	0.0900	0.0200	0.0114	0.0008	0.0047	0.0008	0.02	73.2	5.1	89.0	19.0	1010.0	230.0	73.2	5.10	17.75
Zircon-089_MARA15-01	0.0469	0.0071	0.0810	0.0120	0.0124	0.0005	0.0038	0.0003	0.15	79.4	3.2	79.0	12.0	399.0	94.0	79.4	3.20	-0.51
Zircon-090_MARA15-01	0.0619	0.0095	0.0810	0.0160	0.0103	0.0006	0.0033	0.0005	-0.23	65.8	4.1	78.0	15.0	730.0	140.0	65.8	4.10	15.64
Zircon-093_MARA15-01	0.0475	0.0057	0.0731	0.0078	0.0113	0.0005	0.0038	0.0004	-0.21	72.7	2.8	72.6	7.1	550.0	110.0	72.7	2.80	-0.14
Zircon-094_MARA15-01	0.0572	0.0064	0.0943	0.0096	0.0113	0.0003	0.0038	0.0005	-0.23	72.7	2.1	92.4	8.8	590.0	150.0	72.7	2.10	21.32
Zircon-097_MARA15-01	0.0516	0.0050	0.0822	0.0077	0.0112	0.0003	0.0041	0.0003	-0.17	71.9	1.6	82.0	7.2	545.0	90.0	71.9	1.60	12.32
Zircon-098_MARA15-01	0.0481	0.0025	0.0843	0.0041	0.0125	0.0002	0.0040	0.0002	0.01	80.3	1.4	82.1	3.8	250.0	50.0	80.3	1.40	2.19
Zircon-100_MARA15-01	0.0500	0.0100	0.0670	0.0140	0.0105	0.0006	0.0039	0.0005	-0.07	67.4	3.9	65.0	13.0	810.0	160.0	67.4	3.90	-3.69

CORRECTED RATIOS¹CORRECTED AGES (Ma)²

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁸ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ	±2σ abs	±2σ	±2σ abs	±2σ	±2σ abs	±2σ		±2σ	±2σ	±2σ	±2σ	(Ma) ³	±2σ				
ARM-15-01 (Arm*)	Batolito Manzanillo, Batolito Puerto Vallarta, Suite Zihuatanejo, Suite Cuale-Macias																		
Zircon-001_ARM15-01	0.0470	0.0033	0.0707	0.0044	0.0108	0.0002	0.0034	0.0002	0.12	69.5	1.5	69.3	4.2	293.0	78.0	69.5	1.50	-0.29	

Zircon-003_ARM15-01	0.0506	0.0076	0.0730	0.0110	0.0106	0.0004	0.0030	0.0004	0.03	68.2	2.2	71.5	9.9	560.0	130.0	68.2	2.20	4.62
Zircon-004_ARM15-01	0.0550	0.0110	0.0760	0.0140	0.0097	0.0004	0.0033	0.0003	0.03	62.4	2.3	73.0	13.0	750.0	170.0	62.4	2.30	14.52
Zircon-005_ARM15-01	0.0480	0.0100	0.0740	0.0150	0.0112	0.0005	0.0032	0.0004	0.01	71.7	3.2	72.0	15.0	850.0	190.0	71.7	3.20	0.42
Zircon-007_ARM15-01	0.0502	0.0068	0.0792	0.0098	0.0114	0.0003	0.0038	0.0003	-0.09	73.2	2.1	76.9	9.3	559.0	73.0	73.2	2.10	4.81
Zircon-008_ARM15-01	0.0515	0.0047	0.1240	0.0120	0.0174	0.0004	0.0056	0.0004	-0.19	110.9	2.6	119.0	11.0	420.0	160.0	110.9	2.60	6.81
Zircon-009_ARM15-01	0.0576	0.0073	0.1780	0.0240	0.0225	0.0005	0.0093	0.0007	0.52	143.6	3.1	166.0	19.0	500.0	170.0	143.6	3.10	13.49
Zircon-010_ARM15-01	0.0541	0.0044	0.1103	0.0089	0.0145	0.0003	0.0050	0.0003	0.47	92.5	2.0	106.0	8.1	460.0	110.0	92.5	2.00	12.74
Zircon-011_ARM15-01	0.0518	0.0030	0.1470	0.0110	0.0205	0.0009	0.0066	0.0005	0.29	130.6	5.4	139.0	10.0	339.0	71.0	130.6	5.40	6.04
Zircon-012_ARM15-01	0.0551	0.0097	0.0800	0.0200	0.0103	0.0003	0.0032	0.0004	-0.01	65.7	2.1	78.0	15.0	530.0	230.0	65.7	2.10	15.77
Zircon-015_ARM15-01	0.0462	0.0053	0.0613	0.0073	0.0093	0.0003	0.0034	0.0004	0.04	59.6	1.8	60.1	6.9	530.0	160.0	59.6	1.80	0.83
Zircon-016_ARM15-01	0.0571	0.0061	0.0980	0.0110	0.0121	0.0003	0.0039	0.0002	-0.13	77.3	1.8	95.0	10.0	660.0	130.0	77.3	1.80	18.63
Zircon-017_ARM15-01	0.0652	0.0084	0.0990	0.0130	0.0114	0.0004	0.0041	0.0003	0.11	72.9	2.6	95.0	11.0	1030.0	110.0	72.9	2.60	23.26
Zircon-018_ARM15-01	0.0540	0.0110	0.0670	0.0150	0.0098	0.0006	0.0031	0.0005	0.41	63.1	3.5	68.0	14.0	710.0	160.0	63.1	3.50	7.21
Zircon-019_ARM15-01	0.0554	0.0057	0.0908	0.0083	0.0118	0.0003	0.0040	0.0004	-0.28	75.7	2.1	87.9	7.7	640.0	110.0	75.7	2.10	13.88
Zircon-020_ARM15-01	0.0516	0.0027	0.1747	0.0086	0.0248	0.0004	0.0083	0.0003	-0.22	157.8	2.5	163.2	7.4	298.0	59.0	157.8	2.50	3.31
Zircon-021_ARM15-01	0.0510	0.0130	0.0870	0.0210	0.0119	0.0005	0.0040	0.0003	0.23	75.9	3.2	83.0	18.0	800.0	170.0	75.9	3.20	8.55
Zircon-025_ARM15-01	0.0499	0.0060	0.0750	0.0092	0.0107	0.0004	0.0035	0.0002	0.07	68.7	2.6	73.1	8.6	470.0	130.0	68.7	2.60	6.02
Zircon-027_ARM15-01	0.0623	0.0061	0.0929	0.0094	0.0107	0.0003	0.0037	0.0003	0.28	68.3	1.9	90.0	8.4	730.0	110.0	68.3	1.90	24.11
Zircon-029_ARM15-01	0.0607	0.0048	0.1142	0.0087	0.0136	0.0003	0.0044	0.0005	0.02	87.1	2.0	109.4	8.0	551.0	99.0	87.1	2.00	20.38
Zircon-030_ARM15-01	0.0579	0.0043	0.1036	0.0069	0.0127	0.0003	0.0046	0.0003	-0.11	81.4	1.6	99.9	6.3	572.0	99.0	81.4	1.60	18.52
Zircon-031_ARM15-01	0.0529	0.0078	0.0770	0.0130	0.0108	0.0004	0.0042	0.0004	0.21	69.5	2.6	75.0	12.0	530.0	160.0	69.5	2.60	7.33
Zircon-032_ARM15-01	0.0523	0.0054	0.0793	0.0085	0.0111	0.0007	0.0034	0.0007	0.04	71.2	4.6	79.3	8.0	376.0	91.0	71.2	4.60	10.21
Zircon-035_ARM15-01	0.0511	0.0026	0.1215	0.0056	0.0175	0.0003	0.0059	0.0003	-0.02	111.6	1.8	116.3	5.1	271.0	52.0	111.6	1.80	4.04
Zircon-038_ARM15-01	0.0571	0.0024	0.1154	0.0057	0.0143	0.0003	0.0052	0.0003	0.21	91.4	1.7	110.8	5.1	475.0	64.0	91.4	1.70	17.51
Zircon-039_ARM15-01	0.0494	0.0022	0.0941	0.0042	0.0136	0.0002	0.0047	0.0002	0.30	87.3	1.3	91.3	3.8	191.0	57.0	87.3	1.30	4.38
Zircon-041_ARM15-01	0.0531	0.0067	0.0734	0.0087	0.0102	0.0003	0.0033	0.0003	-0.08	65.1	2.1	71.6	8.6	580.0	140.0	65.1	2.10	9.08
Zircon-044_ARM15-01	0.0495	0.0038	0.0944	0.0062	0.0132	0.0003	0.0041	0.0002	-0.12	84.5	1.8	91.6	5.6	335.0	88.0	84.5	1.80	7.75
Zircon-045_ARM15-01	0.0514	0.0019	0.0887	0.0031	0.0127	0.0002	0.0038	0.0002	-0.15	81.6	1.3	86.3	2.9	265.0	40.0	81.6	1.30	5.45
Zircon-046_ARM15-01	0.0594	0.0079	0.0900	0.0120	0.0115	0.0005	0.0040	0.0003	0.22	73.6	3.0	90.0	11.0	740.0	120.0	73.6	3.00	18.22
Zircon-048_ARM15-01	0.0520	0.0042	0.1370	0.0110	0.0185	0.0005	0.0057	0.0003	0.01	117.9	2.9	132.0	10.0	400.0	110.0	117.9	2.90	10.68
Zircon-049_ARM15-01	0.0566	0.0070	0.0917	0.0097	0.0120	0.0005	0.0044	0.0004	0.13	76.7	2.9	88.3	9.0	660.0	130.0	76.7	2.90	13.14
Zircon-050_ARM15-01	0.0516	0.0031	0.0943	0.0054	0.0133	0.0002	0.0046	0.0002	0.02	85.2	1.5	91.4	5.0	306.0	60.0	85.2	1.50	6.78
Zircon-052_ARM15-01	0.0560	0.0130	0.0830	0.0170	0.0108	0.0005	0.0042	0.0004	-0.06	69.1	3.3	80.0	16.0	880.0	240.0	69.1	3.30	13.63
Zircon-054_ARM15-01	0.0600	0.0110	0.0730	0.0140	0.0096	0.0005	0.0035	0.0005	-0.09	61.8	2.9	71.0	14.0	970.0	140.0	61.8	2.90	12.96
Zircon-055_ARM15-01	0.0523	0.0066	0.0850	0.0110	0.0116	0.0004	0.0045	0.0004	-0.08	74.6	2.6	82.3	9.9	710.0	140.0	74.6	2.60	9.36
Zircon-056_ARM15-01	0.0536	0.0044	0.0786	0.0062	0.0107	0.0003	0.0033	0.0002	-0.04	68.3	1.7	76.7	5.8	407.0	84.0	68.3	1.70	10.95
Zircon-057_ARM15-01	0.0482	0.0032	0.0879	0.0059	0.0130	0.0002	0.0039	0.0003	0.10	83.0	1.4	85.4	5.3	273.0	50.0	83.0	1.40	2.81
Zircon-059_ARM15-01	0.0458	0.0036	0.0692	0.0054	0.0109	0.0003	0.0033	0.0001	-0.25	69.7	1.8	67.9	5.1	281.0	82.0	69.7	1.80	-2.65
Zircon-060_ARM15-01	0.0508	0.0057	0.1460	0.0160	0.0212	0.0006	0.0069	0.0004	-0.12	135.1	3.7	137.0	14.0	370.0	100.0	135.1	3.70	1.39
Zircon-062_ARM15-01	0.0589	0.0041	0.1033	0.0071	0.0129	0.0003	0.0044	0.0003	0.20	82.8	1.8	99.6	6.8	570.0	70.0	82.8	1.80	16.87
Zircon-063_ARM15-01	0.0508	0.0022	0.1620	0.0067	0.0228	0.0004	0.0075	0.0003	-0.02	145.5	2.2	152.3	5.8	296.0	46.0	145.5	2.20	4.46
Zircon-064_ARM15-01	0.0614	0.0049	0.1103	0.0087	0.0130	0.0003	0.0058	0.0004	0.10	83.0	2.0	105.9	7.9	625.0	96.0	83.0	2.00	21.62
Zircon-065_ARM15-01	0.0470	0.0100	0.0720	0.0150	0.0112	0.0004	0.0039	0.0005	0.03	71.5	2.6	69.0	15.0	730.0	210.0	71.5	2.60	-3.62
Zircon-066_ARM15-01	0.0556	0.0049	0.1080	0.0100	0.0137	0.0003	0.0049	0.0005	0.17	87.4	2.1	103.9	9.2	430.0	140.0	87.4	2.10	15.88
Zircon-067_ARM15-01	0.0519	0.0058	0.0870	0.0110	0.0131	0.0004	0.0035	0.0003	0.02	83.7	2.2	84.0	10.0	611.0	83.0	83.7	2.20	0.36
Zircon-070_ARM15-01	0.0519	0.0055	0.0719	0.0084	0.0099	0.0003	0.0032	0.0003	0.12	63.2	1.9	70.4	7.7	360.0	150.0	63.2	1.90	10.23
Zircon-071_ARM15-01	0.0518	0.0023	0.1722	0.0080	0.0242	0.0003	0.0077	0.0003	0.05	154.4	1.9	161.2	6.8	313.0	56.0	154.4	1.90	4.22
Zircon-072_ARM15-01	0.0596	0.0044	0.1147	0.0073	0.0138	0.0003	0.0050	0.0003	-0.30	88.6	1.8	110.1	6.6	615.0	99.0	88.6	1.80	19.53
Zircon-073_ARM15-01	0.0482	0.0087	0.0720	0.0140	0.0109	0.0004	0.0039	0.0006	-0.08	69.7	2.7	75.0	13.0	1200.0	120.0	69.7	2.70	7.07
Zircon-074_ARM15-01	0.0491	0.0043	0.1320	0.0120	0.0185	0.0007	0.0070	0.0004	-0.11	117.9	4.3	126.0	11.0	368.0	87.0	117.9	4.30	6.43
Zircon-075_ARM15-01	0.0520	0.0040	0.0649	0.0052	0.0093	0.0002	0.0031	0.0002	0.26	59.5	1.5	63.7	4.9	425.0	88.0	59.5	1.50	6.59
Zircon-078_ARM15-01	0.0508	0.0040	0.0727	0.0064	0.0104	0.0003	0.0038	0.0004	0.01	66.8	1.6	71.1	6.0	349.0	96.0	66.8	1.60	6.05
Zircon-080_ARM15-01	0.0486	0.0025	0.0880	0.0040	0.0133	0.0002	0.0043	0.0002	-0.13	84.9	1.4	85.6	3.7	282.0	75.0	84.9	1.40	0.82
Zircon-082_ARM15-01	0.0543	0.0041	0.0852	0.0062	0.0111	0.0002	0.0039	0.0002	0.34	71.3	1.5	82.8	5.8	414.0	96.0	71.3	1.50	13.89

Zircon-083_ARM15-01	0.0492	0.0099	0.0640	0.0130	0.0088	0.0003	0.0029	0.0003	0.50	56.6	2.1	62.0	12.0	470.0	180.0	56.6	2.10	8.71
Zircon-084_ARM15-01	0.0571	0.0062	0.0864	0.0088	0.0116	0.0003	0.0040	0.0003	-0.06	74.4	1.8	85.6	9.0	650.0	110.0	74.4	1.80	13.08
Zircon-085_ARM15-01	0.0582	0.0054	0.0964	0.0088	0.0122	0.0003	0.0043	0.0002	0.07	78.4	2.0	93.1	8.1	596.0	92.0	78.4	2.00	15.79
Zircon-087_ARM15-01	0.0590	0.0110	0.0740	0.0130	0.0098	0.0004	0.0032	0.0003	0.05	62.6	2.7	72.0	12.0	770.0	160.0	62.6	2.70	13.06
Zircon-088_ARM15-01	0.0493	0.0028	0.0835	0.0044	0.0124	0.0002	0.0041	0.0002	-0.06	79.6	1.3	81.4	4.2	269.0	59.0	79.6	1.30	2.21
Zircon-090_ARM15-01	0.0608	0.0029	0.0716	0.0033	0.0088	0.0002	0.0026	0.0001	0.03	56.3	1.1	71.3	3.1	574.0	79.0	56.3	1.10	21.04
Zircon-091_ARM15-01	0.0520	0.0021	0.0934	0.0033	0.0133	0.0002	0.0039	0.0002	0.23	85.3	1.3	90.6	3.0	329.0	60.0	85.3	1.30	5.85
Zircon-092_ARM15-01	0.0646	0.0061	0.1230	0.0100	0.0142	0.0005	0.0056	0.0004	-0.26	90.5	2.8	117.6	9.4	731.0	93.0	90.5	2.80	23.04
Zircon-093_ARM15-01	0.0504	0.0039	0.0914	0.0063	0.0129	0.0003	0.0046	0.0003	-0.13	82.8	2.0	88.6	5.8	383.0	82.0	82.8	2.00	6.55

CORRECTED RATIOS¹CORRECTED AGES (Ma)⁴

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁸ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ	±2σ		±2σ	±2σ	(Ma) ³	±2σ						
MICH16-01 (MI01*)	Batolito Jilotlán, Suite Zihuatanejo, Complejo Arteaga																		
Zr2_MiCH16-01	0.0459	0.0068	0.1410	0.0210	0.0202	0.0007	0.0069	0.0008	0.29	128.9	4.3	132.0	19.0	30.0	260.0	128.9	4.30	2.35	
Zr3_MiCH16-01	0.0455	0.0046	0.1160	0.0110	0.0172	0.0005	0.0056	0.0004	-0.34	109.9	3.2	111.0	9.8	-50.0	190.0	109.9	3.20	0.99	
Zr5_MiCH16-01	0.0453	0.0042	0.0638	0.0057	0.0095	0.0003	0.0038	0.0005	-0.15	60.9	1.7	62.6	5.1	-20.0	170.0	60.9	1.70	2.72	
Zr7_MiCH16-01	0.0402	0.0095	0.0570	0.0130	0.0090	0.0003	0.0029	0.0003	-0.08	57.6	2.2	58.0	13.0	-200.0	390.0	57.6	2.20	0.69	
Zr8_MiCH16-01	0.0560	0.0110	0.0810	0.0150	0.0095	0.0004	0.0036	0.0005	0.05	60.7	2.6	78.0	14.0	490.0	350.0	60.7	2.60	22.18	
Zr9_MiCH16-01	0.0470	0.0100	0.0610	0.0130	0.0090	0.0005	0.0026	0.0003	-0.01	57.8	3.3	60.0	12.0	0.0	380.0	57.8	3.30	3.67	
Zr10_MiCH16-01	0.0528	0.0066	0.0664	0.0086	0.0089	0.0004	0.0026	0.0003	0.02	57.0	2.2	64.9	8.2	180.0	260.0	57.0	2.20	12.17	
Zr11_MiCH16-01	0.0500	0.0059	0.0705	0.0084	0.0109	0.0004	0.0036	0.0003	-0.19	69.7	2.4	68.8	7.9	140.0	220.0	69.7	2.40	-1.31	
Zr13_MiCH16-01	0.0526	0.0037	0.1172	0.0080	0.0177	0.0004	0.0055	0.0004	0.06	113.2	2.6	112.3	7.2	310.0	150.0	113.2	2.60	-0.80	
Zr15_MiCH16-01	0.0517	0.0039	0.1251	0.0092	0.0192	0.0005	0.0062	0.0004	-0.06	122.8	2.8	119.3	8.2	240.0	150.0	122.8	2.80	-2.93	
Zr16_MiCH16-01	0.0537	0.0071	0.0568	0.0074	0.0083	0.0003	0.0027	0.0002	0.14	53.3	2.2	55.8	7.1	250.0	280.0	53.3	2.20	4.48	
Zr17_MiCH16-01	0.0525	0.0042	0.1250	0.0110	0.0187	0.0006	0.0057	0.0008	0.38	119.5	3.8	119.0	9.6	280.0	170.0	119.5	3.80	-0.42	
Zr19_MiCH16-01	0.0503	0.0057	0.0574	0.0064	0.0087	0.0003	0.0029	0.0002	0.12	56.0	1.8	56.4	6.1	170.0	210.0	56.0	1.80	0.71	
Zr20_MiCH16-01	0.0484	0.0058	0.0259	0.0030	0.0042	0.0001	0.0014	0.0001	-0.17	26.7	0.9	26.4	2.9	90.0	220.0	26.7	0.90	-0.98	
Zr22_MiCH16-01	0.0452	0.0033	0.1125	0.0085	0.0172	0.0004	0.0054	0.0004	0.07	109.9	2.7	107.9	7.7	-30.0	150.0	109.9	2.70	-1.85	
Zr23_MiCH16-01	0.0450	0.0057	0.1100	0.0130	0.0175	0.0006	0.0053	0.0005	-0.09	111.8	3.5	107.0	12.0	-100.0	240.0	111.8	3.50	-4.49	
Zr24_MiCH16-01	0.0515	0.0072	0.1340	0.0190	0.0179	0.0007	0.0058	0.0008	0.19	114.1	4.2	129.0	17.0	130.0	280.0	114.1	4.20	11.55	
Zr25_MiCH16-01	0.0448	0.0029	0.0902	0.0058	0.0136	0.0003	0.0042	0.0003	0.01	87.2	2.2	87.5	5.4	-40.0	130.0	87.2	2.20	0.34	
Zr28_MiCH16-01	0.0425	0.0090	0.0590	0.0130	0.0089	0.0005	0.0035	0.0005	0.31	57.4	3.1	58.0	13.0	-140.0	350.0	57.4	3.10	1.03	
Zr29_MiCH16-01	0.0430	0.0110	0.0690	0.0170	0.0107	0.0006	0.0037	0.0004	0.53	68.6	3.9	66.0	16.0	-200.0	410.0	68.6	3.90	-3.94	
Zr30_MiCH16-01	0.0490	0.0046	0.1400	0.0120	0.0191	0.0006	0.0062	0.0005	-0.15	121.8	3.7	132.0	11.0	180.0	180.0	121.8	3.70	7.73	
Zr31_MiCH16-01	0.0539	0.0062	0.1260	0.0140	0.0178	0.0006	0.0060	0.0006	0.09	113.6	4.1	119.0	12.0	310.0	220.0	113.6	4.10	4.54	
Zr32_MiCH16-01	0.0554	0.0040	0.1298	0.0092	0.0178	0.0005	0.0063	0.0005	0.20	113.9	2.9	123.5	8.8	350.0	160.0	113.9	2.90	7.77	
Zr33_MiCH16-01	0.0510	0.0074	0.1180	0.0160	0.0176	0.0007	0.0055	0.0006	0.15	112.2	4.3	114.0	15.0	190.0	280.0	112.2	4.30	1.58	
Zr34_MiCH16-01	0.0570	0.0100	0.0640	0.0130	0.0082	0.0004	0.0027	0.0002	0.13	52.4	2.3	61.0	12.0	300.0	220.0	52.4	2.30	14.10	
Zr35_MiCH16-01	0.0495	0.0063	0.1030	0.0130	0.0160	0.0007	0.0049	0.0005	-0.15	102.4	4.7	98.0	12.0	80.0	250.0	102.4	4.70	-4.49	
Zr36_MiCH16-01	0.0901	0.0019	2.5990	0.0770	0.2201	0.0049	0.0751	0.0038	0.52	1282.0	26.0	1304.0	23.0	1421.0	39.0	1282.0	26.00	1.69	
Zr37_MiCH16-01	0.0511	0.0041	0.1320	0.0110	0.0195	0.0006	0.0055	0.0007	0.09	124.1	3.5	125.5	9.6	200.0	170.0	124.1	3.50	1.12	
Zr38_MiCH16-01	0.0650	0.0120	0.1500	0.0320	0.0173	0.0008	0.0055	0.0012	-0.21	110.8	5.1	141.0	25.0	580.0	290.0	110.8	5.10	21.42	
Zr39_MiCH16-01	0.0583	0.0090	0.1360	0.0210	0.0179	0.0009	0.0060	0.0008	-0.13	114.3	6.0	127.0	19.0	360.0	330.0	114.3	6.00	10.00	
Zr40_MiCH16-01	0.0494	0.0072	0.0623	0.0092	0.0092	0.0003	0.0028	0.0002	0.14	59.3	1.9	60.9	8.8	80.0	290.0	59.3	1.90	2.63	
Zr41_MiCH16-01	0.0478	0.0065	0.0575	0.0075	0.0088	0.0003	0.0030	0.0003	-0.21	56.7	1.8	56.4	7.2	120.0	280.0	56.7	1.80	-0.53	
Zr42_MiCH16-01	0.0523	0.0047	0.1340	0.0130	0.0188	0.0006	0.0059	0.0004	-0.12	120.0	3.5	130.0	11.0	230.0	190.0	120.0	3.50	7.69	
Zr43_MiCH16-01	0.0490	0.0070	0.0634	0.0087	0.0090	0.0004	0.0031	0.0004	0.10	58.0	2.6	63.6	8.3	250.0	280.0	58.0	2.60	8.81	
Zr44_MiCH16-01	0.0563	0.0046	0.0857	0.0067	0.0112	0.0004	0.0037	0.0003	-0.23	72.0	2.3	83.4	6.3	400.0	170.0	72.0	2.30	13.67	
Zr45_MiCH16-01	0.0548	0.0056	0.0646	0.0060	0.0083	0.0003	0.0027	0.0002	-0.11	53.0	2.0	63.4	5.7	410.0	220.0	53.0	2.00	16.40	
Zr46_MiCH16-01	0.0465	0.0056	0.0565	0.0063	0.0088	0.0003	0.0027	0.0002	-0.37	56.2	1.6	55.6	6.1	40.0	240.0	56.2	1.60	-1.08	
Zr47_MiCH16-01	0.0549	0.0092	0.0690	0.0110	0.0092	0.0005	0.0026	0.0004	0.05	58.9	3.0	67.0	10.0	300.0	290.0	58.9	3.00	12.09	
Zr48_MiCH16-01	0.0520	0.0069	0.0582	0.0090	0.0081	0.0004	0.0024	0.0002	0.05	51.8	2.2	57.2	8.5	200.0	250.0	51.8	2.20	9.44	

Zr50_MiCH16-01	0.0514	0.0047	0.1290	0.0120	0.0182	0.0007	0.0052	0.0007	0.14	116.5	4.2	122.0	10.0	220.0	180.0	116.5	4.20	4.51
Zr52_MiCH16-01	0.0550	0.0100	0.0630	0.0120	0.0086	0.0004	0.0028	0.0003	-0.16	55.3	2.4	62.0	11.0	350.0	350.0	55.3	2.40	10.81
Zr55_MiCH16-01	0.0524	0.0031	0.1392	0.0084	0.0200	0.0005	0.0065	0.0004	0.00	127.7	2.8	132.0	7.6	260.0	130.0	127.7	2.80	3.26
Zr56_MiCH16-01	0.0481	0.0076	0.0579	0.0085	0.0087	0.0004	0.0025	0.0003	0.07	55.5	2.8	56.8	8.2	140.0	310.0	55.5	2.80	2.29
Zr57_MiCH16-01	0.0539	0.0079	0.0651	0.0090	0.0089	0.0004	0.0029	0.0002	-0.11	56.9	2.5	63.4	8.5	250.0	300.0	56.9	2.50	10.25
Zr58_MiCH16-01	0.0540	0.0170	0.1570	0.0550	0.0210	0.0010	0.0073	0.0018	0.66	133.8	6.6	147.0	41.0	340.0	310.0	133.8	6.60	8.98
Zr59_MiCH16-01	0.0531	0.0051	0.1380	0.0130	0.0187	0.0006	0.0068	0.0006	0.01	119.2	3.7	130.0	12.0	230.0	200.0	119.2	3.70	8.31
Zr60_MiCH16-01	0.0540	0.0100	0.1390	0.0230	0.0175	0.0009	0.0053	0.0006	-0.06	111.9	5.9	130.0	20.0	450.0	310.0	111.9	5.90	13.92
Zr61_MiCH16-01	0.0510	0.0047	0.1230	0.0120	0.0171	0.0006	0.0057	0.0004	0.00	109.4	3.9	118.0	10.0	220.0	180.0	109.4	3.90	7.29
Zr62_MiCH16-01	0.0475	0.0062	0.0656	0.0084	0.0107	0.0003	0.0033	0.0003	-0.02	68.3	2.0	66.9	8.0	80.0	240.0	68.3	2.00	-2.09
Zr63_MiCH16-01	0.0624	0.0073	0.1250	0.0140	0.0151	0.0006	0.0051	0.0005	-0.10	96.5	3.5	119.0	12.0	530.0	250.0	96.5	3.50	18.91
Zr64_MiCH16-01	0.0505	0.0089	0.0600	0.0100	0.0092	0.0004	0.0033	0.0003	-0.12	58.8	2.7	58.8	9.8	180.0	350.0	58.8	2.70	
Zr65_MiCH16-01	0.0560	0.0100	0.0740	0.0140	0.0097	0.0005	0.0033	0.0005	0.22	62.3	3.5	72.0	13.0	410.0	340.0	62.3	3.50	13.47
Zr66_MiCH16-01	0.0540	0.0050	0.1230	0.0110	0.0178	0.0006	0.0058	0.0006	0.02	114.0	3.8	117.3	9.5	370.0	190.0	114.0	3.80	2.81
Zr67_MiCH16-01	0.0527	0.0044	0.0938	0.0073	0.0136	0.0004	0.0044	0.0003	-0.15	87.0	2.4	90.8	6.8	270.0	180.0	87.0	2.40	4.19
Zr68_MiCH16-01	0.0770	0.0018	1.7820	0.0510	0.1764	0.0033	0.0531	0.0030	0.08	1047.0	18.0	1038.0	19.0	1112.0	47.0	1047.0	18.00	-0.87
Zr69_MiCH16-01	0.0541	0.0087	0.1450	0.0240	0.0194	0.0011	0.0063	0.0009	0.17	123.7	6.8	134.0	21.0	570.0	310.0	123.7	6.80	7.69
Zr70_MiCH16-01	0.1156	0.0027	5.1200	0.1600	0.3297	0.0064	0.0979	0.0055	0.22	1837.0	31.0	1838.0	25.0	1891.0	39.0	1891.0	39.00	0.05
Zr71_MiCH16-01	0.1162	0.0012	5.9100	0.1200	0.3504	0.0062	0.0971	0.0052	0.16	1936.0	30.0	1962.0	18.0	1896.0	19.0	1896.0	19.00	1.33
Zr73_MiCH16-01	0.0454	0.0044	0.0594	0.0057	0.0089	0.0003	0.0029	0.0002	0.16	57.2	1.9	58.4	5.5	-10.0	200.0	57.2	1.90	2.05
Zr74_MiCH16-01	0.0447	0.0072	0.0630	0.0100	0.0095	0.0004	0.0032	0.0003	0.00	60.7	2.6	62.8	9.9	-50.0	300.0	60.7	2.60	3.34
Zr75_MiCH16-01	0.0466	0.0065	0.0598	0.0079	0.0090	0.0004	0.0028	0.0002	-0.04	57.7	2.3	58.7	7.6	30.0	270.0	57.7	2.30	1.70
Zr76_MiCH16-01	0.0464	0.0091	0.0560	0.0110	0.0083	0.0004	0.0025	0.0003	-0.06	53.3	2.4	55.1	9.9	-20.0	310.0	53.3	2.40	3.27
Zr77_MiCH16-01	0.0489	0.0047	0.0606	0.0059	0.0089	0.0003	0.0028	0.0002	0.07	57.3	2.0	59.6	5.6	170.0	190.0	57.3	2.00	3.86
Zr78_MiCH16-01	0.0497	0.0049	0.1330	0.0120	0.0186	0.0007	0.0064	0.0006	-0.07	118.5	4.3	127.0	11.0	180.0	200.0	118.5	4.30	6.69
Zr79_MiCH16-01	0.0495	0.0047	0.0688	0.0061	0.0104	0.0003	0.0032	0.0002	0.04	66.4	2.2	67.4	6.0	170.0	180.0	66.4	2.20	1.48
Zr80_MiCH16-01	0.0583	0.0056	0.0704	0.0066	0.0087	0.0003	0.0030	0.0002	-0.06	55.6	2.0	68.7	6.3	530.0	210.0	55.6	2.00	19.07
Zr82_MiCH16-01	0.0507	0.0089	0.0680	0.0120	0.0101	0.0005	0.0034	0.0010	-0.10	64.7	3.4	68.0	11.0	170.0	290.0	64.7	3.40	4.85
Zr83_MiCH16-01	0.0514	0.0046	0.1230	0.0110	0.0176	0.0006	0.0056	0.0005	0.04	112.2	3.9	119.0	11.0	230.0	190.0	112.2	3.90	5.71
Zr84_MiCH16-01	0.0590	0.0140	0.0670	0.0150	0.0091	0.0006	0.0037	0.0004	-0.08	58.4	3.8	64.0	14.0	180.0	460.0	58.4	3.80	8.75
Zr86_MiCH16-01	0.0528	0.0093	0.0640	0.0120	0.0089	0.0005	0.0032	0.0004	0.21	57.2	3.3	63.0	11.0	280.0	330.0	57.2	3.30	9.21
Zr87_MiCH16-01	0.0480	0.0036	0.1002	0.0076	0.0154	0.0005	0.0048	0.0004	-0.16	98.8	2.9	96.7	7.0	90.0	160.0	98.8	2.90	-2.17
Zr89_MiCH16-01	0.0520	0.0073	0.1180	0.0170	0.0175	0.0008	0.0063	0.0008	0.63	111.9	5.1	112.0	15.0	290.0	270.0	111.9	5.10	0.09
Zr90_MiCH16-01	0.0536	0.0080	0.1270	0.0170	0.0177	0.0006	0.0063	0.0006	-0.11	112.8	3.7	120.0	17.0	290.0	250.0	112.8	3.70	6.00
Zr91_MiCH16-01	0.0451	0.0060	0.0588	0.0074	0.0092	0.0004	0.0030	0.0003	0.02	58.9	2.8	57.8	6.7	40.0	250.0	58.9	2.80	-1.90
Zr92_MiCH16-01	0.0496	0.0036	0.1156	0.0089	0.0165	0.0005	0.0054	0.0004	0.10	105.4	3.1	110.8	8.0	180.0	150.0	105.4	3.10	4.87
Zr93_MiCH16-01	0.0514	0.0059	0.0586	0.0070	0.0085	0.0004	0.0029	0.0003	0.64	54.8	2.6	57.6	6.6	190.0	190.0	54.8	2.60	4.86
Zr94_MiCH16-01	0.1144	0.0025	5.5200	0.1400	0.3418	0.0069	0.0958	0.0052	-0.36	1895.0	33.0	1904.0	24.0	1859.0	41.0	1859.0	41.00	0.47
Zr95_MiCH16-01	0.0446	0.0061	0.0571	0.0078	0.0090	0.0004	0.0028	0.0003	-0.01	57.7	2.5	56.0	7.5	-40.0	260.0	57.7	2.50	-3.04
Zr97_MiCH16-01	0.0516	0.0062	0.1190	0.0140	0.0166	0.0006	0.0053	0.0004	-0.15	106.3	4.0	113.0	12.0	190.0	240.0	106.3	4.00	5.93
Zr98_MiCH16-01	0.0499	0.0052	0.1100	0.0120	0.0153	0.0005	0.0048	0.0003	0.10	97.7	3.3	106.0	11.0	190.0	200.0	97.7	3.30	7.83
Zr99_MiCH16-01	0.0497	0.0049	0.0560	0.0068	0.0083	0.0003	0.0026	0.0002	0.06	53.6	1.9	55.2	6.5	140.0	190.0	53.6	1.90	2.90
Zr100_MiCH16-01	0.0485	0.0048	0.0558	0.0056	0.0082	0.0002	0.0028	0.0002	-0.03	52.4	1.6	54.9	5.4	160.0	190.0	52.4	1.60	4.55
Zr102_MiCH16-01	0.0575	0.0080	0.0627	0.0086	0.0086	0.0004	0.0025	0.0002	-0.20	55.0	2.4	61.0	8.5	210.0	280.0	55.0	2.40	9.84
Zr103_MiCH16-01	0.0516	0.0066	0.0589	0.0076	0.0082	0.0003	0.0027	0.0002	-0.07	52.5	2.0	59.2	7.4	250.0	260.0	52.5	2.00	11.32

CORRECTED RATIOS [†]CORRECTED AGES (Ma) [‡]

Best age

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb ±2σ abs		²⁰⁷ Pb/ ²³⁵ U ±2σ abs		²⁰⁶ Pb/ ²³⁸ U ±2σ abs		²⁰⁸ Pb/ ²³² Th ±2σ abs		R/σ	²⁰⁶ Pb/ ²³⁸ U ±2σ		²⁰⁷ Pb/ ²³⁵ U ±2σ		²⁰⁷ Pb/ ²⁰⁶ Pb ±2σ		Best age (Ma) ³	±2σ	Disc % ⁴
	Batolito Aquila, Suite Zihuatanejo																	
Zircon_02_MiCH16-06	0.0630	0.0180	0.0720	0.0210	0.0088	0.0007	0.0027	0.0007	0.03	56.5	4.4	69.0	20.0	230.0	540.0	56.5	4.40	18.12
Zircon_03_MiCH16-06	0.0530	0.0250	0.0650	0.0280	0.0097	0.0011	0.0026	0.0008	0.04	62.5	7.1	60.0	26.0	-230.0	690.0	62.5	7.10	-4.17
Zircon_04_MiCH16-06	0.0590	0.0150	0.0730	0.0180	0.0092	0.0007	0.0039	0.0006	0.04	58.9	4.1	70.0	17.0	260.0	450.0	58.9	4.10	15.86

Zircon_07_MiCH16-06	0.0440	0.0120	0.0580	0.0160	0.0091	0.0005	0.0030	0.0004	0.03	58.2	3.3	56.0	15.0	-270.0	430.0	58.2	3.30	-3.93
Zircon_09_MiCH16-06	0.0740	0.0230	0.0730	0.0230	0.0090	0.0009	0.0037	0.0008	0.04	57.5	5.7	72.0	22.0	270.0	630.0	57.5	5.70	20.14
Zircon_11_MiCH16-06	0.0570	0.0210	0.0650	0.0210	0.0094	0.0009	0.0027	0.0010	0.04	60.5	5.6	61.0	20.0	50.0	610.0	60.5	5.60	0.82
Zircon_14_MiCH16-06	0.0770	0.0420	0.0930	0.0450	0.0096	0.0011	0.0029	0.0009	0.02	61.6	7.0	81.0	41.0	110.0	890.0	61.6	7.00	23.95
Zircon_17_MiCH16-06	0.0660	0.0410	0.0770	0.0420	0.0098	0.0012	0.0033	0.0013	0.03	62.6	7.8	66.0	40.0	100.0	870.0	62.6	7.80	5.15
Zircon_22_MiCH16-06	0.0550	0.0150	0.0600	0.0160	0.0087	0.0007	0.0033	0.0006	0.04	55.6	4.2	58.0	15.0	140.0	480.0	55.6	4.20	4.14
Zircon_23_MiCH16-06	0.0520	0.0140	0.0580	0.0140	0.0082	0.0007	0.0033	0.0004	0.05	52.5	4.4	56.0	13.0	90.0	460.0	52.5	4.40	6.25
Zircon_24_MiCH16-06	0.0570	0.0200	0.0790	0.0260	0.0102	0.0007	0.0042	0.0007	0.03	65.4	4.6	78.0	25.0	60.0	590.0	65.4	4.60	16.15
Zircon_25_MiCH16-06	0.0880	0.0390	0.0970	0.0420	0.0106	0.0012	0.0037	0.0012	0.03	68.0	7.5	92.0	40.0	90.0	940.0	68.0	7.50	26.09
Zircon_27_MiCH16-06	0.0630	0.0180	0.0830	0.0230	0.0096	0.0008	0.0034	0.0006	0.03	61.7	4.9	78.0	21.0	320.0	530.0	61.7	4.90	20.90
Zircon_30_MiCH16-06	0.0670	0.0290	0.0610	0.0260	0.0082	0.0010	0.0021	0.0010	0.04	52.6	6.4	56.0	25.0	-100.0	790.0	52.6	6.40	6.07
Zircon_31_MiCH16-06	0.0620	0.0480	0.0640	0.0470	0.0085	0.0010	0.0025	0.0016	0.02	54.7	6.1	58.0	45.0	-500.0	1100.0	54.7	6.10	5.69
Zircon_35_MiCH16-06	0.0840	0.0370	0.1020	0.0460	0.0104	0.0011	0.0040	0.0016	0.02	66.5	7.1	95.0	43.0	260.0	840.0	66.5	7.10	30.00
Zircon_36_MiCH16-06	0.0464	0.0071	0.0568	0.0083	0.0092	0.0004	0.0027	0.0005	0.05	59.1	2.5	57.1	8.3	50.0	280.0	59.1	2.50	-3.50
Zircon_37_MiCH16-06	0.0420	0.0320	0.0630	0.0380	0.0095	0.0009	0.0046	0.0019	0.02	60.8	5.7	60.0	35.0	-190.0	800.0	60.8	5.70	-1.33
Zircon_43_MiCH16-06	0.0560	0.0170	0.0680	0.0200	0.0094	0.0006	0.0030	0.0004	0.03	60.3	3.6	64.0	19.0	150.0	540.0	60.3	3.60	5.78
Zircon_44_MiCH16-06	0.0520	0.0420	0.0650	0.0920	0.0085	0.0014	0.0033	0.0020	0.02	54.8	8.9	59.0	62.0	-380.0	260.0	54.8	8.90	7.12
Zircon_55_MiCH16-06	0.0500	0.0160	0.0590	0.0170	0.0092	0.0007	0.0032	0.0005	0.04	59.0	4.2	57.0	16.0	40.0	490.0	59.0	4.20	-3.51
Zircon_56_MiCH16-06	0.0690	0.0330	0.0880	0.0320	0.0096	0.0009	0.0031	0.0011	0.03	61.7	5.9	85.0	30.0	120.0	850.0	61.7	5.90	27.41
Zircon_61_MiCH16-06	0.0600	0.0270	0.0690	0.0290	0.0089	0.0009	0.0038	0.0010	0.03	56.8	5.8	69.0	28.0	60.0	710.0	56.8	5.80	17.68
Zircon_71_MiCH16-06	0.0620	0.0260	0.0730	0.0260	0.0091	0.0009	0.0030	0.0009	0.04	58.4	5.9	68.0	24.0	90.0	700.0	58.4	5.90	14.12
Zircon_72_MiCH16-06	0.0660	0.0270	0.0940	0.0360	0.0106	0.0013	0.0051	0.0015	0.04	67.7	8.5	84.0	33.0	130.0	710.0	67.7	8.50	19.40
Zircon_75_MiCH16-06	0.0490	0.0220	0.0680	0.0300	0.0100	0.0010	0.0037	0.0007	0.03	64.2	6.3	62.0	28.0	-70.0	640.0	64.2	6.30	-3.55
Zircon_79_MiCH16-06	0.0640	0.0200	0.0760	0.0220	0.0089	0.0009	0.0028	0.0008	0.04	56.8	5.7	72.0	21.0	260.0	600.0	56.8	5.70	21.11
Zircon_80_MiCH16-06	0.0590	0.0230	0.0710	0.0270	0.0106	0.0012	0.0040	0.0014	0.04	67.7	7.6	66.0	25.0	-50.0	640.0	67.7	7.60	-2.58
Zircon_81_MiCH16-06	0.0640	0.0290	0.0660	0.0260	0.0094	0.0008	0.0028	0.0010	0.03	60.3	5.3	61.0	25.0	-70.0	700.0	60.3	5.30	1.15
Zircon_86_MiCH16-06	0.0610	0.0280	0.0920	0.0380	0.0101	0.0007	0.0048	0.0011	0.02	64.4	4.6	82.0	35.0	-130.0	760.0	64.4	4.60	21.46
Zircon_88_MiCH16-06	0.0580	0.0160	0.0680	0.0180	0.0095	0.0006	0.0035	0.0006	0.04	60.7	4.1	65.0	17.0	60.0	510.0	60.7	4.10	6.62
Zircon_89_MiCH16-06	0.0690	0.0550	0.0950	0.0620	0.0108	0.0012	0.0085	0.0031	0.02	69.5	7.7	74.0	56.0	-400.0	1100.0	69.5	7.70	6.08
Zircon_96_MiCH16-06	0.0430	0.0120	0.0640	0.0170	0.0093	0.0007	0.0037	0.0027	0.04	59.9	4.4	61.0	16.0	-20.0	460.0	59.9	4.40	1.80
Zircon_99_MiCH16-06	0.0473	0.0048	0.1070	0.0100	0.0167	0.0006	0.0058	0.0005	0.06	106.9	3.9	102.7	9.6	90.0	200.0	106.9	3.90	-4.09
Zircon_103_MiCH16-06	0.0490	0.0150	0.0600	0.0170	0.0091	0.0008	0.0030	0.0005	0.05	58.4	4.9	57.0	16.0	120.0	500.0	58.4	4.90	-2.46

CORRECTED RATIOS ¹CORRECTED AGES (Ma) ⁴

Best age

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ abs	²⁰⁷ Pb/ ²³⁵ U	±2σ abs	²⁰⁶ Pb/ ²³⁸ U	±2σ abs	²⁰⁸ Pb/ ²³² Th	±2σ abs	Rho	²⁰⁶ Pb/ ²³⁸ U	±2σ	²⁰⁷ Pb/ ²³⁵ U	±2σ	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ	(Ma) ³	±2σ	Disc % ⁴
MiCH16-07 (Mi07*) Batolito Aquila																		
Zircon_01_MiCH16-07	0.0730	0.0280	0.0790	0.0300	0.0096	0.0010	0.0040	0.0014	-0.23	61.8	6.6	73.0	28.0	330.0	710.0	61.8	6.60	15.34
Zircon_02_MiCH16-07	0.0468	0.0084	0.0600	0.0110	0.0096	0.0005	0.0028	0.0004	-0.08	61.3	3.1	59.0	10.0	-20.0	320.0	61.3	3.10	-3.90
Zircon_03_MiCH16-07	0.0660	0.0250	0.0700	0.0260	0.0085	0.0008	0.0010	0.0009	-0.18	54.7	4.9	66.0	23.0	0.0	610.0	54.7	4.90	17.12
Zircon_07_MiCH16-07	0.0640	0.0180	0.0780	0.0210	0.0094	0.0008	0.0029	0.0006	0.00	60.3	4.8	74.0	19.0	330.0	500.0	60.3	4.80	18.51
Zircon_08_MiCH16-07	0.0486	0.0099	0.0580	0.0110	0.0085	0.0006	0.0024	0.0005	0.12	54.3	3.5	59.0	11.0	240.0	340.0	54.3	3.50	7.97
Zircon_09_MiCH16-07	0.0530	0.0230	0.0640	0.0240	0.0090	0.0011	0.0023	0.0009	0.11	57.8	6.9	60.0	23.0	80.0	680.0	57.8	6.90	3.67
Zircon_10_MiCH16-07	0.0660	0.0250	0.0590	0.0200	0.0085	0.0009	0.0042	0.0011	-0.19	54.5	6.0	56.0	19.0	50.0	580.0	54.5	6.00	2.68
Zircon_11_MiCH16-07	0.0930	0.0340	0.1110	0.0360	0.0112	0.0012	0.0047	0.0011	0.14	71.6	7.5	101.0	32.0	700.0	630.0	71.6	7.50	29.11
Zircon_14_MiCH16-07	0.0670	0.0350	0.0590	0.0270	0.0083	0.0009	0.0036	0.0008	-0.04	53.0	5.5	54.0	25.0	-350.0	690.0	53.0	5.50	1.85
Zircon_15_MiCH16-07	0.0630	0.0260	0.0780	0.0300	0.0098	0.0008	0.0027	0.0006	-0.09	62.6	5.3	76.0	29.0	10.0	720.0	62.6	5.30	17.63
Zircon_16_MiCH16-07	0.0550	0.0210	0.0550	0.0190	0.0084	0.0009	0.0022	0.0005	0.04	53.8	5.8	53.0	19.0	40.0	640.0	53.8	5.80	-1.51
Zircon_17_MiCH16-07	0.0510	0.0340	0.0520	0.0340	0.0081	0.0007	0.0035	0.0012	-0.04	51.9	4.7	55.0	34.0	-690.0	910.0	51.9	4.70	5.64
Zircon_18_MiCH16-07	0.0630	0.0220	0.0730	0.0210	0.0090	0.0008	0.0029	0.0006	-0.25	57.4	4.9	69.0	20.0	90.0	530.0	57.4	4.90	16.81
Zircon_21_MiCH16-07	0.0600	0.0220	0.0670	0.0250	0.0096	0.0007	0.0046	0.0011	-0.14	61.5	4.2	68.0	25.0	80.0	660.0	61.5	4.20	9.56
Zircon_26_MiCH16-07	0.0530	0.0170	0.0640	0.0200	0.0088	0.0009	0.0029	0.0007	-0.05	56.2	5.8	61.0	18.0	100.0	560.0	56.2	5.80	7.87
Zircon_27_MiCH16-07	0.0670	0.0280	0.1010	0.0330	0.0101	0.0011	0.0049	0.0017	0.10	64.6	6.8	92.0	31.0	400.0	750.0	64.6	6.80	29.78

Zircon_30_MiCH16-07	0.0590	0.0220	0.0690	0.0220	0.0090	0.0009	0.0042	0.0009	-0.05	57.6	5.6	65.0	21.0	50.0	600.0	57.6	5.60	11.38
Zircon_31_MiCH16-07	0.0520	0.0110	0.0630	0.0120	0.0093	0.0005	0.0031	0.0003	-0.17	59.9	3.2	63.0	12.0	90.0	350.0	59.9	3.20	4.92
Zircon_33_MiCH16-07	0.0740	0.0270	0.0670	0.0200	0.0082	0.0008	0.0036	0.0009	0.06	52.8	4.9	64.0	18.0	100.0	600.0	52.8	4.90	17.50
Zircon_34_MiCH16-07	0.0670	0.0230	0.0830	0.0250	0.0092	0.0009	0.0030	0.0009	0.14	58.9	5.8	78.0	23.0	260.0	610.0	58.9	5.80	24.49
Zircon_36_MiCH16-07	0.0770	0.0270	0.0680	0.0210	0.0088	0.0009	0.0035	0.0010	0.03	56.7	5.9	64.0	20.0	260.0	660.0	56.7	5.90	11.41
Zircon_39_MiCH16-07	0.0504	0.0082	0.0620	0.0100	0.0090	0.0004	0.0031	0.0003	0.09	57.6	2.7	61.0	9.9	240.0	300.0	57.6	2.70	5.57
Zircon_41_MiCH16-07	0.0640	0.0270	0.0740	0.0270	0.0085	0.0009	0.0039	0.0011	0.04	54.2	5.6	68.0	26.0	340.0	730.0	54.2	5.60	20.29
Zircon_42_MiCH16-07	0.0760	0.0220	0.0790	0.0220	0.0092	0.0008	0.0037	0.0010	-0.27	59.2	5.3	75.0	20.0	440.0	520.0	59.2	5.30	21.07
Zircon_43_MiCH16-07	0.0740	0.0220	0.0850	0.0260	0.0088	0.0009	0.0029	0.0008	0.04	56.5	5.8	80.0	24.0	630.0	480.0	56.5	5.80	29.38
Zircon_44_MiCH16-07	0.0610	0.0220	0.0660	0.0230	0.0090	0.0009	0.0040	0.0009	0.06	57.7	5.7	63.0	22.0	100.0	640.0	57.7	5.70	8.41
Zircon_49_MiCH16-07	0.0520	0.0210	0.0720	0.0240	0.0099	0.0010	0.0034	0.0006	-0.06	63.4	6.1	68.0	22.0	-90.0	610.0	63.4	6.10	6.76
Zircon_50_MiCH16-07	0.0860	0.0300	0.1000	0.0310	0.0106	0.0010	0.0045	0.0010	-0.17	68.1	6.1	92.0	29.0	660.0	650.0	68.1	6.10	25.98
Zircon_55_MiCH16-07	0.0760	0.0290	0.0990	0.0350	0.0099	0.0008	0.0049	0.0013	0.14	63.8	5.2	90.0	32.0	350.0	730.0	63.8	5.20	29.11
Zircon_56_MiCH16-07	0.0560	0.0160	0.0740	0.0200	0.0088	0.0009	0.0033	0.0007	0.16	56.2	5.9	71.0	19.0	340.0	500.0	56.2	5.90	20.85
Zircon_60_MiCH16-07	0.0600	0.0140	0.0690	0.0140	0.0087	0.0007	0.0032	0.0005	-0.20	55.8	4.2	67.0	13.0	380.0	440.0	55.8	4.20	16.72
Zircon_61_MiCH16-07	0.0520	0.0150	0.0670	0.0180	0.0089	0.0007	0.0033	0.0008	0.06	56.8	4.3	64.0	17.0	100.0	540.0	56.8	4.30	11.25
Zircon_69_MiCH16-07	-0.0030	0.0190	0.0030	0.0230	0.0092	0.0008	0.0019	0.0009	0.19	58.9	5.0	0.0	23.0	-1900.0	790.0	58.9	5.00	
Zircon_71_MiCH16-07	0.0860	0.0420	0.0670	0.0360	0.0089	0.0011	0.0040	0.0016	0.18	57.0	6.8	65.0	36.0	-500.0	980.0	57.0	6.80	12.31
Zircon_74_MiCH16-07	0.0620	0.0210	0.0670	0.0220	0.0093	0.0010	0.0031	0.0009	-0.20	59.5	6.3	63.0	21.0	-120.0	590.0	59.5	6.30	5.56
Zircon_75_MiCH16-07	0.0557	0.0080	0.0730	0.0110	0.0092	0.0004	0.0034	0.0004	0.26	59.1	2.7	71.0	10.0	300.0	300.0	59.1	2.70	16.76
Zircon_76_MiCH16-07	0.0590	0.0200	0.0720	0.0190	0.0082	0.0008	0.0030	0.0007	-0.07	52.5	5.3	69.0	18.0	240.0	570.0	52.5	5.30	23.91
Zircon_77_MiCH16-07	0.0930	0.0400	0.0840	0.0390	0.0108	0.0012	0.0039	0.0014	0.02	69.0	7.9	74.0	36.0	-90.0	900.0	69.0	7.90	6.76
Zircon_78_MiCH16-07	0.0600	0.0310	0.0880	0.0380	0.0090	0.0011	0.0033	0.0011	0.15	57.8	6.8	72.0	32.0	0.0	770.0	57.8	6.80	19.72
Zircon_82_MiCH16-07	0.0730	0.0200	0.1210	0.0280	0.0131	0.0010	0.0057	0.0007	-0.13	83.8	6.2	112.0	25.0	470.0	530.0	83.8	6.20	25.18
Zircon_83_MiCH16-07	0.0690	0.0340	0.0670	0.0270	0.0090	0.0012	0.0036	0.0011	-0.15	57.9	7.9	63.0	25.0	-100.0	770.0	57.9	7.90	8.10
Zircon_86_MiCH16-07	0.0620	0.0100	0.0780	0.0130	0.0094	0.0006	0.0028	0.0004	0.14	60.3	3.6	75.0	12.0	430.0	330.0	60.3	3.60	19.60
Zircon_87_MiCH16-07	0.0566	0.0069	0.0681	0.0083	0.0087	0.0004	0.0033	0.0004	-0.11	56.1	2.6	66.6	7.9	480.0	260.0	56.1	2.60	15.77
Zircon_90_MiCH16-07	0.0510	0.0130	0.0680	0.0180	0.0096	0.0006	0.0030	0.0005	0.03	62.3	3.9	65.0	17.0	-50.0	470.0	62.3	3.90	4.15
Zircon_92_MiCH16-07	0.0680	0.0210	0.0800	0.0230	0.0090	0.0009	0.0035	0.0010	-0.27	57.5	5.8	76.0	22.0	350.0	610.0	57.5	5.80	24.34
Zircon_96_MiCH16-07	0.0480	0.0180	0.0770	0.0240	0.0090	0.0008	0.0027	0.0011	0.04	57.4	5.2	73.0	22.0	-10.0	600.0	57.4	5.20	21.37
Zircon_98_MiCH16-07	0.0570	0.0170	0.0780	0.0220	0.0104	0.0011	0.0028	0.0006	0.01	66.7	6.9	77.0	21.0	100.0	530.0	66.7	6.90	13.38
Zircon_100_MiCH16-07	0.0670	0.0130	0.0840	0.0160	0.0097	0.0009	0.0044	0.0008	0.02	61.9	5.6	81.0	15.0	540.0	400.0	61.9	5.60	23.58
Zircon_104_MiCH16-07	0.0620	0.0140	0.0820	0.0170	0.0098	0.0008	0.0038	0.0006	-0.07	63.1	4.9	78.0	16.0	380.0	450.0	63.1	4.90	19.10

CORRECTED RATIOS¹CORRECTED AGES (Ma)²

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁶ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ	±2σ		±2σ	±2σ	(Ma) ³	±2σ						
MiCH16-09 (MI09*)	Batolito Aquila, Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																		
Zircon_01_MiCH16-09	0.0544	0.0068	0.1170	0.0150	0.0165	0.0006	0.0057	0.0005	-0.20	105.5	3.6	118.0	13.0	440.0	240.0	105.5	3.60	10.59	
Zircon_02_MiCH16-09	0.0533	0.0026	0.4280	0.0190	0.0587	0.0012	0.0181	0.0008	0.10	367.6	7.4	365.0	14.0	330.0	110.0	367.6	7.40	-0.71	
Zircon_03_MiCH16-09	0.0477	0.0063	0.1080	0.0140	0.0161	0.0006	0.0056	0.0005	0.13	102.8	3.9	107.0	12.0	120.0	240.0	102.8	3.90	3.93	
Zircon_04_MiCH16-09	0.0488	0.0039	0.1101	0.0087	0.0164	0.0004	0.0050	0.0003	-0.12	104.6	2.6	105.7	7.9	130.0	170.0	104.6	2.60	1.04	
Zircon_05_MiCH16-09	0.0472	0.0041	0.1160	0.0100	0.0175	0.0005	0.0056	0.0003	0.19	112.0	3.1	111.3	9.4	60.0	180.0	112.0	3.10	-0.63	
Zircon_06_MiCH16-09	0.0951	0.0037	3.1100	0.1100	0.2361	0.0050	0.0710	0.0023	0.15	1366.0	27.0	1435.0	29.0	1526.0	68.0	1366.0	27.00	4.81	
Zircon_07_MiCH16-09	0.0545	0.0061	0.1350	0.0150	0.0183	0.0007	0.0062	0.0006	0.23	116.7	4.3	128.0	12.0	330.0	190.0	116.7	4.30	8.83	
Zircon_08_MiCH16-09	0.0530	0.0120	0.1260	0.0260	0.0175	0.0008	0.0065	0.0007	-0.10	111.6	5.2	118.0	24.0	210.0	390.0	111.6	5.20	5.42	
Zircon_09_MiCH16-09	0.0525	0.0071	0.1220	0.0150	0.0170	0.0007	0.0066	0.0005	0.04	108.7	4.7	119.0	14.0	220.0	250.0	108.7	4.70	8.66	
Zircon_10_MiCH16-09	0.0496	0.0058	0.1180	0.0130	0.0174	0.0006	0.0065	0.0006	0.03	110.9	3.8	117.0	12.0	140.0	230.0	110.9	3.80	5.21	
Zircon_11_MiCH16-09	0.0576	0.0059	0.2180	0.0220	0.0282	0.0008	0.0100	0.0015	0.59	179.4	5.0	200.0	17.0	650.0	160.0	179.4	5.00	10.30	
Zircon_12_MiCH16-09	0.0529	0.0038	0.1780	0.0120	0.0252	0.0007	0.0078	0.0005	-0.25	160.7	4.1	168.0	11.0	280.0	150.0	160.7	4.10	4.35	
Zircon_13_MiCH16-09	0.0560	0.0077	0.1330	0.0160	0.0167	0.0007	0.0049	0.0006	-0.06	107.0	4.5	125.0	14.0	390.0	270.0	107.0	4.50	14.40	
Zircon_14_MiCH16-09	0.0502	0.0075	0.1240	0.0170	0.0177	0.0009	0.0063	0.0006	-0.20	113.0	5.4	118.0	15.0	150.0	290.0	113.0	5.40	4.24	
Zircon_15_MiCH16-09	0.0524	0.0070	0.1230	0.0160	0.0170	0.0006	0.0054	0.0005	0.03	108.4	3.8	116.0	14.0	350.0	250.0	108.4	3.80	6.55	

Zircon_16_MiCH16-09	0.0529	0.0082	0.1250	0.0180	0.0176	0.0008	0.0058	0.0006	-0.20	112.3	5.0	121.0	15.0	290.0	300.0	112.3	5.00	7.19
Zircon_17_MiCH16-09	0.0462	0.0050	0.1140	0.0120	0.0176	0.0006	0.0051	0.0004	-0.16	112.6	3.5	111.0	10.0	40.0	220.0	112.6	3.50	-1.44
Zircon_18_MiCH16-09	0.0620	0.0130	0.0690	0.0150	0.0092	0.0005	0.0023	0.0005	-0.19	59.1	3.4	67.0	14.0	340.0	410.0	59.1	3.40	11.79
Zircon_19_MiCH16-09	0.0580	0.0100	0.1410	0.0250	0.0181	0.0013	0.0072	0.0012	0.08	115.4	8.5	131.0	22.0	400.0	320.0	115.4	8.50	11.91
Zircon_20_MiCH16-09	0.0519	0.0070	0.1210	0.0160	0.0173	0.0009	0.0057	0.0005	0.26	110.8	5.6	115.0	14.0	200.0	260.0	110.8	5.60	3.65
Zircon_21_MiCH16-09	0.0799	0.0036	2.2660	0.0950	0.2046	0.0041	0.0612	0.0022	0.04	1200.0	22.0	1200.0	29.0	1183.0	88.0	1200.0	22.00	
Zircon_23_MiCH16-09	0.0506	0.0045	0.1700	0.0150	0.0246	0.0007	0.0073	0.0013	0.06	156.9	4.1	159.0	12.0	200.0	160.0	156.9	4.10	1.32
Zircon_24_MiCH16-09	0.0609	0.0048	0.6650	0.0540	0.0835	0.0025	0.0257	0.0018	0.36	517.0	15.0	530.0	32.0	620.0	170.0	517.0	15.00	2.45
Zircon_25_MiCH16-09	0.0536	0.0054	0.1250	0.0110	0.0165	0.0006	0.0050	0.0005	-0.04	105.7	3.7	119.0	10.0	380.0	210.0	105.7	3.70	11.18
Zircon_26_MiCH16-09	0.0668	0.0032	0.4140	0.0260	0.0443	0.0020	0.0148	0.0009	0.53	280.0	12.0	351.0	18.0	815.0	95.0	280.0	12.00	20.23
Zircon_27_MiCH16-09	0.0493	0.0086	0.1250	0.0210	0.0189	0.0009	0.0060	0.0006	0.12	120.8	5.4	118.0	19.0	10.0	320.0	120.8	5.40	-2.37
Zircon_28_MiCH16-09	0.0482	0.0033	0.1187	0.0083	0.0175	0.0005	0.0055	0.0003	0.24	111.6	2.9	113.6	7.5	130.0	150.0	111.6	2.90	1.76
Zircon_29_MiCH16-09	0.0502	0.0072	0.1210	0.0170	0.0172	0.0008	0.0063	0.0005	-0.03	109.6	5.1	115.0	15.0	150.0	290.0	109.6	5.10	4.70
Zircon_30_MiCH16-09	0.0559	0.0030	0.5260	0.0280	0.0670	0.0015	0.0214	0.0010	0.39	418.2	8.8	429.0	19.0	430.0	120.0	418.2	8.80	2.52
Zircon_31_MiCH16-09	0.0535	0.0047	0.1181	0.0092	0.0160	0.0006	0.0049	0.0004	-0.18	102.4	3.5	113.1	8.4	360.0	190.0	102.4	3.50	9.46
Zircon_32_MiCH16-09	0.0593	0.0068	0.1390	0.0160	0.0172	0.0007	0.0069	0.0006	0.16	110.1	4.6	131.0	14.0	550.0	240.0	110.1	4.60	15.95
Zircon_33_MiCH16-09	0.0514	0.0059	0.1160	0.0120	0.0165	0.0006	0.0056	0.0004	-0.18	105.7	3.7	111.0	11.0	240.0	240.0	105.7	3.70	4.77
Zircon_34_MiCH16-09	0.0575	0.0034	0.5350	0.0270	0.0676	0.0014	0.0212	0.0009	-0.02	421.4	8.5	434.0	19.0	480.0	130.0	421.4	8.50	2.90
Zircon_35_MiCH16-09	0.0570	0.0100	0.0700	0.0130	0.0089	0.0004	0.0028	0.0004	0.12	57.2	2.7	68.0	12.0	360.0	380.0	57.2	2.70	15.88
Zircon_36_MiCH16-09	0.0763	0.0033	1.7530	0.0660	0.1702	0.0036	0.0501	0.0023	0.38	1013.0	20.0	1025.0	24.0	1075.0	83.0	1013.0	20.00	1.17
Zircon_37_MiCH16-09	0.0508	0.0041	0.2060	0.0170	0.0303	0.0009	0.0092	0.0005	0.16	192.2	5.5	192.0	14.0	210.0	170.0	192.2	5.50	-0.10
Zircon_38_MiCH16-09	0.0777	0.0056	2.2400	0.1700	0.2030	0.0095	0.0627	0.0045	-0.01	1191.0	52.0	1187.0	55.0	1100.0	130.0	1191.0	52.00	-0.34
Zircon_39_MiCH16-09	0.0495	0.0028	0.2040	0.0110	0.0304	0.0007	0.0115	0.0006	0.31	193.2	4.5	188.4	9.6	150.0	130.0	193.2	4.50	-2.55
Zircon_40_MiCH16-09	0.0560	0.0059	0.1410	0.0150	0.0185	0.0005	0.0062	0.0004	0.12	117.9	3.4	133.0	13.0	410.0	210.0	117.9	3.40	11.35
Zircon_42_MiCH16-09	0.0600	0.0071	0.7300	0.4700	0.0880	0.0260	0.0316	0.0063	0.32	550.0	140.0	550.0	150.0	600.0	170.0	550.0	140.00	
Zircon_43_MiCH16-09	0.0521	0.0056	0.1300	0.0120	0.0185	0.0008	0.0065	0.0005	0.06	117.8	4.9	124.0	11.0	290.0	210.0	117.8	4.90	5.00
Zircon_44_MiCH16-09	0.0530	0.0047	0.2810	0.0240	0.0396	0.0015	0.0137	0.0013	0.11	250.3	9.2	253.0	19.0	310.0	190.0	250.3	9.20	1.07
Zircon_45_MiCH16-09	0.0680	0.0140	0.1240	0.0230	0.0135	0.0008	0.0059	0.0009	-0.12	86.6	4.7	117.0	20.0	580.0	410.0	86.6	4.70	25.98
Zircon_46_MiCH16-09	0.0777	0.0036	1.9610	0.0830	0.1840	0.0037	0.0568	0.0027	0.18	1089.0	20.0	1100.0	29.0	1126.0	93.0	1089.0	20.00	1.00
Zircon_47_MiCH16-09	0.0489	0.0032	0.1289	0.0089	0.0193	0.0005	0.0061	0.0003	0.08	123.2	3.4	122.8	8.0	160.0	150.0	123.2	3.40	-0.33
Zircon_49_MiCH16-09	0.0515	0.0051	0.1800	0.1100	0.0259	0.0084	0.0086	0.0021	0.41	165.0	51.0	171.0	71.0	250.0	160.0	165.0	51.00	3.51
Zircon_50_MiCH16-09	0.0595	0.0033	0.5800	0.0330	0.0685	0.0017	0.0201	0.0009	0.34	427.0	10.0	462.0	21.0	580.0	120.0	427.0	10.00	7.58
Zircon_51_MiCH16-09	0.0509	0.0029	0.1754	0.0096	0.0253	0.0006	0.0080	0.0005	0.00	161.3	3.8	163.8	8.3	220.0	130.0	161.3	3.80	1.53
Zircon_52_MiCH16-09	0.0504	0.0038	0.1211	0.0081	0.0176	0.0005	0.0057	0.0003	-0.08	112.5	3.0	117.1	7.6	220.0	170.0	112.5	3.00	3.93
Zircon_53_MiCH16-09	0.0656	0.0085	0.1640	0.0220	0.0187	0.0008	0.0080	0.0007	0.07	119.3	5.1	153.0	18.0	710.0	220.0	119.3	5.10	22.03
Zircon_54_MiCH16-09	0.0542	0.0056	0.3510	0.0360	0.0453	0.0013	0.0161	0.0015	0.03	285.7	8.1	302.0	27.0	340.0	220.0	285.7	8.10	5.40
Zircon_55_MiCH16-09	0.0504	0.0072	0.1210	0.0180	0.0167	0.0009	0.0055	0.0006	0.03	106.8	5.7	114.0	16.0	180.0	300.0	106.8	5.70	6.32
Zircon_56_MiCH16-09	0.0737	0.0036	1.7570	0.0840	0.1730	0.0051	0.0511	0.0018	0.42	1028.0	28.0	1027.0	31.0	1017.0	99.0	1028.0	28.00	-0.10
Zircon_57_MiCH16-09	0.0546	0.0072	0.1230	0.0140	0.0170	0.0008	0.0060	0.0006	-0.02	108.8	5.2	117.0	13.0	250.0	260.0	108.8	5.20	7.01
Zircon_58_MiCH16-09	0.0550	0.0190	0.1290	0.0590	0.0174	0.0009	0.0060	0.0021	-0.23	111.1	5.3	123.0	45.0	370.0	300.0	111.1	5.30	9.67
Zircon_59_MiCH16-09	0.0522	0.0071	0.1360	0.0170	0.0188	0.0009	0.0065	0.0008	-0.17	120.2	6.0	131.0	16.0	250.0	280.0	120.2	6.00	8.24
Zircon_60_MiCH16-09	0.0757	0.0033	1.7880	0.0790	0.1705	0.0039	0.0527	0.0024	0.70	1014.0	21.0	1040.0	27.0	1086.0	83.0	1014.0	21.00	2.50
Zircon_61_MiCH16-09	0.0670	0.0210	0.1510	0.0670	0.0178	0.0010	0.0072	0.0031	-0.09	113.6	6.1	141.0	49.0	710.0	370.0	113.6	6.10	19.43
Zircon_62_MiCH16-09	0.1027	0.0042	4.5200	0.1800	0.3164	0.0067	0.0891	0.0032	0.49	1776.0	31.0	1736.0	32.0	1668.0	75.0	1668.0	75.00	-2.30
Zircon_63_MiCH16-09	0.0515	0.0031	0.3220	0.0170	0.0457	0.0011	0.0150	0.0007	0.08	289.2	7.1	283.0	13.0	230.0	130.0	289.2	7.10	-2.19
Zircon_64_MiCH16-09	0.0520	0.0051	0.1230	0.0120	0.0173	0.0004	0.0056	0.0004	0.23	110.8	2.8	117.0	11.0	230.0	200.0	110.8	2.80	5.30
Zircon_65_MiCH16-09	0.0482	0.0047	0.1170	0.0100	0.0179	0.0005	0.0058	0.0004	-0.04	114.5	3.4	111.6	9.6	70.0	190.0	114.5	3.40	-2.60
Zircon_66_MiCH16-09	0.0599	0.0058	0.1530	0.0150	0.0180	0.0008	0.0062	0.0006	0.11	114.9	4.9	144.0	13.0	630.0	200.0	114.9	4.90	20.21
Zircon_68_MiCH16-09	0.0516	0.0053	0.1200	0.0160	0.0168	0.0006	0.0054	0.0005	-0.12	107.5	3.5	115.0	10.0	250.0	220.0	107.5	3.50	6.52
Zircon_69_MiCH16-09	0.0683	0.0032	1.1280	0.0560	0.1211	0.0034	0.0526	0.0020	0.37	737.0	19.0	766.0	28.0	890.0	100.0	737.0	19.00	3.79
Zircon_70_MiCH16-09	0.0710	0.0030	1.7270	0.0690	0.1776	0.0035	0.0538	0.0019	0.21	1054.0	19.0	1017.0	25.0	957.0	89.0	1054.0	19.00	-3.64
Zircon_71_MiCH16-09	0.1207	0.0048	6.0300	0.2100	0.3671	0.0067	0.1024	0.0033	0.24	2016.0	31.0	1983.0	31.0	1971.0	66.0	1971.0	66.00	-1.66
Zircon_72_MiCH16-09	0.0539	0.0075	0.1930	0.0320	0.0266	0.0007	0.0093	0.0016	0.18	169.5	4.6	179.0	25.0	340.0	220.0	169.5	4.60	5.31
Zircon_73_MiCH16-09	0.0569	0.0076	0.1340	0.0170	0.0179	0.0007	0.0060	0.0007	-0.06	114.6	4.6	127.0	15.0	370.0	270.0	114.6	4.60	9.76

Zircon_74_MiCH16-09	0.0540	0.0410	0.1300	0.1400	0.0171	0.0012	0.0058	0.0065	0.15	109.6	7.8	125.0	87.0	370.0	440.0	109.6	7.80	12.32
Zircon_75_MiCH16-09	0.0510	0.0040	0.1216	0.0093	0.0170	0.0006	0.0063	0.0005	-0.05	108.9	3.7	116.5	8.3	220.0	160.0	108.9	3.70	6.52
Zircon_76_MiCH16-09	0.0493	0.0035	0.1205	0.0078	0.0180	0.0005	0.0056	0.0002	0.02	115.1	2.9	116.2	7.2	140.0	150.0	115.1	2.90	0.95
Zircon_77_MiCH16-09	0.0502	0.0087	0.1300	0.0220	0.0200	0.0011	0.0062	0.0010	0.02	127.7	6.8	122.0	20.0	90.0	340.0	127.7	6.80	-4.67
Zircon_78_MiCH16-09	0.0591	0.0063	0.1270	0.0120	0.0157	0.0006	0.0056	0.0005	-0.05	100.2	3.5	121.0	11.0	450.0	220.0	100.2	3.50	17.19
Zircon_79_MiCH16-09	0.0532	0.0054	0.1240	0.0120	0.0174	0.0006	0.0058	0.0004	-0.02	111.3	3.9	118.0	10.0	330.0	210.0	111.3	3.90	5.68
Zircon_80_MiCH16-09	0.0660	0.0150	0.0790	0.0230	0.0087	0.0006	0.0039	0.0012	0.16	56.1	3.7	76.0	20.0	700.0	290.0	56.1	3.70	26.18
Zircon_81_MiCH16-09	0.0713	0.0055	0.3460	0.0270	0.0366	0.0011	0.0129	0.0009	-0.19	231.5	6.6	305.0	20.0	980.0	160.0	231.5	6.60	24.10
Zircon_82_MiCH16-09	0.0732	0.0036	1.7430	0.0830	0.1719	0.0037	0.0536	0.0029	0.10	1022.0	21.0	1025.0	31.0	1020.0	100.0	1022.0	21.00	0.29
Zircon_83_MiCH16-09	0.0536	0.0074	0.1350	0.0190	0.0188	0.0007	0.0059	0.0007	0.45	120.1	4.5	127.0	17.0	170.0	270.0	120.1	4.50	5.43
Zircon_84_MiCH16-09	0.0520	0.0049	0.1790	0.0160	0.0253	0.0009	0.0086	0.0006	-0.03	160.9	5.4	167.0	14.0	250.0	200.0	160.9	5.40	3.65
Zircon_85_MiCH16-09	0.0523	0.0034	0.1820	0.0100	0.0260	0.0007	0.0080	0.0006	0.07	165.7	4.1	169.6	9.0	260.0	140.0	165.7	4.10	2.30
Zircon_86_MiCH16-09	0.0620	0.0270	0.1500	0.1000	0.0179	0.0013	0.0057	0.0032	0.13	114.2	8.1	145.0	69.0	540.0	370.0	114.2	8.10	21.24
Zircon_87_MiCH16-09	0.0622	0.0049	0.5420	0.0420	0.0641	0.0021	0.0177	0.0014	0.10	400.0	13.0	441.0	27.0	630.0	180.0	400.0	13.00	9.30
Zircon_88_MiCH16-09	0.0492	0.0080	0.0700	0.0110	0.0106	0.0005	0.0041	0.0004	0.12	67.9	3.3	68.0	11.0	150.0	310.0	67.9	3.30	0.15
Zircon_89_MiCH16-09	0.0509	0.0034	0.1790	0.0110	0.0256	0.0007	0.0085	0.0006	-0.03	162.8	4.2	166.9	9.8	220.0	150.0	162.8	4.20	2.46
Zircon_90_MiCH16-09	0.0720	0.0160	0.0890	0.0170	0.0094	0.0005	0.0040	0.0009	-0.04	60.3	3.3	86.0	16.0	930.0	340.0	60.3	3.30	29.88
Zircon_91_MiCH16-09	0.0609	0.0062	0.1400	0.0140	0.0167	0.0006	0.0064	0.0005	0.06	107.0	3.7	132.0	12.0	640.0	210.0	107.0	3.70	18.94
Zircon_92_MiCH16-09	0.0521	0.0028	0.1830	0.0084	0.0259	0.0006	0.0083	0.0004	0.06	164.8	3.7	170.5	7.2	270.0	120.0	164.8	3.70	3.34
Zircon_93_MiCH16-09	0.0549	0.0058	0.1230	0.0110	0.0169	0.0006	0.0065	0.0006	-0.06	107.8	3.8	118.6	9.8	360.0	210.0	107.8	3.80	9.11
Zircon_94_MiCH16-09	0.0554	0.0064	0.1400	0.0130	0.0191	0.0007	0.0069	0.0004	-0.20	122.1	4.5	135.0	12.0	310.0	230.0	122.1	4.50	9.56
Zircon_95_MiCH16-09	0.0487	0.0034	0.1690	0.0110	0.0253	0.0007	0.0081	0.0006	0.10	161.2	4.1	158.3	9.4	140.0	150.0	161.2	4.10	-1.83
Zircon_96_MiCH16-09	0.0488	0.0041	0.1096	0.0087	0.0165	0.0005	0.0055	0.0004	0.08	105.2	3.3	107.4	7.6	100.0	170.0	105.2	3.30	2.05
Zircon_98_MiCH16-09	0.0506	0.0032	0.1225	0.0080	0.0177	0.0005	0.0057	0.0003	0.55	113.0	2.9	117.2	7.2	230.0	130.0	113.0	2.90	3.58
Zircon_99_MiCH16-09	0.0517	0.0057	0.1180	0.0130	0.0172	0.0006	0.0061	0.0005	0.04	110.0	4.0	114.0	11.0	240.0	230.0	110.0	4.00	3.51
Zircon_100_MiCH16-09	0.0620	0.0110	0.1510	0.0240	0.0183	0.0010	0.0059	0.0006	0.04	116.8	6.5	140.0	22.0	410.0	360.0	116.8	6.50	16.57
Zircon_101_MiCH16-09	0.0647	0.0040	1.1000	0.0670	0.1228	0.0031	0.0387	0.0018	0.14	747.0	18.0	749.0	31.0	720.0	130.0	747.0	18.00	0.27
Zircon_102_MiCH16-09	0.0540	0.0075	0.1330	0.0200	0.0175	0.0009	0.0075	0.0012	-0.05	112.1	5.7	128.0	17.0	290.0	270.0	112.1	5.70	12.42
Zircon_103_MiCH16-09	0.0487	0.0060	0.1070	0.0130	0.0163	0.0008	0.0059	0.0005	0.10	104.4	4.9	107.0	13.0	130.0	250.0	104.4	4.90	2.43
Zircon_104_MiCH16-09	0.0568	0.0056	0.1270	0.0140	0.0155	0.0006	0.0048	0.0005	0.20	99.1	3.6	121.0	12.0	410.0	220.0	99.1	3.60	18.10

CORRECTED RATIOS¹CORRECTED AGES (Ma)⁴

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁶ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ	±2σ abs	±2σ	±2σ abs	±2σ	±2σ abs	±2σ		±2σ	±2σ	±2σ	±2σ	(Ma) ³	±2σ				
MiCH16-13 (MI13*)	Suite Zihuatanejo, Complejo Arteaga																		
Zircon_02_MiCH16-13	0.0476	0.0022	0.1189	0.0057	0.0181	0.0003	0.0056	0.0004	0.11	115.5	1.9	113.9	5.2	89.0	94.0	115.5	1.90	-1.40	
Zircon_03_MiCH16-13	0.0519	0.0059	0.1120	0.0110	0.0165	0.0006	0.0056	0.0006	-0.01	105.6	3.9	109.0	11.0	170.0	220.0	105.6	3.90	3.12	
Zircon_04_MiCH16-13	0.0532	0.0039	0.1178	0.0083	0.0165	0.0004	0.0054	0.0004	-0.08	105.7	2.6	112.8	7.6	330.0	150.0	105.7	2.60	6.29	
Zircon_06_MiCH16-13	0.0691	0.0089	0.1730	0.0220	0.0179	0.0009	0.0075	0.0010	0.10	114.1	5.9	160.0	19.0	760.0	290.0	114.1	5.90	28.69	
Zircon_07_MiCH16-13	0.0649	0.0051	0.1650	0.0130	0.0188	0.0006	0.0017	0.0001	-0.02	119.8	3.8	156.0	11.0	800.0	170.0	119.8	3.80	23.21	
Zircon_08_MiCH16-13	0.0476	0.0059	0.1040	0.0120	0.0163	0.0005	0.0054	0.0005	-0.20	103.9	3.3	100.0	11.0	10.0	230.0	103.9	3.30	-3.90	
Zircon_09_MiCH16-13	0.0482	0.0057	0.1180	0.0140	0.0180	0.0008	0.0059	0.0007	0.07	115.1	5.0	113.0	13.0	30.0	220.0	115.1	5.00	-1.86	
Zircon_10_MiCH16-13	0.0469	0.0046	0.1090	0.0110	0.0165	0.0007	0.0055	0.0006	-0.05	105.4	4.1	104.5	9.8	40.0	170.0	105.4	4.10	-0.86	
Zircon_11_MiCH16-13	0.0536	0.0038	0.1249	0.0083	0.0173	0.0004	0.0054	0.0004	0.07	110.3	2.7	119.2	7.6	320.0	150.0	110.3	2.70	7.47	
Zircon_12_MiCH16-13	0.0535	0.0069	0.1250	0.0160	0.0170	0.0005	0.0058	0.0007	0.09	108.5	3.1	119.0	14.0	250.0	260.0	108.5	3.10	8.82	
Zircon_13_MiCH16-13	0.0549	0.0041	0.1310	0.0100	0.0179	0.0005	0.0061	0.0006	0.37	114.6	3.2	125.8	9.7	340.0	160.0	114.6	3.20	8.90	
Zircon_14_MiCH16-13	0.0643	0.0075	0.1520	0.0160	0.0170	0.0008	0.0075	0.0010	0.14	109.1	4.9	143.0	14.0	690.0	260.0	109.1	4.90	23.71	
Zircon_15_MiCH16-13	0.0492	0.0052	0.1260	0.0120	0.0179	0.0006	0.0053	0.0007	-0.01	114.3	3.9	120.0	11.0	200.0	210.0	114.3	3.90	4.75	
Zircon_16_MiCH16-13	0.0491	0.0039	0.1059	0.0075	0.0159	0.0004	0.0050	0.0004	-0.09	101.5	2.8	102.0	6.9	140.0	170.0	101.5	2.80	0.49	
Zircon_17_MiCH16-13	0.0475	0.0028	0.1162	0.0070	0.0171	0.0003	0.0057	0.0004	0.09	109.4	2.1	111.5	6.3	120.0	130.0	109.4	2.10	1.88	
Zircon_18_MiCH16-13	0.0556	0.0052	0.1270	0.0120	0.0169	0.0006	0.0056	0.0005	0.09	107.8	3.6	123.0	11.0	430.0	200.0	107.8	3.60	12.36	
Zircon_21_MiCH16-13	0.0511	0.0025	0.1097	0.0057	0.0156	0.0003	0.0049	0.0003	0.20	99.7	1.8	105.5	5.2	220.0	110.0	99.7	1.80	5.50	
Zircon_22_MiCH16-13	0.0456	0.0031	0.1142	0.0082	0.0178	0.0005	0.0055	0.0005	0.16	113.9	2.9	110.7	7.7	0.0	140.0	113.9	2.90	-2.89	

Zircon_23_MiCH16-13	0.0622	0.0076	0.1470	0.0170	0.0178	0.0008	0.0068	0.0009	-0.11	113.6	4.9	138.0	15.0	580.0	250.0	113.6	4.90	17.68
Zircon_24_MiCH16-13	0.0592	0.0085	0.1490	0.0220	0.0183	0.0008	0.0057	0.0008	0.21	117.2	5.2	139.0	20.0	400.0	310.0	117.2	5.20	15.68
Zircon_25_MiCH16-13	0.0585	0.0041	0.1320	0.0100	0.0164	0.0004	0.0052	0.0005	0.35	104.8	2.7	126.5	9.2	550.0	140.0	104.8	2.70	17.15
Zircon_26_MiCH16-13	0.0538	0.0065	0.1220	0.0140	0.0172	0.0006	0.0054	0.0007	0.07	109.9	3.6	116.0	13.0	220.0	240.0	109.9	3.60	5.26
Zircon_27_MiCH16-13	0.0547	0.0056	0.1240	0.0110	0.0172	0.0005	0.0053	0.0005	-0.06	109.7	3.4	120.0	11.0	330.0	210.0	109.7	3.40	8.58
Zircon_28_MiCH16-13	0.0677	0.0089	0.1500	0.0190	0.0173	0.0007	0.0071	0.0008	-0.02	110.6	4.1	144.0	18.0	770.0	280.0	110.6	4.10	23.19
Zircon_29_MiCH16-13	0.0516	0.0098	0.1260	0.0210	0.0173	0.0011	0.0061	0.0009	0.11	110.3	7.2	119.0	19.0	110.0	310.0	110.3	7.20	7.31
Zircon_30_MiCH16-13	0.0543	0.0043	0.1255	0.0089	0.0167	0.0005	0.0056	0.0005	-0.18	107.0	3.0	119.7	8.0	330.0	170.0	107.0	3.00	10.61
Zircon_31_MiCH16-13	0.0456	0.0052	0.1080	0.0130	0.0169	0.0006	0.0052	0.0008	0.18	108.0	3.9	103.0	12.0	50.0	220.0	108.0	3.90	-4.85
Zircon_32_MiCH16-13	0.0494	0.0047	0.1117	0.0098	0.0169	0.0005	0.0054	0.0005	0.01	107.9	2.9	108.6	8.6	130.0	180.0	107.9	2.90	0.64
Zircon_33_MiCH16-13	0.0514	0.0076	0.1190	0.0170	0.0168	0.0008	0.0055	0.0008	0.05	107.6	5.2	115.0	15.0	160.0	270.0	107.6	5.20	6.43
Zircon_34_MiCH16-13	0.0541	0.0044	0.1220	0.0100	0.0165	0.0006	0.0057	0.0006	0.17	105.5	3.6	116.0	9.4	300.0	170.0	105.5	3.60	9.05
Zircon_35_MiCH16-13	0.0565	0.0060	0.1320	0.0140	0.0171	0.0008	0.0058	0.0007	0.12	109.9	4.9	129.0	11.0	530.0	200.0	109.9	4.90	14.81
Zircon_36_MiCH16-13	0.0496	0.0019	0.1140	0.0046	0.0168	0.0003	0.0053	0.0003	0.09	107.6	1.8	109.6	4.2	165.0	84.0	107.6	1.80	1.82
Zircon_37_MiCH16-13	0.0563	0.0061	0.1360	0.0150	0.0170	0.0007	0.0059	0.0006	-0.10	108.7	4.4	128.0	13.0	500.0	220.0	108.7	4.40	15.08
Zircon_38_MiCH16-13	0.0558	0.0023	0.5610	0.0220	0.0729	0.0015	0.0225	0.0015	-0.01	453.5	8.8	451.0	14.0	416.0	94.0	453.5	8.80	-0.55
Zircon_39_MiCH16-13	0.0511	0.0050	0.1200	0.0110	0.0172	0.0004	0.0056	0.0005	-0.06	109.7	2.4	114.0	10.0	230.0	210.0	109.7	2.40	3.77
Zircon_40_MiCH16-13	0.0517	0.0044	0.1250	0.0110	0.0178	0.0005	0.0053	0.0006	0.05	113.7	3.1	120.7	9.1	250.0	180.0	113.7	3.10	5.80
Zircon_42_MiCH16-13	0.0504	0.0064	0.1130	0.0140	0.0169	0.0007	0.0059	0.0006	0.23	108.0	4.3	108.0	12.0	100.0	230.0	108.0	4.30	
Zircon_43_MiCH16-13	0.0494	0.0058	0.1090	0.0120	0.0165	0.0005	0.0052	0.0006	-0.16	105.7	2.9	105.0	11.0	110.0	230.0	105.7	2.90	-0.67
Zircon_44_MiCH16-13	0.0502	0.0085	0.1130	0.0180	0.0175	0.0011	0.0058	0.0008	-0.01	111.7	7.0	110.0	17.0	70.0	320.0	111.7	7.00	-1.55
Zircon_45_MiCH16-13	0.0495	0.0062	0.1180	0.0150	0.0177	0.0006	0.0061	0.0007	0.01	112.9	3.8	112.0	13.0	60.0	230.0	112.9	3.80	-0.80
Zircon_46_MiCH16-13	0.0531	0.0067	0.1290	0.0160	0.0179	0.0008	0.0049	0.0007	0.04	114.2	5.0	124.0	15.0	280.0	260.0	114.2	5.00	7.90
Zircon_48_MiCH16-13	0.0490	0.0110	0.1200	0.0270	0.0174	0.0012	0.0067	0.0013	0.11	111.4	7.5	112.0	24.0	20.0	410.0	111.4	7.50	0.54
Zircon_50_MiCH16-13	0.0537	0.0070	0.1350	0.0180	0.0176	0.0007	0.0061	0.0007	0.16	112.3	4.7	127.0	16.0	390.0	240.0	112.3	4.70	11.57
Zircon_51_MiCH16-13	0.0556	0.0048	0.1320	0.0120	0.0172	0.0006	0.0057	0.0006	0.23	109.9	3.6	125.0	11.0	350.0	190.0	109.9	3.60	12.08
Zircon_52_MiCH16-13	0.0535	0.0058	0.1340	0.0140	0.0182	0.0009	0.0063	0.0008	0.06	116.3	5.8	127.0	13.0	280.0	220.0	116.3	5.80	8.43
Zircon_53_MiCH16-13	0.0502	0.0073	0.1160	0.0150	0.0179	0.0007	0.0053	0.0007	-0.14	114.0	4.7	113.0	15.0	200.0	290.0	114.0	4.70	-0.88
Zircon_54_MiCH16-13	0.0449	0.0064	0.1100	0.0140	0.0172	0.0006	0.0058	0.0005	-0.18	109.6	3.6	105.0	13.0	10.0	260.0	109.6	3.60	-4.38
Zircon_56_MiCH16-13	0.0549	0.0095	0.1300	0.0220	0.0171	0.0010	0.0053	0.0008	0.22	109.4	6.1	122.0	20.0	230.0	350.0	109.4	6.10	10.33
Zircon_57_MiCH16-13	0.0530	0.0057	0.1210	0.0120	0.0166	0.0007	0.0051	0.0005	-0.20	106.3	4.3	115.0	11.0	270.0	220.0	106.3	4.30	7.57
Zircon_58_MiCH16-13	0.0576	0.0069	0.1320	0.0150	0.0166	0.0007	0.0060	0.0007	0.20	106.2	4.1	125.0	13.0	510.0	240.0	106.2	4.10	15.04
Zircon_59_MiCH16-13	0.0499	0.0068	0.1270	0.0170	0.0184	0.0007	0.0069	0.0008	0.03	117.8	4.3	120.0	15.0	150.0	270.0	117.8	4.30	1.83
Zircon_60_MiCH16-13	0.0564	0.0080	0.1230	0.0170	0.0163	0.0008	0.0058	0.0007	0.14	104.4	4.8	116.0	16.0	360.0	300.0	104.4	4.80	10.00
Zircon_61_MiCH16-13	0.0525	0.0074	0.1170	0.0150	0.0163	0.0008	0.0058	0.0009	-0.17	104.4	4.7	111.0	14.0	200.0	290.0	104.4	4.70	5.95
Zircon_62_MiCH16-13	0.0512	0.0038	0.1255	0.0094	0.0178	0.0005	0.0059	0.0005	0.00	113.6	2.9	119.6	8.5	230.0	150.0	113.6	2.90	5.02
Zircon_63_MiCH16-13	0.0568	0.0078	0.1370	0.0190	0.0178	0.0007	0.0068	0.0007	-0.08	113.5	4.3	129.0	17.0	380.0	290.0	113.5	4.30	12.02
Zircon_64_MiCH16-13	0.0545	0.0029	0.1333	0.0073	0.0175	0.0003	0.0055	0.0004	0.26	111.9	2.0	127.9	6.7	390.0	110.0	111.9	2.00	12.51
Zircon_66_MiCH16-13	0.0518	0.0037	0.1255	0.0090	0.0174	0.0005	0.0053	0.0004	0.06	111.4	3.0	119.7	8.1	310.0	140.0	111.4	3.00	6.93
Zircon_67_MiCH16-13	0.0461	0.0064	0.1100	0.0140	0.0175	0.0008	0.0052	0.0007	-0.15	112.0	4.8	109.0	13.0	10.0	260.0	112.0	4.80	-2.75
Zircon_69_MiCH16-13	0.0648	0.0072	0.1430	0.0150	0.0167	0.0007	0.0059	0.0006	0.19	106.6	4.3	135.0	13.0	600.0	220.0	106.6	4.30	21.04
Zircon_70_MiCH16-13	0.0626	0.0075	0.1480	0.0160	0.0177	0.0008	0.0057	0.0007	-0.02	112.8	5.0	139.0	14.0	630.0	250.0	112.8	5.00	18.85
Zircon_71_MiCH16-13	0.0504	0.0042	0.1178	0.0096	0.0168	0.0005	0.0057	0.0005	0.05	107.4	3.3	114.1	9.0	210.0	180.0	107.4	3.30	5.87
Zircon_72_MiCH16-13	0.0567	0.0073	0.1350	0.0160	0.0177	0.0006	0.0064	0.0007	-0.14	112.9	4.0	127.0	15.0	340.0	270.0	112.9	4.00	11.10
Zircon_73_MiCH16-13	0.0570	0.0100	0.1400	0.0220	0.0182	0.0009	0.0066	0.0008	-0.18	116.0	5.6	131.0	20.0	350.0	340.0	116.0	5.60	11.45
Zircon_74_MiCH16-13	0.0503	0.0053	0.1230	0.0120	0.0176	0.0007	0.0055	0.0006	0.06	112.3	4.6	117.0	11.0	190.0	210.0	112.3	4.60	4.02
Zircon_75_MiCH16-13	0.0540	0.0084	0.1320	0.0190	0.0176	0.0008	0.0054	0.0006	-0.05	112.3	5.3	124.0	17.0	240.0	270.0	112.3	5.30	9.44
Zircon_76_MiCH16-13	0.0471	0.0042	0.1170	0.0110	0.0184	0.0004	0.0056	0.0005	0.01	117.4	2.6	112.0	9.8	30.0	180.0	117.4	2.60	-4.82
Zircon_77_MiCH16-13	0.0534	0.0064	0.1210	0.0130	0.0173	0.0006	0.0056	0.0005	-0.09	110.5	4.1	115.0	12.0	260.0	240.0	110.5	4.10	3.91
Zircon_78_MiCH16-13	0.0567	0.0052	0.1350	0.0120	0.0173	0.0005	0.0058	0.0006	-0.08	110.8	3.2	128.0	11.0	440.0	190.0	110.8	3.20	13.44
Zircon_79_MiCH16-13	0.0470	0.0110	0.1130	0.0230	0.0174	0.0011	0.0060	0.0011	-0.16	111.3	6.7	106.0	21.0	-30.0	380.0	111.3	6.70	-5.00
Zircon_80_MiCH16-13	0.0493	0.0058	0.1140	0.0130	0.0172	0.0006	0.0067	0.0008	0.24	109.7	3.9	111.0	13.0	150.0	230.0	109.7	3.90	1.17

Zircon_81_MiCH16-13	0.0500	0.0067	0.1250	0.0180	0.0175	0.0007	0.0061	0.0009	0.30	111.5	4.2	118.0	16.0	160.0	260.0	111.5	4.20	5.51
Zircon_82_MiCH16-13	0.0570	0.0077	0.1270	0.0150	0.0171	0.0008	0.0059	0.0008	-0.07	109.4	5.1	120.0	14.0	310.0	270.0	109.4	5.10	8.83
Zircon_83_MiCH16-13	0.0462	0.0035	0.1107	0.0081	0.0174	0.0004	0.0053	0.0005	0.00	111.2	2.5	106.3	7.4	20.0	160.0	111.2	2.50	-4.61
Zircon_84_MiCH16-13	0.0484	0.0035	0.1152	0.0078	0.0176	0.0005	0.0056	0.0005	0.09	112.5	2.9	110.4	7.1	110.0	150.0	112.5	2.90	-1.90
Zircon_85_MiCH16-13	0.0490	0.0069	0.1130	0.0130	0.0169	0.0008	0.0056	0.0008	-0.11	107.7	5.0	110.0	13.0	130.0	270.0	107.7	5.00	2.09
Zircon_86_MiCH16-13	0.0561	0.0097	0.1280	0.0220	0.0181	0.0011	0.0062	0.0010	-0.06	115.8	6.9	120.0	19.0	180.0	350.0	115.8	6.90	3.50
Zircon_88_MiCH16-13	0.0488	0.0022	0.1142	0.0048	0.0168	0.0003	0.0051	0.0003	-0.19	107.7	1.9	109.7	4.3	140.0	100.0	107.7	1.90	1.82
Zircon_89_MiCH16-13	0.0493	0.0053	0.1250	0.0130	0.0181	0.0004	0.0058	0.0006	-0.01	115.6	2.6	119.0	12.0	120.0	210.0	115.6	2.60	2.86
Zircon_91_MiCH16-13	0.0509	0.0076	0.1200	0.0170	0.0174	0.0007	0.0061	0.0008	0.15	111.0	4.6	116.0	15.0	250.0	280.0	111.0	4.60	4.31
Zircon_92_MiCH16-13	0.0666	0.0090	0.1520	0.0200	0.0178	0.0011	0.0071	0.0011	0.15	113.9	6.9	145.0	17.0	660.0	280.0	113.9	6.90	21.45
Zircon_94_MiCH16-13	0.0504	0.0069	0.1140	0.0140	0.0167	0.0007	0.0060	0.0006	-0.10	106.8	4.3	109.0	13.0	160.0	270.0	106.8	4.30	2.02
Zircon_95_MiCH16-13	0.0564	0.0078	0.1340	0.0170	0.0175	0.0008	0.0061	0.0006	-0.18	112.0	4.8	126.0	15.0	290.0	280.0	112.0	4.80	11.11
Zircon_96_MiCH16-13	0.0486	0.0017	0.1151	0.0043	0.0171	0.0002	0.0054	0.0003	0.19	109.0	1.5	110.5	3.9	119.0	78.0	109.0	1.50	1.36
Zircon_97_MiCH16-13	0.0548	0.0073	0.1300	0.0150	0.0169	0.0007	0.0062	0.0008	-0.10	107.7	4.4	123.0	13.0	390.0	270.0	107.7	4.40	12.44
Zircon_98_MiCH16-13	0.0529	0.0032	0.1349	0.0099	0.0184	0.0004	0.0058	0.0004	-0.36	117.6	2.5	128.3	6.2	280.0	130.0	117.6	2.50	8.34
Zircon_99_MiCH16-13	0.0497	0.0032	0.1223	0.0080	0.0178	0.0005	0.0057	0.0005	0.20	114.0	3.2	118.1	7.5	190.0	140.0	114.0	3.20	3.47
Zircon_100_MiCH16-13	0.0509	0.0043	0.1226	0.0094	0.0181	0.0006	0.0059	0.0005	-0.12	115.5	3.5	117.1	8.5	230.0	170.0	115.5	3.50	1.37
Zircon_101_MiCH16-13	0.0660	0.0130	0.1370	0.0310	0.0166	0.0011	0.0061	0.0009	-0.06	106.2	7.2	139.0	28.0	630.0	430.0	106.2	7.20	23.60
Zircon_103_MiCH16-13	0.0481	0.0057	0.1130	0.0130	0.0177	0.0006	0.0056	0.0006	0.02	112.9	3.7	108.0	12.0	30.0	230.0	112.9	3.70	-4.54

CORRECTED RATIOS¹CORRECTED AGES (Ma)⁴

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁶ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs		±2σ	±2σ	±2σ	±2σ	(Ma) ³	±2σ				
MiCH16-15 (Mi15*) Suite Zihuatanejo, Suite Cuale-Macias, Complejo Artega																			
Zircon_01_MiCH16-15	0.0484	0.0042	0.1230	0.0100	0.0181	0.0006	0.0061	0.0006	0.07	115.6	3.9	117.9	9.2	110.0	180.0	115.6	3.90	1.95	
Zircon_02_MiCH16-15	0.0497	0.0034	0.1790	0.0120	0.0259	0.0008	0.0081	0.0008	-0.10	165.0	4.9	167.0	10.0	170.0	140.0	165.0	4.90	1.20	
Zircon_03_MiCH16-15	0.0525	0.0072	0.1210	0.0160	0.0174	0.0008	0.0057	0.0007	-0.06	110.8	5.1	115.0	14.0	200.0	270.0	110.8	5.10	3.65	
Zircon_04_MiCH16-15	0.0537	0.0078	0.1330	0.0200	0.0179	0.0012	0.0061	0.0010	0.11	116.0	7.6	128.0	17.0	220.0	280.0	116.0	7.60	9.38	
Zircon_05_MiCH16-15	0.0477	0.0046	0.1110	0.0100	0.0173	0.0006	0.0055	0.0005	0.13	110.8	3.6	106.3	9.3	50.0	190.0	110.8	3.60	-4.23	
Zircon_06_MiCH16-15	0.0484	0.0061	0.1110	0.0130	0.0171	0.0008	0.0052	0.0006	-0.11	109.5	4.8	107.0	12.0	120.0	260.0	109.5	4.80	-2.34	
Zircon_07_MiCH16-15	0.0502	0.0046	0.1770	0.0160	0.0256	0.0009	0.0082	0.0010	0.18	162.6	5.5	165.0	14.0	230.0	190.0	162.6	5.50	1.45	
Zircon_08_MiCH16-15	0.0709	0.0045	1.4660	0.0940	0.1509	0.0048	0.0456	0.0042	0.20	906.0	27.0	917.0	38.0	970.0	130.0	906.0	27.00	1.20	
Zircon_09_MiCH16-15	0.0527	0.0079	0.1320	0.0200	0.0177	0.0009	0.0071	0.0009	-0.02	113.3	5.5	125.0	18.0	260.0	310.0	113.3	5.50	9.36	
Zircon_10_MiCH16-15	0.0500	0.0037	0.1217	0.0093	0.0180	0.0006	0.0055	0.0005	0.32	114.9	3.9	117.4	8.7	170.0	160.0	114.9	3.90	2.13	
Zircon_11_MiCH16-15	0.0537	0.0062	0.1250	0.0160	0.0173	0.0010	0.0055	0.0006	0.25	110.2	6.0	119.0	14.0	270.0	230.0	110.2	6.00	7.39	
Zircon_12_MiCH16-15	0.0506	0.0048	0.1290	0.0120	0.0187	0.0008	0.0052	0.0005	0.04	119.4	4.8	123.0	11.0	170.0	200.0	119.4	4.80	2.93	
Zircon_14_MiCH16-15	0.0485	0.0032	0.1680	0.0110	0.0249	0.0008	0.0073	0.0006	0.29	158.4	4.7	157.1	9.9	130.0	140.0	158.4	4.70	-0.83	
Zircon_15_MiCH16-15	0.0465	0.0050	0.1090	0.0110	0.0170	0.0007	0.0052	0.0006	-0.04	108.8	4.5	104.0	10.0	-10.0	210.0	108.8	4.50	-4.62	
Zircon_16_MiCH16-15	0.0488	0.0070	0.1200	0.0160	0.0187	0.0011	0.0062	0.0010	-0.14	119.1	6.7	114.0	15.0	20.0	270.0	119.1	6.70	-4.47	
Zircon_17_MiCH16-15	0.0484	0.0060	0.1030	0.0120	0.0156	0.0006	0.0055	0.0006	-0.11	99.7	3.9	99.0	11.0	70.0	240.0	99.7	3.90	-0.71	
Zircon_18_MiCH16-15	0.0493	0.0035	0.1710	0.0110	0.0255	0.0008	0.0080	0.0007	0.02	162.5	4.7	160.0	10.0	140.0	150.0	162.5	4.70	-1.56	
Zircon_19_MiCH16-15	0.0734	0.0059	1.6400	0.1200	0.1638	0.0062	0.0515	0.0060	0.07	977.0	34.0	996.0	47.0	1030.0	160.0	977.0	34.00	1.91	
Zircon_20_MiCH16-15	0.0540	0.0120	0.1340	0.0280	0.0186	0.0013	0.0064	0.0012	0.21	118.6	8.1	124.0	25.0	160.0	410.0	118.6	8.10	4.35	
Zircon_21_MiCH16-15	0.0511	0.0089	0.0620	0.0100	0.0090	0.0005	0.0033	0.0004	-0.26	57.8	3.1	60.4	9.5	60.0	330.0	57.8	3.10	4.30	
Zircon_23_MiCH16-15	0.0514	0.0041	0.3410	0.0290	0.0478	0.0019	0.0151	0.0013	0.25	301.0	11.0	297.0	22.0	220.0	170.0	301.0	11.00	-1.35	
Zircon_24_MiCH16-15	0.0513	0.0073	0.1220	0.0180	0.0180	0.0010	0.0058	0.0010	0.25	115.2	6.3	116.0	16.0	160.0	280.0	115.2	6.30	0.69	
Zircon_25_MiCH16-15	0.0518	0.0065	0.1380	0.0160	0.0197	0.0008	0.0063	0.0008	0.14	126.0	5.1	130.0	15.0	170.0	250.0	126.0	5.10	3.08	
Zircon_26_MiCH16-15	0.0529	0.0063	0.1240	0.0130	0.0182	0.0007	0.0059	0.0006	0.18	116.2	4.3	118.0	12.0	220.0	240.0	116.2	4.30	1.53	
Zircon_27_MiCH16-15	0.0517	0.0037	0.1820	0.0130	0.0255	0.0008	0.0079	0.0008	0.17	162.6	5.3	173.0	11.0	270.0	150.0	162.6	5.30	6.01	
Zircon_28_MiCH16-15	0.0610	0.0038	0.8790	0.0540	0.1043	0.0030	0.0313	0.0026	0.08	640.0	18.0	639.0	29.0	640.0	130.0	640.0	18.00	-0.16	
Zircon_29_MiCH16-15	0.0530	0.0051	0.1250	0.0110	0.0171	0.0006	0.0055	0.0005	0.01	109.0	3.5	121.0	10.0	330.0	200.0	109.0	3.50	9.92	
Zircon_30_MiCH16-15	0.0804	0.0041	2.2000	0.1100	0.1994	0.0055	0.0594	0.0048	0.45	1172.0	30.0	1181.0	36.0	1200.0	100.0	1172.0	30.00	0.76	
Zircon_31_MiCH16-15	0.0553	0.0056	0.1430	0.0130	0.0191	0.0008	0.0064	0.0007	-0.06	121.8	4.9	135.0	11.0	380.0	210.0	121.8	4.90	9.78	

Zircon_32_MiCH16-15	0.0493	0.0034	0.1680	0.0110	0.0244	0.0007	0.0075	0.0007	-0.19	155.3	4.5	157.1	9.6	170.0	150.0	155.3	4.50	1.15
Zircon_33_MiCH16-15	0.0536	0.0049	0.2860	0.0240	0.0390	0.0014	0.0127	0.0012	-0.21	246.6	8.4	254.0	19.0	350.0	190.0	246.6	8.40	2.91
Zircon_34_MiCH16-15	0.0454	0.0067	0.1280	0.0170	0.0184	0.0011	0.0069	0.0009	0.20	117.3	6.9	121.0	15.0	120.0	260.0	117.3	6.90	3.06
Zircon_35_MiCH16-15	0.0494	0.0034	0.1760	0.0120	0.0258	0.0008	0.0084	0.0007	0.11	163.9	5.0	165.0	10.0	180.0	150.0	163.9	5.00	0.67
Zircon_36_MiCH16-15	0.0479	0.0063	0.1110	0.0140	0.0165	0.0007	0.0056	0.0008	-0.23	105.6	4.5	108.0	12.0	130.0	240.0	105.6	4.50	2.22
Zircon_38_MiCH16-15	0.0540	0.0100	0.1250	0.0220	0.0175	0.0009	0.0062	0.0009	-0.14	112.0	5.9	117.0	19.0	160.0	350.0	112.0	5.90	4.27
Zircon_39_MiCH16-15	0.0528	0.0048	0.1310	0.0120	0.0181	0.0006	0.0058	0.0006	0.16	115.4	3.8	124.0	11.0	290.0	200.0	115.4	3.80	6.94
Zircon_40_MiCH16-15	0.0860	0.0054	2.1300	0.1300	0.1812	0.0051	0.0680	0.0100	0.32	1073.0	28.0	1156.0	41.0	1340.0	110.0	1073.0	28.00	7.18
Zircon_41_MiCH16-15	0.0484	0.0090	0.1130	0.0200	0.0175	0.0010	0.0065	0.0012	-0.07	112.1	6.2	107.0	18.0	-30.0	340.0	112.1	6.20	-4.77
Zircon_42_MiCH16-15	0.0525	0.0049	0.2760	0.0240	0.0393	0.0014	0.0123	0.0012	0.11	248.2	8.9	246.0	19.0	300.0	200.0	248.2	8.90	-0.89
Zircon_43_MiCH16-15	0.0782	0.0042	2.0700	0.1100	0.1924	0.0054	0.0581	0.0046	0.35	1134.0	29.0	1137.0	37.0	1140.0	110.0	1134.0	29.00	0.26
Zircon_44_MiCH16-15	0.0485	0.0032	0.1710	0.0110	0.0254	0.0008	0.0079	0.0007	0.24	161.8	5.2	161.0	10.0	130.0	150.0	161.8	5.20	-0.50
Zircon_45_MiCH16-15	0.0483	0.0033	0.1660	0.0110	0.0251	0.0008	0.0078	0.0007	0.06	159.7	4.8	155.5	9.5	110.0	150.0	159.7	4.80	-2.70
Zircon_46_MiCH16-15	0.0499	0.0059	0.1190	0.0130	0.0174	0.0007	0.0056	0.0006	0.13	110.9	4.4	115.0	12.0	170.0	230.0	110.9	4.40	3.57
Zircon_48_MiCH16-15	0.0507	0.0045	0.1270	0.0110	0.0183	0.0006	0.0056	0.0005	0.12	116.6	3.8	121.0	10.0	190.0	190.0	116.6	3.80	3.64
Zircon_49_MiCH16-15	0.0507	0.0044	0.1230	0.0100	0.0177	0.0006	0.0055	0.0006	0.01	112.8	4.0	117.6	9.4	210.0	190.0	112.8	4.00	4.08
Zircon_50_MiCH16-15	0.0516	0.0053	0.1330	0.0140	0.0191	0.0007	0.0061	0.0008	0.24	122.2	4.5	126.0	12.0	200.0	210.0	122.2	4.50	3.02
Zircon_51_MiCH16-15	0.0463	0.0063	0.1240	0.0170	0.0191	0.0009	0.0063	0.0009	0.15	121.8	5.7	117.0	16.0	30.0	270.0	121.8	5.70	-4.10
Zircon_52_MiCH16-15	0.0497	0.0037	0.1109	0.0081	0.0163	0.0005	0.0054	0.0005	0.13	104.5	3.4	106.6	7.4	160.0	160.0	104.5	3.40	1.97
Zircon_53_MiCH16-15	0.0485	0.0068	0.1310	0.0190	0.0203	0.0011	0.0064	0.0007	0.26	129.5	6.8	124.0	17.0	50.0	270.0	129.5	6.80	-4.44
Zircon_54_MiCH16-15	0.0530	0.0110	0.1200	0.0240	0.0169	0.0012	0.0064	0.0011	-0.09	108.2	7.8	112.0	22.0	140.0	400.0	108.2	7.80	3.39
Zircon_55_MiCH16-15	0.0534	0.0047	0.3770	0.0340	0.0505	0.0018	0.0167	0.0016	0.17	318.0	11.0	328.0	26.0	410.0	190.0	318.0	11.00	3.05
Zircon_56_MiCH16-15	0.1656	0.0088	10.5200	0.5500	0.4670	0.0130	0.1248	0.0098	0.41	2468.0	59.0	2481.0	48.0	2511.0	89.0	2511.0	89.00	0.52
Zircon_58_MiCH16-15	0.0480	0.0047	0.1140	0.0110	0.0174	0.0007	0.0053	0.0005	0.36	111.1	4.3	111.0	11.0	140.0	210.0	111.1	4.30	-0.09
Zircon_60_MiCH16-15	0.0521	0.0060	0.1290	0.0140	0.0181	0.0008	0.0061	0.0006	-0.05	115.4	5.2	124.0	12.0	200.0	230.0	115.4	5.20	6.94
Zircon_61_MiCH16-15	0.0493	0.0077	0.0583	0.0090	0.0091	0.0005	0.0029	0.0004	-0.03	58.1	3.1	58.4	8.3	230.0	280.0	58.1	3.10	0.51
Zircon_62_MiCH16-15	0.0565	0.0039	0.5450	0.0370	0.0696	0.0020	0.0213	0.0018	-0.03	434.0	12.0	440.0	24.0	450.0	160.0	434.0	12.00	1.36
Zircon_63_MiCH16-15	0.0518	0.0062	0.1340	0.0150	0.0190	0.0007	0.0062	0.0007	0.03	121.0	4.5	129.0	13.0	260.0	240.0	121.0	4.50	6.20
Zircon_64_MiCH16-15	0.0900	0.0066	2.8400	0.2000	0.2345	0.0076	0.0714	0.0081	0.08	1358.0	40.0	1370.0	49.0	1430.0	130.0	1358.0	40.00	0.88
Zircon_65_MiCH16-15	0.0745	0.0068	2.0200	0.1800	0.1952	0.0075	0.0584	0.0065	0.18	1155.0	40.0	1124.0	62.0	1010.0	200.0	1155.0	40.00	-2.76
Zircon_66_MiCH16-15	0.0534	0.0080	0.1240	0.0160	0.0174	0.0010	0.0072	0.0010	0.16	110.9	6.2	118.0	15.0	240.0	280.0	110.9	6.20	6.02
Zircon_67_MiCH16-15	0.0493	0.0038	0.1253	0.0090	0.0183	0.0006	0.0057	0.0005	-0.12	116.6	3.9	119.6	8.1	150.0	170.0	116.6	3.90	2.51
Zircon_68_MiCH16-15	0.0578	0.0039	0.6470	0.0400	0.0817	0.0026	0.0236	0.0019	-0.03	506.0	16.0	505.0	25.0	520.0	150.0	506.0	16.00	-0.20
Zircon_69_MiCH16-15	0.0522	0.0056	0.1260	0.0150	0.0181	0.0008	0.0061	0.0006	0.24	115.8	5.2	120.0	13.0	240.0	210.0	115.8	5.20	3.50
Zircon_70_MiCH16-15	0.0584	0.0043	0.5900	0.1400	0.0740	0.0110	0.0454	0.0050	0.46	462.0	61.0	477.0	64.0	570.0	130.0	462.0	61.00	3.14
Zircon_71_MiCH16-15	0.0570	0.0095	0.1520	0.0250	0.0188	0.0012	0.0061	0.0009	-0.14	119.9	7.6	144.0	23.0	590.0	340.0	119.9	7.60	16.74
Zircon_72_MiCH16-15	0.0476	0.0040	0.1800	0.0140	0.0279	0.0011	0.0086	0.0009	-0.03	177.4	6.7	169.0	12.0	80.0	170.0	177.4	6.70	-4.97
Zircon_73_MiCH16-15	0.0573	0.0034	0.5880	0.0350	0.0754	0.0022	0.0227	0.0019	0.33	468.0	13.0	469.0	22.0	500.0	130.0	468.0	13.00	0.21
Zircon_74_MiCH16-15	0.0463	0.0062	0.0990	0.0130	0.0148	0.0006	0.0047	0.0005	0.17	94.9	3.8	95.0	12.0	50.0	250.0	94.9	3.80	0.11
Zircon_75_MiCH16-15	0.0460	0.0062	0.1180	0.0140	0.0184	0.0008	0.0058	0.0006	-0.18	117.4	5.2	113.0	12.0	30.0	240.0	117.4	5.20	-3.89
Zircon_76_MiCH16-15	0.0490	0.0059	0.1240	0.0150	0.0183	0.0007	0.0057	0.0006	-0.02	116.7	4.5	118.0	13.0	210.0	250.0	116.7	4.50	1.10
Zircon_77_MiCH16-15	0.0530	0.0067	0.1250	0.0150	0.0174	0.0007	0.0060	0.0007	-0.21	111.0	4.7	121.0	14.0	200.0	250.0	111.0	4.70	8.26
Zircon_78_MiCH16-15	0.0500	0.0095	0.0590	0.0110	0.0092	0.0006	0.0030	0.0004	0.17	58.9	3.7	57.0	11.0	-10.0	350.0	58.9	3.70	-3.33
Zircon_79_MiCH16-15	0.0488	0.0060	0.1260	0.0150	0.0189	0.0009	0.0059	0.0008	0.04	120.7	5.4	121.0	14.0	110.0	240.0	120.7	5.40	0.25
Zircon_81_MiCH16-15	0.0514	0.0057	0.1230	0.0130	0.0178	0.0007	0.0055	0.0006	0.21	114.0	4.3	117.0	12.0	200.0	230.0	114.0	4.30	2.56
Zircon_82_MiCH16-15	0.0503	0.0044	0.1230	0.0100	0.0177	0.0006	0.0062	0.0006	-0.19	113.2	3.8	117.3	9.3	200.0	190.0	113.2	3.80	3.50
Zircon_83_MiCH16-15	0.0535	0.0081	0.1330	0.0180	0.0180	0.0011	0.0063	0.0008	0.27	114.9	6.9	130.0	16.0	330.0	280.0	114.9	6.90	11.62
Zircon_85_MiCH16-15	0.0508	0.0070	0.1230	0.0160	0.0186	0.0010	0.0060	0.0011	-0.22	118.8	6.2	116.0	15.0	140.0	310.0	118.8	6.20	-2.41
Zircon_86_MiCH16-15	0.0494	0.0045	0.1220	0.0110	0.0180	0.0006	0.0058	0.0007	0.05	115.1	3.9	116.5	9.5	140.0	190.0	115.1	3.90	1.20
Zircon_87_MiCH16-15	0.0517	0.0078	0.1300	0.0210	0.0178	0.0009	0.0055	0.0006	0.07	113.5	5.7	123.0	19.0	310.0	310.0	113.5	5.70	7.72
Zircon_88_MiCH16-15	0.0522	0.0051	0.1340	0.0130	0.0189	0.0008	0.0066	0.0007	0.28	120.5	4.7	127.0	11.0	250.0	200.0	120.5	4.70	5.12
Zircon_89_MiCH16-15	0.0560	0.0036	0.5870	0.0370	0.0766	0.0026	0.0258	0.0023	0.18	477.0	15.0	468.0	24.0	420.0	150.0	477.0	15.00	-1.92
Zircon_90_MiCH16-15	0.0511	0.0031	0.2770	0.0170	0.0396	0.0012	0.0121	0.0010	0.32	250.1	7.3	248.0	13.0	240.0	130.0	250.1	7.30	-0.85
Zircon_91_MiCH16-15	0.0457	0.0057	0.1200	0.0160	0.0184	0.0010	0.0059	0.0008	0.17	117.3	6.1	114.0	14.0	-60.0	230.0	117.3	6.10	-2.89

Zircon_92_MiCH16-15	0.0743	0.0044	1.7600	0.1200	0.1712	0.0066	0.0564	0.0054	0.21	1019.0	36.0	1034.0	42.0	1070.0	110.0	1019.0	36.00	1.45
Zircon_93_MiCH16-15	0.0465	0.0034	0.1143	0.0080	0.0180	0.0006	0.0057	0.0005	0.05	114.8	3.8	109.8	7.3	20.0	150.0	114.8	3.80	-4.55
Zircon_94_MiCH16-15	0.0495	0.0039	0.1710	0.0120	0.0255	0.0009	0.0086	0.0009	0.02	162.4	5.4	162.0	10.0	160.0	160.0	162.4	5.40	-0.25
Zircon_95_MiCH16-15	0.0520	0.0350	0.1200	0.1800	0.0186	0.0021	0.0061	0.0044	0.31	119.0	13.0	119.0	92.0	270.0	400.0	119.0	13.00	
Zircon_96_MiCH16-15	0.0560	0.0130	0.1300	0.0280	0.0180	0.0014	0.0051	0.0009	0.12	114.9	8.9	121.0	25.0	140.0	430.0	114.9	8.90	5.04
Zircon_97_MiCH16-15	0.0564	0.0057	0.3040	0.0300	0.0406	0.0017	0.0145	0.0015	-0.11	256.0	11.0	268.0	23.0	420.0	220.0	256.0	11.00	4.48
Zircon_98_MiCH16-15	0.0511	0.0075	0.1230	0.0160	0.0184	0.0008	0.0064	0.0006	-0.35	117.6	4.8	119.0	14.0	140.0	270.0	117.6	4.80	1.18
Zircon_99_MiCH16-15	0.0548	0.0065	0.1180	0.0140	0.0158	0.0007	0.0053	0.0005	0.27	101.0	4.1	113.0	12.0	300.0	240.0	101.0	4.10	10.62
Zircon_100_MiCH16-15	0.0494	0.0093	0.1310	0.0240	0.0193	0.0012	0.0060	0.0010	-0.09	123.1	7.7	122.0	21.0	140.0	370.0	123.1	7.70	-0.90

CORRECTED RATIOS¹CORRECTED AGES (Ma)⁴

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁸ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs		±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	(Ma) ³	±2σ			
MiCH16-18 (M118*)	Batolito Arteaga, Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																		
Zircon_01_MiCH16-18	0.0730	0.0032	1.6270	0.0700	0.1626	0.0036	0.0481	0.0029	-0.07	971.0	20.0	982.0	26.0	1004.0	88.0	971.0	20.00	1.12	
Zircon_02_MiCH16-18	0.0747	0.0038	1.7290	0.0890	0.1666	0.0041	0.0500	0.0035	0.17	993.0	23.0	1018.0	33.0	1050.0	100.0	993.0	23.00	2.46	
Zircon_04_MiCH16-18	0.0795	0.0034	2.2240	0.0930	0.2012	0.0045	0.0587	0.0032	-0.06	1182.0	24.0	1190.0	30.0	1177.0	85.0	1182.0	24.00	0.67	
Zircon_05_MiCH16-18	0.0498	0.0041	0.1223	0.0095	0.0181	0.0006	0.0058	0.0004	-0.01	115.7	3.5	118.4	8.3	180.0	170.0	115.7	3.50	2.28	
Zircon_06_MiCH16-18	0.0488	0.0064	0.1190	0.0140	0.0181	0.0010	0.0051	0.0006	-0.25	115.4	6.2	113.0	13.0	110.0	260.0	115.4	6.20	-2.12	
Zircon_07_MiCH16-18	0.0550	0.0110	0.1250	0.0340	0.0162	0.0011	0.0056	0.0011	-0.06	103.8	7.0	118.0	28.0	230.0	330.0	103.8	7.00	12.03	
Zircon_08_MiCH16-18	0.0521	0.0082	0.1230	0.0180	0.0177	0.0009	0.0061	0.0007	-0.15	113.3	5.8	122.0	15.0	220.0	290.0	113.3	5.80	7.13	
Zircon_09_MiCH16-18	0.0597	0.0039	0.2000	0.1100	0.0240	0.0100	0.0086	0.0025	0.21	151.0	63.0	188.0	71.0	600.0	130.0	151.0	63.00	19.68	
Zircon_10_MiCH16-18	0.0507	0.0049	0.3010	0.0260	0.0418	0.0013	0.0131	0.0012	-0.05	264.0	8.3	270.0	20.0	210.0	200.0	264.0	8.30	2.22	
Zircon_11_MiCH16-18	0.0494	0.0061	0.1240	0.0150	0.0182	0.0008	0.0055	0.0005	0.08	116.1	4.9	120.0	14.0	190.0	260.0	116.1	4.90	3.25	
Zircon_12_MiCH16-18	0.0542	0.0059	0.1200	0.0130	0.0160	0.0006	0.0055	0.0004	-0.19	102.2	3.9	115.0	12.0	350.0	230.0	102.2	3.90	11.13	
Zircon_13_MiCH16-18	0.0553	0.0059	0.3640	0.0370	0.0473	0.0018	0.0158	0.0017	0.05	298.0	11.0	312.0	28.0	410.0	220.0	298.0	11.00	4.49	
Zircon_14_MiCH16-18	0.0560	0.0035	0.6860	0.0430	0.0875	0.0023	0.0257	0.0015	0.19	541.0	14.0	528.0	26.0	430.0	140.0	541.0	14.00	-2.46	
Zircon_15_MiCH16-18	0.0574	0.0095	0.1420	0.0220	0.0171	0.0012	0.0057	0.0011	0.08	109.5	7.7	133.0	19.0	640.0	310.0	109.5	7.70	17.67	
Zircon_16_MiCH16-18	0.0794	0.0037	2.0570	0.0970	0.1905	0.0052	0.0543	0.0030	0.35	1124.0	28.0	1132.0	34.0	1168.0	91.0	1124.0	28.00	0.71	
Zircon_17_MiCH16-18	0.0494	0.0049	0.1130	0.0110	0.0165	0.0006	0.0053	0.0004	0.06	105.1	3.6	108.0	10.0	220.0	200.0	105.1	3.60	2.69	
Zircon_18_MiCH16-18	0.0717	0.0060	1.6600	0.1200	0.1721	0.0064	0.0526	0.0043	0.00	1023.0	35.0	994.0	43.0	940.0	170.0	1023.0	35.00	-2.92	
Zircon_19_MiCH16-18	0.0541	0.0030	0.2810	0.0150	0.0383	0.0010	0.0117	0.0007	0.19	242.4	6.3	251.0	12.0	360.0	120.0	242.4	6.30	3.43	
Zircon_20_MiCH16-18	0.0580	0.0110	0.1510	0.0260	0.0181	0.0010	0.0065	0.0009	0.07	115.3	6.2	140.0	23.0	380.0	370.0	115.3	6.20	17.64	
Zircon_21_MiCH16-18	0.0473	0.0090	0.0491	0.0090	0.0077	0.0004	0.0023	0.0003	0.05	49.5	2.7	49.6	8.9	10.0	350.0	49.5	2.70	0.20	
Zircon_22_MiCH16-18	0.0757	0.0038	1.8380	0.0870	0.1764	0.0048	0.0556	0.0037	0.22	1047.0	26.0	1058.0	31.0	1110.0	98.0	1047.0	26.00	1.04	
Zircon_23_MiCH16-18	0.0644	0.0080	0.4150	0.0490	0.0487	0.0022	0.0172	0.0021	0.20	307.0	13.0	352.0	34.0	640.0	250.0	307.0	13.00	12.78	
Zircon_24_MiCH16-18	0.0589	0.0024	0.7770	0.0320	0.0954	0.0022	0.0355	0.0042	0.31	587.0	13.0	583.0	18.0	555.0	90.0	587.0	13.00	-0.69	
Zircon_25_MiCH16-18	0.0473	0.0051	0.1300	0.0140	0.0191	0.0008	0.0064	0.0008	-0.05	121.7	4.8	124.0	12.0	140.0	210.0	121.7	4.80	1.85	
Zircon_26_MiCH16-18	0.0660	0.0032	0.2390	0.0240	0.0245	0.0024	0.0087	0.0015	-0.36	156.0	15.0	218.0	18.0	830.0	120.0	156.0	15.00	28.44	
Zircon_27_MiCH16-18	0.0815	0.0032	2.2590	0.0910	0.2008	0.0044	0.0604	0.0037	0.55	1179.0	23.0	1199.0	29.0	1229.0	77.0	1179.0	23.00	1.67	
Zircon_28_MiCH16-18	0.0746	0.0036	1.7230	0.0820	0.1687	0.0038	0.0516	0.0032	-0.02	1005.0	21.0	1015.0	30.0	1045.0	98.0	1005.0	21.00	0.99	
Zircon_29_MiCH16-18	0.0529	0.0045	0.2810	0.0260	0.0389	0.0010	0.0111	0.0009	0.28	246.0	6.4	250.0	20.0	340.0	180.0	246.0	6.40	1.60	
Zircon_30_MiCH16-18	0.0616	0.0027	0.7600	0.0430	0.0898	0.0045	0.0278	0.0016	0.64	554.0	27.0	573.0	27.0	651.0	98.0	554.0	27.00	3.32	
Zircon_31_MiCH16-18	0.0834	0.0037	2.2770	0.0950	0.1991	0.0048	0.0588	0.0037	-0.14	1170.0	26.0	1208.0	30.0	1266.0	91.0	1170.0	26.00	3.15	
Zircon_32_MiCH16-18	0.0557	0.0040	0.3640	0.0260	0.0488	0.0015	0.0157	0.0016	-0.43	307.2	9.0	313.0	20.0	390.0	150.0	307.2	9.00	1.85	
Zircon_33_MiCH16-18	0.0525	0.0041	0.3140	0.0270	0.0428	0.0012	0.0133	0.0009	0.27	269.9	7.4	279.0	20.0	320.0	160.0	269.9	7.40	3.26	
Zircon_34_MiCH16-18	0.0513	0.0061	0.1260	0.0140	0.0173	0.0008	0.0063	0.0007	-0.08	110.3	4.8	122.0	13.0	270.0	250.0	110.3	4.80	9.59	
Zircon_35_MiCH16-18	0.0517	0.0059	0.1270	0.0140	0.0179	0.0008	0.0055	0.0006	-0.05	114.0	4.9	121.0	13.0	280.0	240.0	114.0	4.90	5.79	
Zircon_36_MiCH16-18	0.0808	0.0035	2.2720	0.0990	0.2038	0.0048	0.0586	0.0032	0.24	1196.0	25.0	1202.0	31.0	1216.0	89.0	1196.0	25.00	0.50	
Zircon_37_MiCH16-18	0.0561	0.0074	0.1330	0.0170	0.0171	0.0009	0.0056	0.0008	0.18	109.0	5.9	126.0	16.0	410.0	260.0	109.0	5.90	13.49	
Zircon_38_MiCH16-18	0.0483	0.0089	0.1210	0.0220	0.0186	0.0007	0.0066	0.0011	0.05	118.7	4.6	114.0	20.0	50.0	350.0	118.7	4.60	-4.12	
Zircon_39_MiCH16-18	0.0583	0.0063	0.1510	0.0150	0.0184	0.0009	0.0066	0.0006	-0.11	117.8	5.4	142.0	13.0	450.0	230.0	117.8	5.40	17.04	
Zircon_40_MiCH16-18	0.0521	0.0037	0.1920	0.0130	0.0271	0.0007	0.0090	0.0007	-0.01	172.5	4.3	178.0	11.0	250.0	150.0	172.5	4.30	3.09	

Zircon_41_MiCH16-18	0.0560	0.0073	0.1270	0.0160	0.0164	0.0008	0.0058	0.0007	0.07	104.6	5.0	120.0	14.0	340.0	270.0	104.6	5.00	12.83
Zircon_42_MiCH16-18	0.0524	0.0070	0.1300	0.0170	0.0183	0.0007	0.0060	0.0008	0.18	117.0	4.6	123.0	15.0	210.0	270.0	117.0	4.60	4.88
Zircon_43_MiCH16-18	0.0515	0.0061	0.1220	0.0150	0.0169	0.0007	0.0062	0.0007	-0.19	108.2	4.4	116.0	13.0	300.0	240.0	108.2	4.40	6.72
Zircon_44_MiCH16-18	0.0539	0.0083	0.1220	0.0200	0.0170	0.0009	0.0061	0.0008	0.20	108.5	5.4	118.0	18.0	190.0	300.0	108.5	5.40	8.05
Zircon_45_MiCH16-18	0.0482	0.0077	0.1210	0.0180	0.0174	0.0008	0.0056	0.0006	0.10	111.4	5.2	115.0	17.0	170.0	280.0	111.4	5.20	3.13
Zircon_46_MiCH16-18	0.0566	0.0027	0.5590	0.0260	0.0718	0.0017	0.0233	0.0016	0.02	447.0	10.0	450.0	17.0	460.0	100.0	447.0	10.00	0.67
Zircon_47_MiCH16-18	0.0789	0.0031	2.1970	0.0850	0.2009	0.0044	0.0595	0.0035	0.21	1180.0	23.0	1180.0	27.0	1165.0	76.0	1180.0	23.00	
Zircon_48_MiCH16-18	0.0475	0.0068	0.1140	0.0160	0.0173	0.0008	0.0058	0.0007	0.15	110.5	4.9	108.0	15.0	70.0	280.0	110.5	4.90	-2.31
Zircon_49_MiCH16-18	0.0496	0.0032	0.1680	0.0110	0.0247	0.0006	0.0076	0.0008	0.26	157.5	4.0	158.9	9.7	170.0	130.0	157.5	4.00	0.88
Zircon_50_MiCH16-18	0.0528	0.0089	0.0567	0.0091	0.0079	0.0004	0.0031	0.0004	-0.02	50.7	2.3	55.6	8.7	200.0	320.0	50.7	2.30	8.81
Zircon_51_MiCH16-18	0.0723	0.0030	1.5520	0.0640	0.1574	0.0035	0.0459	0.0025	0.20	942.0	20.0	954.0	26.0	989.0	83.0	942.0	20.00	1.26
Zircon_52_MiCH16-18	0.0756	0.0033	1.7540	0.0780	0.1656	0.0041	0.0490	0.0027	0.44	987.0	22.0	1027.0	29.0	1075.0	88.0	987.0	22.00	3.89
Zircon_54_MiCH16-18	0.0482	0.0077	0.1210	0.0200	0.0182	0.0011	0.0055	0.0009	0.19	116.0	6.9	114.0	18.0	80.0	270.0	116.0	6.90	-1.75
Zircon_55_MiCH16-18	0.0503	0.0073	0.1260	0.0140	0.0170	0.0006	0.0057	0.0007	-0.17	108.6	3.7	120.0	13.0	240.0	240.0	108.6	3.70	9.50
Zircon_57_MiCH16-18	0.0520	0.0036	0.1780	0.0130	0.0255	0.0008	0.0083	0.0007	0.13	162.1	4.7	166.0	11.0	240.0	150.0	162.1	4.70	2.35
Zircon_58_MiCH16-18	0.0558	0.0071	0.1270	0.0160	0.0170	0.0007	0.0055	0.0006	0.32	108.5	4.5	121.0	14.0	340.0	260.0	108.5	4.50	10.33
Zircon_59_MiCH16-18	0.0493	0.0062	0.1160	0.0150	0.0173	0.0006	0.0059	0.0006	0.23	110.2	4.0	110.0	13.0	110.0	250.0	110.2	4.00	-0.18
Zircon_60_MiCH16-18	0.0560	0.0061	0.3370	0.0340	0.0444	0.0013	0.0141	0.0014	-0.04	280.0	8.3	303.0	25.0	370.0	220.0	280.0	8.30	7.59
Zircon_61_MiCH16-18	0.0484	0.0074	0.1130	0.0170	0.0172	0.0009	0.0057	0.0006	0.17	109.7	5.5	107.0	15.0	10.0	290.0	109.7	5.50	-2.52
Zircon_62_MiCH16-18	0.0511	0.0038	0.1840	0.0150	0.0262	0.0009	0.0095	0.0016	0.46	166.4	5.3	171.0	12.0	210.0	150.0	166.4	5.30	2.69
Zircon_63_MiCH16-18	0.0809	0.0040	1.9400	0.1400	0.1740	0.0100	0.0521	0.0040	0.69	1033.0	59.0	1100.0	52.0	1230.0	110.0	1033.0	59.00	6.09
Zircon_64_MiCH16-18	0.0598	0.0069	0.1380	0.0160	0.0172	0.0007	0.0056	0.0005	0.16	109.8	4.6	130.0	14.0	440.0	230.0	109.8	4.60	15.54
Zircon_65_MiCH16-18	0.0478	0.0034	0.1142	0.0086	0.0173	0.0005	0.0050	0.0003	0.17	110.5	2.9	109.5	7.8	90.0	150.0	110.5	2.90	-0.91
Zircon_66_MiCH16-18	0.0479	0.0049	0.0980	0.0100	0.0149	0.0005	0.0047	0.0004	0.24	95.6	3.0	95.0	9.3	80.0	180.0	95.6	3.00	-0.63
Zircon_67_MiCH16-18	0.0480	0.0050	0.1110	0.0110	0.0171	0.0006	0.0054	0.0004	0.03	109.4	3.7	106.6	9.9	140.0	210.0	109.4	3.70	-2.63
Zircon_68_MiCH16-18	0.0710	0.0120	0.0780	0.0110	0.0088	0.0004	0.0029	0.0004	-0.23	56.2	2.8	75.0	11.0	600.0	350.0	56.2	2.80	25.07
Zircon_69_MiCH16-18	0.0595	0.0032	0.6110	0.0340	0.0763	0.0018	0.0264	0.0020	0.18	474.0	11.0	483.0	21.0	570.0	120.0	474.0	11.00	1.86
Zircon_70_MiCH16-18	0.0515	0.0050	0.1140	0.0110	0.0161	0.0005	0.0053	0.0005	-0.37	103.1	3.3	109.6	9.9	230.0	200.0	103.1	3.30	5.93
Zircon_72_MiCH16-18	0.0731	0.0041	1.6980	0.0890	0.1684	0.0043	0.0493	0.0040	-0.09	1003.0	23.0	1005.0	34.0	1010.0	120.0	1003.0	23.00	0.20
Zircon_73_MiCH16-18	0.0672	0.0086	0.0688	0.0093	0.0074	0.0003	0.0035	0.0003	0.27	47.6	1.6	67.1	8.8	830.0	260.0	47.6	1.60	29.06
Zircon_74_MiCH16-18	0.0466	0.0053	0.1130	0.0140	0.0175	0.0007	0.0058	0.0006	0.16	112.0	4.5	108.0	12.0	70.0	220.0	112.0	4.50	-3.70
Zircon_75_MiCH16-18	0.0749	0.0031	1.8720	0.0770	0.1812	0.0040	0.0533	0.0029	0.10	1073.0	22.0	1070.0	27.0	1066.0	85.0	1073.0	22.00	-0.28
Zircon_76_MiCH16-18	0.0508	0.0077	0.0501	0.0066	0.0076	0.0003	0.0025	0.0002	-0.25	48.6	2.1	49.4	6.3	80.0	280.0	48.6	2.10	1.62
Zircon_77_MiCH16-18	0.0506	0.0052	0.1120	0.0120	0.0155	0.0006	0.0048	0.0005	0.08	99.4	3.7	107.0	11.0	240.0	220.0	99.4	3.70	7.10
Zircon_78_MiCH16-18	0.0487	0.0040	0.1180	0.0110	0.0173	0.0007	0.0060	0.0004	0.23	110.4	4.4	112.4	9.6	110.0	170.0	110.4	4.40	1.78
Zircon_79_MiCH16-18	0.0520	0.0140	0.1420	0.0380	0.0178	0.0009	0.0058	0.0022	-0.29	113.5	5.6	133.0	30.0	200.0	330.0	113.5	5.60	14.66
Zircon_80_MiCH16-18	0.0900	0.0037	2.9700	0.1300	0.2398	0.0054	0.0741	0.0050	0.39	1386.0	28.0	1399.0	32.0	1436.0	75.0	1386.0	28.00	0.93
Zircon_81_MiCH16-18	0.0600	0.0140	0.1350	0.0300	0.0169	0.0013	0.0065	0.0013	0.00	107.8	8.4	126.0	26.0	660.0	450.0	107.8	8.40	14.44
Zircon_82_MiCH16-18	0.0546	0.0093	0.1260	0.0160	0.0173	0.0011	0.0063	0.0009	-0.05	110.7	7.0	120.0	15.0	300.0	290.0	110.7	7.00	7.75
Zircon_83_MiCH16-18	0.0592	0.0048	0.6150	0.0460	0.0745	0.0024	0.0234	0.0016	0.06	463.0	15.0	483.0	29.0	620.0	170.0	463.0	15.00	4.14
Zircon_84_MiCH16-18	0.0540	0.0110	0.1320	0.0250	0.0190	0.0011	0.0073	0.0013	0.12	121.2	7.0	123.0	23.0	200.0	380.0	121.2	7.00	1.46
Zircon_85_MiCH16-18	0.0519	0.0082	0.1360	0.0190	0.0177	0.0008	0.0057	0.0008	0.02	112.8	5.1	128.0	17.0	290.0	290.0	112.8	5.10	11.88
Zircon_86_MiCH16-18	0.0776	0.0031	2.1520	0.0860	0.1991	0.0043	0.0576	0.0030	0.15	1170.0	23.0	1165.0	28.0	1132.0	81.0	1170.0	23.00	-0.43
Zircon_87_MiCH16-18	0.0538	0.0028	0.4560	0.0260	0.0609	0.0017	0.0215	0.0015	0.48	381.0	10.0	382.0	18.0	350.0	110.0	381.0	10.00	0.26
Zircon_88_MiCH16-18	0.0536	0.0055	0.1360	0.0130	0.0179	0.0007	0.0062	0.0007	0.00	114.6	4.1	129.0	12.0	320.0	200.0	114.6	4.10	11.16
Zircon_89_MiCH16-18	0.0487	0.0083	0.1110	0.0190	0.0173	0.0009	0.0065	0.0009	0.14	110.3	5.9	109.0	18.0	90.0	330.0	110.3	5.90	-1.19
Zircon_90_MiCH16-18	0.0719	0.0031	1.6530	0.0800	0.1601	0.0046	0.0458	0.0030	0.19	957.0	25.0	989.0	32.0	990.0	100.0	957.0	25.00	3.24
Zircon_91_MiCH16-18	0.0534	0.0046	0.2320	0.0490	0.0260	0.0043	0.0085	0.0022	-0.35	165.0	26.0	211.0	36.0	320.0	160.0	165.0	26.00	21.80
Zircon_93_MiCH16-18	0.0530	0.0037	0.3280	0.0230	0.0449	0.0012	0.0145	0.0010	0.00	282.9	7.5	289.0	18.0	330.0	160.0	282.9	7.50	2.11
Zircon_94_MiCH16-18	0.0529	0.0045	0.1810	0.0140	0.0254	0.0008	0.0079	0.0006	0.00	161.5	4.7	168.0	12.0	280.0	170.0	161.5	4.70	3.87
Zircon_95_MiCH16-18	0.0714	0.0030	1.5000	0.0610	0.1539	0.0034	0.0446	0.0025	0.11	923.0	19.0	930.0	25.0	963.0	84.0	923.0	19.00	0.75
Zircon_96_MiCH16-18	0.0530	0.0130	0.0780	0.0150	0.0097	0.0006	0.0031	0.0005	-0.08	62.5	4.1	75.0	15.0	210.0	420.0	62.5	4.10	16.67

Zircon_97_MiCH16-18	0.0500	0.0047	0.1190	0.0120	0.0169	0.0006	0.0054	0.0004	-0.14	107.8	3.5	113.0	11.0	200.0	200.0	107.8	3.50	4.60
Zircon_98_MiCH16-18	0.0590	0.0100	0.1400	0.0210	0.0182	0.0009	0.0061	0.0006	-0.05	116.3	5.9	134.0	20.0	460.0	330.0	116.3	5.90	13.21
Zircon_99_MiCH16-18	0.0458	0.0042	0.1105	0.0099	0.0174	0.0006	0.0056	0.0004	-0.11	110.9	3.6	106.0	9.0	40.0	180.0	110.9	3.60	-4.62
Zircon_100_MiCH16-18	0.0508	0.0073	0.1210	0.0160	0.0174	0.0008	0.0062	0.0007	-0.14	110.9	5.1	115.0	15.0	150.0	290.0	110.9	5.10	3.57
Zircon_101_MiCH16-18	0.0491	0.0045	0.1240	0.0110	0.0185	0.0006	0.0064	0.0007	-0.06	118.0	3.9	118.3	9.9	140.0	190.0	118.0	3.90	0.25
Zircon_102_MiCH16-18	0.0670	0.0130	0.1530	0.0350	0.0174	0.0007	0.0062	0.0010	0.23	111.2	4.4	143.0	29.0	640.0	330.0	111.2	4.40	22.24
Zircon_103_MiCH16-18	0.0544	0.0049	0.1940	0.0180	0.0257	0.0008	0.0122	0.0009	0.24	163.4	5.1	179.0	15.0	320.0	170.0	163.4	5.10	8.72
Zircon_104_MiCH16-18	0.0489	0.0056	0.1220	0.0130	0.0183	0.0008	0.0061	0.0007	0.18	116.7	4.8	116.0	12.0	110.0	230.0	116.7	4.80	-0.60

CORRECTED RATIOS¹CORRECTED AGES (Ma)⁴

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁶ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ	±2σ		±2σ	±2σ	(Ma) ³	±2σ						
MiCH16-20 (Mi20*)	Batolito Arteaga, Suite Zihuatanejo, Complejo Arteaga																		
Zircon_01_MiCH16-20	0.0545	0.0088	0.0540	0.0077	0.0078	0.0004	0.0024	0.0002	0.06	50.3	2.7	53.1	7.4	240.0	310.0	50.3	2.70	5.27	
Zircon_02_MiCH16-20	0.0513	0.0090	0.0545	0.0094	0.0076	0.0004	0.0026	0.0003	0.04	48.7	2.4	53.5	9.0	150.0	330.0	48.7	2.40	8.97	
Zircon_03_MiCH16-20	0.0541	0.0089	0.1360	0.0230	0.0174	0.0010	0.0066	0.0009	0.04	111.2	6.4	127.0	20.0	270.0	310.0	111.2	6.40	12.44	
Zircon_05_MiCH16-20	0.0546	0.0088	0.0596	0.0094	0.0080	0.0004	0.0028	0.0004	0.05	51.1	2.8	58.2	9.3	270.0	300.0	51.1	2.80	12.20	
Zircon_06_MiCH16-20	0.0503	0.0060	0.0522	0.0057	0.0077	0.0004	0.0026	0.0003	0.07	49.2	2.5	51.5	5.5	150.0	240.0	49.2	2.50	4.47	
Zircon_08_MiCH16-20	0.0475	0.0086	0.0513	0.0094	0.0077	0.0005	0.0027	0.0004	0.05	49.7	3.1	50.3	9.1	90.0	360.0	49.7	3.10	1.19	
Zircon_10_MiCH16-20	0.0611	0.0074	0.0599	0.0070	0.0074	0.0004	0.0024	0.0003	0.06	47.3	2.7	58.9	6.7	760.0	240.0	47.3	2.70	19.69	
Zircon_11_MiCH16-20	0.0516	0.0059	0.1190	0.0140	0.0168	0.0007	0.0057	0.0006	0.05	107.4	4.3	113.0	12.0	200.0	230.0	107.4	4.30	4.96	
Zircon_12_MiCH16-20	0.0484	0.0052	0.0543	0.0051	0.0080	0.0003	0.0023	0.0002	0.06	51.6	1.9	53.5	4.9	120.0	210.0	51.6	1.90	3.55	
Zircon_13_MiCH16-20	0.0524	0.0083	0.0578	0.0089	0.0081	0.0004	0.0027	0.0004	0.05	52.0	2.7	56.7	8.5	320.0	290.0	52.0	2.70	8.29	
Zircon_15_MiCH16-20	0.0760	0.0031	1.9630	0.0800	0.1869	0.0050	0.0585	0.0040	0.06	1104.0	27.0	1104.0	28.0	1100.0	89.0	1104.0	27.00		
Zircon_16_MiCH16-20	0.0580	0.0100	0.0641	0.0097	0.0076	0.0004	0.0029	0.0003	0.04	48.9	2.4	62.5	9.6	500.0	330.0	48.9	2.40	21.76	
Zircon_18_MiCH16-20	0.0520	0.0170	0.0680	0.0180	0.0105	0.0010	0.0035	0.0006	0.06	67.0	6.4	65.0	17.0	-80.0	510.0	67.0	6.40	-3.08	
Zircon_19_MiCH16-20	0.0460	0.0110	0.0510	0.0110	0.0082	0.0005	0.0027	0.0003	0.05	52.5	3.3	50.0	10.0	-140.0	380.0	52.5	3.30	-5.00	
Zircon_20_MiCH16-20	0.0555	0.0081	0.1440	0.0160	0.0193	0.0009	0.0066	0.0006	0.06	123.5	5.6	139.0	15.0	390.0	260.0	123.5	5.60	11.15	
Zircon_22_MiCH16-20	0.0590	0.0100	0.0580	0.0100	0.0078	0.0003	0.0024	0.0003	0.03	50.2	2.1	57.0	10.0	270.0	370.0	50.2	2.10	11.93	
Zircon_24_MiCH16-20	0.0500	0.0200	0.0580	0.0280	0.0081	0.0005	0.0031	0.0009	0.02	51.7	3.5	57.0	23.0	230.0	260.0	51.7	3.50	9.30	
Zircon_25_MiCH16-20	0.0520	0.0083	0.0573	0.0089	0.0081	0.0004	0.0029	0.0003	0.04	51.8	2.3	56.2	8.5	320.0	300.0	51.8	2.30	7.83	
Zircon_26_MiCH16-20	0.0454	0.0082	0.0525	0.0093	0.0080	0.0005	0.0024	0.0004	0.05	51.2	2.9	51.5	9.0	20.0	340.0	51.2	2.90	0.58	
Zircon_27_MiCH16-20	0.0505	0.0072	0.0554	0.0082	0.0079	0.0004	0.0029	0.0003	0.04	50.5	2.3	54.4	7.9	170.0	290.0	50.5	2.30	7.17	
Zircon_29_MiCH16-20	0.0560	0.0120	0.0580	0.0110	0.0080	0.0005	0.0028	0.0004	0.05	51.0	3.4	56.0	11.0	160.0	410.0	51.0	3.40	8.93	
Zircon_31_MiCH16-20	0.0522	0.0042	0.1170	0.0093	0.0168	0.0006	0.0055	0.0005	0.07	107.5	4.0	112.0	8.3	280.0	160.0	107.5	4.00	4.02	
Zircon_32_MiCH16-20	0.0509	0.0072	0.1180	0.0160	0.0172	0.0007	0.0059	0.0006	0.04	110.1	4.1	112.0	14.0	140.0	280.0	110.1	4.10	1.70	
Zircon_33_MiCH16-20	0.0549	0.0056	0.1340	0.0120	0.0171	0.0008	0.0053	0.0004	0.06	109.1	4.8	127.0	11.0	420.0	200.0	109.1	4.80	14.09	
Zircon_34_MiCH16-20	0.0480	0.0120	0.0750	0.0180	0.0095	0.0009	0.0040	0.0008	0.05	60.7	5.5	71.0	17.0	180.0	430.0	60.7	5.50	14.51	
Zircon_35_MiCH16-20	0.0604	0.0078	0.0685	0.0084	0.0085	0.0004	0.0026	0.0003	0.04	54.7	2.2	66.9	8.0	470.0	250.0	54.7	2.20	18.24	
Zircon_36_MiCH16-20	0.0610	0.0100	0.0649	0.0095	0.0077	0.0004	0.0027	0.0003	0.05	49.4	2.8	63.4	9.0	500.0	330.0	49.4	2.80	22.08	
Zircon_37_MiCH16-20	0.0521	0.0032	0.3320	0.0190	0.0469	0.0014	0.0145	0.0010	0.07	295.3	8.6	290.0	14.0	270.0	130.0	295.3	8.60	-1.83	
Zircon_39_MiCH16-20	0.0680	0.0130	0.0720	0.0120	0.0081	0.0003	0.0030	0.0004	0.05	52.0	3.4	70.0	12.0	480.0	400.0	52.0	3.40	25.71	
Zircon_40_MiCH16-20	0.0521	0.0050	0.1280	0.0110	0.0176	0.0006	0.0057	0.0004	0.05	112.2	3.6	123.0	10.0	290.0	200.0	112.2	3.60	8.78	
Zircon_41_MiCH16-20	0.0600	0.0130	0.0750	0.0160	0.0090	0.0006	0.0033	0.0005	0.03	57.4	3.5	72.0	15.0	240.0	400.0	57.4	3.50	20.28	
Zircon_43_MiCH16-20	0.0544	0.0084	0.1160	0.0170	0.0163	0.0009	0.0054	0.0007	0.05	104.4	5.9	115.0	16.0	340.0	290.0	104.4	5.90	9.22	
Zircon_44_MiCH16-20	0.0509	0.0085	0.0542	0.0085	0.0075	0.0005	0.0026	0.0003	0.06	48.3	3.1	53.2	8.2	300.0	310.0	48.3	3.10	9.21	
Zircon_45_MiCH16-20	0.0534	0.0084	0.0599	0.0075	0.0080	0.0004	0.0026	0.0003	0.05	51.2	2.4	58.8	7.2	310.0	290.0	51.2	2.40	12.93	
Zircon_46_MiCH16-20	0.0496	0.0047	0.1110	0.0100	0.0166	0.0007	0.0054	0.0005	0.07	105.9	4.2	109.5	9.8	140.0	190.0	105.9	4.20	3.29	
Zircon_47_MiCH16-20	0.0534	0.0095	0.0590	0.0100	0.0080	0.0004	0.0026	0.0003	0.04	51.5	2.4	57.4	9.7	340.0	310.0	51.5	2.40	10.28	
Zircon_48_MiCH16-20	0.0482	0.0078	0.0508	0.0079	0.0078	0.0003	0.0025	0.0003	0.04	49.9	1.9	49.9	7.6	30.0	280.0	49.9	1.90		
Zircon_49_MiCH16-20	0.0640	0.0320	0.0790	0.0280	0.0094	0.0010	0.0049	0.0013	0.03	60.1	6.2	74.0	26.0	290.0	650.0	60.1	6.20	18.78	
Zircon_50_MiCH16-20	0.0604	0.0085	0.0643	0.0092	0.0080	0.0004	0.0026	0.0003	0.04	51.6	2.4	62.9	8.7	440.0	280.0	51.6	2.40	17.97	
Zircon_51_MiCH16-20	0.0560	0.0092	0.0581	0.0085	0.0083	0.0004	0.0027	0.0004	0.04	53.3	2.4	57.0	8.2	370.0	310.0	53.3	2.40	6.49	

Zircon_52_MiCH16-20	0.0617	0.0083	0.0618	0.0079	0.0076	0.0004	0.0029	0.0004	0.05	48.9	2.3	60.6	7.5	490.0	280.0	48.9	2.30	19.31
Zircon_53_MiCH16-20	0.0519	0.0068	0.0532	0.0068	0.0075	0.0003	0.0026	0.0003	0.04	48.2	1.9	52.4	6.5	230.0	270.0	48.2	1.90	8.02
Zircon_54_MiCH16-20	0.0511	0.0073	0.0678	0.0093	0.0095	0.0005	0.0033	0.0005	0.05	61.2	3.2	66.1	8.8	140.0	280.0	61.2	3.20	7.41
Zircon_55_MiCH16-20	0.0762	0.0025	1.9280	0.0590	0.1828	0.0044	0.0550	0.0036	0.07	1082.0	24.0	1089.0	21.0	1097.0	67.0	1082.0	24.00	0.64
Zircon_56_MiCH16-20	0.0580	0.0120	0.0600	0.0110	0.0077	0.0005	0.0024	0.0003	0.04	49.6	2.9	59.0	11.0	290.0	390.0	49.6	2.90	15.93
Zircon_57_MiCH16-20	0.0494	0.0067	0.0525	0.0078	0.0076	0.0005	0.0028	0.0004	0.06	49.0	3.1	54.0	7.0	170.0	240.0	49.0	3.10	9.26
Zircon_58_MiCH16-20	0.0620	0.0170	0.0650	0.0170	0.0078	0.0006	0.0028	0.0005	0.04	50.1	4.0	65.0	17.0	340.0	530.0	50.1	4.00	22.92
Zircon_59_MiCH16-20	0.0580	0.0100	0.1280	0.0210	0.0170	0.0008	0.0054	0.0006	0.04	108.7	4.9	121.0	19.0	460.0	320.0	108.7	4.90	10.17
Zircon_60_MiCH16-20	0.0590	0.0150	0.0650	0.0140	0.0081	0.0005	0.0042	0.0007	0.04	52.0	3.2	63.0	13.0	360.0	460.0	52.0	3.20	17.46
Zircon_61_MiCH16-20	0.0554	0.0076	0.0598	0.0081	0.0078	0.0004	0.0026	0.0003	0.05	50.3	2.6	58.6	7.8	380.0	290.0	50.3	2.60	14.16
Zircon_62_MiCH16-20	0.0472	0.0068	0.0586	0.0072	0.0082	0.0004	0.0025	0.0003	0.06	52.4	2.7	57.5	6.9	240.0	270.0	52.4	2.70	8.87
Zircon_63_MiCH16-20	0.0485	0.0048	0.0537	0.0055	0.0078	0.0003	0.0026	0.0002	0.05	50.0	1.8	52.9	5.3	140.0	210.0	50.0	1.80	5.48
Zircon_64_MiCH16-20	0.0490	0.0140	0.0520	0.0130	0.0081	0.0007	0.0027	0.0005	0.05	51.7	4.3	51.0	12.0	-20.0	460.0	51.7	4.30	-1.37
Zircon_65_MiCH16-20	0.0554	0.0079	0.0627	0.0081	0.0078	0.0004	0.0023	0.0003	0.05	50.3	2.4	61.4	7.7	390.0	280.0	50.3	2.40	18.08
Zircon_66_MiCH16-20	0.0484	0.0070	0.0530	0.0073	0.0078	0.0004	0.0023	0.0003	0.06	50.0	2.6	52.1	7.0	100.0	270.0	50.0	2.60	4.03
Zircon_67_MiCH16-20	0.0600	0.0110	0.0650	0.0110	0.0078	0.0005	0.0033	0.0005	0.05	50.3	3.4	64.0	11.0	510.0	360.0	50.3	3.40	21.41
Zircon_68_MiCH16-20	0.0520	0.0170	0.0670	0.0210	0.0104	0.0010	0.0040	0.0011	0.05	66.5	6.4	64.0	19.0	-80.0	550.0	66.5	6.40	-3.91
Zircon_69_MiCH16-20	0.0478	0.0085	0.0521	0.0094	0.0077	0.0005	0.0027	0.0005	0.05	49.7	3.0	51.1	9.1	60.0	350.0	49.7	3.00	2.74
Zircon_70_MiCH16-20	0.0520	0.0092	0.0531	0.0089	0.0077	0.0004	0.0026	0.0003	0.04	49.6	2.6	52.1	8.6	120.0	310.0	49.6	2.60	4.80
Zircon_71_MiCH16-20	0.0470	0.0076	0.0483	0.0076	0.0078	0.0004	0.0026	0.0003	0.05	49.9	2.6	47.6	7.3	30.0	310.0	49.9	2.60	-4.83
Zircon_72_MiCH16-20	0.0445	0.0058	0.0488	0.0061	0.0077	0.0003	0.0026	0.0002	0.05	49.4	2.0	48.1	5.9	-70.0	250.0	49.4	2.00	-2.70
Zircon_73_MiCH16-20	0.0620	0.0260	0.0770	0.0290	0.0088	0.0008	0.0044	0.0013	0.03	56.3	5.3	72.0	27.0	-120.0	700.0	56.3	5.30	21.81
Zircon_74_MiCH16-20	0.0529	0.0069	0.1190	0.0150	0.0167	0.0008	0.0061	0.0007	0.05	106.9	4.8	113.0	13.0	340.0	270.0	106.9	4.80	5.40
Zircon_77_MiCH16-20	0.0560	0.0130	0.0580	0.0120	0.0080	0.0005	0.0031	0.0004	0.04	51.1	3.2	56.0	11.0	190.0	420.0	51.1	3.20	8.75
Zircon_78_MiCH16-20	0.0506	0.0069	0.0556	0.0081	0.0078	0.0004	0.0024	0.0003	0.05	49.8	2.4	54.6	7.8	220.0	280.0	49.8	2.40	8.79
Zircon_79_MiCH16-20	0.0529	0.0071	0.1190	0.0150	0.0172	0.0007	0.0054	0.0005	0.05	110.0	4.3	113.0	13.0	190.0	270.0	110.0	4.30	2.65
Zircon_80_MiCH16-20	0.0522	0.0054	0.0547	0.0049	0.0077	0.0003	0.0026	0.0002	0.07	49.4	2.1	53.9	4.8	200.0	210.0	49.4	2.10	8.35
Zircon_81_MiCH16-20	0.0710	0.0120	0.0686	0.0099	0.0076	0.0005	0.0028	0.0004	0.05	48.8	3.0	66.8	9.4	750.0	320.0	48.8	3.00	26.95
Zircon_82_MiCH16-20	0.0504	0.0089	0.0517	0.0088	0.0077	0.0005	0.0025	0.0003	0.05	49.2	2.9	52.3	8.8	240.0	340.0	49.2	2.90	5.93
Zircon_83_MiCH16-20	0.0447	0.0078	0.0495	0.0086	0.0081	0.0004	0.0025	0.0003	0.04	51.9	2.4	50.0	8.5	-80.0	310.0	51.9	2.40	-3.80
Zircon_86_MiCH16-20	0.0550	0.0100	0.0560	0.0110	0.0076	0.0004	0.0024	0.0003	0.04	48.9	2.6	55.0	10.0	240.0	370.0	48.9	2.60	11.09
Zircon_88_MiCH16-20	0.0560	0.0110	0.0550	0.0110	0.0074	0.0005	0.0026	0.0004	0.05	47.7	3.4	53.0	11.0	310.0	400.0	47.7	3.40	10.00
Zircon_90_MiCH16-20	0.0522	0.0062	0.0558	0.0065	0.0079	0.0003	0.0026	0.0003	0.05	50.5	2.2	54.9	6.2	300.0	240.0	50.5	2.20	8.01
Zircon_91_MiCH16-20	0.0569	0.0073	0.0588	0.0068	0.0076	0.0004	0.0023	0.0003	0.05	48.6	2.3	57.8	6.5	450.0	250.0	48.6	2.30	15.92
Zircon_93_MiCH16-20	0.0509	0.0085	0.0525	0.0084	0.0079	0.0004	0.0023	0.0003	0.05	50.6	2.8	51.5	8.1	250.0	310.0	50.6	2.80	1.75
Zircon_94_MiCH16-20	0.0540	0.0043	0.3430	0.0260	0.0459	0.0014	0.0146	0.0013	0.05	289.4	8.9	298.0	20.0	290.0	170.0	289.4	8.90	2.89
Zircon_95_MiCH16-20	0.0490	0.0110	0.0540	0.0110	0.0082	0.0006	0.0025	0.0004	0.05	52.7	3.5	53.0	11.0	170.0	410.0	52.7	3.50	0.57
Zircon_96_MiCH16-20	0.0540	0.0120	0.0530	0.0120	0.0079	0.0006	0.0023	0.0005	0.05	50.5	3.7	52.0	11.0	70.0	430.0	50.5	3.70	2.88
Zircon_97_MiCH16-20	0.0513	0.0066	0.0560	0.0064	0.0077	0.0003	0.0024	0.0002	0.04	49.4	1.6	55.1	6.2	210.0	250.0	49.4	1.60	10.34
Zircon_98_MiCH16-20	0.0521	0.0092	0.0555	0.0097	0.0081	0.0005	0.0028	0.0003	0.05	52.3	3.1	54.3	9.3	120.0	320.0	52.3	3.10	3.68
Zircon_99_MiCH16-20	0.0530	0.0110	0.1070	0.0200	0.0152	0.0009	0.0052	0.0006	0.05	98.2	6.2	105.0	19.0	110.0	370.0	98.2	6.20	6.48

CORRECTED RATIOS¹CORRECTED AGES (Ma)⁴

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁸ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs		±2σ abs	±2σ abs	±2σ abs	±2σ abs	(Ma) ³	±2σ	Disc % ⁴		
GUE16-01 (Gr01*)	Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																	
Zircon_02_GUE16-01	0.0606	0.0028	0.7270	0.0360	0.0871	0.0015	0.0235	0.0017	0.09	538.4	9.1	554.0	22.0	610.0	100.0	538.4	9.10	2.82
Zircon_03_GUE16-01	0.0800	0.0035	2.1510	0.0930	0.1937	0.0031	0.0562	0.0036	-0.07	1141.0	17.0	1164.0	30.0	1221.0	85.0	1141.0	17.00	1.98
Zircon_04_GUE16-01	0.2000	1.1000	0.0010	0.0014	0.0001	0.0000	0.0001	0.0001	0.21	0.9	0.2	1.0	1.4	-37000.0	33000.0	0.9	0.22	9.00
Zircon_05_GUE16-01	0.0733	0.0032	1.8770	0.0860	0.1827	0.0022	0.0538	0.0034	0.14	1082.0	12.0	1071.0	31.0	1024.0	90.0	1082.0	12.00	-1.03
Zircon_06_GUE16-01	0.0620	0.0400	0.0410	0.0210	0.0055	0.0006	0.0023	0.0010	0.30	35.1	3.7	38.0	20.0	-800.0	1000.0	35.1	3.70	7.63
Zircon_07_GUE16-01	0.0545	0.0058	0.1290	0.0120	0.0179	0.0005	0.0055	0.0005	-0.01	114.2	3.0	123.0	11.0	350.0	210.0	114.2	3.00	7.15
Zircon_09_GUE16-01	0.0510	0.0100	0.1450	0.0270	0.0198	0.0009	0.0070	0.0007	0.09	126.0	5.7	135.0	23.0	240.0	340.0	126.0	5.70	6.67

Zircon_10_GUE16-01	0.0698	0.0038	1.4960	0.0810	0.1558	0.0031	0.0471	0.0034	0.06	933.0	17.0	928.0	32.0	900.0	110.0	933.0	17.00	-0.54
Zircon_12_GUE16-01	0.1114	0.0059	4.6900	0.2500	0.3118	0.0069	0.0896	0.0060	0.06	1749.0	34.0	1770.0	44.0	1798.0	98.0	1798.0	98.00	1.19
Zircon_13_GUE16-01	0.0824	0.0032	2.4600	0.1000	0.2182	0.0024	0.0659	0.0042	-0.10	1273.0	13.0	1258.0	30.0	1248.0	76.0	1273.0	13.00	-1.19
Zircon_15_GUE16-01	0.0492	0.0057	0.0584	0.0068	0.0084	0.0002	0.0028	0.0003	-0.01	53.6	1.5	57.4	6.7	110.0	230.0	53.6	1.50	6.62
Zircon_17_GUE16-01	0.2582	0.0094	22.2500	0.8700	0.6329	0.0083	0.1662	0.0098	0.02	3160.0	33.0	3194.0	37.0	3233.0	58.0	3233.0	58.00	1.06
Zircon_18_GUE16-01	0.0733	0.0029	1.8180	0.0810	0.1766	0.0028	0.0545	0.0036	0.08	1049.0	15.0	1051.0	30.0	1050.0	81.0	1049.0	15.00	0.19
Zircon_19_GUE16-01	0.0553	0.0035	0.1016	0.0066	0.0133	0.0002	0.0045	0.0004	-0.05	84.9	1.6	98.2	6.1	420.0	140.0	84.9	1.60	13.54
Zircon_20_GUE16-01	0.0525	0.0076	0.0401	0.0056	0.0057	0.0002	0.0022	0.0004	0.12	36.4	1.3	39.8	5.6	240.0	280.0	36.4	1.30	8.54
Zircon_21_GUE16-01	0.0520	0.0090	0.1340	0.0200	0.0184	0.0010	0.0060	0.0008	-0.07	117.4	6.0	126.0	17.0	220.0	310.0	117.4	6.00	6.83
Zircon_25_GUE16-01	0.0777	0.0030	2.1440	0.0890	0.1997	0.0027	0.0581	0.0037	-0.10	1174.0	14.0	1162.0	29.0	1131.0	77.0	1174.0	14.00	-1.03
Zircon_27_GUE16-01	0.0731	0.0032	1.7790	0.0860	0.1761	0.0028	0.0562	0.0040	0.24	1048.0	16.0	1039.0	30.0	1015.0	84.0	1048.0	16.00	-0.87
Zircon_28_GUE16-01	0.0499	0.0047	0.0703	0.0064	0.0102	0.0003	0.0032	0.0003	-0.04	65.4	1.9	68.8	6.0	160.0	190.0	65.4	1.90	4.94
Zircon_29_GUE16-01	0.0531	0.0077	0.1420	0.0190	0.0191	0.0008	0.0067	0.0008	-0.16	122.2	5.1	133.0	17.0	250.0	280.0	122.2	5.10	8.12
Zircon_30_GUE16-01	0.0495	0.0060	0.0664	0.0076	0.0100	0.0004	0.0036	0.0003	-0.03	64.0	2.7	65.1	7.2	160.0	250.0	64.0	2.70	1.69
Zircon_31_GUE16-01	0.0955	0.0035	3.5300	0.1400	0.2684	0.0030	0.0784	0.0049	0.21	1532.0	15.0	1532.0	32.0	1533.0	69.0	1533.0	69.00	
Zircon_32_GUE16-01	0.0798	0.0033	2.3210	0.0980	0.2083	0.0035	0.0638	0.0043	-0.05	1220.0	19.0	1217.0	31.0	1206.0	80.0	1220.0	19.00	-0.25
Zircon_33_GUE16-01	0.0481	0.0058	0.0733	0.0085	0.0113	0.0004	0.0043	0.0006	-0.13	72.1	2.5	71.5	8.0	30.0	230.0	72.1	2.50	-0.84
Zircon_34_GUE16-01	0.0481	0.0041	0.0669	0.0054	0.0101	0.0002	0.0034	0.0004	0.00	64.9	1.5	65.6	5.1	110.0	180.0	64.9	1.50	1.07
Zircon_35_GUE16-01	0.0659	0.0030	1.2370	0.0580	0.1365	0.0017	0.0393	0.0029	-0.03	825.0	9.7	816.0	27.0	823.0	94.0	825.0	9.70	-1.10
Zircon_39_GUE16-01	0.0500	0.0130	0.1150	0.0250	0.0151	0.0011	0.0054	0.0009	0.00	96.8	6.8	108.0	22.0	260.0	420.0	96.8	6.80	10.37
Zircon_40_GUE16-01	0.0600	0.0140	0.1350	0.0290	0.0190	0.0015	0.0064	0.0016	-0.05	121.4	9.5	130.0	27.0	230.0	470.0	121.4	9.50	6.62
Zircon_41_GUE16-01	0.0729	0.0067	1.7600	0.1500	0.1780	0.0050	0.0515	0.0053	0.03	1055.0	27.0	1022.0	56.0	940.0	190.0	1055.0	27.00	-3.23
Zircon_43_GUE16-01	0.0590	0.0089	0.1786	0.0097	0.0228	0.0016	0.0092	0.0007	0.32	145.0	10.0	166.8	8.7	550.0	220.0	145.0	10.00	13.07
Zircon_44_GUE16-01	0.0473	0.0063	0.1170	0.0160	0.0172	0.0007	0.0063	0.0006	0.14	110.2	4.2	111.0	14.0	30.0	250.0	110.2	4.20	0.72
Zircon_45_GUE16-01	0.0526	0.0054	0.0741	0.0075	0.0104	0.0002	0.0035	0.0003	-0.13	66.5	1.3	72.4	7.1	220.0	200.0	66.5	1.30	8.15
Zircon_47_GUE16-01	0.0709	0.0043	1.6800	0.1000	0.1696	0.0040	0.0497	0.0063	-0.06	1009.0	22.0	1003.0	39.0	920.0	130.0	1009.0	22.00	-0.60
Zircon_48_GUE16-01	0.0620	0.0053	0.1360	0.0120	0.0163	0.0005	0.0064	0.0007	0.06	103.9	3.0	129.0	10.0	700.0	150.0	103.9	3.00	19.46
Zircon_49_GUE16-01	0.0510	0.0170	0.0690	0.0200	0.0091	0.0006	0.0031	0.0005	0.08	58.2	4.0	66.0	19.0	40.0	530.0	58.2	4.00	11.82
Zircon_51_GUE16-01	0.0771	0.0035	2.1400	0.1100	0.1985	0.0052	0.0589	0.0038	0.39	1167.0	28.0	1159.0	38.0	1134.0	94.0	1167.0	28.00	-0.69
Zircon_52_GUE16-01	0.0564	0.0021	0.5720	0.0250	0.0734	0.0009	0.0234	0.0017	0.25	456.5	5.5	459.0	16.0	462.0	84.0	456.5	5.50	0.54
Zircon_53_GUE16-01	0.0670	0.0110	0.0950	0.0140	0.0100	0.0004	0.0035	0.0004	0.33	64.2	2.7	91.0	13.0	770.0	270.0	64.2	2.70	29.45
Zircon_55_GUE16-01	0.0590	0.0100	0.0690	0.0120	0.0096	0.0004	0.0042	0.0005	-0.07	61.8	2.6	67.0	11.0	360.0	330.0	61.8	2.60	7.76
Zircon_56_GUE16-01	0.0596	0.0031	0.8270	0.0440	0.0990	0.0018	0.0300	0.0022	0.16	609.0	10.0	613.0	26.0	600.0	120.0	609.0	10.00	0.65
Zircon_57_GUE16-01	0.0511	0.0053	0.0699	0.0069	0.0102	0.0003	0.0038	0.0006	-0.09	65.7	1.9	68.4	6.6	160.0	210.0	65.7	1.90	3.95
Zircon_58_GUE16-01	0.0485	0.0042	0.0680	0.0056	0.0100	0.0002	0.0030	0.0003	-0.16	64.1	1.4	67.4	5.5	140.0	180.0	64.1	1.40	4.90
Zircon_59_GUE16-01	0.0539	0.0069	0.1360	0.0160	0.0192	0.0008	0.0052	0.0007	0.24	122.6	4.9	129.0	15.0	290.0	230.0	122.6	4.90	4.96
Zircon_60_GUE16-01	0.0564	0.0089	0.1350	0.0200	0.0185	0.0008	0.0062	0.0009	-0.12	118.1	5.0	127.0	17.0	400.0	310.0	118.1	5.00	7.01
Zircon_61_GUE16-01	0.0462	0.0049	0.0645	0.0060	0.0103	0.0004	0.0034	0.0003	-0.11	66.3	2.5	64.1	5.5	40.0	210.0	66.3	2.50	-3.43
Zircon_62_GUE16-01	0.0496	0.0039	0.0695	0.0052	0.0103	0.0003	0.0032	0.0004	-0.25	66.0	1.7	68.1	5.0	160.0	170.0	66.0	1.70	3.08
Zircon_63_GUE16-01	0.0504	0.0050	0.0705	0.0063	0.0101	0.0003	0.0033	0.0003	-0.04	64.7	2.1	69.0	6.0	220.0	200.0	64.7	2.10	6.23
Zircon_64_GUE16-01	0.0894	0.0039	2.6800	0.2200	0.2163	0.0095	0.0704	0.0042	0.48	1262.0	51.0	1321.0	51.0	1410.0	78.0	1262.0	51.00	4.47
Zircon_65_GUE16-01	0.0529	0.0045	0.0621	0.0053	0.0088	0.0003	0.0030	0.0003	0.05	56.4	2.0	61.1	5.1	310.0	190.0	56.4	2.00	7.69
Zircon_66_GUE16-01	0.0785	0.0034	2.1630	0.0990	0.1993	0.0028	0.0601	0.0039	0.27	1171.0	15.0	1171.0	32.0	1158.0	84.0	1171.0	15.00	
Zircon_67_GUE16-01	0.0525	0.0096	0.0670	0.0120	0.0099	0.0004	0.0030	0.0004	0.20	63.7	2.8	65.0	12.0	80.0	350.0	63.7	2.80	2.00
Zircon_68_GUE16-01	0.0551	0.0062	0.0719	0.0078	0.0096	0.0004	0.0033	0.0004	0.01	61.6	2.3	70.3	7.4	370.0	220.0	61.6	2.30	12.38
Zircon_70_GUE16-01	0.0494	0.0063	0.1190	0.0140	0.0175	0.0006	0.0053	0.0008	-0.16	111.8	4.0	113.0	13.0	180.0	260.0	111.8	4.00	1.06
Zircon_71_GUE16-01	0.0470	0.0120	0.1090	0.0260	0.0163	0.0006	0.0051	0.0007	0.06	104.3	4.0	105.0	22.0	40.0	320.0	104.3	4.00	0.67
Zircon_73_GUE16-01	0.0630	0.0130	0.0496	0.0095	0.0056	0.0003	0.0018	0.0004	0.04	35.9	2.0	49.0	9.1	550.0	330.0	35.9	2.00	26.73
Zircon_74_GUE16-01	0.0493	0.0037	0.0369	0.0028	0.0054	0.0001	0.0022	0.0002	-0.05	34.8	0.8	37.2	2.6	160.0	140.0	34.8	0.75	6.48
Zircon_75_GUE16-01	0.0474	0.0027	0.0527	0.0033	0.0080	0.0001	0.0025	0.0002	0.04	51.2	0.7	52.1	3.2	100.0	130.0	51.2	0.66	1.67
Zircon_76_GUE16-01	0.0531	0.0058	0.0961	0.0096	0.0133	0.0005	0.0047	0.0004	0.12	85.4	2.9	92.9	8.8	250.0	210.0	85.4	2.90	8.07
Zircon_77_GUE16-01	0.0460	0.0029	0.0619	0.0042	0.0097	0.0003	0.0031	0.0003	0.23	62.3	1.6	60.9	4.1	0.0	130.0	62.3	1.60	-2.30
Zircon_78_GUE16-01	0.0802	0.0049	2.3100	0.1400	0.2097	0.0042	0.0601	0.0047	0.04	1230.0	22.0	1213.0	45.0	1170.0	120.0	1230.0	22.00	-1.40
Zircon_80_GUE16-01	0.0727	0.0033	1.6360	0.0800	0.1659	0.0023	0.0491	0.0032	0.27	989.0	13.0	995.0	27.0	1015.0	93.0	989.0	13.00	0.60

Zircon_82_GUE16-01	0.0491	0.0077	0.1270	0.0190	0.0192	0.0009	0.0065	0.0010	-0.19	122.8	6.0	125.0	16.0	170.0	290.0	122.8	6.00	1.76
Zircon_83_GUE16-01	0.0731	0.0032	1.7000	0.0820	0.1708	0.0020	0.0529	0.0034	0.23	1016.0	11.0	1014.0	31.0	1004.0	88.0	1016.0	11.00	-0.20
Zircon_85_GUE16-01	0.0488	0.0078	0.1350	0.0210	0.0191	0.0009	0.0067	0.0009	-0.07	122.0	5.7	127.0	19.0	220.0	280.0	122.0	5.70	3.94
Zircon_87_GUE16-01	0.0786	0.0044	2.0900	0.1200	0.1952	0.0041	0.0575	0.0040	0.27	1149.0	22.0	1140.0	40.0	1160.0	110.0	1149.0	22.00	-0.79
Zircon_88_GUE16-01	0.0546	0.0050	0.1400	0.0130	0.0191	0.0007	0.0079	0.0014	0.25	121.7	4.6	132.0	11.0	300.0	200.0	121.7	4.60	7.80
Zircon_89_GUE16-01	0.0478	0.0059	0.0393	0.0049	0.0058	0.0003	0.0018	0.0002	0.04	37.5	1.6	39.0	4.8	200.0	250.0	37.5	1.60	3.85
Zircon_91_GUE16-01	0.0572	0.0055	0.2080	0.0200	0.0262	0.0009	0.0093	0.0011	0.15	166.7	5.5	191.0	17.0	450.0	210.0	166.7	5.50	12.72
Zircon_92_GUE16-01	0.0746	0.0041	1.8400	0.0990	0.1799	0.0037	0.0544	0.0038	0.01	1066.0	20.0	1056.0	36.0	1020.0	110.0	1066.0	20.00	-0.95
Zircon_93_GUE16-01	0.0566	0.0078	0.0430	0.0051	0.0061	0.0003	0.0024	0.0002	0.02	39.1	1.9	43.9	5.0	280.0	270.0	39.1	1.90	10.93
Zircon_96_GUE16-01	0.0545	0.0063	0.2190	0.0190	0.0290	0.0012	0.0095	0.0015	-0.27	184.2	7.7	200.0	16.0	330.0	180.0	184.2	7.70	7.90
Zircon_97_GUE16-01	0.0577	0.0025	0.6690	0.0320	0.0845	0.0013	0.0257	0.0016	0.18	522.9	7.4	519.0	20.0	522.0	92.0	522.9	7.40	-0.75
Zircon_98_GUE16-01	0.0525	0.0054	0.1150	0.0110	0.0161	0.0004	0.0053	0.0005	-0.25	102.7	2.6	109.7	9.9	250.0	210.0	102.7	2.60	6.38
Zircon_99_GUE16-01	0.0534	0.0088	0.0430	0.0069	0.0061	0.0003	0.0018	0.0002	0.07	38.9	2.1	42.5	6.7	190.0	320.0	38.9	2.10	8.47
Zircon_100_GUE16-01	0.0580	0.0120	0.0690	0.0150	0.0093	0.0007	0.0030	0.0006	0.09	59.5	4.3	67.0	14.0	230.0	390.0	59.5	4.30	11.19
Zircon_101_GUE16-01	0.0507	0.0023	0.0420	0.0022	0.0062	0.0002	0.0020	0.0001	0.35	39.9	1.0	41.7	2.2	210.0	100.0	39.9	0.95	4.32
Zircon_102_GUE16-01	0.0484	0.0040	0.1800	0.0170	0.0270	0.0010	0.0088	0.0010	0.12	171.8	6.2	166.0	15.0	60.0	170.0	171.8	6.20	-3.49
Zircon_104_GUE16-01	0.0741	0.0046	1.7400	0.1100	0.1682	0.0037	0.0520	0.0043	-0.04	1002.0	20.0	1023.0	39.0	1070.0	120.0	1002.0	20.00	2.05

CORRECTED RATIOS¹CORRECTED AGES (Ma)²

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁸ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ	±2σ		±2σ	±2σ	(Ma) ³	±2σ						
GUE16-04 (Gr04*)	Ensamblaje El Camalote? Complejo Arteaga																		
Zircon_01_GUE16-04	0.0511	0.0080	0.0465	0.0075	0.0067	0.0003	0.0021	0.0003	0.08	43.0	1.8	46.0	7.0	180.0	270.0	43.0	1.80	6.52	
Zircon_02_GUE16-04	0.0533	0.0071	0.0450	0.0270	0.0069	0.0035	0.0020	0.0016	0.32	44.0	22.0	44.0	24.0	30.0	280.0	44.0	22.00		
Zircon_03_GUE16-04	0.0570	0.0190	0.0520	0.0190	0.0066	0.0006	0.0020	0.0007	0.18	42.6	3.9	50.0	18.0	-20.0	600.0	42.6	3.90	14.80	
Zircon_05_GUE16-04	0.0527	0.0093	0.0441	0.0069	0.0060	0.0003	0.0023	0.0002	-0.20	38.5	1.9	43.6	6.7	180.0	330.0	38.5	1.90	11.70	
Zircon_07_GUE16-04	0.0559	0.0048	0.0576	0.0054	0.0078	0.0003	0.0022	0.0003	0.31	49.9	1.8	56.6	5.2	380.0	200.0	49.9	1.80	11.84	
Zircon_08_GUE16-04	0.0546	0.0097	0.0557	0.0089	0.0076	0.0004	0.0022	0.0003	-0.12	48.5	2.8	54.6	8.6	310.0	320.0	48.5	2.80	11.17	
Zircon_09_GUE16-04	0.0550	0.0100	0.0517	0.0093	0.0072	0.0003	0.0023	0.0004	0.00	45.9	2.1	50.7	9.0	260.0	370.0	45.9	2.10	9.47	
Zircon_11_GUE16-04	0.0660	0.0110	0.0505	0.0089	0.0055	0.0004	0.0021	0.0003	0.19	35.6	2.2	49.6	8.6	680.0	360.0	35.6	2.20	28.23	
Zircon_12_GUE16-04	0.0501	0.0087	0.0416	0.0071	0.0062	0.0003	0.0020	0.0002	0.31	39.8	2.1	42.4	7.2	270.0	320.0	39.8	2.10	6.13	
Zircon_14_GUE16-04	0.0568	0.0095	0.0493	0.0083	0.0065	0.0003	0.0023	0.0003	0.20	41.9	2.2	48.5	8.0	380.0	320.0	41.9	2.20	13.61	
Zircon_15_GUE16-04	0.0541	0.0091	0.0448	0.0075	0.0054	0.0003	0.0020	0.0002	0.16	34.9	1.6	44.2	7.3	360.0	330.0	34.9	1.60	21.04	
Zircon_16_GUE16-04	0.0599	0.0057	0.0576	0.0058	0.0072	0.0003	0.0024	0.0002	-0.16	46.1	2.1	56.7	5.5	470.0	200.0	46.1	2.10	18.69	
Zircon_17_GUE16-04	0.0491	0.0037	0.0500	0.0032	0.0074	0.0002	0.0021	0.0001	-0.13	47.7	1.1	50.0	3.2	140.0	160.0	47.7	1.10	4.60	
Zircon_18_GUE16-04	0.0617	0.0096	0.0646	0.0095	0.0075	0.0003	0.0029	0.0004	-0.18	48.2	2.0	63.1	9.0	460.0	320.0	48.2	2.00	23.61	
Zircon_19_GUE16-04	0.0500	0.0140	0.0410	0.0110	0.0057	0.0004	0.0016	0.0004	-0.07	36.9	2.3	40.0	10.0	-110.0	470.0	36.9	2.30	7.75	
Zircon_21_GUE16-04	0.0590	0.0100	0.0528	0.0087	0.0064	0.0003	0.0023	0.0003	0.20	41.4	2.1	51.8	8.4	430.0	320.0	41.4	2.10	20.08	
Zircon_22_GUE16-04	0.0630	0.0170	0.0550	0.0140	0.0065	0.0005	0.0021	0.0005	0.14	41.8	3.0	53.0	13.0	250.0	520.0	41.8	3.00	21.13	
Zircon_24_GUE16-04	0.0535	0.0078	0.0606	0.0084	0.0084	0.0003	0.0030	0.0003	-0.07	53.7	2.1	59.4	8.0	180.0	280.0	53.7	2.10	9.60	
Zircon_25_GUE16-04	0.0504	0.0039	0.0707	0.0054	0.0102	0.0003	0.0032	0.0002	-0.03	65.4	1.8	69.2	5.1	210.0	170.0	65.4	1.80	5.49	
Zircon_28_GUE16-04	0.0738	0.0038	1.3480	0.0710	0.1410	0.0061	0.0174	0.0013	-0.11	850.0	36.0	871.0	36.0	1046.0	99.0	850.0	36.00	2.41	
Zircon_29_GUE16-04	0.0550	0.0110	0.0475	0.0098	0.0071	0.0005	0.0024	0.0003	-0.08	45.9	3.2	46.7	9.4	180.0	390.0	45.9	3.20	1.71	
Zircon_31_GUE16-04	0.0602	0.0092	0.0573	0.0081	0.0072	0.0003	0.0028	0.0004	-0.12	46.0	1.9	56.2	7.7	530.0	330.0	46.0	1.90	18.15	
Zircon_32_GUE16-04	0.0595	0.0084	0.0520	0.0081	0.0069	0.0003	0.0023	0.0003	0.16	44.1	1.9	52.3	7.5	430.0	290.0	44.1	1.90	15.68	
Zircon_33_GUE16-04	0.0510	0.0150	0.0450	0.0120	0.0071	0.0005	0.0023	0.0005	-0.14	45.6	3.3	44.0	12.0	60.0	490.0	45.6	3.30	-3.64	
Zircon_34_GUE16-04	0.0500	0.0080	0.0512	0.0072	0.0071	0.0004	0.0025	0.0004	-0.05	45.5	2.6	50.5	7.0	180.0	300.0	45.5	2.60	9.90	
Zircon_35_GUE16-04	0.0512	0.0052	0.0630	0.0065	0.0090	0.0003	0.0030	0.0003	0.23	57.5	1.7	62.8	6.4	270.0	220.0	57.5	1.70	8.44	
Zircon_36_GUE16-04	0.0522	0.0059	0.0684	0.0079	0.0090	0.0002	0.0028	0.0003	-0.06	58.0	1.5	66.8	7.5	330.0	230.0	58.0	1.50	13.17	
Zircon_37_GUE16-04	0.0509	0.0069	0.0520	0.0074	0.0068	0.0003	0.0025	0.0003	0.00	43.4	1.9	51.2	7.1	220.0	270.0	43.4	1.90	15.23	
Zircon_38_GUE16-04	0.0464	0.0054	0.0386	0.0037	0.0059	0.0002	0.0020	0.0001	-0.03	38.1	1.3	38.4	3.6	80.0	210.0	38.1	1.30	0.78	
Zircon_39_GUE16-04	0.0533	0.0064	0.0559	0.0070	0.0071	0.0003	0.0021	0.0002	0.17	45.6	2.1	54.9	6.7	310.0	240.0	45.6	2.10	16.94	
Zircon_40_GUE16-04	0.0599	0.0098	0.0552	0.0092	0.0070	0.0004	0.0022	0.0004	0.03	45.2	2.4	54.2	8.8	490.0	310.0	45.2	2.40	16.61	

Zircon_41_GUE16-04	0.0560	0.0130	0.0480	0.0140	0.0072	0.0004	0.0026	0.0004	0.08	46.5	2.4	47.0	13.0	110.0	420.0	46.5	2.40	1.06
Zircon_42_GUE16-04	0.0517	0.0048	0.0620	0.0047	0.0088	0.0003	0.0029	0.0002	-0.27	56.5	1.7	61.0	4.7	250.0	200.0	56.5	1.70	7.38
Zircon_43_GUE16-04	0.0620	0.0110	0.0610	0.0110	0.0071	0.0004	0.0025	0.0004	0.38	45.4	2.2	59.0	10.0	590.0	340.0	45.4	2.20	23.05
Zircon_44_GUE16-04	0.0499	0.0045	0.0557	0.0043	0.0083	0.0002	0.0029	0.0002	-0.08	53.2	1.4	55.0	4.2	160.0	180.0	53.2	1.40	3.27
Zircon_45_GUE16-04	0.0550	0.0130	0.0480	0.0110	0.0070	0.0004	0.0020	0.0003	0.25	44.6	2.8	48.0	10.0	260.0	330.0	44.6	2.80	7.08
Zircon_47_GUE16-04	0.0510	0.0069	0.0450	0.0058	0.0065	0.0003	0.0022	0.0003	-0.07	41.6	2.0	44.5	5.6	200.0	280.0	41.6	2.00	6.52
Zircon_48_GUE16-04	0.0500	0.0110	0.0456	0.0093	0.0068	0.0004	0.0022	0.0005	0.10	43.8	2.4	44.9	9.0	20.0	380.0	43.8	2.40	2.45
Zircon_50_GUE16-04	0.0492	0.0062	0.0434	0.0045	0.0064	0.0003	0.0021	0.0002	0.12	41.3	1.9	43.8	4.2	200.0	230.0	41.3	1.90	5.71
Zircon_51_GUE16-04	0.0516	0.0072	0.0500	0.0066	0.0073	0.0003	0.0023	0.0002	0.09	46.6	1.9	49.3	6.4	210.0	280.0	46.6	1.90	5.48
Zircon_53_GUE16-04	0.0502	0.0050	0.0491	0.0053	0.0068	0.0002	0.0023	0.0002	0.43	43.8	1.4	48.5	5.1	230.0	210.0	43.8	1.40	9.69
Zircon_54_GUE16-04	0.0750	0.0140	0.0660	0.0120	0.0072	0.0004	0.0030	0.0005	0.19	46.0	2.5	64.0	11.0	660.0	380.0	46.0	2.50	28.13
Zircon_56_GUE16-04	0.0476	0.0094	0.0481	0.0091	0.0071	0.0003	0.0024	0.0003	0.09	45.9	1.9	47.3	8.9	10.0	370.0	45.9	1.90	2.96
Zircon_57_GUE16-04	0.0740	0.0430	0.0700	0.1100	0.0074	0.0010	0.0025	0.0035	-0.29	47.4	6.2	65.0	73.0	800.0	280.0	47.4	6.20	27.08
Zircon_59_GUE16-04	0.0592	0.0032	0.0614	0.0032	0.0075	0.0003	0.0036	0.0002	0.53	48.3	1.7	60.4	3.0	560.0	110.0	48.3	1.70	20.03
Zircon_60_GUE16-04	0.0490	0.0046	0.0607	0.0054	0.0088	0.0003	0.0028	0.0002	-0.10	56.3	1.9	59.7	5.2	160.0	200.0	56.3	1.90	5.70
Zircon_61_GUE16-04	0.0560	0.0450	0.0800	0.1700	0.0110	0.0014	0.0040	0.0032	-0.09	70.4	9.0	78.0	79.0	330.0	500.0	70.4	9.00	9.74
Zircon_62_GUE16-04	0.0523	0.0080	0.0487	0.0066	0.0069	0.0004	0.0020	0.0003	-0.13	44.6	2.4	48.0	6.4	220.0	310.0	44.6	2.40	7.08
Zircon_63_GUE16-04	0.0535	0.0088	0.0509	0.0080	0.0070	0.0003	0.0025	0.0003	-0.12	45.1	1.9	50.1	7.8	290.0	320.0	45.1	1.90	9.98
Zircon_64_GUE16-04	0.0534	0.0094	0.0472	0.0079	0.0069	0.0004	0.0028	0.0004	0.16	44.1	2.4	46.5	7.6	340.0	330.0	44.1	2.40	5.16
Zircon_65_GUE16-04	0.0604	0.0060	0.0552	0.0052	0.0069	0.0003	0.0023	0.0002	0.14	44.2	1.8	54.4	5.0	530.0	220.0	44.2	1.80	18.75
Zircon_66_GUE16-04	0.0610	0.0150	0.0480	0.0110	0.0060	0.0004	0.0020	0.0004	0.05	38.3	2.8	47.0	11.0	270.0	470.0	38.3	2.80	18.51
Zircon_67_GUE16-04	0.0557	0.0095	0.0566	0.0093	0.0070	0.0005	0.0025	0.0005	0.09	44.8	3.0	55.5	8.9	530.0	330.0	44.8	3.00	19.28
Zircon_68_GUE16-04	0.0467	0.0066	0.0426	0.0051	0.0065	0.0003	0.0021	0.0001	-0.06	41.8	1.7	42.2	5.0	90.0	260.0	41.8	1.70	0.95
Zircon_69_GUE16-04	0.0527	0.0070	0.0508	0.0064	0.0071	0.0004	0.0020	0.0002	0.18	45.3	2.5	50.1	6.2	300.0	280.0	45.3	2.50	9.58
Zircon_72_GUE16-04	0.0597	0.0089	0.0582	0.0081	0.0072	0.0004	0.0023	0.0003	0.09	45.9	2.4	57.1	7.8	500.0	310.0	45.9	2.40	19.61
Zircon_73_GUE16-04	0.0520	0.0120	0.0560	0.0120	0.0073	0.0004	0.0024	0.0004	-0.03	46.5	2.3	55.0	12.0	120.0	420.0	46.5	2.30	15.45
Zircon_74_GUE16-04	0.0520	0.0120	0.0401	0.0088	0.0059	0.0003	0.0020	0.0003	0.22	38.1	1.8	39.5	8.5	50.0	390.0	38.1	1.80	3.54
Zircon_79_GUE16-04	0.0620	0.0120	0.0590	0.0110	0.0067	0.0004	0.0024	0.0005	0.01	42.8	2.2	58.0	10.0	540.0	410.0	42.8	2.20	26.21
Zircon_80_GUE16-04	0.0500	0.0098	0.0516	0.0097	0.0075	0.0005	0.0022	0.0004	0.21	48.0	3.1	50.6	9.4	40.0	370.0	48.0	3.10	5.14
Zircon_81_GUE16-04	0.0578	0.0093	0.0517	0.0079	0.0066	0.0003	0.0024	0.0003	0.00	42.1	1.7	55.6	7.2	620.0	280.0	42.1	1.70	24.28
Zircon_83_GUE16-04	0.0482	0.0072	0.0475	0.0063	0.0070	0.0004	0.0022	0.0002	-0.03	44.9	2.5	46.9	6.1	100.0	270.0	44.9	2.50	4.26
Zircon_84_GUE16-04	0.0634	0.0099	0.0622	0.0096	0.0070	0.0004	0.0023	0.0004	0.07	45.2	2.5	62.1	8.9	560.0	320.0	45.2	2.50	27.21
Zircon_85_GUE16-04	0.0540	0.0110	0.0445	0.0080	0.0066	0.0004	0.0025	0.0003	0.04	42.2	2.3	43.8	7.8	150.0	380.0	42.2	2.30	3.65
Zircon_86_GUE16-04	0.0592	0.0078	0.0522	0.0063	0.0065	0.0003	0.0022	0.0002	0.07	42.0	1.8	51.4	6.1	430.0	270.0	42.0	1.80	18.29
Zircon_87_GUE16-04	0.0542	0.0082	0.0567	0.0088	0.0072	0.0004	0.0026	0.0004	0.06	46.5	2.6	55.6	8.4	360.0	300.0	46.5	2.60	16.37
Zircon_89_GUE16-04	0.0740	0.0210	0.0610	0.0150	0.0073	0.0005	0.0029	0.0007	-0.30	46.8	3.3	59.0	14.0	420.0	510.0	46.8	3.30	20.68
Zircon_91_GUE16-04	0.0702	0.0070	0.3850	0.0350	0.0394	0.0011	0.0146	0.0009	-0.18	249.3	6.9	327.0	26.0	790.0	210.0	249.3	6.90	23.76
Zircon_92_GUE16-04	0.0650	0.0140	0.0590	0.0120	0.0068	0.0004	0.0024	0.0003	0.15	43.4	2.7	58.0	11.0	400.0	430.0	43.4	2.70	25.17
Zircon_93_GUE16-04	0.0490	0.0120	0.0457	0.0096	0.0068	0.0004	0.0024	0.0003	-0.12	43.9	2.8	44.9	9.3	0.0	400.0	43.9	2.80	2.23
Zircon_94_GUE16-04	0.0645	0.0088	0.0625	0.0082	0.0070	0.0003	0.0031	0.0004	0.14	44.9	2.1	61.2	7.9	630.0	290.0	44.9	2.10	26.63
Zircon_95_GUE16-04	0.0480	0.0038	0.0558	0.0039	0.0084	0.0002	0.0027	0.0002	-0.20	54.0	1.2	55.1	3.8	90.0	150.0	54.0	1.20	2.00
Zircon_96_GUE16-04	0.0530	0.0130	0.0359	0.0084	0.0057	0.0004	0.0025	0.0004	0.07	36.8	2.5	35.5	8.2	140.0	450.0	36.8	2.50	-3.66
Zircon_98_GUE16-04	0.0528	0.0087	0.0498	0.0077	0.0066	0.0003	0.0022	0.0003	-0.09	42.6	1.9	49.0	7.4	290.0	290.0	42.6	1.90	13.06
Zircon_99_GUE16-04	0.0590	0.0100	0.0597	0.0092	0.0073	0.0004	0.0024	0.0005	0.33	46.9	2.7	58.4	8.8	530.0	310.0	46.9	2.70	19.69
Zircon_100_GUE16-04	0.0620	0.0120	0.0612	0.0096	0.0070	0.0005	0.0024	0.0003	-0.25	45.0	2.9	59.9	9.2	600.0	360.0	45.0	2.90	24.87

CORRECTED RATIOS [†]CORRECTED AGES (Ma) [‡]

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb ±2σ abs		²⁰⁷ Pb/ ²³⁵ U ±2σ abs		²⁰⁶ Pb/ ²³⁸ U ±2σ abs		²⁰⁸ Pb/ ²³² Th ±2σ abs		R/σ	²⁰⁶ Pb/ ²³⁸ U ±2σ		²⁰⁷ Pb/ ²³⁵ U ±2σ		²⁰⁷ Pb/ ²⁰⁶ Pb ±2σ		Best age (Ma) ³	±2σ	Disc % ⁴
	Ensamblaje El Camalote, Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																	
Zircon_01_GUE16-06	0.0523	0.0042	0.1930	0.0350	0.0277	0.0035	0.0104	0.0034	0.76	176.0	22.0	178.0	28.0	250.0	160.0	176.0	22.00	1.12
Zircon_02_GUE16-06	0.0573	0.0030	0.6450	0.0380	0.0804	0.0022	0.0240	0.0013	0.06	499.0	13.0	504.0	24.0	490.0	120.0	499.0	13.00	0.99
Zircon_03_GUE16-06	0.0548	0.0030	0.5770	0.0350	0.0756	0.0021	0.0253	0.0015	0.01	471.0	12.0	464.0	22.0	400.0	120.0	471.0	12.00	-1.51

Zircon_04_GUE16-06	0.0578	0.0054	0.0548	0.0054	0.0069	0.0002	0.0024	0.0002	0.13	44.5	1.6	54.0	5.2	450.0	200.0	44.5	1.60	17.59
Zircon_05_GUE16-06	0.0543	0.0040	0.0553	0.0042	0.0073	0.0002	0.0023	0.0001	-0.08	46.6	1.5	54.6	4.0	380.0	160.0	46.6	1.50	14.65
Zircon_06_GUE16-06	0.0690	0.0130	0.0620	0.0160	0.0070	0.0003	0.0025	0.0003	0.13	45.1	2.0	61.0	15.0	730.0	330.0	45.1	2.00	26.07
Zircon_07_GUE16-06	0.0472	0.0054	0.0461	0.0057	0.0071	0.0003	0.0024	0.0002	-0.01	45.5	1.6	45.7	5.6	90.0	230.0	45.5	1.60	0.44
Zircon_08_GUE16-06	0.0610	0.0110	0.0452	0.0078	0.0058	0.0003	0.0019	0.0002	-0.14	37.5	2.0	44.6	7.6	460.0	350.0	37.5	2.00	15.92
Zircon_09_GUE16-06	0.0443	0.0033	0.0631	0.0053	0.0100	0.0003	0.0033	0.0003	0.32	64.0	2.1	62.7	4.9	-30.0	160.0	64.0	2.10	-2.07
Zircon_10_GUE16-06	0.0498	0.0080	0.0398	0.0065	0.0059	0.0003	0.0019	0.0003	-0.10	38.1	1.9	39.4	6.4	260.0	270.0	38.1	1.90	3.30
Zircon_11_GUE16-06	0.0515	0.0049	0.1790	0.0150	0.0255	0.0010	0.0090	0.0010	-0.36	162.2	6.0	166.0	13.0	250.0	200.0	162.2	6.00	2.29
Zircon_12_GUE16-06	0.0487	0.0080	0.0452	0.0078	0.0066	0.0004	0.0020	0.0003	0.30	42.3	2.8	44.6	7.6	150.0	300.0	42.3	2.80	5.16
Zircon_13_GUE16-06	0.0489	0.0067	0.0542	0.0072	0.0085	0.0004	0.0029	0.0004	0.06	54.5	2.8	53.4	6.9	50.0	270.0	54.5	2.80	-2.06
Zircon_14_GUE16-06	0.0508	0.0073	0.0486	0.0069	0.0071	0.0003	0.0022	0.0002	0.08	45.6	2.2	49.0	6.8	210.0	280.0	45.6	2.20	6.94
Zircon_15_GUE16-06	0.0475	0.0075	0.0459	0.0071	0.0074	0.0003	0.0024	0.0003	0.11	47.3	2.0	46.4	7.1	30.0	290.0	47.3	2.00	-1.94
Zircon_16_GUE16-06	0.0640	0.0140	0.0490	0.0100	0.0057	0.0003	0.0021	0.0003	-0.05	36.3	2.2	48.2	9.6	490.0	430.0	36.3	2.20	24.69
Zircon_17_GUE16-06	0.0741	0.0031	1.7180	0.0980	0.1699	0.0052	0.0529	0.0028	0.47	1011.0	30.0	1015.0	35.0	1040.0	87.0	1011.0	30.00	0.39
Zircon_18_GUE16-06	0.0513	0.0047	0.0593	0.0053	0.0085	0.0003	0.0029	0.0003	0.00	54.8	1.9	59.0	5.2	200.0	190.0	54.8	1.90	7.12
Zircon_19_GUE16-06	0.0470	0.0120	0.0411	0.0093	0.0066	0.0004	0.0022	0.0003	-0.06	42.2	2.7	40.5	9.1	-70.0	420.0	42.2	2.70	-4.20
Zircon_22_GUE16-06	0.0536	0.0067	0.0495	0.0059	0.0065	0.0003	0.0021	0.0002	0.18	42.0	1.9	49.0	5.7	260.0	240.0	42.0	1.90	14.29
Zircon_23_GUE16-06	0.0590	0.0130	0.0453	0.0086	0.0056	0.0004	0.0020	0.0003	-0.03	35.8	2.3	44.6	8.4	290.0	420.0	35.8	2.30	19.73
Zircon_24_GUE16-06	0.0540	0.0110	0.0430	0.0082	0.0066	0.0004	0.0025	0.0003	-0.10	42.3	2.4	42.4	7.9	140.0	380.0	42.3	2.40	0.24
Zircon_25_GUE16-06	0.0560	0.0120	0.0510	0.0110	0.0071	0.0003	0.0026	0.0003	0.09	45.4	1.6	51.0	10.0	360.0	290.0	45.4	1.60	10.98
Zircon_26_GUE16-06	0.0503	0.0090	0.0493	0.0084	0.0072	0.0004	0.0022	0.0003	-0.02	46.6	2.7	48.5	8.2	130.0	340.0	46.6	2.70	3.92
Zircon_27_GUE16-06	0.0630	0.0110	0.0532	0.0092	0.0063	0.0003	0.0024	0.0002	0.05	40.2	1.8	52.3	8.8	450.0	340.0	40.2	1.80	23.14
Zircon_28_GUE16-06	0.0495	0.0078	0.1430	0.0210	0.0197	0.0010	0.0060	0.0007	-0.16	126.0	6.4	134.0	18.0	210.0	300.0	126.0	6.40	5.97
Zircon_29_GUE16-06	0.0517	0.0063	0.0504	0.0065	0.0072	0.0003	0.0020	0.0002	-0.07	46.1	2.1	49.8	6.2	350.0	240.0	46.1	2.10	7.43
Zircon_30_GUE16-06	0.0464	0.0046	0.0559	0.0054	0.0087	0.0003	0.0029	0.0002	-0.41	55.8	1.8	55.1	5.2	80.0	200.0	55.8	1.80	-1.27
Zircon_31_GUE16-06	0.0518	0.0060	0.0595	0.0067	0.0085	0.0004	0.0028	0.0002	-0.10	54.8	2.3	58.4	6.5	260.0	240.0	54.8	2.30	6.16
Zircon_32_GUE16-06	0.0475	0.0055	0.0409	0.0045	0.0064	0.0002	0.0021	0.0002	-0.07	41.1	1.6	40.6	4.4	90.0	230.0	41.1	1.60	-1.23
Zircon_33_GUE16-06	0.0541	0.0051	0.3310	0.0310	0.0455	0.0015	0.0148	0.0010	-0.05	286.6	9.5	289.0	23.0	390.0	180.0	286.6	9.50	0.83
Zircon_34_GUE16-06	0.0630	0.0140	0.0570	0.0120	0.0070	0.0004	0.0027	0.0006	0.15	44.7	2.7	56.0	12.0	630.0	360.0	44.7	2.70	20.18
Zircon_35_GUE16-06	0.0550	0.0120	0.0530	0.0110	0.0068	0.0005	0.0023	0.0003	0.23	43.7	3.1	54.0	11.0	220.0	410.0	43.7	3.10	19.07
Zircon_36_GUE16-06	0.0515	0.0040	0.0695	0.0057	0.0101	0.0003	0.0034	0.0003	-0.04	64.9	1.9	69.0	5.2	240.0	160.0	64.9	1.90	5.94
Zircon_37_GUE16-06	0.0470	0.0160	0.0500	0.0160	0.0078	0.0006	0.0024	0.0005	0.01	50.1	3.8	48.0	16.0	-110.0	560.0	50.1	3.80	-4.38
Zircon_39_GUE16-06	0.0541	0.0044	0.0480	0.0044	0.0067	0.0002	0.0023	0.0002	0.11	42.8	1.5	47.5	4.2	330.0	160.0	42.8	1.50	9.89
Zircon_40_GUE16-06	0.0560	0.0120	0.0510	0.0100	0.0074	0.0005	0.0021	0.0003	-0.23	47.7	3.0	51.8	9.9	140.0	400.0	47.7	3.00	7.92
Zircon_41_GUE16-06	0.0477	0.0084	0.0543	0.0093	0.0086	0.0004	0.0025	0.0004	0.02	55.1	2.8	53.3	8.8	40.0	320.0	55.1	2.80	-3.38
Zircon_43_GUE16-06	0.0468	0.0048	0.0419	0.0045	0.0065	0.0003	0.0021	0.0002	0.23	42.0	1.6	40.8	4.1	0.0	190.0	42.0	1.60	-2.94
Zircon_45_GUE16-06	0.0506	0.0046	0.0456	0.0042	0.0065	0.0002	0.0020	0.0001	0.08	42.0	1.4	45.2	4.1	200.0	190.0	42.0	1.40	7.08
Zircon_46_GUE16-06	0.0516	0.0042	0.2830	0.0230	0.0399	0.0014	0.0128	0.0008	-0.09	252.3	8.6	252.0	18.0	240.0	170.0	252.3	8.60	-0.12
Zircon_47_GUE16-06	0.0441	0.0073	0.0435	0.0077	0.0067	0.0004	0.0020	0.0002	0.19	42.9	2.4	42.9	7.4	-80.0	300.0	42.9	2.40	
Zircon_49_GUE16-06	0.0500	0.0050	0.0427	0.0044	0.0061	0.0002	0.0020	0.0001	0.06	39.4	1.4	42.4	4.3	190.0	200.0	39.4	1.40	7.08
Zircon_50_GUE16-06	0.0496	0.0049	0.0480	0.0047	0.0071	0.0003	0.0022	0.0002	0.02	45.5	1.8	47.5	4.6	220.0	210.0	45.5	1.80	4.21
Zircon_51_GUE16-06	0.0460	0.0032	0.0435	0.0034	0.0069	0.0002	0.0023	0.0002	0.25	44.5	1.6	43.7	3.1	0.0	140.0	44.5	1.60	-1.83
Zircon_52_GUE16-06	0.0548	0.0088	0.0459	0.0078	0.0065	0.0004	0.0023	0.0003	0.27	42.0	2.4	45.3	7.5	350.0	310.0	42.0	2.40	7.28
Zircon_54_GUE16-06	0.0470	0.0045	0.0648	0.0063	0.0099	0.0003	0.0033	0.0003	0.10	63.6	2.1	63.6	6.1	110.0	180.0	63.6	2.10	
Zircon_55_GUE16-06	0.0491	0.0044	0.0446	0.0042	0.0066	0.0002	0.0021	0.0002	0.01	42.2	1.5	44.2	4.0	110.0	180.0	42.2	1.50	4.52
Zircon_56_GUE16-06	0.0600	0.0130	0.0540	0.0110	0.0067	0.0004	0.0024	0.0004	-0.17	42.8	2.8	53.0	11.0	220.0	410.0	42.8	2.80	19.25
Zircon_57_GUE16-06	0.0500	0.0057	0.0479	0.0052	0.0069	0.0003	0.0023	0.0002	0.09	44.4	1.8	47.4	5.1	170.0	230.0	44.4	1.80	6.33
Zircon_58_GUE16-06	0.0461	0.0028	0.0415	0.0026	0.0064	0.0002	0.0020	0.0001	0.12	41.2	1.2	41.3	2.5	10.0	130.0	41.2	1.20	0.24
Zircon_59_GUE16-06	0.0512	0.0085	0.0485	0.0080	0.0068	0.0003	0.0024	0.0003	-0.02	43.9	2.0	47.7	7.7	200.0	320.0	43.9	2.00	7.97
Zircon_60_GUE16-06	0.0816	0.0037	2.1800	0.1200	0.1914	0.0054	0.0569	0.0031	0.16	1129.0	29.0	1176.0	37.0	1226.0	90.0	1129.0	29.00	4.00
Zircon_61_GUE16-06	0.0548	0.0097	0.0547	0.0098	0.0072	0.0004	0.0025	0.0003	-0.03	46.2	2.4	53.6	9.4	230.0	360.0	46.2	2.40	13.81
Zircon_62_GUE16-06	0.0506	0.0059	0.0490	0.0053	0.0067	0.0003	0.0025	0.0002	-0.06	43.0	1.8	48.4	5.1	310.0	230.0	43.0	1.80	11.16
Zircon_64_GUE16-06	0.0640	0.0110	0.0596	0.0092	0.0070	0.0004	0.0025	0.0003	-0.12	44.9	2.7	58.4	8.8	460.0	320.0	44.9	2.70	23.12
Zircon_65_GUE16-06	0.0465	0.0052	0.0408	0.0045	0.0063	0.0003	0.0019	0.0002	-0.02	40.7	1.6	40.5	4.3	30.0	220.0	40.7	1.60	-0.49

Zircon_66_GUE16-06	0.0504	0.0084	0.0467	0.0077	0.0066	0.0003	0.0019	0.0003	0.03	42.4	2.2	46.1	7.4	120.0	310.0	42.4	2.20	8.03
Zircon_67_GUE16-06	0.0480	0.0280	0.0590	0.0280	0.0072	0.0009	0.0023	0.0006	0.21	46.5	5.6	54.0	26.0	-360.0	790.0	46.5	5.60	13.89
Zircon_68_GUE16-06	0.0550	0.0350	0.0490	0.0480	0.0068	0.0006	0.0026	0.0016	0.00	43.9	4.0	48.0	39.0	120.0	580.0	43.9	4.00	8.54
Zircon_69_GUE16-06	0.0462	0.0076	0.0334	0.0055	0.0052	0.0003	0.0016	0.0002	0.04	33.1	1.8	34.0	5.2	10.0	270.0	33.1	1.80	2.65
Zircon_70_GUE16-06	0.0470	0.0094	0.0363	0.0071	0.0054	0.0004	0.0021	0.0003	0.32	34.7	2.5	35.9	6.9	0.0	370.0	34.7	2.50	3.34
Zircon_71_GUE16-06	0.0490	0.0110	0.0460	0.0100	0.0068	0.0005	0.0023	0.0004	-0.12	43.8	3.2	45.0	10.0	70.0	430.0	43.8	3.20	2.67
Zircon_72_GUE16-06	0.0537	0.0096	0.0496	0.0087	0.0071	0.0005	0.0029	0.0004	-0.25	45.3	3.1	48.9	8.4	140.0	360.0	45.3	3.10	7.36
Zircon_75_GUE16-06	0.0630	0.0110	0.0520	0.0086	0.0064	0.0004	0.0023	0.0002	-0.16	41.1	2.2	51.1	8.2	490.0	320.0	41.1	2.20	19.57
Zircon_77_GUE16-06	0.0478	0.0036	0.0459	0.0036	0.0070	0.0002	0.0024	0.0002	0.13	45.0	1.4	45.5	3.5	90.0	150.0	45.0	1.40	1.10
Zircon_78_GUE16-06	0.0640	0.0120	0.0510	0.0100	0.0064	0.0005	0.0024	0.0005	-0.03	40.9	3.1	49.8	9.9	720.0	330.0	40.9	3.10	17.87
Zircon_79_GUE16-06	0.0459	0.0036	0.0420	0.0034	0.0066	0.0002	0.0022	0.0001	-0.22	42.5	1.3	41.7	3.3	-20.0	160.0	42.5	1.30	-1.92
Zircon_80_GUE16-06	0.0563	0.0064	0.0603	0.0067	0.0079	0.0003	0.0026	0.0003	0.07	50.6	2.2	59.3	6.2	430.0	230.0	50.6	2.20	14.67
Zircon_81_GUE16-06	0.0493	0.0057	0.0497	0.0053	0.0075	0.0003	0.0023	0.0002	-0.29	48.2	1.8	49.1	5.1	120.0	230.0	48.2	1.80	1.83
Zircon_82_GUE16-06	0.0570	0.0100	0.0506	0.0081	0.0068	0.0004	0.0027	0.0003	-0.07	43.5	2.4	49.8	7.9	310.0	320.0	43.5	2.40	12.65
Zircon_83_GUE16-06	0.0558	0.0059	0.0569	0.0072	0.0069	0.0003	0.0026	0.0003	0.44	46.5	1.7	56.0	6.6	380.0	220.0	46.5	1.70	16.96
Zircon_84_GUE16-06	0.0528	0.0066	0.0494	0.0063	0.0069	0.0003	0.0026	0.0003	-0.03	44.0	1.9	48.8	6.1	280.0	250.0	44.0	1.90	9.84
Zircon_85_GUE16-06	0.0560	0.0120	0.0540	0.0120	0.0067	0.0004	0.0023	0.0004	0.01	43.0	2.6	55.0	12.0	190.0	430.0	43.0	2.60	21.82
Zircon_86_GUE16-06	0.0501	0.0048	0.0474	0.0048	0.0069	0.0002	0.0022	0.0002	0.14	44.1	1.4	46.9	4.6	170.0	200.0	44.1	1.40	5.97
Zircon_87_GUE16-06	0.0630	0.0310	0.0600	0.0370	0.0068	0.0005	0.0029	0.0011	0.29	43.9	3.1	59.0	31.0	590.0	380.0	43.9	3.10	25.59
Zircon_88_GUE16-06	0.0500	0.0110	0.0486	0.0096	0.0074	0.0004	0.0022	0.0003	-0.39	47.7	2.6	47.9	9.1	100.0	360.0	47.7	2.60	0.42
Zircon_89_GUE16-06	0.0503	0.0056	0.0443	0.0049	0.0065	0.0002	0.0020	0.0001	-0.03	41.7	1.6	43.9	4.8	190.0	240.0	41.7	1.60	5.01
Zircon_90_GUE16-06	0.0503	0.0084	0.0440	0.0073	0.0065	0.0002	0.0021	0.0002	0.07	41.6	1.5	43.4	7.1	150.0	310.0	41.6	1.50	4.15
Zircon_93_GUE16-06	0.0466	0.0065	0.0427	0.0056	0.0064	0.0003	0.0021	0.0002	0.07	41.3	1.9	42.3	5.6	60.0	260.0	41.3	1.90	2.36
Zircon_95_GUE16-06	0.0600	0.0120	0.0519	0.0099	0.0064	0.0004	0.0025	0.0004	0.00	41.0	2.8	50.9	9.5	540.0	410.0	41.0	2.80	19.45
Zircon_96_GUE16-06	0.0550	0.0600	0.0540	0.0950	0.0069	0.0009	0.0026	0.0031	0.28	44.3	5.5	53.0	74.0	260.0	430.0	44.3	5.50	16.42
Zircon_97_GUE16-06	0.0506	0.0042	0.0481	0.0039	0.0070	0.0003	0.0023	0.0002	0.06	44.6	1.6	47.6	3.8	160.0	170.0	44.6	1.60	6.30
Zircon_98_GUE16-06	0.0504	0.0033	0.0454	0.0034	0.0065	0.0002	0.0021	0.0001	0.32	42.0	1.3	45.1	3.3	210.0	130.0	42.0	1.30	6.87
Zircon_99_GUE16-06	0.0512	0.0045	0.0517	0.0045	0.0073	0.0003	0.0023	0.0002	-0.01	47.0	1.6	51.1	4.3	240.0	190.0	47.0	1.60	8.02
Zircon_100_GUE16-06	0.0664	0.0046	0.0708	0.0048	0.0077	0.0002	0.0041	0.0005	-0.17	49.6	1.5	69.4	4.5	770.0	140.0	49.6	1.50	28.53
Zircon_101_GUE16-06	0.0630	0.0160	0.0550	0.0120	0.0071	0.0006	0.0023	0.0004	0.08	45.7	3.9	54.0	12.0	350.0	440.0	45.7	3.90	15.37
Zircon_102_GUE16-06	0.0525	0.0084	0.0447	0.0066	0.0065	0.0004	0.0020	0.0003	0.00	42.0	2.4	44.1	6.4	240.0	290.0	42.0	2.40	4.76
Zircon_104_GUE16-06	0.0515	0.0070	0.0456	0.0052	0.0063	0.0003	0.0021	0.0002	-0.22	40.8	1.9	45.2	5.0	160.0	260.0	40.8	1.90	9.73

CORRECTED RATIOS¹CORRECTED AGES (Ma)⁴

Best age

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ abs	²⁰⁷ Pb/ ²³⁵ U	±2σ abs	²⁰⁶ Pb/ ²³⁸ U	±2σ abs	²⁰⁸ Pb/ ²³² Th	±2σ abs	R/σ	²⁰⁶ Pb/ ²³⁸ U	±2σ	²⁰⁷ Pb/ ²³⁵ U	±2σ	²⁰⁷ Pb/ ²⁰⁶ Pb	±2σ	(Ma) ³	±2σ	Disc % ⁴
GUE16-07 (Gr07*)																		
Ensamblaje El Camalote, Suite Cuale-Macias, Complejo Arteaga																		
Zircon_01_GUE16-07	0.0537	0.0097	0.0575	0.0099	0.0080	0.0003	0.0026	0.0003	-0.22	51.4	2.1	56.2	9.5	120.0	350.0	51.4	2.10	8.54
Zircon_02_GUE16-07	0.0500	0.0100	0.0464	0.0089	0.0069	0.0005	0.0020	0.0002	0.06	44.3	3.0	45.6	8.5	140.0	380.0	44.3	3.00	2.85
Zircon_03_GUE16-07	0.0609	0.0088	0.3450	0.0700	0.0435	0.0017	0.0035	0.0019	-0.02	274.0	11.0	301.0	36.0	610.0	130.0	274.0	11.00	8.97
Zircon_04_GUE16-07	0.0648	0.0092	0.0656	0.0078	0.0075	0.0004	0.0025	0.0003	-0.05	48.2	2.5	64.2	7.4	630.0	290.0	48.2	2.50	24.92
Zircon_05_GUE16-07	0.0530	0.0130	0.0405	0.0087	0.0063	0.0004	0.0020	0.0002	-0.23	40.3	2.7	40.0	8.4	90.0	420.0	40.3	2.70	-0.75
Zircon_06_GUE16-07	0.0600	0.0140	0.0490	0.0110	0.0062	0.0004	0.0020	0.0004	0.05	40.1	2.3	48.0	11.0	250.0	440.0	40.1	2.30	16.46
Zircon_07_GUE16-07	0.0481	0.0039	0.0456	0.0035	0.0069	0.0002	0.0022	0.0001	0.15	44.5	1.4	45.2	3.4	70.0	160.0	44.5	1.40	1.55
Zircon_08_GUE16-07	0.0700	0.0170	0.0540	0.0120	0.0060	0.0005	0.0022	0.0004	-0.02	38.5	3.3	54.0	12.0	410.0	500.0	38.5	3.30	28.70
Zircon_09_GUE16-07	0.0486	0.0066	0.0569	0.0079	0.0083	0.0004	0.0027	0.0003	0.14	53.4	2.3	57.1	7.3	250.0	280.0	53.4	2.30	6.48
Zircon_11_GUE16-07	0.0489	0.0027	0.1787	0.0094	0.0260	0.0006	0.0083	0.0007	0.00	165.3	3.7	167.8	7.8	140.0	110.0	165.3	3.70	1.49
Zircon_12_GUE16-07	0.0486	0.0076	0.0537	0.0081	0.0082	0.0004	0.0026	0.0003	-0.08	52.8	2.3	52.8	7.8	160.0	290.0	52.8	2.30	
Zircon_14_GUE16-07	0.0528	0.0091	0.1820	0.0310	0.0252	0.0011	0.0081	0.0016	-0.19	161.5	6.8	171.0	25.0	280.0	290.0	161.5	6.80	5.56
Zircon_15_GUE16-07	0.0560	0.0110	0.0590	0.0120	0.0081	0.0005	0.0029	0.0006	0.17	51.7	3.3	60.0	11.0	200.0	380.0	51.7	3.30	13.83
Zircon_16_GUE16-07	0.0574	0.0095	0.0543	0.0097	0.0063	0.0004	0.0022	0.0002	0.44	40.7	2.5	53.1	9.3	520.0	300.0	40.7	2.50	23.35
Zircon_17_GUE16-07	0.0745	0.0021	1.7920	0.0640	0.1742	0.0040	0.0421	0.0027	0.17	1035.0	22.0	1041.0	23.0	1042.0	58.0	1035.0	22.00	0.58
Zircon_18_GUE16-07	0.0450	0.0110	0.0440	0.0100	0.0066	0.0005	0.0022	0.0003	0.16	42.2	2.9	43.3	9.9	-90.0	430.0	42.2	2.90	2.54

Zircon_19_GUE16-07	0.0620	0.0160	0.0530	0.0120	0.0063	0.0004	0.0020	0.0003	-0.08	40.6	2.6	51.0	11.0	280.0	460.0	40.6	2.60	20.39
Zircon_20_GUE16-07	0.0512	0.0044	0.0672	0.0055	0.0096	0.0003	0.0031	0.0003	-0.06	61.6	1.7	65.9	5.3	220.0	180.0	61.6	1.70	6.53
Zircon_21_GUE16-07	0.0570	0.0170	0.0480	0.0130	0.0064	0.0005	0.0023	0.0004	0.12	40.9	3.3	47.0	13.0	170.0	510.0	40.9	3.30	12.98
Zircon_23_GUE16-07	0.0521	0.0027	0.3120	0.0150	0.0436	0.0010	0.0135	0.0008	0.18	275.0	6.0	275.0	12.0	280.0	120.0	275.0	6.00	
Zircon_24_GUE16-07	0.0498	0.0077	0.0561	0.0086	0.0083	0.0004	0.0029	0.0003	0.10	53.1	2.3	55.1	8.2	170.0	300.0	53.1	2.30	3.63
Zircon_25_GUE16-07	0.0586	0.0097	0.0488	0.0083	0.0063	0.0004	0.0021	0.0003	-0.02	40.7	2.6	48.0	8.0	460.0	320.0	40.7	2.60	15.21
Zircon_26_GUE16-07	0.0718	0.0037	1.7320	0.0910	0.1720	0.0038	0.0527	0.0033	0.22	1025.0	21.0	1023.0	36.0	990.0	100.0	1025.0	21.00	-0.20
Zircon_28_GUE16-07	0.0515	0.0066	0.1800	0.0220	0.0251	0.0010	0.0086	0.0007	0.04	160.0	6.3	174.0	18.0	280.0	240.0	160.0	6.30	8.05
Zircon_29_GUE16-07	0.0508	0.0064	0.0538	0.0060	0.0078	0.0003	0.0025	0.0002	-0.05	50.2	1.9	53.1	5.7	180.0	240.0	50.2	1.90	5.46
Zircon_30_GUE16-07	0.0610	0.0100	0.0476	0.0073	0.0061	0.0003	0.0019	0.0003	0.10	39.2	2.2	48.2	7.4	640.0	290.0	39.2	2.20	18.67
Zircon_32_GUE16-07	0.0550	0.0100	0.0580	0.0110	0.0080	0.0004	0.0026	0.0003	-0.12	51.4	2.5	57.0	10.0	160.0	360.0	51.4	2.50	9.82
Zircon_33_GUE16-07	0.0516	0.0041	0.2980	0.0250	0.0417	0.0011	0.0127	0.0008	0.26	263.1	7.0	263.0	19.0	240.0	160.0	263.1	7.00	-0.04
Zircon_36_GUE16-07	0.0503	0.0079	0.0589	0.0090	0.0086	0.0003	0.0025	0.0003	-0.09	55.3	2.1	57.6	8.6	100.0	290.0	55.3	2.10	3.99
Zircon_37_GUE16-07	0.0548	0.0058	0.0554	0.0053	0.0076	0.0003	0.0024	0.0003	-0.14	48.6	1.9	54.7	5.1	430.0	220.0	48.6	1.90	11.15
Zircon_38_GUE16-07	0.0561	0.0057	0.0618	0.0059	0.0081	0.0004	0.0026	0.0003	0.17	51.8	2.2	60.7	5.7	480.0	220.0	51.8	2.20	14.66
Zircon_39_GUE16-07	0.0493	0.0087	0.0530	0.0100	0.0078	0.0005	0.0030	0.0005	-0.57	49.9	3.4	52.1	9.9	30.0	340.0	49.9	3.40	4.22
Zircon_40_GUE16-07	0.0516	0.0051	0.0568	0.0057	0.0080	0.0003	0.0026	0.0002	0.22	51.3	1.7	55.9	5.5	260.0	200.0	51.3	1.70	8.23
Zircon_41_GUE16-07	0.0560	0.0079	0.0820	0.0110	0.0108	0.0005	0.0036	0.0004	0.01	69.3	3.2	79.0	10.0	300.0	290.0	69.3	3.20	12.28
Zircon_43_GUE16-07	0.0570	0.0190	0.0520	0.0140	0.0062	0.0006	0.0020	0.0005	0.27	40.0	3.8	51.0	14.0	280.0	530.0	40.0	3.80	21.57
Zircon_44_GUE16-07	0.0556	0.0094	0.0463	0.0074	0.0061	0.0003	0.0021	0.0002	-0.11	39.4	1.9	45.7	7.2	340.0	320.0	39.4	1.90	13.79
Zircon_45_GUE16-07	0.0725	0.0018	1.4670	0.0640	0.1462	0.0043	0.0320	0.0020	0.42	879.0	24.0	917.0	24.0	997.0	48.0	879.0	24.00	4.14
Zircon_46_GUE16-07	0.0532	0.0064	0.0604	0.0069	0.0082	0.0003	0.0028	0.0003	-0.08	52.5	2.2	59.3	6.6	210.0	240.0	52.5	2.20	11.47
Zircon_47_GUE16-07	0.0467	0.0038	0.0537	0.0041	0.0083	0.0003	0.0028	0.0002	-0.06	53.2	1.6	53.0	3.9	150.0	180.0	53.2	1.60	-0.38
Zircon_49_GUE16-07	0.0500	0.0110	0.0480	0.0100	0.0069	0.0005	0.0019	0.0003	0.20	44.1	2.8	47.2	9.6	90.0	390.0	44.1	2.80	6.57
Zircon_50_GUE16-07	0.0514	0.0075	0.0546	0.0068	0.0083	0.0004	0.0028	0.0002	-0.28	53.2	2.2	55.1	7.0	150.0	270.0	53.2	2.20	3.45
Zircon_51_GUE16-07	0.0487	0.0086	0.0482	0.0074	0.0079	0.0004	0.0025	0.0003	-0.23	50.8	2.6	48.7	7.5	10.0	330.0	50.8	2.60	-4.31
Zircon_52_GUE16-07	0.0734	0.0031	1.6930	0.0650	0.1689	0.0036	0.0503	0.0027	0.01	1006.0	20.0	1003.0	24.0	1001.0	84.0	1006.0	20.00	-0.30
Zircon_53_GUE16-07	0.0760	0.0023	1.8000	0.0540	0.1737	0.0034	0.0499	0.0022	0.36	1032.0	19.0	1045.0	21.0	1097.0	63.0	1032.0	19.00	1.24
Zircon_54_GUE16-07	0.0471	0.0030	0.0540	0.0033	0.0083	0.0002	0.0026	0.0001	-0.09	53.0	1.3	53.4	3.2	110.0	130.0	53.0	1.30	0.75
Zircon_55_GUE16-07	0.0640	0.0180	0.0650	0.0160	0.0077	0.0006	0.0025	0.0005	-0.03	49.4	3.7	63.0	16.0	270.0	520.0	49.4	3.70	21.59
Zircon_57_GUE16-07	0.0798	0.0023	2.1510	0.0740	0.1975	0.0050	0.0549	0.0032	0.37	1161.0	27.0	1165.0	24.0	1185.0	58.0	1161.0	27.00	0.34
Zircon_58_GUE16-07	0.0474	0.0048	0.1550	0.0130	0.0239	0.0010	0.0082	0.0007	-0.08	152.3	6.0	147.0	12.0	80.0	200.0	152.3	6.00	-3.61
Zircon_60_GUE16-07	0.0680	0.0140	0.0520	0.0110	0.0059	0.0005	0.0025	0.0004	-0.07	38.2	3.1	53.0	11.0	500.0	440.0	38.2	3.10	27.92
Zircon_61_GUE16-07	0.0530	0.0220	0.0580	0.0330	0.0081	0.0004	0.0026	0.0005	0.13	52.0	2.7	57.0	28.0	180.0	390.0	52.0	2.70	8.77
Zircon_62_GUE16-07	0.0452	0.0045	0.0543	0.0052	0.0086	0.0003	0.0021	0.0004	0.35	55.1	1.9	53.6	4.9	-30.0	180.0	55.1	1.90	-2.80
Zircon_63_GUE16-07	0.0716	0.0026	1.5360	0.0580	0.1565	0.0034	0.0445	0.0028	0.22	937.0	19.0	950.0	22.0	960.0	74.0	937.0	19.00	1.37
Zircon_64_GUE16-07	0.0522	0.0096	0.0402	0.0077	0.0060	0.0003	0.0018	0.0002	0.08	38.3	2.1	39.8	7.5	330.0	320.0	38.3	2.10	3.77
Zircon_65_GUE16-07	0.0535	0.0095	0.0610	0.0100	0.0085	0.0004	0.0028	0.0003	-0.15	54.2	2.6	59.7	9.9	210.0	350.0	54.2	2.60	9.21
Zircon_66_GUE16-07	0.0590	0.0130	0.0540	0.0110	0.0063	0.0004	0.0023	0.0003	-0.26	40.4	2.4	53.0	11.0	440.0	460.0	40.4	2.40	23.77
Zircon_67_GUE16-07	0.0524	0.0033	0.3190	0.0180	0.0434	0.0009	0.0133	0.0008	0.03	273.9	5.3	280.0	14.0	310.0	140.0	273.9	5.30	2.18
Zircon_68_GUE16-07	0.2033	0.0039	14.4700	0.3400	5.153	0.0099	0.1480	0.0061	0.45	2679.0	42.0	2781.0	22.0	2855.0	31.0	2855.0	31.00	3.67
Zircon_69_GUE16-07	0.0537	0.0095	0.0580	0.0100	0.0078	0.0004	0.0022	0.0003	0.15	49.8	2.6	57.0	9.8	170.0	320.0	49.8	2.60	12.63
Zircon_70_GUE16-07	0.0790	0.0023	2.1490	0.0650	0.1965	0.0040	0.0592	0.0028	0.21	1156.0	21.0	1166.0	21.0	1161.0	56.0	1156.0	21.00	0.86
Zircon_71_GUE16-07	0.0507	0.0048	0.0611	0.0051	0.0087	0.0003	0.0030	0.0002	-0.23	55.8	1.8	60.0	4.9	220.0	200.0	55.8	1.80	7.00
Zircon_75_GUE16-07	0.0580	0.0120	0.0486	0.0092	0.0062	0.0004	0.0021	0.0003	-0.05	39.9	2.6	47.7	8.9	260.0	390.0	39.9	2.60	16.35
Zircon_76_GUE16-07	0.0785	0.0035	2.0200	0.1000	0.1885	0.0044	0.0570	0.0036	0.21	1113.0	24.0	1118.0	34.0	1163.0	89.0	1113.0	24.00	0.45
Zircon_77_GUE16-07	0.0502	0.0050	0.2930	0.0300	0.0408	0.0014	0.0124	0.0011	-0.04	257.9	8.7	261.0	23.0	260.0	210.0	257.9	8.70	1.19
Zircon_78_GUE16-07	0.0502	0.0018	0.2274	0.0086	0.0326	0.0007	0.0100	0.0004	-0.05	206.9	4.1	207.9	7.1	210.0	77.0	206.9	4.10	0.48
Zircon_79_GUE16-07	0.0600	0.0130	0.0620	0.0120	0.0083	0.0005	0.0029	0.0003	-0.14	53.2	2.9	60.0	11.0	280.0	390.0	53.2	2.90	11.33
Zircon_80_GUE16-07	0.0570	0.0100	0.0650	0.0110	0.0086	0.0005	0.0025	0.0003	-0.23	55.4	3.1	63.0	10.0	210.0	350.0	55.4	3.10	12.06
Zircon_82_GUE16-07	0.0523	0.0038	0.0679	0.0055	0.0097	0.0003	0.0029	0.0002	0.26	62.4	1.6	67.4	5.1	270.0	160.0	62.4	1.60	7.42
Zircon_83_GUE16-07	0.0520	0.0060	0.0566	0.0064	0.0079	0.0003	0.0026	0.0002	0.00	50.5	1.8	56.6	6.0	250.0	230.0	50.5	1.80	10.78
Zircon_85_GUE16-07	0.0680	0.0400	0.0540	0.0820	0.0066	0.0012	-0.0002	0.0029	0.63	42.3	7.8	52.0	43.0	40.0	130.0	42.3	7.80	18.65
Zircon_86_GUE16-07	0.0495	0.0077	0.0426	0.0067	0.0061	0.0003	0.0017	0.0002	0.10	39.3	1.9	42.1	6.5	130.0	280.0	39.3	1.90	6.65

Zircon_87_GUE16-07	0.0495	0.0049	0.0593	0.0056	0.0084	0.0003	0.0026	0.0002	0.09	54.0	1.6	58.4	5.4	200.0	210.0	54.0	1.60	7.53
Zircon_88_GUE16-07	0.0490	0.0076	0.0555	0.0086	0.0081	0.0004	0.0028	0.0003	-0.07	52.1	2.7	55.8	8.5	260.0	300.0	52.1	2.70	6.63
Zircon_89_GUE16-07	0.0450	0.0160	0.0430	0.0140	0.0063	0.0005	0.0021	0.0004	0.06	40.5	3.4	42.0	13.0	-120.0	560.0	40.5	3.40	3.57
Zircon_90_GUE16-07	0.0512	0.0034	0.0571	0.0037	0.0081	0.0002	0.0025	0.0001	0.00	51.8	1.1	56.3	3.6	230.0	140.0	51.8	1.10	7.99
Zircon_91_GUE16-07	0.0509	0.0066	0.0570	0.0069	0.0082	0.0004	0.0025	0.0002	0.17	52.5	2.4	57.5	6.6	270.0	260.0	52.5	2.40	8.70
Zircon_92_GUE16-07	0.0880	0.0097	2.2600	0.3400	0.1838	0.0061	0.0658	0.0091	0.22	1088.0	32.0	1194.0	82.0	1370.0	170.0	1088.0	32.00	8.88
Zircon_93_GUE16-07	0.0530	0.0400	0.0570	0.0890	0.0081	0.0009	0.0007	0.0032	-0.22	52.0	5.4	56.0	64.0	90.0	250.0	52.0	5.40	7.14
Zircon_94_GUE16-07	0.0657	0.0033	1.0820	0.0640	0.1196	0.0030	0.0364	0.0021	-0.24	728.0	17.0	751.0	29.0	840.0	100.0	728.0	17.00	3.06
Zircon_95_GUE16-07	0.0780	0.0021	1.9550	0.0600	0.1836	0.0034	0.0519	0.0023	0.18	1086.0	18.0	1098.0	21.0	1148.0	57.0	1086.0	18.00	1.09
Zircon_96_GUE16-07	0.0522	0.0042	0.3370	0.0250	0.0453	0.0013	0.0148	0.0011	-0.25	285.5	7.8	293.0	19.0	270.0	160.0	285.5	7.80	2.56
Zircon_98_GUE16-07	0.0510	0.0054	0.1820	0.0180	0.0259	0.0009	0.0077	0.0006	-0.11	164.6	5.9	169.0	15.0	220.0	210.0	164.6	5.90	2.60
Zircon_99_GUE16-07	0.0570	0.0140	0.0470	0.0110	0.0062	0.0004	0.0021	0.0003	-0.19	39.7	2.6	46.0	10.0	100.0	430.0	39.7	2.60	13.70
Zircon_100_GUE16-07	0.0539	0.0046	0.2900	0.0240	0.0394	0.0012	0.0117	0.0007	0.12	249.3	7.4	256.0	19.0	290.0	180.0	249.3	7.40	2.62
Zircon_101_GUE16-07	0.0564	0.0091	0.0607	0.0092	0.0080	0.0005	0.0027	0.0004	-0.21	51.2	3.3	60.7	8.4	320.0	290.0	51.2	3.30	15.65
Zircon_103_GUE16-07	0.0495	0.0071	0.0563	0.0080	0.0081	0.0003	0.0026	0.0003	0.14	52.1	2.2	55.3	7.7	190.0	270.0	52.1	2.20	5.79

CORRECTED RATIOS¹CORRECTED AGES (Ma)²

SAMPLE	²⁰⁷ Pb/ ²⁰⁶ Pb		²⁰⁷ Pb/ ²³⁵ U		²⁰⁶ Pb/ ²³⁸ U		²⁰⁸ Pb/ ²³² Th		Rho	²⁰⁶ Pb/ ²³⁸ U		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		Best age		Disc % ⁴	
	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs	±2σ abs		±2σ abs	±2σ abs	±2σ abs	±2σ abs	(Ma) ³	±2σ				
BAL17-01 (Bal*)	Batolito Jilotlán, Suite Zihuatanejo, Complejo Arteaga																		
Zircon_02_BAL17-01	0.0596	0.0130	0.1420	0.0310	0.0166	0.0008	0.0056	0.0012	0.03	106.3	5.1	134.0	25.0	490.0	330.0	106.3	5.10	20.67	
Zircon_03_BAL17-01	0.0524	0.0057	0.1060	0.0110	0.0150	0.0006	0.0053	0.0007	-0.24	96.1	3.6	102.0	10.0	220.0	230.0	96.1	3.60	5.78	
Zircon_06_BAL17-01	0.0510	0.0130	0.0660	0.0160	0.0089	0.0006	0.0035	0.0009	0.21	56.9	3.9	63.0	15.0	140.0	440.0	56.9	3.90	9.68	
Zircon_07_BAL17-01	0.0550	0.0160	0.0600	0.0160	0.0082	0.0004	0.0030	0.0006	-0.23	52.9	2.5	58.0	15.0	250.0	470.0	52.9	2.50	8.79	
Zircon_08_BAL17-01	0.0508	0.0100	0.1250	0.0240	0.0185	0.0009	0.0063	0.0010	-0.24	117.8	5.7	118.0	21.0	140.0	350.0	117.8	5.70	0.17	
Zircon_09_BAL17-01	0.0476	0.0066	0.1190	0.0160	0.0185	0.0007	0.0055	0.0008	-0.04	118.0	4.3	113.0	15.0	50.0	270.0	118.0	4.30	-4.42	
Zircon_11_BAL17-01	0.0659	0.0050	1.3050	0.0970	0.1426	0.0037	0.0360	0.0044	0.33	859.0	21.0	843.0	43.0	765.0	160.0	859.0	21.00	-1.90	
Zircon_15_BAL17-01	0.0510	0.0099	0.1170	0.0220	0.0168	0.0007	0.0048	0.0007	-0.11	107.1	4.1	110.0	20.0	170.0	380.0	107.1	4.10	2.64	
Zircon_16_BAL17-01	0.0499	0.0069	0.0618	0.0084	0.0091	0.0004	0.0027	0.0005	0.04	58.3	2.4	60.6	7.8	210.0	270.0	58.3	2.40	3.80	
Zircon_17_BAL17-01	0.0517	0.0074	0.1310	0.0220	0.0182	0.0009	0.0065	0.0013	0.31	116.0	5.7	130.0	19.0	350.0	310.0	116.0	5.70	10.77	
Zircon_18_BAL17-01	0.0536	0.0073	0.1410	0.0180	0.0192	0.0007	0.0064	0.0010	0.11	122.7	4.2	135.0	17.0	310.0	280.0	122.7	4.20	9.11	
Zircon_19_BAL17-01	0.0463	0.0045	0.0841	0.0076	0.0132	0.0004	0.0042	0.0005	0.01	84.6	2.6	81.8	7.1	0.0	190.0	84.6	2.60	-3.42	
Zircon_20_BAL17-01	0.0540	0.0110	0.0700	0.0140	0.0096	0.0005	0.0045	0.0008	0.18	61.3	3.1	68.0	13.0	170.0	360.0	61.3	3.10	9.85	
Zircon_22_BAL17-01	0.0450	0.0069	0.1170	0.0170	0.0180	0.0007	0.0041	0.0008	-0.25	115.0	4.2	111.0	16.0	50.0	290.0	115.0	4.20	-3.60	
Zircon_24_BAL17-01	0.0480	0.0140	0.0580	0.0160	0.0087	0.0005	0.0032	0.0006	0.08	55.9	3.5	56.0	15.0	70.0	480.0	55.9	3.50	0.18	
Zircon_25_BAL17-01	0.0505	0.0100	0.1110	0.0240	0.0174	0.0010	0.0049	0.0010	0.10	111.4	6.3	110.0	21.0	40.0	370.0	111.4	6.30	-1.27	
Zircon_26_BAL17-01	0.0630	0.0130	0.1640	0.0310	0.0218	0.0012	0.0063	0.0012	-0.06	139.0	7.3	161.0	29.0	360.0	420.0	139.0	7.30	13.66	
Zircon_27_BAL17-01	0.0520	0.0110	0.1260	0.0260	0.0183	0.0010	0.0077	0.0011	0.17	116.7	6.2	124.0	23.0	150.0	380.0	116.7	6.20	5.89	
Zircon_30_BAL17-01	0.0470	0.0110	0.1110	0.0240	0.0174	0.0011	0.0059	0.0011	-0.15	111.1	6.7	109.0	22.0	120.0	410.0	111.1	6.70	-1.93	
Zircon_32_BAL17-01	0.0473	0.0084	0.1200	0.0210	0.0181	0.0007	0.0060	0.0010	0.23	115.9	4.5	117.0	19.0	200.0	320.0	115.9	4.50	0.94	
Zircon_33_BAL17-01	0.0498	0.0075	0.0636	0.0099	0.0088	0.0004	0.0029	0.0004	0.12	56.5	2.6	62.2	9.4	100.0	290.0	56.5	2.60	9.16	
Zircon_34_BAL17-01	0.0510	0.0110	0.0600	0.0110	0.0087	0.0005	0.0026	0.0005	-0.18	55.5	3.0	59.0	10.0	50.0	350.0	55.5	3.00	5.93	
Zircon_35_BAL17-01	0.0525	0.0084	0.0690	0.0100	0.0091	0.0004	0.0031	0.0005	0.32	58.3	2.4	67.0	9.6	250.0	280.0	58.3	2.40	12.99	
Zircon_36_BAL17-01	0.0640	0.0140	0.0720	0.0160	0.0088	0.0005	0.0030	0.0005	0.19	56.5	3.3	69.0	15.0	400.0	410.0	56.5	3.30	18.12	
Zircon_37_BAL17-01	0.0494	0.0071	0.0616	0.0085	0.0092	0.0004	0.0032	0.0005	0.00	58.7	2.4	61.5	7.9	140.0	280.0	58.7	2.40	4.55	
Zircon_38_BAL17-01	0.0590	0.0130	0.0720	0.0160	0.0093	0.0007	0.0024	0.0006	0.11	59.5	4.3	69.0	15.0	330.0	420.0	59.5	4.30	13.77	
Zircon_39_BAL17-01	0.0560	0.0100	0.1360	0.0220	0.0187	0.0009	0.0067	0.0011	-0.14	119.3	5.6	127.0	20.0	290.0	350.0	119.3	5.60	6.06	
Zircon_41_BAL17-01	0.0505	0.0073	0.0652	0.0090	0.0092	0.0004	0.0026	0.0005	-0.07	59.7	2.2	63.8	8.5	210.0	280.0	59.7	2.20	6.43	
Zircon_42_BAL17-01	0.0491	0.0077	0.0635	0.0098	0.0093	0.0003	0.0031	0.0005	0.66	59.3	1.6	62.4	9.1	140.0	230.0	59.3	1.60	4.97	
Zircon_44_BAL17-01	0.0450	0.0140	0.0610	0.0160	0.0096	0.0005	0.0032	0.0005	-0.32	61.7	2.9	61.0	15.0	-100.0	450.0	61.7	2.90	-1.15	
Zircon_45_BAL17-01	0.0550	0.0085	0.1240	0.0200	0.0166	0.0006	0.0061	0.0009	0.15	106.0	3.7	124.0	17.0	440.0	300.0	106.0	3.70	14.52	
Zircon_47_BAL17-01	0.0618	0.0081	0.1130	0.0140	0.0132	0.0004	0.0048	0.0006	-0.16	84.4	2.6	110.0	12.0	650.0	250.0	84.4	2.60	23.27	
Zircon_48_BAL17-01	0.0680	0.0100	0.0820	0.0120	0.0094	0.0005	0.0033	0.0006	0.05	60.2	3.4	80.0	11.0	690.0	290.0	60.2	3.40	24.75	

Zircon_49_BAL17-01	0.0530	0.0067	0.1310	0.0150	0.0181	0.0006	0.0065	0.0009	-0.27	115.3	3.6	124.0	13.0	230.0	240.0	115.3	3.60	7.02
Zircon_50_BAL17-01	0.0520	0.0120	0.0620	0.0140	0.0087	0.0005	0.0025	0.0008	-0.10	55.7	3.3	62.0	13.0	190.0	400.0	55.7	3.30	10.16
Zircon_52_BAL17-01	0.0664	0.0071	0.1560	0.0150	0.0172	0.0007	0.0074	0.0009	-0.03	110.1	4.2	146.0	14.0	770.0	220.0	110.1	4.20	24.59
Zircon_55_BAL17-01	0.0575	0.0041	0.5860	0.0390	0.0751	0.0018	0.0238	0.0027	0.26	466.6	11.0	471.0	25.0	492.0	160.0	466.6	11.00	0.93
Zircon_57_BAL17-01	0.0542	0.0078	0.1310	0.0170	0.0182	0.0008	0.0052	0.0009	0.03	116.1	5.2	124.0	16.0	300.0	280.0	116.1	5.20	6.37
Zircon_59_BAL17-01	0.0480	0.0180	0.0580	0.0300	0.0087	0.0005	0.0029	0.0009	-0.28	56.0	2.8	57.0	26.0	150.0	350.0	56.0	2.80	1.75
Zircon_66_BAL17-01	0.0548	0.0091	0.0700	0.0120	0.0095	0.0004	0.0032	0.0005	0.14	61.4	2.3	68.0	11.0	360.0	300.0	61.4	2.30	9.71
Zircon_67_BAL17-01	0.0470	0.0120	0.0259	0.0063	0.0039	0.0002	0.0010	0.0004	0.07	25.4	1.4	26.8	6.2	40.0	430.0	25.4	1.40	5.22
Zircon_69_BAL17-01	0.0541	0.0092	0.1340	0.0210	0.0181	0.0008	0.0060	0.0009	-0.19	115.7	4.9	126.0	19.0	340.0	340.0	115.7	4.90	8.17
Zircon_70_BAL17-01	0.0528	0.0120	0.0640	0.0150	0.0088	0.0004	0.0029	0.0005	0.40	56.4	2.6	62.0	15.0	150.0	420.0	56.4	2.60	9.03
Zircon_71_BAL17-01	0.0530	0.0130	0.1150	0.0270	0.0183	0.0011	0.0065	0.0012	-0.28	117.1	6.9	112.0	24.0	110.0	430.0	117.1	6.90	-4.55
Zircon_72_BAL17-01	0.0463	0.0054	0.0557	0.0065	0.0088	0.0002	0.0028	0.0003	-0.21	56.6	1.5	54.9	6.2	-30.0	230.0	56.6	1.50	-3.10
Zircon_73_BAL17-01	0.0617	0.0092	0.1490	0.0220	0.0191	0.0010	0.0080	0.0014	-0.22	121.8	6.1	145.0	20.0	540.0	320.0	121.8	6.10	16.00
Zircon_74_BAL17-01	0.0580	0.0120	0.1540	0.0280	0.0188	0.0009	0.0062	0.0013	0.13	120.1	6.0	147.0	24.0	390.0	350.0	120.1	6.00	18.30
Zircon_77_BAL17-01	0.0510	0.0350	0.0600	0.0620	0.0092	0.0009	0.0033	0.0016	0.44	58.9	5.7	58.0	46.0	20.0	440.0	58.9	5.70	-1.55
Zircon_80_BAL17-01	0.0478	0.0052	0.1032	0.0100	0.0159	0.0005	0.0050	0.0006	0.08	101.6	3.1	100.6	10.0	120.0	220.0	101.6	3.10	-0.99
Zircon_81_BAL17-01	0.0580	0.0092	0.1000	0.0160	0.0133	0.0005	0.0049	0.0006	-0.31	85.1	3.2	99.0	15.0	300.0	290.0	85.1	3.20	14.04
Zircon_84_BAL17-01	0.0530	0.0130	0.1400	0.0350	0.0191	0.0011	0.0087	0.0020	0.10	122.1	7.1	132.0	30.0	170.0	470.0	122.1	7.10	7.50
Zircon_87_BAL17-01	0.0503	0.0074	0.0620	0.0097	0.0092	0.0004	0.0030	0.0004	0.14	59.0	2.4	62.8	8.5	200.0	270.0	59.0	2.40	6.05
Zircon_88_BAL17-01	0.0650	0.0250	0.0860	0.0190	0.0094	0.0006	0.0038	0.0007	0.02	60.1	3.6	85.0	17.0	760.0	350.0	60.1	3.60	29.29
Zircon_93_BAL17-01	0.0532	0.0081	0.1360	0.0210	0.0191	0.0008	0.0056	0.0009	0.05	121.7	5.2	128.0	18.0	230.0	300.0	121.7	5.20	4.92
Zircon_94_BAL17-01	0.0753	0.0048	1.8800	0.1100	0.1802	0.0033	0.0538	0.0060	0.25	1067.8	18.0	1075.0	40.0	1071.0	130.0	1067.8	18.00	0.67
Zircon_95_BAL17-01	0.0497	0.0048	0.1330	0.0180	0.0196	0.0016	0.0064	0.0012	0.49	124.9	9.8	126.0	16.0	150.0	190.0	124.9	9.80	0.87
Zircon_96_BAL17-01	0.0490	0.0039	0.0736	0.0056	0.0111	0.0003	0.0035	0.0004	0.21	70.9	1.7	72.0	5.3	130.0	170.0	70.9	1.70	1.53
Zircon_97_BAL17-01	0.0580	0.0150	0.0730	0.0230	0.0104	0.0005	0.0032	0.0006	0.14	66.9	2.9	75.0	19.0	210.0	420.0	66.9	2.90	10.80
Zircon_99_BAL17-01	0.0670	0.0085	0.1010	0.0140	0.0109	0.0006	0.0038	0.0008	-0.02	70.2	3.6	97.0	13.0	770.0	250.0	70.2	3.60	27.63
Zircon_104_BAL17-01	0.0447	0.0052	0.0572	0.0066	0.0091	0.0003	0.0028	0.0003	0.19	58.1	1.8	56.2	6.4	20.0	230.0	58.1	1.80	-3.38

1. Incertidumbre absoluta propagada 2σ de acuerdo con [Paton et al., 2010](#), Improved laser ablation U-Pb zircon geochronology through robust downhole fractionation correction: *Geochemistry, Geophysics, Geosystems*, v. 11.

2. Determinación de edades usando Iolite y VizualAge software de [Petrus, J. A y Kamber, B. S. 2012](#), VizualAge: A Novel Approach to Laser Ablation ICP-MS U-Pb Geochronology Data Reduction: *Geostandards and Geoanalytical Research*, v. 36, p. 247-270.

3. Mejor edad calculada usando la relación $^{206}\text{Pb}/^{238}\text{U}$, edad para zircones más jóvenes que 1500Ma; y la relación $^{207}\text{Pb}/^{206}\text{Pb}$ para la edad de zircones más viejos. Valores límites (*cutoff*) de acuerdo a [Spencer et al., \(2016\)](#). Strategies towards statistically robust interpretations of in situ U-Pb zircon geochronology: *Geoscience Frontiers*, v. 7, p. 581-589.

4. Porcentaje de discordancia obtenido con la ecuación $[(\text{edad } ^{207}\text{Pb}/^{235}\text{U} - \text{edad } ^{206}\text{Pb}/^{238}\text{U}) / (\text{edad } ^{207}\text{Pb}/^{235}\text{U})] * 100$ de acuerdo con [Ludwig \(2003\)](#), ISOPLLOT, A geochronological toolkit for Microsoft Excel, Version 3.00: Berkeley Geochronology Center Special Publication 4, 70 p.

* Muestra abreviada nombrada en Figura 4 y 11.

Apéndice 4. Datos Analíticos de Isótopos de Hf en zircón obtenidos por LA-MC-ICPMS

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_i$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_C$	$\epsilon\text{Hf}(0)$	$\pm 2\text{SE } \epsilon\text{Hf}(0)$	$\epsilon\text{Hf}(0)$	T_{DM} (Ma)	T_{DM}^C (Ma)	
CHI-15-01 (Chi*)	Batolito Puerto Vallarta, Suite Cuale Macias																
Zircon-002_CHI15-01	76.0	0.282867	0.000030	0.002730	0.000180	0.282863	0.282785	0.033600	0.283250	0.038400	0.015	2.9	1.1	4.5	572.0	830.3	
Zircon-003_CHI15-01	77.2	0.282855	0.000022	0.001838	0.000042	0.282852	0.282785	0.033600	0.283250	0.038400	0.015	2.5	0.8	4.1	575.6	853.8	
Zircon-004_CHI15-01	92.7	0.282817	0.000028	0.000978	0.000023	0.282815	0.282785	0.033600	0.283250	0.038400	0.015	1.1	1.0	3.1	616.2	927.5	
Zircon-005_CHI15-01	74.2	0.282825	0.000021	0.001402	0.000009	0.282823	0.282785	0.033600	0.283250	0.038400	0.015	1.4	0.7	3.0	611.8	921.7	
Zircon-006_CHI15-01	82.0	0.282807	0.000035	0.002590	0.000050	0.282803	0.282785	0.033600	0.283250	0.038400	0.015	0.8	1.2	2.5	658.5	961.8	
Zircon-007_CHI15-01	68.0	0.282805	0.000019	0.001508	0.000018	0.282803	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.7	2.1	642.2	970.5	
Zircon-008_CHI15-01	76.9	0.282806	0.000022	0.001737	0.000038	0.282804	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.8	2.4	644.8	964.0	
Zircon-009_CHI15-01	92.4	0.282835	0.000027	0.002044	0.000086	0.282831	0.282785	0.033600	0.283250	0.038400	0.015	1.8	1.0	3.7	607.9	891.3	
Zircon-010_CHI15-01	89.5	0.282817	0.000021	0.001059	0.000027	0.282815	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.7	3.1	617.5	929.6	
Zircon-011_CHI15-01	87.3	0.282832	0.000025	0.000413	0.000003	0.282831	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.9	3.6	586.2	894.8	
Zircon-012_CHI15-01	20.7	0.282887	0.000020	0.001323	0.000026	0.282886	0.282785	0.033600	0.283250	0.038400	0.015	3.6	0.7	4.0	521.8	812.6	
Zircon-014_CHI15-01	80.0	0.282817	0.000026	0.002494	0.000022	0.282813	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.9	2.8	642.1	940.0	
Zircon-015_CHI15-01	83.0	0.282791	0.000027	0.001829	0.000005	0.282788	0.282785	0.033600	0.283250	0.038400	0.015	0.2	1.0	2.0	668.1	994.6	
Zircon-016_CHI15-01	77.8	0.282799	0.000021	0.001646	0.000031	0.282797	0.282785	0.033600	0.283250	0.038400	0.015	0.5	0.7	2.1	653.2	978.9	
Zircon-017_CHI15-01	69.4	0.282758	0.000021	0.000840	0.000019	0.282757	0.282785	0.033600	0.283250	0.038400	0.015	-1.0	0.7	0.5	697.1	1073.3	
Zircon-019_CHI15-01	66.8	0.282760	0.000016	0.000649	0.000007	0.282759	0.282785	0.033600	0.283250	0.038400	0.015	-0.9	0.6	0.6	690.7	1069.8	
Zircon-020_CHI15-01	80.4	0.282800	0.000030	0.002790	0.000140	0.282796	0.282785	0.033600	0.283250	0.038400	0.015	0.5	1.1	2.2	672.6	979.0	
Zircon-021_CHI15-01	79.2	0.282793	0.000024	0.001216	0.000043	0.282791	0.282785	0.033600	0.283250	0.038400	0.015	0.3	0.8	2.0	654.3	990.2	
Zircon-022_CHI15-01	84.6	0.282843	0.000020	0.001026	0.000016	0.282841	0.282785	0.033600	0.283250	0.038400	0.015	2.1	0.7	3.9	580.1	873.9	
Zircon-023_CHI15-01	75.1	0.282835	0.000022	0.001940	0.000110	0.282832	0.282785	0.033600	0.283250	0.038400	0.015	1.8	0.8	3.3	606.2	900.4	
Zircon-024_CHI15-01	80.0	0.282789	0.000023	0.001171	0.000017	0.282787	0.282785	0.033600	0.283250	0.038400	0.015	0.1	0.8	1.9	659.2	998.5	
Zircon-027_CHI15-01	86.4	0.282852	0.000019	0.000927	0.000010	0.282851	0.282785	0.033600	0.283250	0.038400	0.015	2.4	0.7	4.2	565.9	852.2	
Zircon-028_CHI15-01	68.7	0.282841	0.000026	0.001553	0.000036	0.282839	0.282785	0.033600	0.283250	0.038400	0.015	2.0	0.9	3.4	591.3	889.3	
Zircon-029_CHI15-01	85.5	0.282865	0.000023	0.000956	0.000019	0.282863	0.282785	0.033600	0.283250	0.038400	0.015	2.8	0.8	4.7	547.9	823.5	
Zircon-030_CHI15-01	72.2	0.282789	0.000019	0.000975	0.000008	0.282788	0.282785	0.033600	0.283250	0.038400	0.015	0.1	0.7	1.7	655.7	1002.5	
Zircon-031_CHI15-01	67.4	0.282789	0.000032	0.003765	0.000061	0.282784	0.282785	0.033600	0.283250	0.038400	0.015	0.1	1.1	1.5	708.2	1013.2	
Zircon-033_CHI15-01	80.1	0.282706	0.000025	0.001201	0.000027	0.282704	0.282785	0.033600	0.283250	0.038400	0.015	-2.8	0.9	-1.1	777.6	1184.7	
Zircon-034_CHI15-01	68.4	0.282791	0.000016	0.002131	0.000019	0.282788	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.6	1.6	673.6	1003.5	
Zircon-035_CHI15-01	80.9	0.282788	0.000029	0.001905	0.000020	0.282785	0.282785	0.033600	0.283250	0.038400	0.015	0.1	1.0	1.8	673.8	1002.8	
Zircon-036_CHI15-01	74.3	0.282806	0.000028	0.001743	0.000047	0.282804	0.282785	0.033600	0.283250	0.038400	0.015	0.7	1.0	2.3	644.9	965.4	
Zircon-037_CHI15-01	84.7	0.282794	0.000023	0.001115	0.000014	0.282792	0.282785	0.033600	0.283250	0.038400	0.015	0.3	0.8	2.1	651.1	984.4	
Zircon-038_CHI15-01	82.0	0.282763	0.000029	0.000909	0.000033	0.282762	0.282785	0.033600	0.283250	0.038400	0.015	-0.8	1.0	1.0	691.3	1054.9	
Zircon-039_CHI15-01	71.5	0.282770	0.000025	0.001306	0.000018	0.282768	0.282785	0.033600	0.283250	0.038400	0.015	-0.5	0.9	1.0	688.6	1046.5	
Zircon-041_CHI15-01	77.9	0.282814	0.000023	0.001661	0.000039	0.282812	0.282785	0.033600	0.283250	0.038400	0.015	1.0	0.8	2.7	631.9	945.2	
Zircon-042_CHI15-01	87.0	0.282745	0.000021	0.000960	0.000003	0.282743	0.282785	0.033600	0.283250	0.038400	0.015	-1.4	0.7	0.5	717.6	1092.5	
Zircon-043_CHI15-01	90.3	0.282841	0.000025	0.001376	0.000054	0.282839	0.282785	0.033600	0.283250	0.038400	0.015	2.0	0.9	3.9	588.4	876.4	
Zircon-044_CHI15-01	88.5	0.282851	0.000019	0.000891	0.000016	0.282850	0.282785	0.033600	0.283250	0.038400	0.015	2.3	0.7	4.2	566.8	853.1	
Zircon-046_CHI15-01	92.3	0.282816	0.000019	0.000440	0.000009	0.282815	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.7	3.1	608.9	927.8	
Zircon-047_CHI15-01	29.7	0.282849	0.000024	0.001840	0.000022	0.282848	0.282785	0.033600	0.283250	0.038400	0.015	2.3	0.8	2.9	584.3	893.7	
Zircon-048_CHI15-01	171.6	0.282597	0.000026	0.001753	0.000023	0.282591	0.282785	0.033600	0.283250	0.038400	0.015	-6.6	0.9	-3.0	946.0	1379.5	
Zircon-049_CHI15-01	87.5	0.282695	0.000022	0.001575	0.000033	0.282692	0.282785	0.033600	0.283250	0.038400	0.015	-3.2	0.8	-1.3	801.2	1206.4	
Zircon-050_CHI15-01	80.2	0.282791	0.000024	0.001484	0.000057	0.282789	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.8	1.9	661.9	995.0	
Zircon-051_CHI15-01	67.4	0.282721	0.000021	0.000550	0.000003	0.282720	0.282785	0.033600	0.283250	0.038400	0.015	-2.3	0.7	-0.8	743.4	1156.6	
Zircon-052_CHI15-01	91.3	0.282848	0.000024	0.000725	0.000004	0.282847	0.282785	0.033600	0.283250	0.038400	0.015	2.2	0.8	4.2	568.5	857.5	
Zircon-053_CHI15-01	79.3	0.282828	0.000021	0.001040	0.000008	0.282826	0.282785	0.033600	0.283250	0.038400	0.015	1.5	0.7	3.2	601.6	910.8	
Zircon-054_CHI15-01	21.1	0.282865	0.000024	0.001255	0.000051	0.282865	0.282785	0.033600	0.283250	0.038400	0.015	2.8	0.8	3.3	552.3	861.9	

Zircon-055_CHI15-01	85.8	0.282856	0.000020	0.000900	0.000019	0.282855	0.282785	0.033600	0.283250	0.038400	0.015	2.5	0.7	4.4	559.8	843.4
Zircon-056_CHI15-01	96.1	0.283011	0.000024	0.002032	0.000047	0.283007	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.8	10.0	350.8	491.5
Zircon-057_CHI15-01	87.1	0.282839	0.000022	0.000654	0.000013	0.282838	0.282785	0.033600	0.283250	0.038400	0.015	1.9	0.8	3.8	580.1	880.1
Zircon-058_CHI15-01	84.5	0.282818	0.000022	0.001418	0.000023	0.282816	0.282785	0.033600	0.283250	0.038400	0.015	1.2	0.8	3.0	622.0	931.6
Zircon-059_CHI15-01	90.3	0.282799	0.000021	0.001264	0.000025	0.282797	0.282785	0.033600	0.283250	0.038400	0.015	0.5	0.7	2.4	646.6	970.4
Zircon-060_CHI15-01	81.0	0.282766	0.000022	0.001440	0.000100	0.282764	0.282785	0.033600	0.283250	0.038400	0.015	-0.7	0.8	1.0	696.9	1050.5
Zircon-061_CHI15-01	79.2	0.282846	0.000029	0.001848	0.000022	0.282843	0.282785	0.033600	0.283250	0.038400	0.015	2.2	1.0	3.8	588.8	873.0
Zircon-062_CHI15-01	95.1	0.282803	0.000016	0.000553	0.000018	0.282802	0.282785	0.033600	0.283250	0.038400	0.015	0.6	0.6	2.7	628.9	955.8
Zircon-063_CHI15-01	65.0	0.282794	0.000028	0.002640	0.000110	0.282791	0.282785	0.033600	0.283250	0.038400	0.015	0.3	1.0	1.6	678.7	1000.0
Zircon-064_CHI15-01	85.9	0.282798	0.000029	0.002463	0.000079	0.282794	0.282785	0.033600	0.283250	0.038400	0.015	0.5	1.0	2.2	669.5	979.5
Zircon-065_CHI15-01	84.2	0.282856	0.000021	0.001026	0.000019	0.282854	0.282785	0.033600	0.283250	0.038400	0.015	2.5	0.7	4.3	561.7	844.8
Zircon-066_CHI15-01	88.3	0.282792	0.000022	0.000570	0.000027	0.282791	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.8	2.2	644.6	984.7
Zircon-067_CHI15-01	78.9	0.282846	0.000021	0.001466	0.000017	0.282844	0.282785	0.033600	0.283250	0.038400	0.015	2.2	0.7	3.8	582.7	871.9
Zircon-069_CHI15-01	71.9	0.282796	0.000023	0.001783	0.000039	0.282794	0.282785	0.033600	0.283250	0.038400	0.015	0.4	0.8	1.9	660.0	989.4
Zircon-070_CHI15-01	77.1	0.282775	0.000033	0.001317	0.000020	0.282773	0.282785	0.033600	0.283250	0.038400	0.015	-0.4	1.2	1.3	681.7	1032.1
Zircon-071_CHI15-01	88.4	0.282816	0.000019	0.000622	0.000003	0.282815	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.7	3.0	611.8	930.9
Zircon-072_CHI15-01	91.9	0.282809	0.000021	0.000567	0.000005	0.282808	0.282785	0.033600	0.283250	0.038400	0.015	0.8	0.7	2.9	620.7	944.3
Zircon-073_CHI15-01	68.5	0.282779	0.000022	0.000826	0.000038	0.282778	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	0.8	1.3	667.2	1026.7
Zircon-074_CHI15-01	21.5	0.282840	0.000024	0.001196	0.000004	0.282840	0.282785	0.033600	0.283250	0.038400	0.015	1.9	0.8	2.4	587.0	917.9
Zircon-075_CHI15-01	78.2	0.282815	0.000025	0.001905	0.000036	0.282812	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.9	2.7	634.7	943.5
Zircon-076_CHI15-01	70.6	0.282799	0.000022	0.001591	0.000030	0.282797	0.282785	0.033600	0.283250	0.038400	0.015	0.5	0.8	2.0	652.3	982.8
Zircon-077_CHI15-01	76.4	0.282819	0.000025	0.001586	0.000053	0.282817	0.282785	0.033600	0.283250	0.038400	0.015	1.2	0.9	2.8	623.4	934.5
Zircon-078_CHI15-01	78.8	0.282827	0.000022	0.002276	0.000027	0.282824	0.282785	0.033600	0.283250	0.038400	0.015	1.5	0.8	3.1	623.5	917.5
Zircon-079_CHI15-01	20.4	0.282860	0.000029	0.002205	0.000037	0.282859	0.282785	0.033600	0.283250	0.038400	0.015	2.7	1.0	3.1	574.0	874.4
Zircon-080_CHI15-01	79.8	0.282795	0.000017	0.001088	0.000019	0.282793	0.282785	0.033600	0.283250	0.038400	0.015	0.4	0.6	2.1	649.2	984.9
Zircon-081_CHI15-01	88.7	0.282810	0.000018	0.000790	0.000013	0.282809	0.282785	0.033600	0.283250	0.038400	0.015	0.9	0.6	2.8	623.0	944.9
Zircon-082_CHI15-01	80.2	0.282801	0.000019	0.001452	0.000012	0.282799	0.282785	0.033600	0.283250	0.038400	0.015	0.6	0.7	2.3	647.0	972.4
Zircon-083_CHI15-01	87.4	0.282851	0.000022	0.000914	0.000010	0.282850	0.282785	0.033600	0.283250	0.038400	0.015	2.3	0.8	4.2	567.1	853.8
Zircon-084_CHI15-01	82.2	0.282793	0.000023	0.001975	0.000027	0.282790	0.282785	0.033600	0.283250	0.038400	0.015	0.3	0.8	2.0	667.8	991.0
Zircon-085_CHI15-01	72.9	0.282805	0.000023	0.002040	0.000100	0.282802	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.8	2.2	651.5	969.4
Zircon-086_CHI15-01	81.3	0.282842	0.000024	0.002201	0.000027	0.282839	0.282785	0.033600	0.283250	0.038400	0.015	2.0	0.8	3.7	600.3	882.1
Zircon-087_CHI15-01	91.5	0.282787	0.000022	0.001382	0.000036	0.282785	0.282785	0.033600	0.283250	0.038400	0.015	0.1	0.8	2.0	665.8	997.2
Zircon-088_CHI15-01	87.8	0.282828	0.000021	0.000399	0.000004	0.282827	0.282785	0.033600	0.283250	0.038400	0.015	1.5	0.7	3.4	591.5	903.5
Zircon-089_CHI15-01	83.2	0.282745	0.000021	0.000909	0.000026	0.282744	0.282785	0.033600	0.283250	0.038400	0.015	-1.4	0.7	0.4	716.7	1094.5
Zircon-090_CHI15-01	80.9	0.282832	0.000025	0.001617	0.000029	0.282830	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.9	3.4	605.2	902.8
Zircon-091_CHI15-01	90.1	0.282815	0.000022	0.000705	0.000008	0.282814	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.8	3.0	614.6	932.4
Zircon-092_CHI15-01	89.2	0.282822	0.000019	0.000663	0.000027	0.282821	0.282785	0.033600	0.283250	0.038400	0.015	1.3	0.7	3.3	604.1	917.1
Zircon-093_CHI15-01	72.5	0.282786	0.000025	0.001608	0.000024	0.282784	0.282785	0.033600	0.283250	0.038400	0.015	0.0	0.9	1.6	671.3	1011.0
Zircon-094_CHI15-01	90.0	0.282788	0.000022	0.001029	0.000026	0.282786	0.282785	0.033600	0.283250	0.038400	0.015	0.1	0.8	2.0	658.1	994.4
Zircon-095_CHI15-01	98.9	0.283028	0.000037	0.002432	0.000042	0.283024	0.282785	0.033600	0.283250	0.038400	0.015	8.6	1.3	10.6	329.6	453.1
Zircon-096_CHI15-01	89.5	0.282849	0.000020	0.000774	0.000007	0.282848	0.282785	0.033600	0.283250	0.038400	0.015	2.3	0.7	4.2	567.8	856.5
Zircon-097_CHI15-01	69.4	0.282790	0.000024	0.001356	0.000044	0.282788	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.8	1.7	661.0	1003.0
Zircon-098_CHI15-01	68.8	0.282764	0.000020	0.001023	0.000014	0.282763	0.282785	0.033600	0.283250	0.038400	0.015	-0.7	0.7	0.7	692.0	1060.7
Zircon-099_CHI15-01	76.0	0.282806	0.000018	0.001269	0.000006	0.282804	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.6	2.4	636.7	963.0
Zircon-100_CHI15-01	88.9	0.282719	0.000020	0.000916	0.000027	0.282717	0.282785	0.033600	0.283250	0.038400	0.015	-2.3	0.7	-0.4	753.4	1149.5

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_i$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_c$	$\epsilon\text{Hf}_{(t)}$	$\pm 2\text{SE } \epsilon\text{Hf}_{(t)}$	$\epsilon\text{Hf}_{(t)}$	T_{DM} (Ma)	T_{DM}^c (Ma)
AME-15-01a (Ame-a*) Batolito Puerto Vallarta, Suite Zihuatanejo, Complejo Arteaga																
Zircon-001_AME15-01a	66.6	0.282830	0.000015	0.000490	0.000004	0.282829	0.282785	0.033600	0.283250	0.038400	0.015	1.6	0.5	3.0	590.1	912.2
Zircon-002_AME15-01a	81.6	0.282758	0.000020	0.001530	0.000018	0.282756	0.282785	0.033600	0.283250	0.038400	0.015	-1.0	0.7	0.8	710.0	1068.4
Zircon-003_AME15-01a	78.5	0.282826	0.000018	0.000700	0.000005	0.282825	0.282785	0.033600	0.283250	0.038400	0.015	1.4	0.6	3.2	599.0	914.7
Zircon-004_AME15-01a	63.5	0.282853	0.000020	0.000790	0.000052	0.282852	0.282785	0.033600	0.283250	0.038400	0.015	2.4	0.7	3.8	562.4	863.1

Zircon-005_AME15-01a	77.3	0.282806	0.000016	0.001130	0.000015	0.282804	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.6	2.4	634.3	961.8
Zircon-006_AME15-01a	74.3	0.282781	0.000021	0.001520	0.000010	0.282779	0.282785	0.033600	0.283250	0.038400	0.015	-0.1	0.7	1.4	676.8	1020.9
Zircon-007_AME15-01a	79.7	0.282767	0.000020	0.001250	0.000023	0.282765	0.282785	0.033600	0.283250	0.038400	0.015	-0.6	0.7	1.1	691.9	1048.4
Zircon-008_AME15-01a	75.2	0.282703	0.000021	0.002150	0.000017	0.282700	0.282785	0.033600	0.283250	0.038400	0.015	-2.9	0.7	-1.3	802.2	1197.3
Zircon-009_AME15-01a	80.9	0.282723	0.000023	0.002080	0.000041	0.282720	0.282785	0.033600	0.283250	0.038400	0.015	-2.2	0.8	-0.5	771.6	1149.2
Zircon-010_AME15-01a	76.7	0.282737	0.000019	0.001640	0.000033	0.282735	0.282785	0.033600	0.283250	0.038400	0.015	-1.7	0.7	-0.1	742.3	1118.7
Zircon-012_AME15-01a	82.0	0.282689	0.000017	0.001570	0.000015	0.282687	0.282785	0.033600	0.283250	0.038400	0.015	-3.4	0.6	-1.7	809.7	1222.9
Zircon-013_AME15-01a	85.6	0.282755	0.000016	0.001200	0.000046	0.282753	0.282785	0.033600	0.283250	0.038400	0.015	-1.1	0.6	0.8	708.0	1071.7
Zircon-014_AME15-01a	83.1	0.282811	0.000018	0.001140	0.000020	0.282809	0.282785	0.033600	0.283250	0.038400	0.015	0.9	0.6	2.7	627.4	947.2
Zircon-015_AME15-01a	77.6	0.282796	0.000017	0.001110	0.000027	0.282794	0.282785	0.033600	0.283250	0.038400	0.015	0.4	0.6	2.1	648.2	984.0
Zircon-017_AME15-01a	80.5	0.282788	0.000021	0.001350	0.000072	0.282786	0.282785	0.033600	0.283250	0.038400	0.015	0.1	0.7	1.8	663.8	1001.1
Zircon-018_AME15-01a	59.9	0.282859	0.000024	0.001610	0.000023	0.282857	0.282785	0.033600	0.283250	0.038400	0.015	2.6	0.8	3.9	566.2	853.8
Zircon-019_AME15-01a	55.0	0.282822	0.000019	0.000830	0.000009	0.282821	0.282785	0.033600	0.283250	0.038400	0.015	1.3	0.7	2.5	606.7	938.1
Zircon-020_AME15-01a	88.6	0.282835	0.000019	0.001010	0.000008	0.282833	0.282785	0.033600	0.283250	0.038400	0.015	1.8	0.7	3.7	591.2	889.5
Zircon-021_AME15-01a	76.8	0.282705	0.000018	0.001720	0.000026	0.282703	0.282785	0.033600	0.283250	0.038400	0.015	-2.8	0.6	-1.2	790.0	1190.5
Zircon-022_AME15-01a	81.6	0.282733	0.000020	0.001460	0.000065	0.282731	0.282785	0.033600	0.283250	0.038400	0.015	-1.8	0.7	-0.1	744.4	1124.3
Zircon-023_AME15-01a	79.2	0.282724	0.000021	0.001090	0.000044	0.282722	0.282785	0.033600	0.283250	0.038400	0.015	-2.2	0.7	-0.5	749.8	1144.6
Zircon-024_AME15-01a	79.2	0.282748	0.000025	0.001660	0.000012	0.282746	0.282785	0.033600	0.283250	0.038400	0.015	-1.3	0.9	0.4	726.9	1092.7
Zircon-025_AME15-01a	77.8	0.282719	0.000022	0.001350	0.000012	0.282717	0.282785	0.033600	0.283250	0.038400	0.015	-2.3	0.8	-0.7	762.2	1157.4
Zircon-026_AME15-01a	82.9	0.282799	0.000024	0.001160	0.000120	0.282797	0.282785	0.033600	0.283250	0.038400	0.015	0.5	0.8	2.3	644.8	974.3
Zircon-027_AME15-01a	88.7	0.282771	0.000017	0.001090	0.000019	0.282769	0.282785	0.033600	0.283250	0.038400	0.015	-0.5	0.6	1.4	683.3	1033.6
Zircon-028_AME15-01a	80.3	0.282778	0.000018	0.000870	0.000011	0.282777	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	0.6	1.5	669.4	1022.1
Zircon-029_AME15-01a	399.4	0.282662	0.000021	0.001050	0.000018	0.282654	0.282785	0.033600	0.283250	0.038400	0.015	-4.3	0.7	4.3	836.7	1095.6
Zircon-030_AME15-01a	75.4	0.282915	0.000017	0.000760	0.000015	0.282914	0.282785	0.033600	0.283250	0.038400	0.015	4.6	0.6	6.2	474.6	716.1
Zircon-031_AME15-01a	77.0	0.282744	0.000052	0.001260	0.000022	0.282742	0.282785	0.033600	0.283250	0.038400	0.015	-1.4	1.8	0.2	724.8	1101.6
Zircon-032_AME15-01a	84.1	0.282735	0.000019	0.001710	0.000014	0.282732	0.282785	0.033600	0.283250	0.038400	0.015	-1.8	0.7	0.0	746.6	1119.2
Zircon-033_AME15-01a	82.4	0.282834	0.000020	0.001250	0.000007	0.282832	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.7	3.5	596.4	896.2
Zircon-034_AME15-01a	56.9	0.282809	0.000014	0.000590	0.000016	0.282808	0.282785	0.033600	0.283250	0.038400	0.015	0.8	0.5	2.1	621.1	965.6
Zircon-035_AME15-01a	81.9	0.282703	0.000024	0.002340	0.000059	0.282699	0.282785	0.033600	0.283250	0.038400	0.015	-2.9	0.8	-1.2	806.4	1194.3
Zircon-036_AME15-01a	89.1	0.282760	0.000019	0.000850	0.000019	0.282759	0.282785	0.033600	0.283250	0.038400	0.015	-0.9	0.7	1.0	694.4	1057.2
Zircon-037_AME15-01a	80.3	0.282777	0.000016	0.001290	0.000005	0.282775	0.282785	0.033600	0.283250	0.038400	0.015	-0.3	0.6	1.4	678.4	1025.7
Zircon-038_AME15-01a	78.0	0.282719	0.000026	0.002040	0.000058	0.282716	0.282785	0.033600	0.283250	0.038400	0.015	-2.3	0.9	-0.7	776.6	1159.6
Zircon-039_AME15-01a	86.9	0.282803	0.000022	0.001490	0.000018	0.282801	0.282785	0.033600	0.283250	0.038400	0.015	0.6	0.8	2.5	644.8	964.2
Zircon-040_AME15-01a	79.3	0.282786	0.000023	0.001000	0.000022	0.282785	0.282785	0.033600	0.283250	0.038400	0.015	0.0	0.8	1.7	660.4	1005.1
Zircon-041_AME15-01a	71.2	0.282814	0.000022	0.001100	0.000034	0.282813	0.282785	0.033600	0.283250	0.038400	0.015	1.0	0.8	2.6	622.5	947.2
Zircon-042_AME15-01a	80.0	0.282676	0.000028	0.002340	0.000014	0.282673	0.282785	0.033600	0.283250	0.038400	0.015	-3.9	1.0	-2.2	845.9	1255.7
Zircon-043_AME15-01a	76.7	0.282572	0.000032	0.002810	0.000120	0.282568	0.282785	0.033600	0.283250	0.038400	0.015	-7.5	1.1	-6.0	1010.8	1491.0
Zircon-044_AME15-01a	81.0	0.282735	0.000020	0.001080	0.000017	0.282733	0.282785	0.033600	0.283250	0.038400	0.015	-1.8	0.7	0.0	734.1	1118.8
Zircon-045_AME15-01a	81.8	0.282808	0.000021	0.000490	0.000015	0.282807	0.282785	0.033600	0.283250	0.038400	0.015	0.8	0.7	2.6	620.9	952.4
Zircon-046_AME15-01a	80.0	0.282769	0.000027	0.000780	0.000024	0.282768	0.282785	0.033600	0.283250	0.038400	0.015	-0.6	1.0	1.2	680.5	1042.1
Zircon-047_AME15-01a	83.1	0.282723	0.000019	0.001460	0.000021	0.282721	0.282785	0.033600	0.283250	0.038400	0.015	-2.2	0.7	-0.4	758.7	1145.8
Zircon-048_AME15-01a	77.2	0.282738	0.000021	0.001520	0.000015	0.282736	0.282785	0.033600	0.283250	0.038400	0.015	-1.7	0.7	0.0	738.5	1115.7
Zircon-049_AME15-01a	76.7	0.282737	0.000015	0.001240	0.000018	0.282735	0.282785	0.033600	0.283250	0.038400	0.015	-1.7	0.5	-0.1	734.4	1117.4
Zircon-050_AME15-01a	80.8	0.282725	0.000022	0.001730	0.000016	0.282722	0.282785	0.033600	0.283250	0.038400	0.015	-2.1	0.8	-0.4	761.4	1143.6
Zircon-051_AME15-01a	82.4	0.282719	0.000022	0.001960	0.000033	0.282716	0.282785	0.033600	0.283250	0.038400	0.015	-2.3	0.8	-0.6	774.9	1156.9
Zircon-052_AME15-01a	59.1	0.282852	0.000019	0.000710	0.000008	0.282851	0.282785	0.033600	0.283250	0.038400	0.015	2.4	0.7	3.7	562.6	867.8
Zircon-053_AME15-01a	74.8	0.282789	0.000020	0.001200	0.000023	0.282787	0.282785	0.033600	0.283250	0.038400	0.015	0.1	0.7	1.7	659.7	1001.6
Zircon-054_AME15-01a	80.3	0.282692	0.000023	0.000830	0.000013	0.282691	0.282785	0.033600	0.283250	0.038400	0.015	-3.3	0.8	-1.6	789.7	1214.7
Zircon-055_AME15-01a	81.0	0.282610	0.000020	0.001290	0.000034	0.282608	0.282785	0.033600	0.283250	0.038400	0.015	-6.2	0.7	-4.5	915.9	1399.0
Zircon-057_AME15-01a	78.8	0.282741	0.000023	0.001120	0.000023	0.282739	0.282785	0.033600	0.283250	0.038400	0.015	-1.6	0.8	0.1	726.4	1106.8
Zircon-058_AME15-01a	97.0	0.282690	0.000020	0.001390	0.000011	0.282687	0.282785	0.033600	0.283250	0.038400	0.015	-3.4	0.7	-1.3	804.4	1211.5
Zircon-059_AME15-01a	80.3	0.282726	0.000021	0.001510	0.000024	0.282724	0.282785	0.033600	0.283250	0.038400	0.015	-2.1	0.7	-0.4	755.5	1140.9
Zircon-060_AME15-01a	80.1	0.282789	0.000017	0.001330	0.000027	0.282787	0.282785	0.033600	0.283250	0.038400	0.015	0.1	0.6	1.8	662.0	999.0
Zircon-061_AME15-01a	79.4	0.282673	0.000020	0.001420	0.000059	0.282671	0.282785	0.033600	0.283250	0.038400	0.015	-4.0	0.7	-2.3	829.3	1259.7

Zircon-062_AME15-01a	82.5	0.282752	0.000020	0.001460	0.000018	0.282750	0.282785	0.033600	0.283250	0.038400	0.015	-1.2	0.7	0.6	717.3	1081.1
Zircon-063_AME15-01a	82.4	0.282704	0.000022	0.002330	0.000063	0.282700	0.282785	0.033600	0.283250	0.038400	0.015	-2.9	0.8	-1.2	804.7	1191.8
Zircon-064_AME15-01a	79.1	0.282804	0.000024	0.001750	0.000029	0.282801	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.8	2.3	647.9	967.3
Zircon-065_AME15-01a	86.9	0.282733	0.000020	0.002100	0.000070	0.282730	0.282785	0.033600	0.283250	0.038400	0.015	-1.8	0.7	0.0	757.5	1123.6
Zircon-066_AME15-01a	77.4	0.282772	0.000018	0.001480	0.000023	0.282770	0.282785	0.033600	0.283250	0.038400	0.015	-0.5	0.6	1.2	689.0	1039.2
Zircon-067_AME15-01a	80.2	0.282717	0.000029	0.002180	0.000031	0.282714	0.282785	0.033600	0.283250	0.038400	0.015	-2.4	1.0	-0.7	782.5	1163.3
Zircon-068_AME15-01a	100.3	0.282807	0.000021	0.001070	0.000014	0.282805	0.282785	0.033600	0.283250	0.038400	0.015	0.8	0.7	2.9	631.9	945.8
Zircon-069_AME15-01a	66.8	0.282792	0.000018	0.001150	0.000012	0.282791	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.6	1.7	654.5	999.4
Zircon-070_AME15-01a	78.7	0.282648	0.000022	0.002230	0.000036	0.282645	0.282785	0.033600	0.283250	0.038400	0.015	-4.8	0.8	-3.2	884.1	1318.6
Zircon-071_AME15-01b	79.5	0.282742	0.000020	0.001630	0.000052	0.282740	0.282785	0.033600	0.283250	0.038400	0.015	-1.5	0.7	0.2	734.9	1105.8
Zircon-072_AME15-01b	82.6	0.282698	0.000028	0.002930	0.000056	0.282693	0.282785	0.033600	0.283250	0.038400	0.015	-3.1	1.0	-1.4	827.1	1207.2
Zircon-073_AME15-01b	129.4	0.282631	0.000019	0.001430	0.000005	0.282628	0.282785	0.033600	0.283250	0.038400	0.015	-5.4	0.7	-2.7	889.4	1325.2
Zircon-074_AME15-01b	81.4	0.282768	0.000016	0.001170	0.000020	0.282766	0.282785	0.033600	0.283250	0.038400	0.015	-0.6	0.6	1.1	689.0	1044.9
Zircon-075_AME15-01b	81.3	0.282754	0.000021	0.001000	0.000054	0.282752	0.282785	0.033600	0.283250	0.038400	0.015	-1.1	0.7	0.7	705.7	1075.8
Zircon-076_AME15-01b	83.3	0.282780	0.000018	0.000750	0.000005	0.282779	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	0.6	1.6	664.5	1015.4
Zircon-077_AME15-01b	82.0	0.282708	0.000017	0.001610	0.000004	0.282706	0.282785	0.033600	0.283250	0.038400	0.015	-2.7	0.6	-1.0	783.3	1180.6
Zircon-078_AME15-01b	78.7	0.282773	0.000020	0.001260	0.000007	0.282771	0.282785	0.033600	0.283250	0.038400	0.015	-0.4	0.7	1.3	683.5	1035.5
Zircon-079_AME15-01b	75.8	0.282726	0.000018	0.001520	0.000040	0.282724	0.282785	0.033600	0.283250	0.038400	0.015	-2.1	0.6	-0.5	755.7	1143.4
Zircon-080_AME15-01b	103.9	0.282762	0.000018	0.001060	0.000044	0.282760	0.282785	0.033600	0.283250	0.038400	0.015	-0.8	0.6	1.4	695.5	1044.8
Zircon-081_AME15-01b	60.4	0.282863	0.000015	0.000550	0.000005	0.282862	0.282785	0.033600	0.283250	0.038400	0.015	2.8	0.5	4.1	544.9	841.9
Zircon-082_AME15-01b	79.0	0.282805	0.000023	0.000540	0.000006	0.282804	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.8	2.4	625.9	961.1
Zircon-085_AME15-01b	55.8	0.282794	0.000023	0.000670	0.000007	0.282793	0.282785	0.033600	0.283250	0.038400	0.015	0.3	0.8	1.5	643.5	1000.2
Zircon-086_AME15-01b	82.1	0.282783	0.000026	0.001600	0.000018	0.282781	0.282785	0.033600	0.283250	0.038400	0.015	-0.1	0.9	1.7	675.4	1012.3
Zircon-087_AME15-01b	76.3	0.282810	0.000029	0.001150	0.000022	0.282808	0.282785	0.033600	0.283250	0.038400	0.015	0.9	1.0	2.5	629.0	953.4
Zircon-088_AME15-01b	84.4	0.282743	0.000028	0.001680	0.000018	0.282740	0.282785	0.033600	0.283250	0.038400	0.015	-1.5	1.0	0.3	734.5	1101.0
Zircon-089_AME15-01b	68.3	0.282816	0.000017	0.000920	0.000034	0.282815	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.6	2.6	616.7	943.9
Zircon-090_AME15-01b	80.7	0.282695	0.000030	0.001240	0.000058	0.282693	0.282785	0.033600	0.283250	0.038400	0.015	-3.2	1.1	-1.5	794.1	1209.1
Zircon-091_AME15-01b	81.7	0.282700	0.000021	0.001520	0.000035	0.282698	0.282785	0.033600	0.283250	0.038400	0.015	-3.0	0.7	-1.3	792.9	1198.3
Zircon-092_AME15-01b	74.9	0.282736	0.000018	0.001210	0.000015	0.282734	0.282785	0.033600	0.283250	0.038400	0.015	-1.7	0.6	-0.1	735.2	1120.6
Zircon-093_AME15-01b	76.9	0.282724	0.000021	0.001380	0.000009	0.282722	0.282785	0.033600	0.283250	0.038400	0.015	-2.2	0.7	-0.5	755.7	1146.8
Zircon-094_AME15-01b	79.5	0.282720	0.000021	0.001220	0.000010	0.282718	0.282785	0.033600	0.283250	0.038400	0.015	-2.3	0.7	-0.6	758.1	1153.8
Zircon-095_AME15-01b	77.8	0.282742	0.000019	0.001020	0.000019	0.282741	0.282785	0.033600	0.283250	0.038400	0.015	-1.5	0.7	0.2	723.0	1104.8
Zircon-096_AME15-01b	64.9	0.282800	0.000016	0.000610	0.000002	0.282799	0.282785	0.033600	0.283250	0.038400	0.015	0.5	0.6	1.9	634.0	981.1
Zircon-097_AME15-01b	75.4	0.282769	0.000019	0.001330	0.000016	0.282767	0.282785	0.033600	0.283250	0.038400	0.015	-0.6	0.7	1.0	690.5	1046.6
Zircon-098_AME15-01b	78.7	0.282686	0.000020	0.000930	0.000013	0.282685	0.282785	0.033600	0.283250	0.038400	0.015	-3.5	0.7	-1.8	800.2	1229.4
Zircon-099_AME15-01b	73.8	0.282718	0.000019	0.001290	0.000017	0.282716	0.282785	0.033600	0.283250	0.038400	0.015	-2.4	0.7	-0.8	762.4	1161.8
Zircon-100_AME15-01b	75.4	0.282679	0.000025	0.002130	0.000030	0.282676	0.282785	0.033600	0.283250	0.038400	0.015	-3.7	0.9	-2.2	836.7	1250.8
Zircon-101_AME15-01b	70.9	0.282719	0.000019	0.001350	0.000027	0.282717	0.282785	0.033600	0.283250	0.038400	0.015	-2.3	0.7	-0.8	762.2	1161.4
Zircon-102_AME15-01b	81.4	0.282769	0.000039	0.000970	0.000048	0.282768	0.282785	0.033600	0.283250	0.038400	0.015	-0.6	1.4	1.2	683.9	1042.0
Zircon-103_AME15-01b	78.5	0.282778	0.000023	0.001520	0.000025	0.282776	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	0.8	1.4	681.1	1025.3
Zircon-104_AME15-01b	73.1	0.282653	0.000021	0.002730	0.000058	0.282649	0.282785	0.033600	0.283250	0.038400	0.015	-4.7	0.7	-3.2	889.0	1312.0
Zircon-105_AME15-01b	80.0	0.282737	0.000019	0.001990	0.000052	0.282734	0.282785	0.033600	0.283250	0.038400	0.015	-1.7	0.7	0.0	749.4	1118.0
Zircon-107_AME15-01b	82.4	0.282781	0.000018	0.001180	0.000028	0.282779	0.282785	0.033600	0.283250	0.038400	0.015	-0.1	0.6	1.6	670.7	1015.1
Zircon-108_AME15-01b	72.1	0.282781	0.000022	0.001500	0.000021	0.282779	0.282785	0.033600	0.283250	0.038400	0.015	-0.1	0.8	1.4	676.5	1022.1
Zircon-109_AME15-01b	77.0	0.282780	0.000027	0.001640	0.000009	0.282778	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	1.0	1.4	680.5	1022.0
Zircon-110_AME15-01b	75.5	0.282803	0.000019	0.001460	0.000017	0.282801	0.282785	0.033600	0.283250	0.038400	0.015	0.6	0.7	2.2	644.2	970.6
Zircon-111_AME15-01b	76.0	0.282754	0.000025	0.001680	0.000056	0.282752	0.282785	0.033600	0.283250	0.038400	0.015	-1.1	0.9	0.5	718.7	1081.1
Zircon-112_AME15-01b	84.5	0.282711	0.000027	0.001980	0.000088	0.282708	0.282785	0.033600	0.283250	0.038400	0.015	-2.6	1.0	-0.9	786.9	1173.7
Zircon-113_AME15-01b	76.4	0.282770	0.000018	0.001340	0.000011	0.282768	0.282785	0.033600	0.283250	0.038400	0.015	-0.5	0.6	1.1	689.3	1043.8
Zircon-114_AME15-01b	76.1	0.282766	0.000022	0.001350	0.000053	0.282764	0.282785	0.033600	0.283250	0.038400	0.015	-0.7	0.8	0.9	695.2	1053.0
Zircon-115_AME15-01b	77.3	0.282815	0.000019	0.001030	0.000038	0.282814	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.7	2.7	619.9	941.2
Zircon-116_AME15-01b	248.8	0.282795	0.000047	0.001280	0.000052	0.282789	0.282785	0.033600	0.283250	0.038400	0.015	0.4	1.7	5.7	652.5	887.9
Zircon-117_AME15-01b	80.0	0.282770	0.000029	0.001130	0.000011	0.282768	0.282785	0.033600	0.283250	0.038400	0.015	-0.5	1.0	1.2	685.4	1041.1
Zircon-118_AME15-01b	80.3	0.282803	0.000022	0.001570	0.000046	0.282801	0.282785	0.033600	0.283250	0.038400	0.015	0.6	0.8	2.3	646.2	968.2

Zircon-119_AME15-01b	77.4	0.282848	0.000025	0.000790	0.000016	0.282847	0.282785	0.033600	0.283250	0.038400	0.015	2.2	0.9	3.9	569.5	866.1
Zircon-120_AME15-01b	78.6	0.282821	0.000024	0.001380	0.000082	0.282819	0.282785	0.033600	0.283250	0.038400	0.015	1.3	0.8	2.9	617.1	928.1
Zircon-121_AME15-01b	89.7	0.282782	0.000024	0.001940	0.000086	0.282779	0.282785	0.033600	0.283250	0.038400	0.015	-0.1	0.8	1.8	683.1	1011.5
Zircon-122_AME15-01b	103.5	0.282832	0.000017	0.000840	0.000022	0.282830	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.6	3.9	592.8	886.7
Zircon-123_AME15-01b	100.1	0.282854	0.000022	0.000840	0.000028	0.282852	0.282785	0.033600	0.283250	0.038400	0.015	2.4	0.8	4.6	561.8	839.2
Zircon-124_AME15-01b	55.5	0.282795	0.000019	0.000950	0.000015	0.282794	0.282785	0.033600	0.283250	0.038400	0.015	0.4	0.7	1.6	646.8	998.8
Zircon-125_AME15-01b	80.7	0.282665	0.000022	0.002280	0.000015	0.282662	0.282785	0.033600	0.283250	0.038400	0.015	-4.2	0.8	-2.6	860.5	1279.7
Zircon-126_AME15-01b	75.9	0.282672	0.000025	0.001700	0.000038	0.282670	0.282785	0.033600	0.283250	0.038400	0.015	-4.0	0.9	-2.4	837.0	1264.8
Zircon-127_AME15-01b	81.4	0.282751	0.000020	0.001750	0.000110	0.282748	0.282785	0.033600	0.283250	0.038400	0.015	-1.2	0.7	0.5	724.3	1085.0
Zircon-128_AME15-01b	81.3	0.282732	0.000020	0.001430	0.000066	0.282730	0.282785	0.033600	0.283250	0.038400	0.015	-1.9	0.7	-0.1	745.3	1126.6
Zircon-129_AME15-01b	80.6	0.282793	0.000019	0.000910	0.000015	0.282792	0.282785	0.033600	0.283250	0.038400	0.015	0.3	0.7	2.0	649.0	988.3
Zircon-130_AME15-01b	68.8	0.282847	0.000014	0.000600	0.000005	0.282846	0.282785	0.033600	0.283250	0.038400	0.015	2.2	0.5	3.7	568.0	872.9
Zircon-131_AME15-01b	78.7	0.282762	0.000018	0.001090	0.000022	0.282760	0.282785	0.033600	0.283250	0.038400	0.015	-0.8	0.6	0.9	696.0	1059.6
Zircon-132_AME15-01b	79.1	0.282817	0.000015	0.000780	0.000008	0.282816	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.5	2.8	613.0	934.8
Zircon-133_AME15-01b	76.7	0.282720	0.000025	0.002300	0.000036	0.282717	0.282785	0.033600	0.283250	0.038400	0.015	-2.3	0.9	-0.7	780.6	1158.9
Zircon-134_AME15-01b	61.2	0.282881	0.000017	0.000620	0.000009	0.282880	0.282785	0.033600	0.283250	0.038400	0.015	3.4	0.6	4.7	520.6	801.0
Zircon-136_AME15-01b	80.3	0.282795	0.000019	0.001380	0.000023	0.282793	0.282785	0.033600	0.283250	0.038400	0.015	0.4	0.7	2.1	654.3	985.6
Zircon-137_AME15-01b	79.6	0.282804	0.000019	0.001240	0.000023	0.282802	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.7	2.4	639.0	965.3
Zircon-138_AME15-01b	92.4	0.282765	0.000017	0.001210	0.000030	0.282763	0.282785	0.033600	0.283250	0.038400	0.015	-0.7	0.6	1.3	694.0	1045.4
Zircon-140_AME15-01b	76.6	0.282740	0.000021	0.001300	0.000049	0.282738	0.282785	0.033600	0.283250	0.038400	0.015	-1.6	0.7	0.0	731.3	1110.9

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_t$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_1}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_1}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_c$	$\epsilon\text{Hf}(0)$	$\pm 2\text{SE } \epsilon\text{Hf}(0)$	$\epsilon\text{Hf}(0)$	T_{DM} (Ma)	T_{DM}^c (Ma)
AME-15-03 (Ame-b*) Batolito Puerto Vallarta, Suite Zihuatanejo, Complejo Arteaga																
Zircon-001_AME15-03	79.7	0.282790	0.000030	0.002178	0.000095	0.282787	0.282785	0.033600	0.283250	0.038400	0.015	0.2	1.1	1.8	675.9	999.8
Zircon-002_AME15-03	78.7	0.282821	0.000017	0.001213	0.000011	0.282819	0.282785	0.033600	0.283250	0.038400	0.015	1.3	0.6	3.0	614.4	927.5
Zircon-003_AME15-03	71.8	0.282826	0.000026	0.003572	0.000060	0.282821	0.282785	0.033600	0.283250	0.038400	0.015	1.4	0.9	2.9	648.1	927.4
Zircon-004_AME15-03	76.6	0.282839	0.000017	0.001343	0.000029	0.282837	0.282785	0.033600	0.283250	0.038400	0.015	1.9	0.6	3.5	590.8	888.6
Zircon-005_AME15-03	70.4	0.282820	0.000022	0.002050	0.000038	0.282817	0.282785	0.033600	0.283250	0.038400	0.015	1.2	0.8	2.7	629.9	937.0
Zircon-006_AME15-03	74.9	0.282833	0.000023	0.003090	0.000280	0.282829	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.8	3.2	628.8	908.6
Zircon-007_AME15-03	74.2	0.282834	0.000018	0.000662	0.000007	0.282833	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.6	3.3	587.2	899.1
Zircon-009_AME15-03	88.3	0.282873	0.000025	0.001462	0.000027	0.282871	0.282785	0.033600	0.283250	0.038400	0.015	3.1	0.9	5.0	543.9	805.7
Zircon-010_AME15-03	77.3	0.282774	0.000030	0.001369	0.000036	0.282772	0.282785	0.033600	0.283250	0.038400	0.015	-0.4	1.1	1.3	684.1	1034.4
Zircon-012_AME15-03	67.2	0.282876	0.000030	0.004420	0.000120	0.282870	0.282785	0.033600	0.283250	0.038400	0.015	3.2	1.1	4.5	586.3	819.4
Zircon-013_AME15-03	72.2	0.282799	0.000018	0.001064	0.000022	0.282798	0.282785	0.033600	0.283250	0.038400	0.015	0.5	0.6	2.0	643.1	980.3
Zircon-015_AME15-03	79.8	0.282709	0.000039	0.004910	0.000230	0.282702	0.282785	0.033600	0.283250	0.038400	0.015	-2.7	1.4	-1.2	858.3	1190.6
Zircon-016_AME15-03	56.6	0.282786	0.000020	0.000776	0.000016	0.282785	0.282785	0.033600	0.283250	0.038400	0.015	0.0	0.7	1.3	656.5	1017.9
Zircon-017_AME15-03	70.7	0.282861	0.000023	0.001284	0.000016	0.282859	0.282785	0.033600	0.283250	0.038400	0.015	2.7	0.8	4.2	558.4	842.3
Zircon-018_AME15-03	75.7	0.282834	0.000017	0.001374	0.000007	0.282832	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.6	3.3	598.4	900.5
Zircon-019_AME15-03	80.8	0.282806	0.000031	0.003306	0.000033	0.282801	0.282785	0.033600	0.283250	0.038400	0.015	0.7	1.1	2.4	673.4	967.1
Zircon-020_AME15-03	65.1	0.282859	0.000028	0.002117	0.000021	0.282856	0.282785	0.033600	0.283250	0.038400	0.015	2.6	1.0	4.0	574.1	852.3
Zircon-021_AME15-03	75.0	0.282802	0.000020	0.001598	0.000024	0.282800	0.282785	0.033600	0.283250	0.038400	0.015	0.6	0.7	2.2	648.1	973.6
Zircon-022_AME15-03	80.7	0.282758	0.000020	0.001761	0.000014	0.282755	0.282785	0.033600	0.283250	0.038400	0.015	-1.0	0.7	0.7	714.5	1069.7
Zircon-023_AME15-03	77.0	0.282792	0.000018	0.001282	0.000009	0.282790	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.6	1.9	656.9	993.9
Zircon-024_AME15-03	84.9	0.282743	0.000019	0.001006	0.000026	0.282741	0.282785	0.033600	0.283250	0.038400	0.015	-1.5	0.7	0.3	721.3	1098.4
Zircon-025_AME15-03	66.1	0.282857	0.000013	0.000513	0.000015	0.282856	0.282785	0.033600	0.283250	0.038400	0.015	2.5	0.5	4.0	552.7	851.8
Zircon-026_AME15-03	83.9	0.282831	0.000023	0.001745	0.000045	0.282828	0.282785	0.033600	0.283250	0.038400	0.015	1.6	0.8	3.4	608.8	903.8
Zircon-027_AME15-03	64.7	0.282840	0.000022	0.000731	0.000004	0.282839	0.282785	0.033600	0.283250	0.038400	0.015	1.9	0.8	3.4	579.8	891.5
Zircon-029_AME15-03	80.0	0.282761	0.000036	0.002536	0.000054	0.282757	0.282785	0.033600	0.283250	0.038400	0.015	-0.8	1.3	0.8	725.4	1066.0
Zircon-030_AME15-03	79.4	0.282783	0.000021	0.001709	0.000012	0.282780	0.282785	0.033600	0.283250	0.038400	0.015	-0.1	0.7	1.6	677.4	1014.2
Zircon-031_AME15-03	77.5	0.283003	0.000023	0.002316	0.000014	0.283000	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.8	9.3	365.4	520.8
Zircon-032_AME15-03	82.9	0.282800	0.000025	0.002210	0.000100	0.282797	0.282785	0.033600	0.283250	0.038400	0.015	0.5	0.9	2.3	661.9	975.7
Zircon-033_AME15-03	72.4	0.282868	0.000021	0.000737	0.000009	0.282867	0.282785	0.033600	0.283250	0.038400	0.015	2.9	0.7	4.5	540.5	823.9

Zircon-034_AME15-03	80.3	0.282815	0.000022	0.001310	0.000007	0.282813	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.8	2.8	624.5	940.4
Zircon-035_AME15-03	81.3	0.282795	0.000020	0.001205	0.000015	0.282793	0.282785	0.033600	0.283250	0.038400	0.015	0.4	0.7	2.1	651.2	984.4
Zircon-036_AME15-03	85.0	0.282790	0.000021	0.001000	0.000046	0.282788	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.7	2.0	654.8	992.8
Zircon-037_AME15-03	62.6	0.282826	0.000027	0.002453	0.000016	0.282823	0.282785	0.033600	0.283250	0.038400	0.015	1.4	1.0	2.7	628.1	928.8
Zircon-038_AME15-03	21.3	0.282890	0.000027	0.001933	0.000031	0.282889	0.282785	0.033600	0.283250	0.038400	0.015	3.7	1.0	4.2	526.2	806.0
Zircon-039_AME15-03	84.6	0.282756	0.000025	0.002335	0.000062	0.282752	0.282785	0.033600	0.283250	0.038400	0.015	-1.0	0.9	0.7	728.7	1074.1
Zircon-042_AME15-03	61.6	0.282867	0.000018	0.000615	0.000012	0.282866	0.282785	0.033600	0.283250	0.038400	0.015	2.9	0.6	4.2	540.2	832.3
Zircon-044_AME15-03	77.3	0.282856	0.000024	0.002138	0.000054	0.282853	0.282785	0.033600	0.283250	0.038400	0.015	2.5	0.8	4.1	578.8	852.5
Zircon-045_AME15-03	60.3	0.282776	0.000021	0.001031	0.000031	0.282775	0.282785	0.033600	0.283250	0.038400	0.015	-0.3	0.7	1.0	675.1	1038.8
Zircon-046_AME15-03	77.5	0.282816	0.000022	0.001402	0.000014	0.282814	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.8	2.7	624.6	940.0
Zircon-047_AME15-03	65.3	0.282858	0.000021	0.001850	0.000052	0.282856	0.282785	0.033600	0.283250	0.038400	0.015	2.6	0.7	4.0	571.4	853.7
Zircon-048_AME15-03	80.1	0.282825	0.000031	0.001940	0.000056	0.282822	0.282785	0.033600	0.283250	0.038400	0.015	1.4	1.1	3.1	620.7	920.1
Zircon-049_AME15-03	59.3	0.282904	0.000027	0.002250	0.000056	0.282902	0.282785	0.033600	0.283250	0.038400	0.015	4.2	1.0	5.4	510.2	754.3
Zircon-050_AME15-03	61.5	0.282868	0.000020	0.001373	0.000008	0.282866	0.282785	0.033600	0.283250	0.038400	0.015	2.9	0.7	4.2	549.8	832.1
Zircon-051_AME15-03	79.1	0.282789	0.000024	0.001440	0.000007	0.282787	0.282785	0.033600	0.283250	0.038400	0.015	0.1	0.8	1.8	663.9	1000.0
Zircon-052_AME15-03	83.0	0.282802	0.000019	0.001390	0.000018	0.282800	0.282785	0.033600	0.283250	0.038400	0.015	0.6	0.7	2.4	644.5	968.3
Zircon-053_AME15-03	86.0	0.282842	0.000029	0.001819	0.000010	0.282839	0.282785	0.033600	0.283250	0.038400	0.015	2.0	1.0	3.8	594.1	878.2
Zircon-054_AME15-03	65.7	0.282892	0.000027	0.002061	0.000017	0.282889	0.282785	0.033600	0.283250	0.038400	0.015	3.8	1.0	5.2	525.1	777.4
Zircon-055_AME15-03	73.0	0.282774	0.000021	0.001340	0.000046	0.282772	0.282785	0.033600	0.283250	0.038400	0.015	-0.4	0.7	1.2	683.6	1036.8
Zircon-056_AME15-03	63.1	0.282874	0.000026	0.001726	0.000028	0.282872	0.282785	0.033600	0.283250	0.038400	0.015	3.1	0.9	4.5	546.3	818.6
Zircon-057_AME15-03	133.0	0.283004	0.000029	0.004420	0.000180	0.282993	0.282785	0.033600	0.283250	0.038400	0.015	7.7	1.0	10.3	386.4	500.5
Zircon-058_AME15-03	67.5	0.282805	0.000023	0.000507	0.000006	0.282804	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.8	2.2	625.3	968.0
Zircon-059_AME15-03	64.5	0.282831	0.000024	0.000882	0.000012	0.282830	0.282785	0.033600	0.283250	0.038400	0.015	1.6	0.8	3.0	594.9	912.3
Zircon-060_AME15-03	66.0	0.282850	0.000028	0.002162	0.000030	0.282847	0.282785	0.033600	0.283250	0.038400	0.015	2.3	1.0	3.7	588.0	872.2
Zircon-061_AME15-03	76.0	0.282832	0.000019	0.001084	0.000033	0.282830	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.7	3.3	596.6	903.9
Zircon-062_AME15-03	1028.0	0.282456	0.000021	0.001067	0.000028	0.282435	0.282785	0.033600	0.283250	0.038400	0.015	-11.6	0.7	10.3	1127.2	1186.2
Zircon-063_AME15-03	78.9	0.282790	0.000024	0.001717	0.000023	0.282787	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.8	1.8	667.5	998.7
Zircon-064_AME15-03	77.9	0.282785	0.000034	0.001523	0.000025	0.282783	0.282785	0.033600	0.283250	0.038400	0.015	0.0	1.2	1.7	671.2	1009.9
Zircon-065_AME15-03	74.4	0.282879	0.000021	0.000756	0.000007	0.282878	0.282785	0.033600	0.283250	0.038400	0.015	3.3	0.7	4.9	525.3	797.9
Zircon-067_AME15-03	60.4	0.282853	0.000029	0.002004	0.000037	0.282851	0.282785	0.033600	0.283250	0.038400	0.015	2.4	1.0	3.7	581.1	868.1
Zircon-068_AME15-03	78.9	0.282828	0.000032	0.002032	0.000033	0.282825	0.282785	0.033600	0.283250	0.038400	0.015	1.5	1.1	3.2	617.9	914.3
Zircon-069_AME15-03	62.2	0.282859	0.000028	0.001536	0.000090	0.282857	0.282785	0.033600	0.283250	0.038400	0.015	2.6	1.0	3.9	565.1	852.4
Zircon-073_AME15-03	78.5	0.282740	0.000019	0.001730	0.000026	0.282737	0.282785	0.033600	0.283250	0.038400	0.015	-1.6	0.7	0.1	739.8	1111.2
Zircon-074_AME15-03	76.2	0.282835	0.000024	0.001968	0.000050	0.282832	0.282785	0.033600	0.283250	0.038400	0.015	1.8	0.8	3.4	606.7	899.9
Zircon-075_AME15-03	79.0	0.282780	0.000026	0.001572	0.000033	0.282778	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	0.9	1.5	679.2	1020.7
Zircon-076_AME15-03	76.9	0.282837	0.000032	0.002720	0.000120	0.282833	0.282785	0.033600	0.283250	0.038400	0.015	1.8	1.1	3.4	616.4	897.4
Zircon-077_AME15-03	79.4	0.282728	0.000030	0.001355	0.000032	0.282726	0.282785	0.033600	0.283250	0.038400	0.015	-2.0	1.1	-0.3	749.5	1136.4
Zircon-078_AME15-03	79.4	0.282843	0.000023	0.001816	0.000046	0.282840	0.282785	0.033600	0.283250	0.038400	0.015	2.1	0.8	3.7	592.6	879.6
Zircon-079_AME15-03	89.0	0.282920	0.000032	0.002011	0.000042	0.282917	0.282785	0.033600	0.283250	0.038400	0.015	4.8	1.1	6.6	483.5	701.3
Zircon-080_AME15-03	128.6	0.282954	0.000027	0.001499	0.000073	0.282950	0.282785	0.033600	0.283250	0.038400	0.015	6.0	1.0	8.7	427.9	599.9
Zircon-081_AME15-03	71.1	0.282861	0.000024	0.001481	0.000052	0.282859	0.282785	0.033600	0.283250	0.038400	0.015	2.7	0.8	4.2	561.4	842.6
Zircon-082_AME15-03	81.3	0.282933	0.000033	0.001592	0.000032	0.282931	0.282785	0.033600	0.283250	0.038400	0.015	5.2	1.2	7.0	459.3	674.7
Zircon-083_AME15-03	73.6	0.282844	0.000025	0.001145	0.000019	0.282842	0.282785	0.033600	0.283250	0.038400	0.015	2.1	0.9	3.7	580.6	878.5
Zircon-084_AME15-03	68.5	0.282818	0.000025	0.000987	0.000018	0.282817	0.282785	0.033600	0.283250	0.038400	0.015	1.2	0.9	2.6	614.9	939.5
Zircon-085_AME15-03	79.8	0.282878	0.000032	0.004499	0.000058	0.282871	0.282785	0.033600	0.283250	0.038400	0.015	3.3	1.1	4.8	584.5	809.5
Zircon-088_AME15-03	79.2	0.282836	0.000019	0.001554	0.000005	0.282834	0.282785	0.033600	0.283250	0.038400	0.015	1.8	0.7	3.5	598.5	894.6
Zircon-089_AME15-03	80.9	0.282819	0.000021	0.001770	0.000045	0.282816	0.282785	0.033600	0.283250	0.038400	0.015	1.2	0.7	2.9	626.5	932.6
Zircon-090_AME15-03	81.5	0.282805	0.000026	0.001430	0.000014	0.282803	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.9	2.4	640.9	962.6
Zircon-091_AME15-03	85.8	0.282737	0.000030	0.002340	0.000079	0.282733	0.282785	0.033600	0.283250	0.038400	0.015	-1.7	1.1	0.1	756.6	1116.1
Zircon-092_AME15-03	62.5	0.282825	0.000031	0.002311	0.000007	0.282822	0.282785	0.033600	0.283250	0.038400	0.015	1.4	1.1	2.7	627.1	930.8
Zircon-093_AME15-03	3.8	0.282982	0.000024	0.003100	0.000130	0.282982	0.282785	0.033600	0.283250	0.038400	0.015	7.0	0.8	7.0	405.1	608.0
Zircon-094_AME15-03	76.1	0.282814	0.000023	0.001215	0.000013	0.282812	0.282785	0.033600	0.283250	0.038400	0.015	1.0	0.8	2.7	624.4	944.7
Zircon-095_AME15-03	79.6	0.282806	0.000026	0.001460	0.000019	0.282804	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.9	2.4	639.9	961.5
Zircon-096_AME15-03	66.6	0.282666	0.000022	0.000628	0.000015	0.282665	0.282785	0.033600	0.283250	0.038400	0.015	-4.2	0.8	-2.8	821.8	1280.4

Zircon-098_AME15-03	71.5	0.282834	0.000024	0.002190	0.000120	0.282831	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.8	3.2	611.8	905.3
Zircon-099_AME15-03	68.9	0.282808	0.000040	0.001530	0.000110	0.282806	0.282785	0.033600	0.283250	0.038400	0.015	0.8	1.4	2.3	638.3	963.3

SAMPLE	Age (Ma)	¹⁷⁶ Hf/ ¹⁷⁷ Hf _{Zircon}	2SE	¹⁷⁶ Lu/ ¹⁷⁷ Hf _{Zircon}	2SE	¹⁷⁶ Hf/ ¹⁷⁷ Hf _i	¹⁷⁶ Hf/ ¹⁷⁷ Hf _{CHUR,1}	¹⁷⁶ Lu/ ¹⁷⁷ Hf _{CHUR,1}	¹⁷⁶ Hf/ ¹⁷⁷ Hf _{DM}	¹⁷⁶ Lu/ ¹⁷⁷ Hf _{DM}	¹⁷⁶ Lu/ ¹⁷⁷ Hf _C	εHf _(t)	±2SE εHf _(t)	εHf _(t)	T _{DM} (Ma)	T _{DM} ^{C'} (Ma)
CUA-15-01 (Cua*) Batolito Puerto Vallarta, Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																
Zircon-001_CUA15-01	156.9	0.283020	0.000024	0.002040	0.000200	0.283014	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.8	11.6	337.7	437.6
Zircon-003_CUA15-01	258.3	0.282871	0.000018	0.000698	0.000005	0.282868	0.282785	0.033600	0.283250	0.038400	0.015	3.0	0.6	8.7	535.7	704.6
Zircon-006_CUA15-01	83.5	0.282757	0.000027	0.002193	0.000037	0.282754	0.282785	0.033600	0.283250	0.038400	0.015	-1.0	1.0	0.7	724.4	1071.9
Zircon-007_CUA15-01	1232.0	0.282115	0.000023	0.001369	0.000061	0.282083	0.282785	0.033600	0.283250	0.038400	0.015	-23.7	0.8	2.8	1617.0	1840.0
Zircon-009_CUA15-01	80.8	0.282791	0.000023	0.002621	0.000030	0.282787	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.8	1.9	682.8	998.5
Zircon-010_CUA15-01	261.0	0.282848	0.000018	0.000501	0.000011	0.282846	0.282785	0.033600	0.283250	0.038400	0.015	2.2	0.6	7.9	565.1	752.7
Zircon-011_CUA15-01	81.4	0.282773	0.000028	0.002760	0.000066	0.282769	0.282785	0.033600	0.283250	0.038400	0.015	-0.4	1.0	1.2	712.1	1039.1
Zircon-012_CUA15-01	84.3	0.282737	0.000019	0.000812	0.000009	0.282736	0.282785	0.033600	0.283250	0.038400	0.015	-1.7	0.7	0.1	726.1	1111.5
Zircon-014_CUA15-01	82.3	0.282769	0.000024	0.001570	0.000035	0.282767	0.282785	0.033600	0.283250	0.038400	0.015	-0.6	0.8	1.2	695.0	1043.5
Zircon-015_CUA15-01	83.6	0.282707	0.000029	0.001802	0.000061	0.282704	0.282785	0.033600	0.283250	0.038400	0.015	-2.8	1.0	-1.0	788.9	1182.6
Zircon-017_CUA15-01	1191.0	0.282187	0.000017	0.001702	0.000031	0.282149	0.282785	0.033600	0.283250	0.038400	0.015	-21.1	0.6	4.2	1529.4	1720.8
Zircon-019_CUA15-01	82.9	0.282786	0.000028	0.004820	0.000170	0.282779	0.282785	0.033600	0.283250	0.038400	0.015	0.0	1.0	1.6	735.0	1016.3
Zircon-021_CUA15-01	80.8	0.282744	0.000021	0.001303	0.000021	0.282742	0.282785	0.033600	0.283250	0.038400	0.015	-1.4	0.7	0.3	725.6	1099.5
Zircon-023_CUA15-01	83.2	0.282723	0.000025	0.001865	0.000014	0.282720	0.282785	0.033600	0.283250	0.038400	0.015	-2.2	0.9	-0.4	767.1	1147.2
Zircon-027_CUA15-01	137.3	0.282869	0.000017	0.000628	0.000023	0.282867	0.282785	0.033600	0.283250	0.038400	0.015	3.0	0.6	6.0	537.6	781.9
Zircon-028_CUA15-01	84.8	0.282859	0.000025	0.004250	0.000450	0.282852	0.282785	0.033600	0.283250	0.038400	0.015	2.6	0.9	4.3	609.8	849.2
Zircon-029_CUA15-01	157.3	0.282688	0.000023	0.001495	0.000006	0.282684	0.282785	0.033600	0.283250	0.038400	0.015	-3.4	0.8	-0.1	809.5	1182.3
Zircon-030_CUA15-01	82.2	0.282778	0.000024	0.001885	0.000052	0.282775	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	0.8	1.5	687.9	1024.4
Zircon-031_CUA15-01	161.7	0.282886	0.000023	0.000959	0.000016	0.282883	0.282785	0.033600	0.283250	0.038400	0.015	3.6	0.8	7.1	518.2	731.0
Zircon-032_CUA15-01	81.1	0.282807	0.000025	0.002820	0.000140	0.282803	0.282785	0.033600	0.283250	0.038400	0.015	0.8	0.9	2.4	662.8	963.1
Zircon-033_CUA15-01	84.8	0.282751	0.000025	0.001712	0.000037	0.282748	0.282785	0.033600	0.283250	0.038400	0.015	-1.2	0.9	0.6	723.6	1083.0
Zircon-035_CUA15-01	83.2	0.282810	0.000019	0.001256	0.000027	0.282808	0.282785	0.033600	0.283250	0.038400	0.015	0.9	0.7	2.7	630.8	949.8
Zircon-036_CUA15-01	84.0	0.282823	0.000040	0.003810	0.000350	0.282817	0.282785	0.033600	0.283250	0.038400	0.015	1.3	1.4	3.0	657.2	929.1
Zircon-037_CUA15-01	80.9	0.282731	0.000028	0.002170	0.000160	0.282728	0.282785	0.033600	0.283250	0.038400	0.015	-1.9	1.0	-0.2	761.8	1131.5
Zircon-038_CUA15-01	83.1	0.282714	0.000023	0.002390	0.000100	0.282710	0.282785	0.033600	0.283250	0.038400	0.015	-2.5	0.8	-0.8	791.4	1169.2
Zircon-039_CUA15-01	156.7	0.283018	0.000035	0.004843	0.000012	0.283004	0.282785	0.033600	0.283250	0.038400	0.015	8.2	1.2	11.2	369.0	460.9
Zircon-041_CUA15-01	239.0	0.282905	0.000025	0.000512	0.000008	0.282903	0.282785	0.033600	0.283250	0.038400	0.015	4.2	0.9	9.5	485.5	637.6
Zircon-042_CUA15-01	1169.0	0.282118	0.000023	0.000578	0.000013	0.282105	0.282785	0.033600	0.283250	0.038400	0.015	-23.6	0.8	2.2	1579.6	1831.1
Zircon-043_CUA15-01	77.5	0.282778	0.000028	0.002547	0.000057	0.282774	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	1.0	1.3	700.5	1029.2
Zircon-044_CUA15-01	80.3	0.282771	0.000031	0.001426	0.000014	0.282769	0.282785	0.033600	0.283250	0.038400	0.015	-0.5	1.1	1.2	689.4	1039.6
Zircon-046_CUA15-01	157.1	0.282507	0.000026	0.000726	0.000018	0.282505	0.282785	0.033600	0.283250	0.038400	0.015	-9.8	0.9	-6.4	1046.1	1581.2
Zircon-049_CUA15-01	86.9	0.282778	0.000023	0.001543	0.000026	0.282775	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	0.8	1.6	681.6	1020.6
Zircon-050_CUA15-01	156.3	0.282864	0.000031	0.003951	0.000053	0.282852	0.282785	0.033600	0.283250	0.038400	0.015	2.8	1.1	5.9	596.8	803.6
Zircon-052_CUA15-01	132.1	0.282893	0.000024	0.001322	0.000033	0.282890	0.282785	0.033600	0.283250	0.038400	0.015	3.8	0.8	6.6	513.2	734.8
Zircon-053_CUA15-01	80.6	0.282810	0.000020	0.001833	0.000026	0.282807	0.282785	0.033600	0.283250	0.038400	0.015	0.9	0.7	2.6	640.6	953.2
Zircon-054_CUA15-01	87.7	0.282829	0.000024	0.001850	0.000083	0.282826	0.282785	0.033600	0.283250	0.038400	0.015	1.6	0.8	3.4	613.4	906.6
Zircon-056_CUA15-01	81.1	0.282705	0.000022	0.001639	0.000023	0.282703	0.282785	0.033600	0.283250	0.038400	0.015	-2.8	0.8	-1.1	788.3	1187.9
Zircon-057_CUA15-01	289.9	0.282914	0.000020	0.001677	0.000048	0.282905	0.282785	0.033600	0.283250	0.038400	0.015	4.6	0.7	10.7	487.8	600.2
Zircon-058_CUA15-01	88.6	0.282846	0.000021	0.002047	0.000085	0.282843	0.282785	0.033600	0.283250	0.038400	0.015	2.2	0.7	4.0	592.0	868.6
Zircon-059_CUA15-01	151.6	0.282558	0.000029	0.002121	0.000037	0.282552	0.282785	0.033600	0.283250	0.038400	0.015	-8.0	1.0	-4.9	1012.0	1479.8
Zircon-060_CUA15-01	260.2	0.282738	0.000021	0.001453	0.000021	0.282731	0.282785	0.033600	0.283250	0.038400	0.015	-1.7	0.7	3.9	737.1	1011.3
Zircon-061_CUA15-01	155.3	0.282521	0.000022	0.001501	0.000029	0.282517	0.282785	0.033600	0.283250	0.038400	0.015	-9.3	0.8	-6.0	1047.9	1556.1
Zircon-062_CUA15-01	90.2	0.282748	0.000022	0.001266	0.000035	0.282746	0.282785	0.033600	0.283250	0.038400	0.015	-1.3	0.8	0.6	719.2	1085.0
Zircon-063_CUA15-01	81.2	0.282743	0.000023	0.001137	0.000005	0.282741	0.282785	0.033600	0.283250	0.038400	0.015	-1.5	0.8	0.3	723.8	1101.0
Zircon-064_CUA15-01	85.0	0.282744	0.000016	0.000987	0.000007	0.282742	0.282785	0.033600	0.283250	0.038400	0.015	-1.4	0.6	0.4	719.6	1096.0
Zircon-065_CUA15-01	136.3	0.282849	0.000021	0.000909	0.000007	0.282847	0.282785	0.033600	0.283250	0.038400	0.015	2.3	0.7	5.2	569.9	829.2
Zircon-069_CUA15-01	258.5	0.282823	0.000016	0.000729	0.000007	0.282819	0.282785	0.033600	0.283250	0.038400	0.015	1.3	0.6	7.0	603.7	813.1

Zircon-070_CUA15-01	75.0	0.282777	0.000028	0.001693	0.000008	0.282775	0.282785	0.033600	0.283250	0.038400	0.015	-0.3	1.0	1.3	685.8	1030.0
Zircon-072_CUA15-01	153.0	0.282882	0.000026	0.002733	0.000025	0.282874	0.282785	0.033600	0.283250	0.038400	0.015	3.4	0.9	6.6	549.8	756.6
Zircon-074_CUA15-01	258.9	0.282808	0.000019	0.000754	0.000028	0.282804	0.282785	0.033600	0.283250	0.038400	0.015	0.8	0.7	6.4	625.2	847.0
Zircon-075_CUA15-01	169.9	0.282794	0.000032	0.003236	0.000075	0.282784	0.282785	0.033600	0.283250	0.038400	0.015	0.3	1.1	3.7	690.1	949.7
Zircon-076_CUA15-01	160.2	0.282831	0.000025	0.002505	0.000034	0.282823	0.282785	0.033600	0.283250	0.038400	0.015	1.6	0.9	4.9	621.6	866.4
Zircon-080_CUA15-01	81.1	0.282752	0.000017	0.001509	0.000005	0.282750	0.282785	0.033600	0.283250	0.038400	0.015	-1.2	0.6	0.6	718.2	1082.1
Zircon-081_CUA15-01	81.6	0.282752	0.000019	0.001909	0.000048	0.282749	0.282785	0.033600	0.283250	0.038400	0.015	-1.2	0.7	0.5	726.0	1083.2
Zircon-082_CUA15-01	75.5	0.282732	0.000028	0.001653	0.000089	0.282730	0.282785	0.033600	0.283250	0.038400	0.015	-1.9	1.0	-0.3	749.8	1130.6
Zircon-083_CUA15-01	79.2	0.282745	0.000023	0.001747	0.000016	0.282742	0.282785	0.033600	0.283250	0.038400	0.015	-1.4	0.8	0.3	732.9	1099.7
Zircon-084_CUA15-01	82.7	0.282821	0.000022	0.001226	0.000015	0.282819	0.282785	0.033600	0.283250	0.038400	0.015	1.3	0.8	3.0	614.6	925.2
Zircon-087_CUA15-01	84.0	0.282747	0.000022	0.001525	0.000033	0.282745	0.282785	0.033600	0.283250	0.038400	0.015	-1.3	0.8	0.4	725.7	1091.7
Zircon-088_CUA15-01	166.1	0.282839	0.000023	0.003563	0.000042	0.282828	0.282785	0.033600	0.283250	0.038400	0.015	1.9	0.8	5.2	628.2	852.6
Zircon-089_CUA15-01	152.9	0.282722	0.000024	0.002059	0.000060	0.282716	0.282785	0.033600	0.283250	0.038400	0.015	-2.2	0.8	1.0	772.6	1112.3
Zircon-090_CUA15-01	546.6	0.282266	0.000021	0.001110	0.000025	0.282255	0.282785	0.033600	0.283250	0.038400	0.015	-18.4	0.7	-6.6	1395.1	1892.4
Zircon-091_CUA15-01	153.8	0.282715	0.000028	0.002363	0.000083	0.282708	0.282785	0.033600	0.283250	0.038400	0.015	-2.5	1.0	0.7	789.3	1129.4
Zircon-092_CUA15-01	157.8	0.282886	0.000025	0.002887	0.000033	0.282877	0.282785	0.033600	0.283250	0.038400	0.015	3.6	0.9	6.8	546.2	746.2
Zircon-093_CUA15-01	81.1	0.282768	0.000024	0.001423	0.000002	0.282766	0.282785	0.033600	0.283250	0.038400	0.015	-0.6	0.8	1.1	693.7	1045.9
Zircon-094_CUA15-01	83.1	0.282796	0.000027	0.002602	0.000033	0.282792	0.282785	0.033600	0.283250	0.038400	0.015	0.4	1.0	2.1	675.0	986.0
Zircon-095_CUA15-01	158.5	0.282894	0.000033	0.004298	0.000043	0.282881	0.282785	0.033600	0.283250	0.038400	0.015	3.9	1.2	6.9	556.2	737.2
Zircon-096_CUA15-01	157.5	0.282914	0.000030	0.003428	0.000016	0.282904	0.282785	0.033600	0.283250	0.038400	0.015	4.6	1.1	7.7	512.1	686.7
Zircon-097_CUA15-01	73.4	0.282741	0.000034	0.003560	0.000210	0.282736	0.282785	0.033600	0.283250	0.038400	0.015	-1.6	1.2	-0.1	776.9	1117.4
Zircon-099_CUA15-01	83.8	0.282768	0.000019	0.001046	0.000005	0.282766	0.282785	0.033600	0.283250	0.038400	0.015	-0.6	0.7	1.2	686.7	1043.0
Zircon-100_CUA15-01	152.9	0.282940	0.000031	0.002934	0.000079	0.282932	0.282785	0.033600	0.283250	0.038400	0.015	5.5	1.1	8.6	466.1	626.9

SAMPLE	Age (Ma)	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_i$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_1}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_1}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_c$	$\epsilon\text{Hf}_{(t)}$	$\pm 2\text{SE } \epsilon\text{Hf}_{(t)}$	$\epsilon\text{Hf}_{(t)}$	T_{DM} (Ma)	T_{DM}^c (Ma)
TEC-15-01 (Tec*) Batolito Puerto Vallarta, Suite Cuale-Macias, Complejo Arteaga																
Zircon-001_TEC15-01	84.0	0.282751	0.000029	0.001960	0.000130	0.282748	0.282785	0.033600	0.283250	0.038400	0.015	-1.2	1.0	0.6	728.5	1084.3
Zircon-002_TEC15-01	82.7	0.282715	0.000027	0.000865	0.000007	0.282714	0.282785	0.033600	0.283250	0.038400	0.015	-2.5	1.0	-0.7	758.1	1161.9
Zircon-003_TEC15-01	89.5	0.282844	0.000031	0.002334	0.000021	0.282840	0.282785	0.033600	0.283250	0.038400	0.015	2.1	1.1	3.9	599.6	873.7
Zircon-004_TEC15-01	84.2	0.282808	0.000025	0.001318	0.000029	0.282806	0.282785	0.033600	0.283250	0.038400	0.015	0.8	0.9	2.6	634.7	953.9
Zircon-005_TEC15-01	86.9	0.282810	0.000030	0.001678	0.000015	0.282807	0.282785	0.033600	0.283250	0.038400	0.015	0.9	1.1	2.7	638.0	949.2
Zircon-006_TEC15-01	159.7	0.282564	0.000031	0.001339	0.000016	0.282560	0.282785	0.033600	0.283250	0.038400	0.015	-7.8	1.1	-4.4	982.4	1456.9
Zircon-007_TEC15-01	85.2	0.282813	0.000031	0.001035	0.000006	0.282811	0.282785	0.033600	0.283250	0.038400	0.015	1.0	1.1	2.8	622.8	941.1
Zircon-008_TEC15-01	82.3	0.282752	0.000035	0.000895	0.000022	0.282751	0.282785	0.033600	0.283250	0.038400	0.015	-1.2	1.2	0.6	706.5	1079.3
Zircon-009_TEC15-01	81.4	0.282689	0.000034	0.003492	0.000032	0.282684	0.282785	0.033600	0.283250	0.038400	0.015	-3.4	1.2	-1.8	853.9	1229.8
Zircon-011_TEC15-01	82.6	0.282800	0.000029	0.000932	0.000011	0.282799	0.282785	0.033600	0.283250	0.038400	0.015	0.5	1.0	2.3	639.5	971.5
Zircon-012_TEC15-01	86.9	0.282808	0.000030	0.001524	0.000014	0.282806	0.282785	0.033600	0.283250	0.038400	0.015	0.8	1.1	2.7	638.2	953.1
Zircon-014_TEC15-01	85.8	0.282737	0.000043	0.001615	0.000030	0.282734	0.282785	0.033600	0.283250	0.038400	0.015	-1.7	1.5	0.1	741.8	1113.5
Zircon-015_TEC15-01	87.4	0.282848	0.000026	0.001412	0.000008	0.282846	0.282785	0.033600	0.283250	0.038400	0.015	2.2	0.9	4.1	579.0	862.4
Zircon-016_TEC15-01	85.2	0.282826	0.000030	0.001491	0.000022	0.282824	0.282785	0.033600	0.283250	0.038400	0.015	1.4	1.1	3.3	611.8	913.5
Zircon-019_TEC15-01	84.6	0.282758	0.000064	0.000672	0.000025	0.282757	0.282785	0.033600	0.283250	0.038400	0.015	-1.0	2.3	0.9	694.0	1063.7
Zircon-020_TEC15-01	89.3	0.282770	0.000022	0.000600	0.000005	0.282769	0.282785	0.033600	0.283250	0.038400	0.015	-0.5	0.8	1.4	675.9	1033.7
Zircon-021_TEC15-01	87.9	0.282659	0.000073	0.001398	0.000038	0.282657	0.282785	0.033600	0.283250	0.038400	0.015	-4.5	2.6	-2.6	848.7	1286.1
Zircon-022_TEC15-01	87.3	0.282783	0.000037	0.001545	0.000012	0.282780	0.282785	0.033600	0.283250	0.038400	0.015	-0.1	1.3	1.8	674.4	1009.1
Zircon-023_TEC15-01	84.3	0.282725	0.000035	0.001302	0.000047	0.282723	0.282785	0.033600	0.283250	0.038400	0.015	-2.1	1.2	-0.3	752.7	1140.1
Zircon-024_TEC15-01	85.2	0.282739	0.000076	0.001470	0.000066	0.282737	0.282785	0.033600	0.283250	0.038400	0.015	-1.6	2.7	0.2	736.1	1108.8
Zircon-025_TEC15-01	80.9	0.282758	0.000037	0.002387	0.000017	0.282754	0.282785	0.033600	0.283250	0.038400	0.015	-1.0	1.3	0.7	726.8	1071.7
Zircon-026_TEC15-01	82.7	0.282802	0.000040	0.001192	0.000012	0.282800	0.282785	0.033600	0.283250	0.038400	0.015	0.6	1.4	2.4	641.1	967.8
Zircon-027_TEC15-01	90.0	0.282816	0.000029	0.001976	0.000054	0.282813	0.282785	0.033600	0.283250	0.038400	0.015	1.1	1.0	3.0	634.4	935.1
Zircon-028_TEC15-01	81.3	0.282814	0.000032	0.001482	0.000019	0.282812	0.282785	0.033600	0.283250	0.038400	0.015	1.0	1.1	2.8	628.9	942.6
Zircon-029_TEC15-01	83.4	0.282726	0.000033	0.002110	0.000130	0.282723	0.282785	0.033600	0.283250	0.038400	0.015	-2.1	1.2	-0.4	767.9	1141.2
Zircon-030_TEC15-01	147.5	0.282872	0.000023	0.002097	0.000031	0.282866	0.282785	0.033600	0.283250	0.038400	0.015	3.1	0.8	6.2	554.8	778.1

Zircon-031_TEC15-01	81.2	0.282755	0.000028	0.001546	0.000036	0.282753	0.282785	0.033600	0.283250	0.038400	0.015	-1.1	1.0	0.7	714.6	1075.4
Zircon-032_TEC15-01	83.8	0.282799	0.000027	0.001930	0.000160	0.282796	0.282785	0.033600	0.283250	0.038400	0.015	0.5	1.0	2.2	658.3	976.5
Zircon-033_TEC15-01	92.0	0.282743	0.000029	0.001344	0.000077	0.282741	0.282785	0.033600	0.283250	0.038400	0.015	-1.5	1.0	0.5	727.9	1095.5
Zircon-034_TEC15-01	82.3	0.282725	0.000031	0.002412	0.000095	0.282721	0.282785	0.033600	0.283250	0.038400	0.015	-2.1	1.1	-0.4	775.7	1145.1
Zircon-035_TEC15-01	84.3	0.282778	0.000056	0.001798	0.000024	0.282775	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	2.0	1.5	686.3	1023.0
Zircon-036_TEC15-01	85.6	0.282767	0.000043	0.001253	0.000044	0.282765	0.282785	0.033600	0.283250	0.038400	0.015	-0.6	1.5	1.2	691.9	1045.0
Zircon-038_TEC15-01	86.5	0.282761	0.000030	0.002297	0.000042	0.282757	0.282785	0.033600	0.283250	0.038400	0.015	-0.8	1.1	0.9	720.6	1061.7
Zircon-039_TEC15-01	84.1	0.282731	0.000068	0.000825	0.000037	0.282730	0.282785	0.033600	0.283250	0.038400	0.015	-1.9	2.4	-0.1	734.8	1125.1
Zircon-040_TEC15-01	85.8	0.282609	0.000068	0.000921	0.000041	0.282608	0.282785	0.033600	0.283250	0.038400	0.015	-6.2	2.4	-4.4	908.3	1397.2
Zircon-041_TEC15-01	1120.0	0.282290	0.000049	0.000699	0.000032	0.282275	0.282785	0.033600	0.283250	0.038400	0.015	-17.5	1.7	7.1	1346.8	1484.9
Zircon-042_TEC15-01	93.2	0.282744	0.000070	0.001154	0.000024	0.282742	0.282785	0.033600	0.283250	0.038400	0.015	-1.4	2.5	0.5	722.8	1091.8
Zircon-043_TEC15-01	81.4	0.282738	0.000035	0.002148	0.000066	0.282735	0.282785	0.033600	0.283250	0.038400	0.015	-1.7	1.2	0.0	751.2	1115.5
Zircon-044_TEC15-01	88.5	0.282795	0.000039	0.002260	0.000110	0.282791	0.282785	0.033600	0.283250	0.038400	0.015	0.4	1.4	2.2	670.1	984.2
Zircon-046_TEC15-01	82.0	0.282766	0.000047	0.001404	0.000059	0.282764	0.282785	0.033600	0.283250	0.038400	0.015	-0.7	1.7	1.1	696.2	1049.8
Zircon-047_TEC15-01	82.8	0.282658	0.000042	0.002696	0.000036	0.282654	0.282785	0.033600	0.283250	0.038400	0.015	-4.5	1.5	-2.8	880.8	1295.7
Zircon-048_TEC15-01	84.0	0.282807	0.000040	0.001110	0.000003	0.282805	0.282785	0.033600	0.283250	0.038400	0.015	0.8	1.4	2.6	632.6	955.5
Zircon-049_TEC15-01	83.6	0.282764	0.000021	0.000901	0.000006	0.282763	0.282785	0.033600	0.283250	0.038400	0.015	-0.7	0.7	1.1	689.7	1051.6
Zircon-051_TEC15-01	81.1	0.282775	0.000038	0.000628	0.000011	0.282774	0.282785	0.033600	0.283250	0.038400	0.015	-0.4	1.3	1.4	669.4	1027.5
Zircon-053_TEC15-01	156.9	0.282571	0.000018	0.001183	0.000019	0.282568	0.282785	0.033600	0.283250	0.038400	0.015	-7.6	0.6	-4.2	968.4	1441.8
Zircon-054_TEC15-01	82.3	0.282852	0.000060	0.002012	0.000065	0.282849	0.282785	0.033600	0.283250	0.038400	0.015	2.4	2.1	4.1	582.7	858.4
Zircon-055_TEC15-01	91.5	0.282718	0.000034	0.000758	0.000026	0.282717	0.282785	0.033600	0.283250	0.038400	0.015	-2.4	1.2	-0.4	751.7	1149.6
Zircon-056_TEC15-01	258.9	0.282714	0.000032	0.001654	0.000028	0.282706	0.282785	0.033600	0.283250	0.038400	0.015	-2.5	1.1	3.0	775.6	1068.1
Zircon-057_TEC15-01	163.7	0.282613	0.000024	0.000723	0.000029	0.282611	0.282785	0.033600	0.283250	0.038400	0.015	-6.1	0.8	-2.5	898.0	1341.1
Zircon-058_TEC15-01	83.0	0.282704	0.000044	0.001202	0.000090	0.282702	0.282785	0.033600	0.283250	0.038400	0.015	-2.9	1.6	-1.1	780.5	1187.5
Zircon-060_TEC15-01	79.1	0.282894	0.000004	0.002264	0.000012	0.282890	0.282785	0.033600	0.283250	0.038400	0.015	3.8	0.1	5.5	525.4	766.7
Zircon-061_TEC15-01	81.1	0.282783	0.000033	0.001287	0.000012	0.282781	0.282785	0.033600	0.283250	0.038400	0.015	-0.1	1.2	1.7	669.8	1011.8
Zircon-062_TEC15-01	83.2	0.282816	0.000100	0.001060	0.000120	0.282814	0.282785	0.033600	0.283250	0.038400	0.015	1.1	3.5	2.9	619.0	935.6
Zircon-063_TEC15-01	223.1	0.282545	0.000036	0.002192	0.000026	0.282536	0.282785	0.033600	0.283250	0.038400	0.015	-8.5	1.3	-3.9	1032.9	1471.0
Zircon-064_TEC15-01	82.6	0.282646	0.000060	0.000965	0.000023	0.282645	0.282785	0.033600	0.283250	0.038400	0.015	-4.9	2.1	-3.1	857.3	1316.6
Zircon-065_TEC15-01	74.9	0.282806	0.000078	0.001741	0.000060	0.282804	0.282785	0.033600	0.283250	0.038400	0.015	0.7	2.8	2.3	644.8	965.1
Zircon-066_TEC15-01	85.5	0.282723	0.000028	0.001165	0.000020	0.282721	0.282785	0.033600	0.283250	0.038400	0.015	-2.2	1.0	-0.4	752.8	1143.4
Zircon-067_TEC15-01	83.7	0.282702	0.000035	0.001232	0.000029	0.282700	0.282785	0.033600	0.283250	0.038400	0.015	-2.9	1.2	-1.1	783.9	1191.7
Zircon-068_TEC15-01	80.7	0.282840	0.000056	0.002308	0.000015	0.282837	0.282785	0.033600	0.283250	0.038400	0.015	1.9	2.0	3.6	605.0	887.3
Zircon-069_TEC15-01	86.3	0.282685	0.000078	0.002927	0.000089	0.282680	0.282785	0.033600	0.283250	0.038400	0.015	-3.5	2.8	-1.8	846.4	1234.4
Zircon-070_TEC15-01	85.7	0.282793	0.000033	0.001439	0.000008	0.282791	0.282785	0.033600	0.283250	0.038400	0.015	0.3	1.2	2.1	658.2	987.2
Zircon-071_TEC15-01	88.0	0.282823	0.000025	0.001166	0.000038	0.282821	0.282785	0.033600	0.283250	0.038400	0.015	1.3	0.9	3.2	610.8	917.4
Zircon-072_TEC15-01	97.7	0.282711	0.000090	0.001175	0.000009	0.282709	0.282785	0.033600	0.283250	0.038400	0.015	-2.6	3.2	-0.5	770.0	1163.3
Zircon-073_TEC15-01	86.3	0.282754	0.000062	0.007510	0.000100	0.282742	0.282785	0.033600	0.283250	0.038400	0.015	-1.1	2.2	0.4	853.2	1096.4
Zircon-075_TEC15-01	80.9	0.282762	0.000036	0.000911	0.000052	0.282761	0.282785	0.033600	0.283250	0.038400	0.015	-0.8	1.3	0.9	692.7	1057.8
Zircon-076_TEC15-01	84.3	0.282817	0.000025	0.001005	0.000014	0.282815	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.9	2.9	616.6	932.5
Zircon-077_TEC15-01	85.7	0.282797	0.000054	0.001431	0.000047	0.282795	0.282785	0.033600	0.283250	0.038400	0.015	0.4	1.9	2.2	652.3	978.2
Zircon-078_TEC15-01	83.3	0.282802	0.000037	0.001404	0.000005	0.282800	0.282785	0.033600	0.283250	0.038400	0.015	0.6	1.3	2.4	644.7	968.2
Zircon-079_TEC15-01	87.2	0.282713	0.000025	0.000908	0.000010	0.282712	0.282785	0.033600	0.283250	0.038400	0.015	-2.5	0.9	-0.7	761.7	1163.9
Zircon-080_TEC15-01	80.0	0.282719	0.000031	0.001741	0.000045	0.282716	0.282785	0.033600	0.283250	0.038400	0.015	-2.3	1.1	-0.7	770.3	1157.5
Zircon-082_TEC15-01	85.9	0.282757	0.000053	0.002031	0.000048	0.282754	0.282785	0.033600	0.283250	0.038400	0.015	-1.0	1.9	0.8	721.2	1070.1
Zircon-083_TEC15-01	81.0	0.282776	0.000029	0.001579	0.000044	0.282774	0.282785	0.033600	0.283250	0.038400	0.015	-0.3	10.3	1.4	685.1	1028.5
Zircon-084_TEC15-01	82.0	0.282703	0.000043	0.001179	0.000007	0.282701	0.282785	0.033600	0.283250	0.038400	0.015	-2.9	1.5	-1.1	781.4	1190.3
Zircon-085_TEC15-01	83.6	0.282762	0.000035	0.002710	0.000058	0.282758	0.282785	0.033600	0.283250	0.038400	0.015	-0.8	1.2	0.9	727.4	1062.5
Zircon-086_TEC15-01	92.3	0.282763	0.000030	0.002020	0.000100	0.282760	0.282785	0.033600	0.283250	0.038400	0.015	-0.8	1.1	1.1	712.2	1053.1
Zircon-087_TEC15-01	82.2	0.282773	0.000088	0.001745	0.000020	0.282770	0.282785	0.033600	0.283250	0.038400	0.015	-0.4	3.1	1.3	692.5	1035.2
Zircon-089_TEC15-01	94.7	0.282811	0.000039	0.001908	0.000008	0.282808	0.282785	0.033600	0.283250	0.038400	0.015	0.9	1.4	2.9	640.5	943.5
Zircon-090_TEC15-01	83.2	0.282713	0.000027	0.001423	0.000044	0.282711	0.282785	0.033600	0.283250	0.038400	0.015	-2.5	1.0	-0.8	772.3	1168.0
Zircon-091_TEC15-01	80.2	0.282703	0.000044	0.002466	0.000097	0.282699	0.282785	0.033600	0.283250	0.038400	0.015	-2.9	1.6	-1.3	809.2	1195.6
Zircon-092_TEC15-01	81.9	0.282718	0.000044	0.001866	0.000042	0.282715	0.282785	0.033600	0.283250	0.038400	0.015	-2.4	1.6	-0.7	774.3	1159.1

Zircon-094_TEC15-01	93.1	0.282829	0.000046	0.001875	0.000040	0.282826	0.282785	0.033600	0.283250	0.038400	0.015	1.6	1.6	3.5	613.8	903.7
Zircon-095_TEC15-01	90.7	0.282743	0.000037	0.001710	0.000018	0.282740	0.282785	0.033600	0.283250	0.038400	0.015	-1.5	1.3	0.4	735.1	1097.6
Zircon-096_TEC15-01	85.7	0.282739	0.000022	0.001165	0.000049	0.282737	0.282785	0.033600	0.283250	0.038400	0.015	-1.6	0.8	0.2	730.1	1107.4
Zircon-097_TEC15-01	80.9	0.282752	0.000059	0.001154	0.000085	0.282750	0.282785	0.033600	0.283250	0.038400	0.015	-1.2	2.1	0.6	711.4	1081.0
Zircon-099_TEC15-01	82.6	0.282807	0.000040	0.004353	0.000021	0.282800	0.282785	0.033600	0.283250	0.038400	0.015	0.8	1.4	2.4	692.4	967.6
Zircon-100_TEC15-01	87.7	0.282749	0.000030	0.001687	0.000039	0.282746	0.282785	0.033600	0.283250	0.038400	0.015	-1.3	1.1	0.6	726.0	1085.8

SAMPLE	Age (Ma)	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_i$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_c$	$\epsilon\text{Hf}(0)$	$\pm 2\text{SE } \epsilon\text{Hf}(0)$	$\epsilon\text{Hf}(0)$	T_{DM} (Ma)	T_{DM}^c (Ma)
MAG-15-01 (Mag*) Batolito Puerto Vallarta																
Zircon-001_MAG15-01	74.7	0.282904	0.000022	0.000939	0.000002	0.282903	0.282785	0.033600	0.283250	0.038400	0.015	4.2	0.8	5.8	492.4	741.9
Zircon-002_MAG15-01	78.1	0.282864	0.000048	0.001683	0.000056	0.282862	0.282785	0.033600	0.283250	0.038400	0.015	2.8	1.7	4.4	560.1	832.6
Zircon-003_MAG15-01	76.5	0.282881	0.000036	0.000846	0.000008	0.282880	0.282785	0.033600	0.283250	0.038400	0.015	3.4	1.3	5.1	523.7	792.4
Zircon-005_MAG15-01	91.7	0.282845	0.000020	0.001536	0.000049	0.282842	0.282785	0.033600	0.283250	0.038400	0.015	2.1	0.7	4.1	585.2	867.2
Zircon-006_MAG15-01	86.4	0.282858	0.000021	0.001156	0.000051	0.282856	0.282785	0.033600	0.283250	0.038400	0.015	2.6	0.7	4.4	560.8	839.5
Zircon-007_MAG15-01	81.0	0.282847	0.000026	0.001148	0.000038	0.282845	0.282785	0.033600	0.283250	0.038400	0.015	2.2	0.9	3.9	576.3	867.4
Zircon-008_MAG15-01	83.6	0.282871	0.000024	0.001395	0.000035	0.282869	0.282785	0.033600	0.283250	0.038400	0.015	3.0	0.8	4.8	545.8	812.7
Zircon-009_MAG15-01	77.4	0.282815	0.000023	0.001419	0.000006	0.282813	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.8	2.7	626.4	942.4
Zircon-010_MAG15-01	85.2	0.282853	0.000024	0.001812	0.000075	0.282850	0.282785	0.033600	0.283250	0.038400	0.015	2.4	0.8	4.2	578.0	853.8
Zircon-011_MAG15-01	81.5	0.282838	0.000024	0.001639	0.000070	0.282836	0.282785	0.033600	0.283250	0.038400	0.015	1.9	0.8	3.6	597.0	889.1
Zircon-012_MAG15-01	88.0	0.282848	0.000023	0.002015	0.000034	0.282845	0.282785	0.033600	0.283250	0.038400	0.015	2.2	0.8	4.1	588.5	864.3
Zircon-013_MAG15-01	89.3	0.282838	0.000029	0.002252	0.000026	0.282834	0.282785	0.033600	0.283250	0.038400	0.015	1.9	1.0	3.7	607.0	887.0
Zircon-014_MAG15-01	83.1	0.282830	0.000017	0.001219	0.000007	0.282828	0.282785	0.033600	0.283250	0.038400	0.015	1.6	0.6	3.4	601.6	904.7
Zircon-015_MAG15-01	85.8	0.282868	0.000024	0.001115	0.000036	0.282866	0.282785	0.033600	0.283250	0.038400	0.015	2.9	0.8	4.8	546.0	817.2
Zircon-016_MAG15-01	77.7	0.282823	0.000026	0.001963	0.000036	0.282820	0.282785	0.033600	0.283250	0.038400	0.015	1.3	0.9	3.0	624.0	926.0
Zircon-017_MAG15-01	90.0	0.282824	0.000023	0.002259	0.000036	0.282820	0.282785	0.033600	0.283250	0.038400	0.015	1.4	0.8	3.2	627.7	918.1
Zircon-018_MAG15-01	84.4	0.282856	0.000016	0.000741	0.000064	0.282855	0.282785	0.033600	0.283250	0.038400	0.015	2.5	0.6	4.3	557.5	843.7
Zircon-019_MAG15-01	83.7	0.282830	0.000028	0.002054	0.000069	0.282827	0.282785	0.033600	0.283250	0.038400	0.015	1.6	1.0	3.3	615.4	907.3
Zircon-020_MAG15-01	84.5	0.282844	0.000025	0.001686	0.000012	0.282841	0.282785	0.033600	0.283250	0.038400	0.015	2.1	0.9	3.9	589.1	874.0
Zircon-023_MAG15-01	85.5	0.282769	0.000023	0.001615	0.000010	0.282766	0.282785	0.033600	0.283250	0.038400	0.015	-0.6	0.8	1.2	695.8	1041.8
Zircon-024_MAG15-01	81.5	0.282807	0.000026	0.001196	0.000013	0.282805	0.282785	0.033600	0.283250	0.038400	0.015	0.8	0.9	2.5	634.0	957.3
Zircon-025_MAG15-01	77.6	0.282802	0.000030	0.001977	0.000058	0.282799	0.282785	0.033600	0.283250	0.038400	0.015	0.6	1.1	2.2	654.8	973.3
Zircon-026_MAG15-01	81.9	0.282803	0.000027	0.003240	0.000110	0.282798	0.282785	0.033600	0.283250	0.038400	0.015	0.6	1.0	2.3	676.7	973.1
Zircon-027_MAG15-01	85.6	0.282790	0.000031	0.001990	0.000110	0.282787	0.282785	0.033600	0.283250	0.038400	0.015	0.2	1.1	2.0	672.5	996.0
Zircon-031_MAG15-01	81.7	0.282760	0.000031	0.002325	0.000052	0.282756	0.282785	0.033600	0.283250	0.038400	0.015	-0.9	1.1	0.8	722.6	1066.6
Zircon-033_MAG15-01	83.1	0.282804	0.000026	0.002745	0.000076	0.282800	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.9	2.4	665.8	968.5
Zircon-034_MAG15-01	75.8	0.282860	0.000026	0.001858	0.000048	0.282857	0.282785	0.033600	0.283250	0.038400	0.015	2.7	0.9	4.2	568.6	843.4
Zircon-036_MAG15-01	91.8	0.282845	0.000024	0.001449	0.000021	0.282843	0.282785	0.033600	0.283250	0.038400	0.015	2.1	0.8	4.1	583.9	866.8
Zircon-038_MAG15-01	85.0	0.282859	0.000020	0.001220	0.000014	0.282857	0.282785	0.033600	0.283250	0.038400	0.015	2.6	0.7	4.4	560.3	838.3
Zircon-039_MAG15-01	81.8	0.282839	0.000023	0.001414	0.000013	0.282837	0.282785	0.033600	0.283250	0.038400	0.015	1.9	0.8	3.6	591.9	885.9
Zircon-040_MAG15-01	79.3	0.282848	0.000022	0.001523	0.000040	0.282846	0.282785	0.033600	0.283250	0.038400	0.015	2.2	0.8	3.9	580.7	867.4
Zircon-041_MAG15-01	81.5	0.282836	0.000028	0.001762	0.000093	0.282833	0.282785	0.033600	0.283250	0.038400	0.015	1.8	1.0	3.5	601.8	894.0
Zircon-042_MAG15-01	79.4	0.282853	0.000028	0.001168	0.000018	0.282851	0.282785	0.033600	0.283250	0.038400	0.015	2.4	1.0	4.1	568.1	854.9
Zircon-043_MAG15-01	82.2	0.282802	0.000025	0.002123	0.000040	0.282799	0.282785	0.033600	0.283250	0.038400	0.015	0.6	0.9	2.3	657.4	971.3
Zircon-045_MAG15-01	83.5	0.282827	0.000026	0.001720	0.000022	0.282824	0.282785	0.033600	0.283250	0.038400	0.015	1.5	0.9	3.2	614.2	913.0
Zircon-047_MAG15-01	79.6	0.282815	0.000019	0.001171	0.000005	0.282813	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.7	2.8	622.2	940.3
Zircon-048_MAG15-01	88.1	0.282842	0.000027	0.002225	0.000023	0.282838	0.282785	0.033600	0.283250	0.038400	0.015	2.0	1.0	3.8	600.7	878.5
Zircon-049_MAG15-01	83.4	0.282835	0.000026	0.003797	0.000023	0.282829	0.282785	0.033600	0.283250	0.038400	0.015	1.8	0.9	3.4	638.6	902.3
Zircon-050_MAG15-01	79.3	0.282877	0.000018	0.001003	0.000066	0.282876	0.282785	0.033600	0.283250	0.038400	0.015	3.3	0.6	5.0	531.6	800.3
Zircon-052_MAG15-01	83.1	0.282834	0.000024	0.001367	0.000084	0.282832	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.8	3.5	598.3	896.2
Zircon-053_MAG15-01	85.7	0.282841	0.000028	0.002033	0.000034	0.282838	0.282785	0.033600	0.283250	0.038400	0.015	2.0	1.0	3.8	599.0	881.4
Zircon-054_MAG15-01	84.2	0.282801	0.000027	0.001646	0.000024	0.282798	0.282785	0.033600	0.283250	0.038400	0.015	0.6	1.0	2.3	650.4	970.8
Zircon-055_MAG15-01	78.7	0.282890	0.000024	0.001005	0.000062	0.282889	0.282785	0.033600	0.283250	0.038400	0.015	3.7	0.8	5.4	513.2	771.3
Zircon-056_MAG15-01	79.6	0.282830	0.000020	0.001403	0.000012	0.282828	0.282785	0.033600	0.283250	0.038400	0.015	1.6	0.7	3.3	604.6	907.4
Zircon-058_MAG15-01	79.1	0.282880	0.000021	0.000792	0.000010	0.282879	0.282785	0.033600	0.283250	0.038400	0.015	3.4	0.7	5.1	524.4	793.0

Zircon-059_MAG15-01	76.9	0.282910	0.000023	0.001296	0.000026	0.282908	0.282785	0.033600	0.283250	0.038400	0.015	4.4	0.8	6.1	488.6	728.2
Zircon-061_MAG15-01	81.9	0.282806	0.000021	0.001644	0.000012	0.282803	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.7	2.5	643.1	960.9
Zircon-062_MAG15-01	90.0	0.282817	0.000027	0.001452	0.000023	0.282815	0.282785	0.033600	0.283250	0.038400	0.015	1.1	1.0	3.0	624.1	930.8
Zircon-063_MAG15-01	78.1	0.282868	0.000023	0.001487	0.000050	0.282866	0.282785	0.033600	0.283250	0.038400	0.015	2.9	0.8	4.6	551.4	822.9
Zircon-064_MAG15-01	78.9	0.282976	0.000054	0.010950	0.000110	0.282960	0.282785	0.033600	0.283250	0.038400	0.015	6.8	1.9	7.9	532.0	610.0
Zircon-066_MAG15-01	75.4	0.282867	0.000021	0.000917	0.000008	0.282866	0.282785	0.033600	0.283250	0.038400	0.015	2.9	0.7	4.5	544.5	824.9
Zircon-067_MAG15-01	78.6	0.282796	0.000019	0.000610	0.000015	0.282795	0.282785	0.033600	0.283250	0.038400	0.015	0.4	0.7	2.1	639.6	981.8
Zircon-069_MAG15-01	79.3	0.282873	0.000020	0.001376	0.000022	0.282871	0.282785	0.033600	0.283250	0.038400	0.015	3.1	0.7	4.8	542.6	810.6
Zircon-072_MAG15-01	74.0	0.282848	0.000023	0.001571	0.000015	0.282846	0.282785	0.033600	0.283250	0.038400	0.015	2.2	0.8	3.8	581.5	870.6
Zircon-073_MAG15-01	95.3	0.282825	0.000031	0.003390	0.000170	0.282819	0.282785	0.033600	0.283250	0.038400	0.015	1.4	1.1	3.3	646.3	917.6
Zircon-074_MAG15-01	72.2	0.282878	0.000020	0.000912	0.000017	0.282877	0.282785	0.033600	0.283250	0.038400	0.015	3.3	0.7	4.8	528.9	802.0
Zircon-076_MAG15-01	82.4	0.282801	0.000051	0.001708	0.000029	0.282798	0.282785	0.033600	0.283250	0.038400	0.015	0.6	1.8	2.3	651.5	972.0
Zircon-077_MAG15-01	85.0	0.282717	0.000028	0.002109	0.000044	0.282714	0.282785	0.033600	0.283250	0.038400	0.015	-2.4	1.0	-0.6	780.9	1160.5
Zircon-080_MAG15-01	83.6	0.282850	0.000021	0.001205	0.000015	0.282848	0.282785	0.033600	0.283250	0.038400	0.015	2.3	0.7	4.1	572.9	859.3
Zircon-081_MAG15-01	76.3	0.282876	0.000027	0.001446	0.000014	0.282874	0.282785	0.033600	0.283250	0.038400	0.015	3.2	1.0	4.8	539.4	805.8
Zircon-082_MAG15-01	86.9	0.282815	0.000031	0.003290	0.000440	0.282810	0.282785	0.033600	0.283250	0.038400	0.015	1.1	1.1	2.8	659.5	943.8
Zircon-083_MAG15-01	81.8	0.282845	0.000028	0.001689	0.000087	0.282842	0.282785	0.033600	0.283250	0.038400	0.015	2.1	1.0	3.8	587.7	873.3
Zircon-084_MAG15-01	82.5	0.282750	0.000020	0.000901	0.000008	0.282749	0.282785	0.033600	0.283250	0.038400	0.015	-1.2	0.7	0.5	709.5	1083.7
Zircon-085_MAG15-01	85.2	0.282846	0.000030	0.002168	0.000089	0.282843	0.282785	0.033600	0.283250	0.038400	0.015	2.2	1.1	3.9	593.9	870.9
Zircon-086_MAG15-01	80.2	0.282858	0.000018	0.001383	0.000024	0.282856	0.282785	0.033600	0.283250	0.038400	0.015	2.6	0.6	4.3	564.2	843.9
Zircon-087_MAG15-01	75.8	0.282817	0.000020	0.001466	0.000008	0.282815	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.7	2.7	624.3	939.0
Zircon-088_MAG15-01	73.1	0.282854	0.000019	0.001796	0.000052	0.282852	0.282785	0.033600	0.283250	0.038400	0.015	2.4	0.7	4.0	576.3	858.2
Zircon-090_MAG15-01	75.2	0.282851	0.000028	0.001719	0.000023	0.282849	0.282785	0.033600	0.283250	0.038400	0.015	2.3	1.0	3.9	579.5	863.6
Zircon-091_MAG15-01	82.1	0.282861	0.000023	0.001416	0.000010	0.282859	0.282785	0.033600	0.283250	0.038400	0.015	2.7	0.8	4.4	560.4	836.2
Zircon-092_MAG15-01	88.0	0.282855	0.000024	0.002240	0.000057	0.282851	0.282785	0.033600	0.283250	0.038400	0.015	2.5	0.8	4.3	581.9	849.3
Zircon-094_MAG15-01	83.7	0.282801	0.000025	0.001826	0.000011	0.282798	0.282785	0.033600	0.283250	0.038400	0.015	0.6	0.9	2.3	653.5	971.7
Zircon-096_MAG15-01	80.9	0.282833	0.000025	0.001943	0.000080	0.282830	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.9	3.4	609.2	901.7
Zircon-097_MAG15-01	81.8	0.282837	0.000029	0.002061	0.000056	0.282834	0.282785	0.033600	0.283250	0.038400	0.015	1.8	1.0	3.5	605.3	892.6
Zircon-099_MAG15-01	81.4	0.282770	0.000026	0.002460	0.000130	0.282766	0.282785	0.033600	0.283250	0.038400	0.015	-0.5	0.9	1.1	710.6	1044.8
Zircon-100_MAG15-01	81.2	0.282922	0.000039	0.007720	0.000170	0.282910	0.282785	0.033600	0.283250	0.038400	0.015	4.8	1.4	6.2	569.6	720.6

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_t$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_C$	$\epsilon\text{Hf}(0)$	$\pm 2\text{SE } \epsilon\text{Hf}(0)$	$\epsilon\text{Hf}(t)$	$T_{\text{DM}} \text{ (Ma)}$	$T_{\text{DM}}^C \text{ (Ma)}$
PUR-15-01 (Pur*) Batolito Manzanillo, Suite Zihuatanejo																
Zircon-003_PUR15-01	68.7	0.283005	0.000027	0.000392	0.000002	0.283004	0.282785	0.033600	0.283250	0.038400	0.015	7.8	1.0	9.3	344.2	515.4
Zircon-004_PUR15-01	75.4	0.283011	0.000025	0.000994	0.000059	0.283010	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.9	9.6	341.1	499.6
Zircon-005_PUR15-01	78.6	0.282980	0.000024	0.000344	0.000004	0.282979	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.8	8.6	378.7	565.8
Zircon-006_PUR15-01	67.5	0.282988	0.000056	0.001155	0.000027	0.282987	0.282785	0.033600	0.283250	0.038400	0.015	7.2	2.0	8.6	375.5	556.8
Zircon-007_PUR15-01	82.9	0.282982	0.000027	0.000889	0.000023	0.282981	0.282785	0.033600	0.283250	0.038400	0.015	7.0	1.0	8.8	381.3	560.5
Zircon-009_PUR15-01	87.2	0.282985	0.000031	0.001203	0.000009	0.282983	0.282785	0.033600	0.283250	0.038400	0.015	7.1	1.1	8.9	380.2	552.3
Zircon-011_PUR15-01	119.5	0.282949	0.000030	0.001252	0.000010	0.282946	0.282785	0.033600	0.283250	0.038400	0.015	5.8	1.1	8.4	432.2	615.1
Zircon-012_PUR15-01	88.5	0.283016	0.000096	0.005567	0.000046	0.283007	0.282785	0.033600	0.283250	0.038400	0.015	8.2	3.4	9.8	380.4	497.6
Zircon-013_PUR15-01	65.9	0.283015	0.000030	0.001428	0.000061	0.283013	0.282785	0.033600	0.283250	0.038400	0.015	8.1	1.1	9.5	339.4	497.3
Zircon-014_PUR15-01	117.5	0.282874	0.000022	0.001242	0.000015	0.282871	0.282785	0.033600	0.283250	0.038400	0.015	3.1	0.8	5.7	539.3	785.7
Zircon-015_PUR15-01	71.0	0.283026	0.000032	0.001396	0.000021	0.283024	0.282785	0.033600	0.283250	0.038400	0.015	8.5	1.1	10.0	323.3	469.4
Zircon-016_PUR15-01	69.5	0.283013	0.000032	0.000871	0.000025	0.283012	0.282785	0.033600	0.283250	0.038400	0.015	8.1	1.1	9.6	337.2	498.2
Zircon-020_PUR15-01	71.4	0.282989	0.000026	0.002086	0.000030	0.282986	0.282785	0.033600	0.283250	0.038400	0.015	7.2	0.9	8.7	383.6	555.1
Zircon-021_PUR15-01	67.6	0.283042	0.000023	0.000626	0.000003	0.283041	0.282785	0.033600	0.283250	0.038400	0.015	9.1	0.8	10.6	294.1	432.8
Zircon-022_PUR15-01	70.6	0.282983	0.000026	0.001054	0.000021	0.282982	0.282785	0.033600	0.283250	0.038400	0.015	7.0	0.9	8.5	381.6	566.0
Zircon-023_PUR15-01	82.9	0.282972	0.000033	0.001792	0.000012	0.282969	0.282785	0.033600	0.283250	0.038400	0.015	6.6	1.2	8.4	405.2	586.3
Zircon-024_PUR15-01	71.5	0.283021	0.000027	0.000962	0.000011	0.283020	0.282785	0.033600	0.283250	0.038400	0.015	8.3	1.0	9.9	326.6	479.1
Zircon-025_PUR15-01	75.2	0.283011	0.000031	0.001027	0.000029	0.283010	0.282785	0.033600	0.283250	0.038400	0.015	8.0	1.1	9.6	341.4	499.8
Zircon-026_PUR15-01	109.1	0.282999	0.000034	0.002515	0.000027	0.282994	0.282785	0.033600	0.283250	0.038400	0.015	7.6	1.2	9.8	373.3	513.8

Zircon-030_PUR15-01	79.1	0.283020	0.000030	0.002009	0.000065	0.283017	0.282785	0.033600	0.283250	0.038400	0.015	8.3	1.1	10.0	337.5	480.4
Zircon-031_PUR15-01	80.3	0.282977	0.000027	0.000850	0.000031	0.282976	0.282785	0.033600	0.283250	0.038400	0.015	6.8	1.0	8.5	388.0	573.2
Zircon-032_PUR15-01	122.6	0.282859	0.000027	0.001498	0.000017	0.282856	0.282785	0.033600	0.283250	0.038400	0.015	2.6	1.0	5.2	564.5	817.9
Zircon-033_PUR15-01	65.4	0.283021	0.000026	0.000468	0.000005	0.283020	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.9	9.8	322.4	481.4
Zircon-034_PUR15-01	82.1	0.282959	0.000029	0.002695	0.000093	0.282955	0.282785	0.033600	0.283250	0.038400	0.015	6.2	1.0	7.8	434.8	619.3
Zircon-037_PUR15-01	73.9	0.282998	0.000028	0.000923	0.000009	0.282997	0.282785	0.033600	0.283250	0.038400	0.015	7.5	1.0	9.1	359.0	529.7
Zircon-038_PUR15-01	116.0	0.282994	0.000031	0.002211	0.000042	0.282989	0.282785	0.033600	0.283250	0.038400	0.015	7.4	1.1	9.8	377.6	520.0
Zircon-039_PUR15-01	79.7	0.283017	0.000026	0.001167	0.000028	0.283015	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.9	9.9	334.1	484.0
Zircon-040_PUR15-01	69.2	0.282997	0.000020	0.000894	0.000012	0.282996	0.282785	0.033600	0.283250	0.038400	0.015	7.5	0.7	9.0	360.1	534.7
Zircon-041_PUR15-01	87.0	0.282943	0.000028	0.002044	0.000032	0.282940	0.282785	0.033600	0.283250	0.038400	0.015	5.6	1.0	7.4	450.4	650.5
Zircon-043_PUR15-01	118.7	0.282907	0.000027	0.001906	0.000036	0.282903	0.282785	0.033600	0.283250	0.038400	0.015	4.3	1.0	6.8	501.1	713.8
Zircon-044_PUR15-01	83.6	0.283011	0.000033	0.002680	0.000068	0.283007	0.282785	0.033600	0.283250	0.038400	0.015	8.0	1.2	9.7	357.2	500.7
Zircon-045_PUR15-01	84.2	0.282907	0.000033	0.000995	0.000022	0.282905	0.282785	0.033600	0.283250	0.038400	0.015	4.3	1.2	6.1	488.9	729.7
Zircon-046_PUR15-01	71.4	0.283006	0.000023	0.000783	0.000010	0.283005	0.282785	0.033600	0.283250	0.038400	0.015	7.8	0.8	9.4	346.3	512.6
Zircon-048_PUR15-01	72.1	0.282964	0.000026	0.000805	0.000033	0.282963	0.282785	0.033600	0.283250	0.038400	0.015	6.3	0.9	7.9	405.9	607.4
Zircon-049_PUR15-01	84.9	0.282964	0.000021	0.000696	0.000024	0.282963	0.282785	0.033600	0.283250	0.038400	0.015	6.3	0.7	8.2	404.8	599.3
Zircon-050_PUR15-01	67.9	0.283020	0.000031	0.001637	0.000033	0.283018	0.282785	0.033600	0.283250	0.038400	0.015	8.3	1.1	9.7	334.1	485.5
Zircon-051_PUR15-01	69.9	0.282996	0.000029	0.000677	0.000016	0.282995	0.282785	0.033600	0.283250	0.038400	0.015	7.5	1.0	9.0	359.4	535.9
Zircon-052_PUR15-01	69.3	0.283025	0.000034	0.001094	0.000018	0.283024	0.282785	0.033600	0.283250	0.038400	0.015	8.5	1.2	10.0	322.1	471.7
Zircon-053_PUR15-01	114.0	0.282890	0.000022	0.001793	0.000025	0.282886	0.282785	0.033600	0.283250	0.038400	0.015	3.7	0.8	6.1	524.2	754.3
Zircon-054_PUR15-01	69.6	0.282999	0.000031	0.001063	0.000019	0.282998	0.282785	0.033600	0.283250	0.038400	0.015	7.6	1.1	9.1	358.9	530.4
Zircon-056_PUR15-01	86.9	0.282971	0.000027	0.000777	0.000011	0.282970	0.282785	0.033600	0.283250	0.038400	0.015	6.6	1.0	8.5	395.7	582.6
Zircon-058_PUR15-01	71.5	0.283016	0.000025	0.000781	0.000007	0.283015	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.9	9.7	332.1	489.9
Zircon-059_PUR15-01	73.7	0.282991	0.000025	0.000498	0.000011	0.282990	0.282785	0.033600	0.283250	0.038400	0.015	7.3	0.9	8.9	364.8	544.4
Zircon-060_PUR15-01	73.2	0.283025	0.000058	0.002382	0.000027	0.283022	0.282785	0.033600	0.283250	0.038400	0.015	8.5	2.1	10.0	333.6	473.4
Zircon-061_PUR15-01	93.7	0.282931	0.000053	0.001089	0.000007	0.282929	0.282785	0.033600	0.283250	0.038400	0.015	5.2	1.9	7.2	456.0	670.2
Zircon-062_PUR15-01	79.8	0.282976	0.000045	0.002180	0.000021	0.282973	0.282785	0.033600	0.283250	0.038400	0.015	6.8	1.6	8.4	403.7	580.3
Zircon-063_PUR15-01	86.0	0.283019	0.000038	0.002670	0.000010	0.283015	0.282785	0.033600	0.283250	0.038400	0.015	8.3	1.3	10.0	345.2	481.2
Zircon-064_PUR15-01	71.8	0.282988	0.000025	0.000781	0.000006	0.282987	0.282785	0.033600	0.283250	0.038400	0.015	7.2	0.9	8.7	371.7	553.2
Zircon-065_PUR15-01	84.3	0.282985	0.000030	0.001636	0.000005	0.282982	0.282785	0.033600	0.283250	0.038400	0.015	7.1	1.1	8.9	384.7	555.5
Zircon-066_PUR15-01	71.6	0.283009	0.000028	0.000866	0.000015	0.283008	0.282785	0.033600	0.283250	0.038400	0.015	7.9	1.0	9.5	342.8	506.0
Zircon-069_PUR15-01	66.8	0.283016	0.000020	0.000913	0.000017	0.283015	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.7	9.6	333.3	493.1
Zircon-072_PUR15-01	69.7	0.283009	0.000027	0.000984	0.000016	0.283008	0.282785	0.033600	0.283250	0.038400	0.015	7.9	1.0	9.4	343.9	507.5
Zircon-073_PUR15-01	72.8	0.283016	0.000019	0.000813	0.000020	0.283015	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.7	9.7	332.4	489.2
Zircon-074_PUR15-01	80.2	0.282960	0.000025	0.000721	0.000016	0.282959	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.9	7.9	410.7	611.3
Zircon-075_PUR15-01	118.3	0.282896	0.000028	0.000831	0.000063	0.282894	0.282785	0.033600	0.283250	0.038400	0.015	3.9	1.0	6.5	502.3	733.5
Zircon-077_PUR15-01	87.4	0.282957	0.000034	0.001200	0.000026	0.282955	0.282785	0.033600	0.283250	0.038400	0.015	6.1	1.2	8.0	420.2	615.5
Zircon-078_PUR15-01	85.6	0.282962	0.000027	0.000614	0.000023	0.282961	0.282785	0.033600	0.283250	0.038400	0.015	6.3	1.0	8.1	406.7	603.1
Zircon-079_PUR15-01	77.0	0.282813	0.000043	0.002861	0.000024	0.282809	0.282785	0.033600	0.283250	0.038400	0.015	1.0	1.5	2.6	654.6	951.8
Zircon-080_PUR15-01	88.1	0.282960	0.000025	0.000869	0.000015	0.282959	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.9	8.1	412.3	607.1
Zircon-085_PUR15-01	71.8	0.283018	0.000022	0.001263	0.000036	0.283016	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.8	9.8	333.6	486.6
Zircon-086_PUR15-01	80.7	0.283011	0.000025	0.000533	0.000017	0.283010	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.9	9.8	337.0	494.8
Zircon-088_PUR15-01	84.1	0.282992	0.000028	0.002331	0.000016	0.282988	0.282785	0.033600	0.283250	0.038400	0.015	7.3	1.0	9.1	381.8	542.2
Zircon-089_PUR15-01	111.8	0.282988	0.000028	0.001326	0.000036	0.282985	0.282785	0.033600	0.283250	0.038400	0.015	7.2	1.0	9.6	377.2	531.7
Zircon-090_PUR15-01	68.1	0.282998	0.000032	0.001325	0.000004	0.282996	0.282785	0.033600	0.283250	0.038400	0.015	7.5	1.1	9.0	362.8	534.3
Zircon-092_PUR15-01	93.1	0.282940	0.000031	0.002907	0.000050	0.282935	0.282785	0.033600	0.283250	0.038400	0.015	5.5	1.1	7.4	465.8	657.4
Zircon-093_PUR15-01	88.2	0.282961	0.000027	0.001338	0.000010	0.282959	0.282785	0.033600	0.283250	0.038400	0.015	6.2	1.0	8.1	416.0	606.5
Zircon-095_PUR15-01	83.3	0.282972	0.000031	0.001617	0.000070	0.282969	0.282785	0.033600	0.283250	0.038400	0.015	6.6	1.1	8.4	403.3	585.4
Zircon-096_PUR15-01	21.2	0.282914	0.000039	0.003724	0.000045	0.282913	0.282785	0.033600	0.283250	0.038400	0.015	4.6	1.4	5.0	516.5	753.5
Zircon-097_PUR15-01	71.4	0.283021	0.000026	0.000990	0.000042	0.283020	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.9	9.9	326.9	479.2
Zircon-098_PUR15-01	113.1	0.282999	0.000032	0.002145	0.000034	0.282994	0.282785	0.033600	0.283250	0.038400	0.015	7.6	1.1	9.9	369.5	509.9
Zircon-099_PUR15-01	77.2	0.282947	0.000044	0.001908	0.000020	0.282944	0.282785	0.033600	0.283250	0.038400	0.015	5.7	1.6	7.3	442.9	646.4
Zircon-100_PUR15-01	75.3	0.282974	0.000036	0.002632	0.000054	0.282970	0.282785	0.033600	0.283250	0.038400	0.015	6.7	1.3	8.2	411.7	588.7

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{Zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Lu}_{\text{Zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_f$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_f}$	$^{176}\text{Lu}/^{177}\text{Lu}_{\text{CHUR}_f}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Lu}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Lu}_c$	$\epsilon\text{Hf}(0)$	$\pm 2\text{SE } \epsilon\text{Hf}(0)$	$\epsilon\text{Hf}(1)$	T_{DM} (Ma)	T_{DM}^c (Ma)	
MARA-15-01 (Mara*)	Batolito Manzanillo																
Zircon-002_MARA15-01	67.4	0.283038	0.000025	0.001110	0.000045	0.283037	0.282785	0.033600	0.283250	0.038400	0.015	8.9	0.9	10.4	303.6	443.4	
Zircon-003_MARA15-01	72.6	0.283026	0.000025	0.001437	0.000003	0.283024	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.9	10.1	323.6	468.6	
Zircon-004_MARA15-01	73.6	0.283035	0.000021	0.001222	0.000012	0.283033	0.282785	0.033600	0.283250	0.038400	0.015	8.8	0.7	10.4	308.9	446.9	
Zircon-005_MARA15-01	68.5	0.282985	0.000029	0.000845	0.000021	0.282984	0.282785	0.033600	0.283250	0.038400	0.015	7.1	1.0	8.6	376.6	562.2	
Zircon-009_MARA15-01	66.4	0.283021	0.000019	0.000849	0.000015	0.283020	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.7	9.8	325.6	481.8	
Zircon-010_MARA15-01	72.7	0.283043	0.000028	0.001924	0.000041	0.283040	0.282785	0.033600	0.283250	0.038400	0.015	9.1	1.0	10.6	303.1	431.4	
Zircon-011_MARA15-01	76.3	0.283022	0.000021	0.001056	0.000014	0.283020	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.7	10.0	326.0	474.3	
Zircon-013_MARA15-01	61.3	0.283010	0.000022	0.000860	0.000016	0.283009	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.8	9.3	341.3	509.9	
Zircon-014_MARA15-01	66.3	0.283031	0.000018	0.000569	0.000007	0.283030	0.282785	0.033600	0.283250	0.038400	0.015	8.7	0.6	10.1	309.2	458.4	
Zircon-015_MARA15-01	68.9	0.283033	0.000021	0.001771	0.000034	0.283031	0.282785	0.033600	0.283250	0.038400	0.015	8.8	0.7	10.2	316.4	455.8	
Zircon-018_MARA15-01	73.8	0.283015	0.000024	0.002462	0.000094	0.283012	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.8	9.7	349.1	496.0	
Zircon-019_MARA15-01	66.5	0.283026	0.000021	0.001491	0.000016	0.283024	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.7	9.9	324.1	472.2	
Zircon-020_MARA15-01	73.3	0.283029	0.000020	0.002376	0.000011	0.283026	0.282785	0.033600	0.283250	0.038400	0.015	8.6	0.7	10.1	327.6	464.3	
Zircon-021_MARA15-01	72.6	0.283022	0.000025	0.000519	0.000030	0.283021	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.9	10.0	321.4	474.8	
Zircon-022_MARA15-01	72.9	0.283016	0.000024	0.000776	0.000015	0.283015	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.8	9.8	332.1	489.0	
Zircon-023_MARA15-01	74.2	0.283022	0.000019	0.001206	0.000049	0.283020	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.7	10.0	327.3	476.0	
Zircon-024_MARA15-01	59.6	0.283011	0.000023	0.000573	0.000017	0.283010	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.8	9.3	337.4	507.9	
Zircon-026_MARA15-01	71.4	0.283015	0.000022	0.000510	0.000011	0.283014	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.8	9.7	331.2	491.4	
Zircon-029_MARA15-01	67.6	0.283018	0.000027	0.000636	0.000009	0.283017	0.282785	0.033600	0.283250	0.038400	0.015	8.2	1.0	9.7	328.0	487.3	
Zircon-031_MARA15-01	74.3	0.283017	0.000026	0.001985	0.000086	0.283014	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.9	9.8	341.6	489.7	
Zircon-032_MARA15-01	65.2	0.283004	0.000022	0.000941	0.000021	0.283003	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.8	9.2	350.6	521.3	
Zircon-033_MARA15-01	57.9	0.283042	0.000018	0.000641	0.000016	0.283041	0.282785	0.033600	0.283250	0.038400	0.015	9.1	0.6	10.4	294.2	438.8	
Zircon-036_MARA15-01	67.1	0.283007	0.000022	0.000733	0.000011	0.283006	0.282785	0.033600	0.283250	0.038400	0.015	7.9	0.8	9.3	344.4	512.8	
Zircon-037_MARA15-01	75.8	0.283018	0.000020	0.001343	0.000019	0.283016	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.7	9.9	334.3	484.6	
Zircon-038_MARA15-01	69.8	0.283009	0.000022	0.000519	0.000005	0.283008	0.282785	0.033600	0.283250	0.038400	0.015	7.9	0.8	9.4	339.7	506.0	
Zircon-039_MARA15-01	73.4	0.283018	0.000021	0.001396	0.000038	0.283016	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.7	9.8	334.8	486.1	
Zircon-040_MARA15-01	73.1	0.283008	0.000022	0.000489	0.000012	0.283007	0.282785	0.033600	0.283250	0.038400	0.015	7.9	0.8	9.5	340.8	506.2	
Zircon-043_MARA15-01	65.3	0.283015	0.000017	0.000687	0.000012	0.283014	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.6	9.6	332.7	495.6	
Zircon-044_MARA15-01	77.0	0.283022	0.000032	0.003470	0.000320	0.283017	0.282785	0.033600	0.283250	0.038400	0.015	8.4	1.1	9.9	348.5	481.7	
Zircon-045_MARA15-01	73.8	0.283016	0.000027	0.002042	0.000055	0.283013	0.282785	0.033600	0.283250	0.038400	0.015	8.2	1.0	9.7	343.6	492.5	
Zircon-047_MARA15-01	79.2	0.283000	0.000024	0.001626	0.000041	0.282998	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.8	9.3	362.9	524.4	
Zircon-049_MARA15-01	72.6	0.283003	0.000017	0.000540	0.000013	0.283002	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.6	9.3	348.3	518.0	
Zircon-050_MARA15-01	65.2	0.283015	0.000023	0.000835	0.000007	0.283014	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.8	9.5	334.0	496.1	
Zircon-052_MARA15-01	73.5	0.283026	0.000023	0.001773	0.000034	0.283024	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.8	10.1	326.6	469.1	
Zircon-054_MARA15-01	73.5	0.283026	0.000031	0.003199	0.000091	0.283022	0.282785	0.033600	0.283250	0.038400	0.015	8.5	1.1	10.0	339.8	473.5	
Zircon-055_MARA15-01	63.7	0.283008	0.000020	0.000829	0.000015	0.283007	0.282785	0.033600	0.283250	0.038400	0.015	7.9	0.7	9.3	343.9	512.9	
Zircon-056_MARA15-01	72.0	0.283033	0.000019	0.000514	0.000018	0.283032	0.282785	0.033600	0.283250	0.038400	0.015	8.8	0.7	10.3	305.9	450.2	
Zircon-057_MARA15-01	74.6	0.283029	0.000021	0.001199	0.000009	0.283027	0.282785	0.033600	0.283250	0.038400	0.015	8.6	0.7	10.2	317.3	459.9	
Zircon-058_MARA15-01	62.3	0.283005	0.000021	0.000659	0.000022	0.283004	0.282785	0.033600	0.283250	0.038400	0.015	7.8	0.7	9.1	346.6	520.1	
Zircon-060_MARA15-01	66.5	0.283022	0.000020	0.000491	0.000006	0.283021	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.7	9.8	321.2	478.5	
Zircon-062_MARA15-01	76.4	0.283019	0.000023	0.001211	0.000010	0.283017	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.8	9.9	331.7	481.5	
Zircon-063_MARA15-01	60.7	0.283002	0.000020	0.000706	0.000014	0.283001	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.7	9.0	351.2	528.0	
Zircon-064_MARA15-01	64.4	0.283011	0.000021	0.000821	0.000042	0.283010	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.7	9.4	339.6	505.6	
Zircon-065_MARA15-01	76.8	0.283007	0.000021	0.001004	0.000034	0.283006	0.282785	0.033600	0.283250	0.038400	0.015	7.9	0.7	9.5	346.9	507.8	
Zircon-067_MARA15-01	77.3	0.283013	0.000022	0.001055	0.000008	0.283011	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.8	9.7	338.8	494.1	
Zircon-068_MARA15-01	68.2	0.283001	0.000023	0.000737	0.000014	0.283000	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.8	9.1	352.9	525.8	
Zircon-070_MARA15-01	76.0	0.283011	0.000026	0.001176	0.000019	0.283009	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.9	9.6	342.8	499.8	
Zircon-071_MARA15-01	74.7	0.283060	0.000026	0.003922	0.000025	0.283055	0.282785	0.033600	0.283250	0.038400	0.015	9.7	0.9	11.2	294.4	398.0	
Zircon-072_MARA15-01	74.0	0.283012	0.000020	0.000571	0.000009	0.283011	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.7	9.6	335.9	496.8	
Zircon-073_MARA15-01	65.6	0.283008	0.000020	0.000750	0.000016	0.283007	0.282785	0.033600	0.283250	0.038400	0.015	7.9	0.7	9.3	343.2	511.5	

Zircon-074_MARA15-01	84.9	0.283018	0.000019	0.000848	0.000023	0.283017	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.7	10.1	329.9	477.5
Zircon-077_MARA15-01	77.0	0.283022	0.000020	0.001010	0.000035	0.283021	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.7	10.0	325.6	473.7
Zircon-080_MARA15-01	73.6	0.283029	0.000023	0.001390	0.000140	0.283027	0.282785	0.033600	0.283250	0.038400	0.015	8.6	0.8	10.2	318.9	461.0
Zircon-081_MARA15-01	67.8	0.283033	0.000020	0.000621	0.000009	0.283032	0.282785	0.033600	0.283250	0.038400	0.015	8.8	0.7	10.2	306.8	453.1
Zircon-082_MARA15-01	74.2	0.283017	0.000021	0.000836	0.000026	0.283016	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.7	9.8	331.2	486.2
Zircon-084_MARA15-01	73.9	0.283005	0.000019	0.000927	0.000050	0.283004	0.282785	0.033600	0.283250	0.038400	0.015	7.8	0.7	9.4	349.0	513.8
Zircon-086_MARA15-01	65.2	0.283017	0.000021	0.000670	0.000004	0.283016	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.7	9.6	329.8	491.1
Zircon-087_MARA15-01	73.2	0.283016	0.000022	0.000869	0.000037	0.283015	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.8	9.8	332.9	489.1
Zircon-089_MARA15-01	79.4	0.283020	0.000019	0.001173	0.000029	0.283018	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.7	10.0	329.9	477.4
Zircon-090_MARA15-01	65.8	0.283000	0.000028	0.001153	0.000044	0.282999	0.282785	0.033600	0.283250	0.038400	0.015	7.6	1.0	9.0	358.3	530.6
Zircon-093_MARA15-01	72.7	0.283034	0.000027	0.001237	0.000004	0.283032	0.282785	0.033600	0.283250	0.038400	0.015	8.8	1.0	10.4	310.4	449.7
Zircon-094_MARA15-01	72.7	0.283017	0.000032	0.002544	0.000097	0.283014	0.282785	0.033600	0.283250	0.038400	0.015	8.2	1.1	9.7	346.9	492.3
Zircon-097_MARA15-01	71.9	0.283004	0.000024	0.001408	0.000016	0.283002	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.8	9.3	355.0	518.8
Zircon-098_MARA15-01	80.3	0.283023	0.000023	0.002077	0.000009	0.283020	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.8	10.1	333.7	473.1
Zircon-100_MARA15-01	67.4	0.283024	0.000026	0.000970	0.000018	0.283023	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.9	9.9	322.4	474.8

SAMPLE	Age (Ma)	$^{176}\text{Lu}/^{177}\text{Lu}_{\text{Zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Lu}_{\text{Zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_i$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Lu}/^{177}\text{Lu}_{\text{CHUR}_i}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Lu}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Lu}_c$	$\epsilon\text{Hf}(t)$	$\pm 2\text{SE } \epsilon\text{Hf}(t)$	$\epsilon\text{Hf}(t)$	T_{DM} (Ma)	T_{DM}^c (Ma)
ARM-15-01 (Arm*) Batolito Manzanillo, Batolito Puerto Vallarta, Suite Zihuatanejo, Suite Cuale-Macias																
Zircon-001_ARM15-01	69.5	0.283057	0.000034	0.005268	0.000063	0.283050	0.282785	0.033600	0.283250	0.038400	0.015	9.6	1.2	10.9	311.1	411.3
Zircon-003_ARM15-01	68.2	0.283033	0.000023	0.001715	0.000083	0.283031	0.282785	0.033600	0.283250	0.038400	0.015	8.8	0.8	10.2	315.9	456.0
Zircon-004_ARM15-01	62.4	0.282986	0.000024	0.001800	0.000130	0.282984	0.282785	0.033600	0.283250	0.038400	0.015	7.1	0.8	8.4	385.0	566.1
Zircon-005_ARM15-01	71.7	0.283026	0.000021	0.001470	0.000011	0.283024	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.7	10.0	323.9	469.2
Zircon-007_ARM15-01	73.2	0.283042	0.000020	0.000942	0.000026	0.283041	0.282785	0.033600	0.283250	0.038400	0.015	9.1	0.7	10.7	296.6	430.4
Zircon-008_ARM15-01	110.9	0.282990	0.000063	0.001457	0.000020	0.282987	0.282785	0.033600	0.283250	0.038400	0.015	7.2	2.2	9.6	375.6	528.3
Zircon-009_ARM15-01	143.6	0.282980	0.000028	0.001150	0.000036	0.282977	0.282785	0.033600	0.283250	0.038400	0.015	6.9	1.0	10.0	386.8	530.3
Zircon-010_ARM15-01	92.5	0.282853	0.000024	0.001123	0.000014	0.282851	0.282785	0.033600	0.283250	0.038400	0.015	2.4	0.8	4.4	567.4	847.1
Zircon-011_ARM15-01	130.6	0.282948	0.000021	0.001589	0.000057	0.282944	0.282785	0.033600	0.283250	0.038400	0.015	5.8	0.7	8.5	437.6	612.8
Zircon-012_ARM15-01	65.7	0.283025	0.000034	0.001535	0.000022	0.283023	0.282785	0.033600	0.283250	0.038400	0.015	8.5	1.2	9.9	325.9	475.1
Zircon-015_ARM15-01	59.6	0.282894	0.000018	0.000820	0.000005	0.282893	0.282785	0.033600	0.283250	0.038400	0.015	3.9	0.6	5.1	505.0	773.1
Zircon-016_ARM15-01	77.3	0.282914	0.000027	0.002455	0.000074	0.282910	0.282785	0.033600	0.283250	0.038400	0.015	4.6	1.0	6.2	498.4	722.7
Zircon-017_ARM15-01	72.9	0.282959	0.000023	0.001339	0.000021	0.282957	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.8	7.7	418.9	619.9
Zircon-018_ARM15-01	63.1	0.283011	0.000017	0.000851	0.000016	0.283010	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.6	9.4	339.8	506.5
Zircon-019_ARM15-01	75.7	0.283042	0.000033	0.001222	0.000014	0.283040	0.282785	0.033600	0.283250	0.038400	0.015	9.1	1.2	10.7	298.8	429.8
Zircon-020_ARM15-01	157.8	0.282788	0.000033	0.002021	0.000021	0.282782	0.282785	0.033600	0.283250	0.038400	0.015	0.1	1.2	3.4	675.9	961.2
Zircon-021_ARM15-01	75.9	0.282965	0.000027	0.001462	0.000065	0.282963	0.282785	0.033600	0.283250	0.038400	0.015	6.4	1.0	8.0	411.7	605.0
Zircon-025_ARM15-01	68.7	0.283018	0.000026	0.001928	0.000031	0.283016	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.9	9.7	339.6	490.4
Zircon-027_ARM15-01	68.3	0.283000	0.000028	0.001973	0.000035	0.282997	0.282785	0.033600	0.283250	0.038400	0.015	7.6	1.0	9.0	366.3	531.5
Zircon-029_ARM15-01	87.1	0.282712	0.000033	0.001550	0.000140	0.282709	0.282785	0.033600	0.283250	0.038400	0.015	-2.6	1.2	-0.7	776.3	1168.5
Zircon-030_ARM15-01	81.4	0.282747	0.000044	0.001435	0.000015	0.282745	0.282785	0.033600	0.283250	0.038400	0.015	-1.3	1.6	0.4	723.9	1092.9
Zircon-031_ARM15-01	69.5	0.283036	0.000029	0.001777	0.000019	0.283034	0.282785	0.033600	0.283250	0.038400	0.015	8.9	1.0	10.3	312.1	448.7
Zircon-032_ARM15-01	71.2	0.283008	0.000031	0.002020	0.000130	0.283005	0.282785	0.033600	0.283250	0.038400	0.015	7.9	1.1	9.4	355.1	512.0
Zircon-035_ARM15-01	111.6	0.282943	0.000022	0.002221	0.000063	0.282938	0.282785	0.033600	0.283250	0.038400	0.015	5.6	0.8	7.9	452.6	637.9
Zircon-038_ARM15-01	91.4	0.282940	0.000023	0.002043	0.000047	0.282937	0.282785	0.033600	0.283250	0.038400	0.015	5.5	0.8	7.4	454.8	654.9
Zircon-039_ARM15-01	87.3	0.282905	0.000026	0.001875	0.000021	0.282902	0.282785	0.033600	0.283250	0.038400	0.015	4.2	0.9	6.1	503.5	735.6
Zircon-041_ARM15-01	65.1	0.283008	0.000030	0.001075	0.000015	0.283007	0.282785	0.033600	0.283250	0.038400	0.015	7.9	1.1	9.3	346.2	512.7
Zircon-044_ARM15-01	84.5	0.282773	0.000029	0.002578	0.000094	0.282769	0.282785	0.033600	0.283250	0.038400	0.015	-0.4	1.0	1.3	708.5	1036.8
Zircon-045_ARM15-01	81.6	0.282763	0.000018	0.001415	0.000031	0.282761	0.282785	0.033600	0.283250	0.038400	0.015	-0.8	0.6	1.0	700.7	1056.8
Zircon-046_ARM15-01	73.6	0.283036	0.000022	0.001122	0.000025	0.283034	0.282785	0.033600	0.283250	0.038400	0.015	8.9	0.8	10.5	306.6	444.3
Zircon-048_ARM15-01	117.9	0.283019	0.000023	0.001774	0.000025	0.283015	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.8	10.8	336.8	460.1
Zircon-049_ARM15-01	76.7	0.283028	0.000017	0.001006	0.000010	0.283027	0.282785	0.033600	0.283250	0.038400	0.015	8.6	0.6	10.2	317.0	460.3
Zircon-050_ARM15-01	85.2	0.282834	0.000021	0.001000	0.000012	0.282832	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.7	3.6	592.5	893.7
Zircon-052_ARM15-01	69.1	0.283010	0.000018	0.000879	0.000008	0.283009	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.6	9.5	341.5	505.2

Zircon-054_ARM15-01	61.8	0.282983	0.000021	0.001216	0.000021	0.282982	0.282785	0.033600	0.283250	0.038400	0.015	7.0	0.7	8.3	383.2	571.7
Zircon-055_ARM15-01	74.6	0.283024	0.000020	0.001144	0.000019	0.283022	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.7	10.1	323.9	471.0
Zircon-056_ARM15-01	68.3	0.282990	0.000025	0.001822	0.000046	0.282988	0.282785	0.033600	0.283250	0.038400	0.015	7.2	0.9	8.7	379.4	553.8
Zircon-057_ARM15-01	83.0	0.282882	0.000017	0.000437	0.000002	0.282881	0.282785	0.033600	0.283250	0.038400	0.015	3.4	0.6	5.2	516.7	784.9
Zircon-059_ARM15-01	69.7	0.283012	0.000028	0.002294	0.000017	0.283009	0.282785	0.033600	0.283250	0.038400	0.015	8.0	1.0	9.5	351.9	504.5
Zircon-060_ARM15-01	135.1	0.282954	0.000018	0.000578	0.000004	0.282953	0.282785	0.033600	0.283250	0.038400	0.015	6.0	0.6	8.9	417.5	590.9
Zircon-062_ARM15-01	82.8	0.282997	0.000020	0.001089	0.000015	0.282995	0.282785	0.033600	0.283250	0.038400	0.015	7.5	0.7	9.3	362.0	527.2
Zircon-063_ARM15-01	145.5	0.282790	0.000022	0.001517	0.000040	0.282786	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.8	3.3	663.9	960.3
Zircon-064_ARM15-01	83.0	0.283014	0.000025	0.002166	0.000019	0.283011	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.9	9.8	347.7	492.4
Zircon-065_ARM15-01	71.5	0.283048	0.000028	0.002267	0.000064	0.283045	0.282785	0.033600	0.283250	0.038400	0.015	9.3	1.0	10.8	298.6	421.8
Zircon-066_ARM15-01	87.4	0.282734	0.000021	0.001423	0.000028	0.282732	0.282785	0.033600	0.283250	0.038400	0.015	-1.8	0.7	0.1	742.3	1118.6
Zircon-067_ARM15-01	83.7	0.283013	0.000023	0.002394	0.000037	0.283009	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.8	9.8	351.4	495.1
Zircon-070_ARM15-01	63.2	0.283032	0.000024	0.000781	0.000012	0.283031	0.282785	0.033600	0.283250	0.038400	0.015	8.7	0.8	10.1	309.5	458.6
Zircon-071_ARM15-01	154.4	0.282805	0.000025	0.004440	0.000120	0.282792	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.9	3.7	697.3	940.5
Zircon-072_ARM15-01	88.6	0.282852	0.000026	0.002232	0.000076	0.282848	0.282785	0.033600	0.283250	0.038400	0.015	2.4	0.9	4.2	586.2	855.8
Zircon-073_ARM15-01	69.7	0.283040	0.000017	0.001143	0.000014	0.283039	0.282785	0.033600	0.283250	0.038400	0.015	9.0	0.6	10.5	301.1	437.6
Zircon-074_ARM15-01	117.9	0.282888	0.000032	0.000564	0.000015	0.282887	0.282785	0.033600	0.283250	0.038400	0.015	3.6	1.1	6.2	510.0	750.5
Zircon-075_ARM15-01	59.5	0.283028	0.000024	0.001371	0.000020	0.283026	0.282785	0.033600	0.283250	0.038400	0.015	8.6	0.8	9.9	320.2	471.4
Zircon-078_ARM15-01	66.8	0.282989	0.000033	0.001779	0.000083	0.282987	0.282785	0.033600	0.283250	0.038400	0.015	7.2	1.2	8.6	380.4	556.8
Zircon-080_ARM15-01	84.9	0.282798	0.000018	0.000791	0.000004	0.282797	0.282785	0.033600	0.283250	0.038400	0.015	0.5	0.6	2.3	639.9	974.1
Zircon-082_ARM15-01	71.3	0.283009	0.000033	0.001299	0.000021	0.283007	0.282785	0.033600	0.283250	0.038400	0.015	7.9	1.2	9.4	346.8	507.5
Zircon-083_ARM15-01	56.6	0.283001	0.000022	0.001436	0.000023	0.282999	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.8	8.8	359.6	534.5
Zircon-084_ARM15-01	74.4	0.282952	0.000026	0.001829	0.000016	0.282949	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.9	7.5	434.7	636.4
Zircon-085_ARM15-01	78.4	0.282919	0.000025	0.001185	0.000019	0.282917	0.282785	0.033600	0.283250	0.038400	0.015	4.7	0.9	6.4	474.3	706.6
Zircon-087_ARM15-01	62.6	0.282974	0.000020	0.001240	0.000010	0.282973	0.282785	0.033600	0.283250	0.038400	0.015	6.7	0.7	8.0	396.3	591.6
Zircon-088_ARM15-01	79.6	0.282828	0.000022	0.001427	0.000051	0.282826	0.282785	0.033600	0.283250	0.038400	0.015	1.5	0.8	3.2	607.9	911.9
Zircon-090_ARM15-01	56.3	0.283018	0.000037	0.002215	0.000040	0.283016	0.282785	0.033600	0.283250	0.038400	0.015	8.2	1.3	9.4	342.3	497.9
Zircon-091_ARM15-01	85.3	0.283005	0.000039	0.004192	0.000078	0.282998	0.282785	0.033600	0.283250	0.038400	0.015	7.8	1.4	9.4	382.2	518.8
Zircon-092_ARM15-01	90.5	0.282844	0.000021	0.000670	0.000021	0.282843	0.282785	0.033600	0.283250	0.038400	0.015	2.1	0.7	4.1	573.3	866.8
Zircon-093_ARM15-01	82.8	0.282808	0.000021	0.001343	0.000022	0.282806	0.282785	0.033600	0.283250	0.038400	0.015	0.8	0.7	2.6	635.1	954.8

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_t$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_c$	$\epsilon\text{Hf}(t)$	$\pm 2\text{SE } \epsilon\text{Hf}(t)$	$\epsilon\text{Hf}(t)$	$T_{\text{DM}} \text{ (Ma)}$	$T_{\text{DM}}^c \text{ (Ma)}$
MICH16-01 (MiO1*) Batolito Jilotlán, Suite Zihuatanejo, Complejo Arteaga																
Zircon2_MiCH16-01	128.9	0.282972	0.000019	0.000802	0.000010	0.282970	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.7	9.4	394.6	555.1
Zircon3_MiCH16-01	109.9	0.283013	0.000029	0.002309	0.000099	0.283008	0.282785	0.033600	0.283250	0.038400	0.015	8.1	1.0	10.3	350.6	480.7
Zircon5_MiCH16-01	60.9	0.283025	0.000020	0.000740	0.000016	0.283024	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.7	9.8	319.1	475.8
Zircon7_MiCH16-01	57.6	0.282845	0.000019	0.000837	0.000015	0.282844	0.282785	0.033600	0.283250	0.038400	0.015	2.1	0.7	3.4	574.4	884.8
Zircon8_MiCH16-01	60.7	0.282959	0.000017	0.000644	0.000009	0.282958	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.6	7.5	411.2	625.2
Zircon9_MiCH16-01	57.8	0.282941	0.000018	0.000559	0.000003	0.282940	0.282785	0.033600	0.283250	0.038400	0.015	5.5	0.6	6.8	435.6	667.4
Zircon10_MiCH16-01	57.0	0.282837	0.000014	0.000824	0.000004	0.282836	0.282785	0.033600	0.283250	0.038400	0.015	1.8	0.5	3.1	585.5	903.1
Zircon11_MiCH16-01	69.7	0.283040	0.000027	0.001428	0.000018	0.283038	0.282785	0.033600	0.283250	0.038400	0.015	9.0	1.0	10.5	303.4	438.4
Zircon13_MiCH16-01	113.2	0.283019	0.000023	0.002036	0.000013	0.283015	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.8	10.6	339.2	464.0
Zircon15_MiCH16-01	122.8	0.283040	0.000017	0.001045	0.000008	0.283038	0.282785	0.033600	0.283250	0.038400	0.015	9.0	0.6	11.7	300.3	405.8
Zircon16_MiCH16-01	53.3	0.282830	0.000015	0.000864	0.000005	0.282829	0.282785	0.033600	0.283250	0.038400	0.015	1.6	0.5	2.7	596.0	921.2
Zircon17_MiCH16-01	119.5	0.283003	0.000019	0.001409	0.000056	0.283000	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.7	10.3	356.5	493.6
Zircon19_MiCH16-01	56.0	0.282962	0.000021	0.000751	0.000011	0.282961	0.282785	0.033600	0.283250	0.038400	0.015	6.3	0.7	7.5	408.2	621.5
Zircon20_MiCH16-01	26.7	0.282917	0.000023	0.002125	0.000007	0.282916	0.282785	0.033600	0.283250	0.038400	0.015	4.7	0.8	5.2	489.4	742.4
Zircon22_MiCH16-01	109.9	0.282972	0.000024	0.001479	0.000022	0.282969	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.8	8.9	401.8	569.7
Zircon23_MiCH16-01	111.8	0.282976	0.000021	0.000911	0.000010	0.282974	0.282785	0.033600	0.283250	0.038400	0.015	6.8	0.7	9.2	390.0	556.9
Zircon24_MiCH16-01	114.1	0.283010	0.000021	0.000980	0.000019	0.283008	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.7	10.4	342.4	478.8
Zircon25_MiCH16-01	87.2	0.282906	0.000017	0.000944	0.000005	0.282904	0.282785	0.033600	0.283250	0.038400	0.015	4.3	0.6	6.2	489.7	730.0
Zircon28_MiCH16-01	57.4	0.282975	0.000016	0.000775	0.000028	0.282974	0.282785	0.033600	0.283250	0.038400	0.015	6.7	0.6	8.0	390.1	591.3

Zircon29_MiCH16-01	68.6	0.282924	0.000022	0.001272	0.000027	0.282922	0.282785	0.033600	0.283250	0.038400	0.015	4.9	0.8	6.4	468.2	701.3
Zircon30_MiCH16-01	121.8	0.282993	0.000026	0.001557	0.000051	0.282989	0.282785	0.033600	0.283250	0.038400	0.015	7.4	0.9	9.9	372.3	515.7
Zircon31_MiCH16-01	113.6	0.283028	0.000020	0.001345	0.000027	0.283025	0.282785	0.033600	0.283250	0.038400	0.015	8.6	0.7	11.0	319.9	440.0
Zircon32_MiCH16-01	113.9	0.283000	0.000027	0.001836	0.000033	0.282996	0.282785	0.033600	0.283250	0.038400	0.015	7.6	1.0	10.0	365.0	505.7
Zircon33_MiCH16-01	112.2	0.282950	0.000022	0.000961	0.000013	0.282948	0.282785	0.033600	0.283250	0.038400	0.015	5.8	0.8	8.3	427.5	615.8
Zircon34_MiCH16-01	52.4	0.282838	0.000022	0.000797	0.000009	0.282837	0.282785	0.033600	0.283250	0.038400	0.015	1.9	0.8	3.0	583.7	903.6
Zircon35_MiCH16-01	102.4	0.282996	0.000023	0.001000	0.000007	0.282994	0.282785	0.033600	0.283250	0.038400	0.015	7.5	0.8	9.7	362.5	517.6
Zircon36_MiCH16-01	1282.0	0.281920	0.000019	0.000713	0.000016	0.281903	0.282785	0.033600	0.283250	0.038400	0.015	-30.6	0.7	-2.4	1857.6	2206.1
Zircon37_MiCH16-01	124.1	0.283037	0.000017	0.000889	0.000017	0.283035	0.282785	0.033600	0.283250	0.038400	0.015	8.9	0.6	11.6	303.3	411.0
Zircon38_MiCH16-01	110.8	0.282978	0.000021	0.001399	0.000053	0.282975	0.282785	0.033600	0.283250	0.038400	0.015	6.8	0.7	9.2	392.3	555.2
Zircon39_MiCH16-01	114.3	0.282961	0.000018	0.000671	0.000021	0.282960	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.6	8.7	408.7	588.2
Zircon40_MiCH16-01	59.3	0.282855	0.000018	0.000777	0.000008	0.282854	0.282785	0.033600	0.283250	0.038400	0.015	2.5	0.6	3.8	559.4	861.1
Zircon41_MiCH16-01	56.7	0.282953	0.000018	0.000730	0.000004	0.282952	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.6	7.2	420.6	641.4
Zircon42_MiCH16-01	120.0	0.283038	0.000021	0.001805	0.000038	0.283034	0.282785	0.033600	0.283250	0.038400	0.015	8.9	0.7	11.5	309.4	415.9
Zircon43_MiCH16-01	58.0	0.282982	0.000019	0.000738	0.000007	0.282981	0.282785	0.033600	0.283250	0.038400	0.015	7.0	0.7	8.2	379.8	575.0
Zircon44_MiCH16-01	72.0	0.283064	0.000025	0.002265	0.000009	0.283061	0.282785	0.033600	0.283250	0.038400	0.015	9.9	0.9	11.4	275.0	385.2
Zircon45_MiCH16-01	53.0	0.282881	0.000020	0.001137	0.000029	0.282880	0.282785	0.033600	0.283250	0.038400	0.015	3.4	0.7	4.5	527.8	807.1
Zircon46_MiCH16-01	56.2	0.282984	0.000023	0.001032	0.000041	0.282983	0.282785	0.033600	0.283250	0.038400	0.015	7.0	0.8	8.2	379.9	572.2
Zircon47_MiCH16-01	58.9	0.282954	0.000019	0.000510	0.000012	0.282953	0.282785	0.033600	0.283250	0.038400	0.015	6.0	0.7	7.3	416.8	637.2
Zircon48_MiCH16-01	51.8	0.282838	0.000022	0.000902	0.000014	0.282837	0.282785	0.033600	0.283250	0.038400	0.015	1.9	0.8	3.0	585.3	904.2
Zircon50_MiCH16-01	116.5	0.283060	0.000026	0.001849	0.000015	0.283056	0.282785	0.033600	0.283250	0.038400	0.015	9.7	0.9	12.2	277.7	368.1
Zircon52_MiCH16-01	55.3	0.282841	0.000019	0.000621	0.000008	0.282840	0.282785	0.033600	0.283250	0.038400	0.015	2.0	0.7	3.2	576.7	894.7
Zircon55_MiCH16-01	127.7	0.283060	0.000024	0.001138	0.000044	0.283057	0.282785	0.033600	0.283250	0.038400	0.015	9.7	0.8	12.5	272.4	358.0
Zircon56_MiCH16-01	55.5	0.282838	0.000017	0.000651	0.000010	0.282837	0.282785	0.033600	0.283250	0.038400	0.015	1.9	0.6	3.1	581.4	901.4
Zircon57_MiCH16-01	56.9	0.283000	0.000024	0.000976	0.000015	0.282999	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.8	8.8	356.6	535.4
Zircon58_MiCH16-01	133.8	0.283030	0.000024	0.000910	0.000026	0.283028	0.282785	0.033600	0.283250	0.038400	0.015	8.7	0.8	11.6	313.4	421.2
Zircon59_MiCH16-01	119.2	0.283011	0.000017	0.000913	0.000007	0.283009	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.6	10.6	340.4	473.1
Zircon60_MiCH16-01	111.9	0.283005	0.000022	0.001426	0.000009	0.283002	0.282785	0.033600	0.283250	0.038400	0.015	7.8	0.8	10.2	353.7	493.5
Zircon61_MiCH16-01	109.4	0.283107	0.000031	0.002530	0.000110	0.283102	0.282785	0.033600	0.283250	0.038400	0.015	11.4	1.1	13.6	213.1	268.3
Zircon62_MiCH16-01	68.3	0.282996	0.000027	0.001789	0.000073	0.282994	0.282785	0.033600	0.283250	0.038400	0.015	7.5	1.0	8.9	370.3	540.1
Zircon63_MiCH16-01	96.5	0.282996	0.000020	0.000549	0.000044	0.282995	0.282785	0.033600	0.283250	0.038400	0.015	7.5	0.7	9.6	358.2	519.2
Zircon64_MiCH16-01	58.8	0.283001	0.000023	0.001047	0.000013	0.283000	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.8	8.9	355.9	532.2
Zircon65_MiCH16-01	62.3	0.282998	0.000020	0.000875	0.000003	0.282997	0.282785	0.033600	0.283250	0.038400	0.015	7.5	0.7	8.9	358.5	536.5
Zircon66_MiCH16-01	114.0	0.282948	0.000017	0.000707	0.000004	0.282946	0.282785	0.033600	0.283250	0.038400	0.015	5.8	0.6	8.2	427.4	618.0
Zircon67_MiCH16-01	87.0	0.282862	0.000021	0.000916	0.000013	0.282861	0.282785	0.033600	0.283250	0.038400	0.015	2.7	0.7	4.6	551.6	829.3
Zircon68_MiCH16-01	1047.0	0.282431	0.000021	0.001247	0.000014	0.282406	0.282785	0.033600	0.283250	0.038400	0.015	-12.5	0.7	10.1	1167.9	1238.8
Zircon69_MiCH16-01	123.7	0.283052	0.000043	0.002670	0.000023	0.283046	0.282785	0.033600	0.283250	0.038400	0.015	9.4	1.5	12.0	296.0	386.6
Zircon70_MiCH16-01	1891.0	0.281789	0.000019	0.000881	0.000005	0.281757	0.282785	0.033600	0.283250	0.038400	0.015	-35.2	0.7	6.4	2046.1	2139.5
Zircon71_MiCH16-01	1896.0	0.281467	0.000022	0.001242	0.000032	0.281422	0.282785	0.033600	0.283250	0.038400	0.015	-46.6	0.8	-5.4	2510.4	2868.3
Zircon73_MiCH16-01	57.2	0.283013	0.000021	0.000981	0.000009	0.283012	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.7	9.3	338.2	505.8
Zircon74_MiCH16-01	60.7	0.282997	0.000019	0.000624	0.000006	0.282996	0.282785	0.033600	0.283250	0.038400	0.015	7.5	0.7	8.8	357.5	539.1
Zircon75_MiCH16-01	57.7	0.282869	0.000017	0.000962	0.000013	0.282868	0.282785	0.033600	0.283250	0.038400	0.015	3.0	0.6	4.2	542.3	831.0
Zircon76_MiCH16-01	53.3	0.282845	0.000020	0.000756	0.000034	0.282844	0.282785	0.033600	0.283250	0.038400	0.015	2.1	0.7	3.3	573.2	887.2
Zircon77_MiCH16-01	57.3	0.282984	0.000016	0.000846	0.000026	0.282983	0.282785	0.033600	0.283250	0.038400	0.015	7.0	0.6	8.3	378.0	571.1
Zircon78_MiCH16-01	118.5	0.283005	0.000016	0.001245	0.000016	0.283002	0.282785	0.033600	0.283250	0.038400	0.015	7.8	0.6	10.3	352.0	488.8
Zircon79_MiCH16-01	66.4	0.282961	0.000023	0.001373	0.000043	0.282959	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.8	7.6	416.4	619.2
Zircon80_MiCH16-01	55.6	0.282831	0.000025	0.000763	0.000012	0.282830	0.282785	0.033600	0.283250	0.038400	0.015	1.6	0.9	2.8	593.0	917.3
Zircon82_MiCH16-01	64.7	0.282955	0.000024	0.001667	0.000096	0.282953	0.282785	0.033600	0.283250	0.038400	0.015	6.0	0.8	7.4	428.4	634.6
Zircon83_MiCH16-01	112.2	0.283125	0.000029	0.002498	0.000024	0.283120	0.282785	0.033600	0.283250	0.038400	0.015	12.0	1.0	14.3	186.2	225.6
Zircon84_MiCH16-01	58.4	0.282942	0.000020	0.000587	0.000013	0.282941	0.282785	0.033600	0.283250	0.038400	0.015	5.6	0.7	6.8	434.5	664.9
Zircon86_MiCH16-01	57.2	0.282956	0.000018	0.000643	0.000011	0.282955	0.282785	0.033600	0.283250	0.038400	0.015	6.0	0.6	7.3	415.5	634.1
Zircon87_MiCH16-01	98.8	0.283014	0.000019	0.001554	0.000013	0.283011	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.7	10.2	342.0	481.2
Zircon89_MiCH16-01	111.9	0.282963	0.000015	0.000744	0.000027	0.282961	0.282785	0.033600	0.283250	0.038400	0.015	6.3	0.5	8.7	407.7	585.5
Zircon90_MiCH16-01	112.8	0.282997	0.000018	0.001361	0.000037	0.282994	0.282785	0.033600	0.283250	0.038400	0.015	7.5	0.6	9.9	364.6	510.8

Zircon91_MiCH16-01	58.9	0.283013	0.000020	0.001125	0.000012	0.283012	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.7	9.3	339.5	505.2
Zircon92_MiCH16-01	105.4	0.282944	0.000019	0.001037	0.000012	0.282942	0.282785	0.033600	0.283250	0.038400	0.015	5.6	0.7	7.9	436.9	633.7
Zircon93_MiCH16-01	54.8	0.282858	0.000023	0.000947	0.000017	0.282857	0.282785	0.033600	0.283250	0.038400	0.015	2.6	0.8	3.8	557.7	857.4
Zircon94_MiCH16-01	1859.0	0.281539	0.000019	0.001006	0.000007	0.281503	0.282785	0.033600	0.283250	0.038400	0.015	-44.1	0.7	-3.4	2396.4	2715.2
Zircon95_MiCH16-01	57.7	0.282978	0.000019	0.000833	0.000019	0.282977	0.282785	0.033600	0.283250	0.038400	0.015	6.8	0.7	8.1	386.4	584.4
Zircon97_MiCH16-01	106.3	0.282973	0.000027	0.001207	0.000014	0.282971	0.282785	0.033600	0.283250	0.038400	0.015	6.6	1.0	8.9	397.4	568.3
Zircon98_MiCH16-01	97.7	0.283052	0.000030	0.002445	0.000061	0.283048	0.282785	0.033600	0.283250	0.038400	0.015	9.4	1.1	11.5	294.1	399.3
Zircon99_MiCH16-01	53.6	0.282922	0.000021	0.001498	0.000077	0.282921	0.282785	0.033600	0.283250	0.038400	0.015	4.8	0.7	6.0	474.0	715.0
Zircon100_MiCH16-01	52.4	0.282873	0.000017	0.000964	0.000011	0.282872	0.282785	0.033600	0.283250	0.038400	0.015	3.1	0.6	4.2	536.7	825.1
Zircon102_MiCH16-01	55.0	0.282872	0.000021	0.000886	0.000020	0.282871	0.282785	0.033600	0.283250	0.038400	0.015	3.1	0.7	4.3	537.0	825.6
Zircon103_MiCH16-01	52.5	0.282850	0.000017	0.000613	0.000008	0.282849	0.282785	0.033600	0.283250	0.038400	0.015	2.3	0.6	3.4	564.0	876.1

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_i$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_c$	$\epsilon\text{Hf}(0)$	$\pm 2\text{SE } \epsilon\text{Hf}(0)$	$\epsilon\text{Hf}(t)$	$T_{\text{DM}} \text{ (Ma)}$	$T_{\text{DM}}^c \text{ (Ma)}$
MiCH16-06 (Mi06*) Batolito Aquila, Suite Zihuatanejo																
Zircon_02_MiCH16-06	56.5	0.283038	0.000023	0.000989	0.000055	0.283037	0.282785	0.033600	0.283250	0.038400	0.015	8.9	0.8	10.2	302.7	449.5
Zircon_03_MiCH16-06	62.5	0.283005	0.000020	0.000457	0.000013	0.283004	0.282785	0.033600	0.283250	0.038400	0.015	7.8	0.7	9.1	344.7	519.4
Zircon_04_MiCH16-06	58.9	0.283047	0.000022	0.001334	0.000046	0.283046	0.282785	0.033600	0.283250	0.038400	0.015	9.3	0.8	10.5	292.5	428.5
Zircon_07_MiCH16-06	58.2	0.283037	0.000019	0.000940	0.000032	0.283036	0.282785	0.033600	0.283250	0.038400	0.015	8.9	0.7	10.2	303.7	450.7
Zircon_09_MiCH16-06	57.5	0.283028	0.000020	0.000671	0.000019	0.283027	0.282785	0.033600	0.283250	0.038400	0.015	8.6	0.7	9.8	314.2	470.8
Zircon_11_MiCH16-06	60.5	0.283026	0.000016	0.000478	0.000025	0.283025	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.6	9.8	315.5	473.1
Zircon_14_MiCH16-06	61.6	0.283048	0.000022	0.000581	0.000006	0.283047	0.282785	0.033600	0.283250	0.038400	0.015	9.3	0.8	10.6	285.3	422.7
Zircon_17_MiCH16-06	62.6	0.283022	0.000017	0.000361	0.000003	0.283022	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.6	9.8	320.1	480.5
Zircon_22_MiCH16-06	55.6	0.283058	0.000030	0.001631	0.000019	0.283056	0.282785	0.033600	0.283250	0.038400	0.015	9.7	1.1	10.8	279.0	406.2
Zircon_23_MiCH16-06	52.5	0.283022	0.000020	0.000949	0.000033	0.283021	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.7	9.5	325.1	488.1
Zircon_24_MiCH16-06	65.4	0.283056	0.000023	0.000704	0.000023	0.283055	0.282785	0.033600	0.283250	0.038400	0.015	9.6	0.8	11.0	274.9	402.6
Zircon_25_MiCH16-06	68.0	0.283031	0.000018	0.000422	0.000006	0.283030	0.282785	0.033600	0.283250	0.038400	0.015	8.7	0.6	10.2	308.0	456.9
Zircon_27_MiCH16-06	61.7	0.283064	0.000021	0.001067	0.000062	0.283063	0.282785	0.033600	0.283250	0.038400	0.015	9.9	0.7	11.2	266.2	387.6
Zircon_30_MiCH16-06	52.6	0.283061	0.000025	0.000773	0.000030	0.283060	0.282785	0.033600	0.283250	0.038400	0.015	9.8	0.9	10.9	268.4	399.1
Zircon_31_MiCH16-06	54.7	0.283027	0.000023	0.000437	0.000004	0.283027	0.282785	0.033600	0.283250	0.038400	0.015	8.6	0.8	9.8	313.7	474.3
Zircon_35_MiCH16-06	66.5	0.283039	0.000018	0.000701	0.000013	0.283038	0.282785	0.033600	0.283250	0.038400	0.015	9.0	0.6	10.4	298.9	440.5
Zircon_36_MiCH16-06	59.1	0.283039	0.000022	0.000761	0.000006	0.283038	0.282785	0.033600	0.283250	0.038400	0.015	9.0	0.8	10.3	299.4	445.1
Zircon_37_MiCH16-06	60.8	0.283020	0.000026	0.000649	0.000012	0.283019	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.9	9.6	325.3	486.9
Zircon_43_MiCH16-06	60.3	0.283033	0.000022	0.000814	0.000011	0.283032	0.282785	0.033600	0.283250	0.038400	0.015	8.8	0.8	10.1	308.3	458.2
Zircon_44_MiCH16-06	54.8	0.283048	0.000018	0.000579	0.000021	0.283047	0.282785	0.033600	0.283250	0.038400	0.015	9.3	0.6	10.5	285.3	426.9
Zircon_55_MiCH16-06	59.0	0.283005	0.000020	0.000855	0.000018	0.283004	0.282785	0.033600	0.283250	0.038400	0.015	7.8	0.7	9.1	348.4	522.6
Zircon_56_MiCH16-06	61.7	0.282993	0.000016	0.000438	0.000022	0.282992	0.282785	0.033600	0.283250	0.038400	0.015	7.4	0.6	8.7	361.4	547.0
Zircon_61_MiCH16-06	56.8	0.283024	0.000022	0.000619	0.000019	0.283023	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.8	9.7	319.4	480.2
Zircon_71_MiCH16-06	58.4	0.282995	0.000019	0.000864	0.000022	0.282994	0.282785	0.033600	0.283250	0.038400	0.015	7.4	0.7	8.7	362.6	545.6
Zircon_72_MiCH16-06	67.7	0.283015	0.000019	0.000475	0.000018	0.283014	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.7	9.6	330.9	493.6
Zircon_75_MiCH16-06	64.2	0.283022	0.000023	0.000985	0.000010	0.283021	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.8	9.8	325.4	481.2
Zircon_79_MiCH16-06	56.8	0.283002	0.000016	0.000437	0.000005	0.283002	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.6	8.9	348.8	529.7
Zircon_80_MiCH16-06	67.7	0.283018	0.000020	0.000562	0.000014	0.283017	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.7	9.7	327.4	487.0
Zircon_81_MiCH16-06	60.3	0.283015	0.000017	0.000429	0.000008	0.283015	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.6	9.5	330.5	498.0
Zircon_86_MiCH16-06	64.4	0.283020	0.000024	0.000710	0.000021	0.283019	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.8	9.7	325.9	484.9
Zircon_88_MiCH16-06	60.7	0.283047	0.000020	0.000785	0.000017	0.283046	0.282785	0.033600	0.283250	0.038400	0.015	9.3	0.7	10.6	288.3	426.1
Zircon_89_MiCH16-06	69.5	0.283047	0.000019	0.000392	0.000022	0.283046	0.282785	0.033600	0.283250	0.038400	0.015	9.3	0.7	10.8	285.3	419.6
Zircon_96_MiCH16-06	59.9	0.283025	0.000025	0.000403	0.000022	0.283025	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.9	9.8	316.2	475.5
Zircon_99_MiCH16-06	106.9	0.283094	0.000030	0.001646	0.000026	0.283091	0.282785	0.033600	0.283250	0.038400	0.015	10.9	1.1	13.2	226.9	295.2
Zircon_103_MiCH16-06	58.4	0.283063	0.000025	0.000877	0.000035	0.283062	0.282785	0.033600	0.283250	0.038400	0.015	9.8	0.9	11.1	266.3	391.3

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{Zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{Zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_i$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_c$	$\epsilon\text{Hf}(t)$	$\pm 2\text{SE } \epsilon\text{Hf}(t)$	$\epsilon\text{Hf}(t)$	$T_{\text{DM}} \text{ (Ma)}$	$T_{\text{DM}}^c \text{ (Ma)}$
MICH16-09 (MI09*) Batolito Aquila, Suite Zihuatanejo, Suite Cuale-Macias, Complejo Artega																
Zircon_01_MiCH16-09	105.5	0.283004	0.000024	0.001348	0.000017	0.283001	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.8	10.0	354.4	499.1
Zircon_02_MiCH16-09	367.6	0.282506	0.000024	0.001639	0.000011	0.282495	0.282785	0.033600	0.283250	0.038400	0.015	-9.9	0.8	-2.1	1073.2	1472.0
Zircon_03_MiCH16-09	102.8	0.283033	0.000024	0.000996	0.000041	0.283031	0.282785	0.033600	0.283250	0.038400	0.015	8.8	0.8	11.0	309.8	433.4
Zircon_04_MiCH16-09	104.6	0.282967	0.000025	0.001160	0.000016	0.282965	0.282785	0.033600	0.283250	0.038400	0.015	6.4	0.9	8.7	405.5	582.7
Zircon_05_MiCH16-09	112.0	0.282997	0.000028	0.002235	0.000014	0.282992	0.282785	0.033600	0.283250	0.038400	0.015	7.5	1.0	9.8	373.4	515.5
Zircon_06_MiCH16-09	1366.0	0.282152	0.000021	0.001249	0.000005	0.282120	0.282785	0.033600	0.283250	0.038400	0.015	-22.4	0.7	7.2	1560.1	1673.8
Zircon_07_MiCH16-09	116.7	0.283043	0.000038	0.003883	0.000030	0.283035	0.282785	0.033600	0.283250	0.038400	0.015	9.1	1.3	11.4	320.3	416.7
Zircon_08_MiCH16-09	111.6	0.282991	0.000026	0.001385	0.000012	0.282988	0.282785	0.033600	0.283250	0.038400	0.015	7.3	0.9	9.7	373.5	525.3
Zircon_09_MiCH16-09	108.7	0.282984	0.000028	0.001511	0.000016	0.282981	0.282785	0.033600	0.283250	0.038400	0.015	7.0	1.0	9.3	384.8	543.4
Zircon_10_MiCH16-09	110.9	0.283046	0.000028	0.004050	0.000150	0.283038	0.282785	0.033600	0.283250	0.038400	0.015	9.2	1.0	11.4	317.2	413.4
Zircon_11_MiCH16-09	179.4	0.282693	0.000025	0.001804	0.000024	0.282687	0.282785	0.033600	0.283250	0.038400	0.015	-3.3	0.9	0.5	809.1	1160.9
Zircon_12_MiCH16-09	160.7	0.282710	0.000024	0.002268	0.000064	0.282703	0.282785	0.033600	0.283250	0.038400	0.015	-2.7	0.8	0.7	794.6	1136.3
Zircon_13_MiCH16-09	107.0	0.283028	0.000022	0.000852	0.000036	0.283026	0.282785	0.033600	0.283250	0.038400	0.015	8.6	0.8	10.9	315.7	441.6
Zircon_14_MiCH16-09	113.0	0.283028	0.000027	0.002021	0.000036	0.283024	0.282785	0.033600	0.283250	0.038400	0.015	8.6	1.0	11.0	325.9	443.6
Zircon_15_MiCH16-09	108.4	0.283013	0.000030	0.002400	0.000220	0.283008	0.282785	0.033600	0.283250	0.038400	0.015	8.1	1.1	10.3	351.5	481.9
Zircon_16_MiCH16-09	112.3	0.283021	0.000027	0.002112	0.000020	0.283017	0.282785	0.033600	0.283250	0.038400	0.015	8.3	1.0	10.7	336.9	460.3
Zircon_17_MiCH16-09	112.6	0.282984	0.000021	0.001121	0.000020	0.282982	0.282785	0.033600	0.283250	0.038400	0.015	7.0	0.7	9.5	380.8	539.3
Zircon_18_MiCH16-09	59.1	0.283026	0.000023	0.001095	0.000009	0.283025	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.8	9.8	320.7	475.5
Zircon_19_MiCH16-09	115.4	0.283004	0.000029	0.001188	0.000006	0.283001	0.282785	0.033600	0.283250	0.038400	0.015	7.7	1.0	10.2	352.9	492.6
Zircon_20_MiCH16-09	110.8	0.283019	0.000019	0.000585	0.000004	0.283018	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.7	10.7	326.2	458.5
Zircon_21_MiCH16-09	1200.0	0.282185	0.000022	0.001196	0.000014	0.282158	0.282785	0.033600	0.283250	0.038400	0.015	-21.2	0.8	4.8	1511.7	1694.8
Zircon_23_MiCH16-09	156.9	0.282787	0.000028	0.002418	0.000093	0.282780	0.282785	0.033600	0.283250	0.038400	0.015	0.1	1.0	3.3	684.8	966.5
Zircon_24_MiCH16-09	517.0	0.282331	0.000019	0.000745	0.000036	0.282324	0.282785	0.033600	0.283250	0.038400	0.015	-16.1	0.7	-4.8	1291.5	1757.9
Zircon_25_MiCH16-09	105.7	0.283046	0.000022	0.001265	0.000017	0.283044	0.282785	0.033600	0.283250	0.038400	0.015	9.2	0.8	11.5	293.4	403.3
Zircon_26_MiCH16-09	280.0	0.282830	0.000024	0.002704	0.000052	0.282816	0.282785	0.033600	0.283250	0.038400	0.015	1.6	0.8	7.3	626.5	807.7
Zircon_27_MiCH16-09	120.8	0.282980	0.000021	0.000801	0.000007	0.282978	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.7	9.5	383.3	541.9
Zircon_28_MiCH16-09	111.6	0.282996	0.000021	0.001278	0.000007	0.282993	0.282785	0.033600	0.283250	0.038400	0.015	7.5	0.7	9.8	365.2	513.4
Zircon_29_MiCH16-09	109.6	0.282955	0.000029	0.001676	0.000023	0.282952	0.282785	0.033600	0.283250	0.038400	0.015	6.0	1.0	8.3	428.5	609.3
Zircon_30_MiCH16-09	418.2	0.282450	0.000023	0.001197	0.000008	0.282441	0.282785	0.033600	0.283250	0.038400	0.015	-11.8	0.8	-2.9	1139.6	1560.6
Zircon_31_MiCH16-09	102.4	0.283041	0.000022	0.001087	0.000016	0.283039	0.282785	0.033600	0.283250	0.038400	0.015	9.1	0.8	11.3	299.2	415.8
Zircon_32_MiCH16-09	110.1	0.282981	0.000022	0.001596	0.000020	0.282978	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.8	9.3	390.1	549.8
Zircon_33_MiCH16-09	105.7	0.283024	0.000022	0.001141	0.000020	0.283022	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.8	10.7	323.9	452.7
Zircon_34_MiCH16-09	421.4	0.282425	0.000018	0.001365	0.000019	0.282414	0.282785	0.033600	0.283250	0.038400	0.015	-12.7	0.6	-3.7	1180.1	1617.2
Zircon_35_MiCH16-09	57.2	0.283013	0.000022	0.000966	0.000008	0.283012	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.8	9.3	338.0	505.8
Zircon_36_MiCH16-09	1013.0	0.282232	0.000017	0.000312	0.000007	0.282226	0.282785	0.033600	0.283250	0.038400	0.015	-19.6	0.6	2.9	1412.8	1662.2
Zircon_37_MiCH16-09	192.2	0.282581	0.000027	0.001476	0.000051	0.282576	0.282785	0.033600	0.283250	0.038400	0.015	-7.2	1.0	-3.1	961.8	1401.5
Zircon_38_MiCH16-09	1191.0	0.282234	0.000019	0.000500	0.000007	0.282223	0.282785	0.033600	0.283250	0.038400	0.015	-19.5	0.7	6.9	1417.0	1556.5
Zircon_39_MiCH16-09	193.2	0.282721	0.000020	0.001587	0.000063	0.282715	0.282785	0.033600	0.283250	0.038400	0.015	-2.3	0.7	1.8	764.2	1088.8
Zircon_40_MiCH16-09	117.9	0.283038	0.000043	0.005119	0.000075	0.283027	0.282785	0.033600	0.283250	0.038400	0.015	8.9	1.5	11.2	340.1	433.7
Zircon_42_MiCH16-09	550.0	0.281481	0.000021	0.002199	0.000008	0.281458	0.282785	0.033600	0.283250	0.038400	0.015	-46.1	0.7	-34.7	2555.4	3621.5
Zircon_43_MiCH16-09	117.8	0.283013	0.000023	0.001363	0.000004	0.283010	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.8	10.6	341.7	471.7
Zircon_44_MiCH16-09	250.3	0.282474	0.000018	0.000717	0.000008	0.282471	0.282785	0.033600	0.283250	0.038400	0.015	-11.0	0.6	-5.6	1091.8	1599.0
Zircon_45_MiCH16-09	86.6	0.283076	0.000020	0.001273	0.000009	0.283074	0.282785	0.033600	0.283250	0.038400	0.015	10.3	0.7	12.1	250.4	346.3
Zircon_46_MiCH16-09	1089.0	0.282198	0.000017	0.000573	0.000018	0.282186	0.282785	0.033600	0.283250	0.038400	0.015	-20.8	0.6	3.2	1469.3	1702.4
Zircon_47_MiCH16-09	123.2	0.283000	0.000018	0.001496	0.000026	0.282997	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.6	10.2	361.6	498.7
Zircon_49_MiCH16-09	165.0	0.282555	0.000022	0.001420	0.000058	0.282551	0.282785	0.033600	0.283250	0.038400	0.015	-8.1	0.8	-4.6	997.3	1474.4
Zircon_50_MiCH16-09	427.0	0.282489	0.000024	0.000968	0.000012	0.282481	0.282785	0.033600	0.283250	0.038400	0.015	-10.5	0.8	-1.2	1078.0	1464.6
Zircon_51_MiCH16-09	161.3	0.282769	0.000015	0.000961	0.000011	0.282766	0.282785	0.033600	0.283250	0.038400	0.015	-0.6	0.5	2.9	683.8	994.8
Zircon_52_MiCH16-09	112.5	0.282876	0.000026	0.002583	0.000055	0.282871	0.282785	0.033600	0.283250	0.038400	0.015	3.2	0.9	5.5	556.4	790.5
Zircon_53_MiCH16-09	119.3	0.283003	0.000031	0.002496	0.000032	0.282997	0.282785	0.033600	0.283250	0.038400	0.015	7.7	1.1	10.2	367.2	499.2

Zircon_54_MiCH16-09	285.7	0.282845	0.000021	0.001206	0.000019	0.282839	0.282785	0.033600	0.283250	0.038400	0.015	2.1	0.7	8.3	580.1	752.9
Zircon_55_MiCH16-09	106.8	0.282951	0.000027	0.001444	0.000011	0.282948	0.282785	0.033600	0.283250	0.038400	0.015	5.9	1.0	8.1	431.6	618.9
Zircon_56_MiCH16-09	1028.0	0.282166	0.000018	0.000479	0.000004	0.282157	0.282785	0.033600	0.283250	0.038400	0.015	-21.9	0.6	0.8	1509.6	1806.3
Zircon_57_MiCH16-09	108.8	0.282984	0.000024	0.000998	0.000022	0.282982	0.282785	0.033600	0.283250	0.038400	0.015	7.0	0.8	9.4	379.6	541.0
Zircon_58_MiCH16-09	111.1	0.283007	0.000020	0.001479	0.000036	0.283004	0.282785	0.033600	0.283250	0.038400	0.015	7.9	0.7	10.2	351.4	489.7
Zircon_59_MiCH16-09	120.2	0.282960	0.000019	0.000604	0.000005	0.282959	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.7	8.8	409.4	586.5
Zircon_60_MiCH16-09	1014.0	0.282224	0.000018	0.000563	0.000052	0.282213	0.282785	0.033600	0.283250	0.038400	0.015	-19.8	0.6	2.5	1433.1	1690.0
Zircon_61_MiCH16-09	113.6	0.282995	0.000025	0.001294	0.000015	0.282992	0.282785	0.033600	0.283250	0.038400	0.015	7.4	0.9	9.9	366.8	514.6
Zircon_62_MiCH16-09	1668.0	0.281861	0.000017	0.000585	0.000014	0.281842	0.282785	0.033600	0.283250	0.038400	0.015	-32.7	0.6	4.3	1932.1	2094.2
Zircon_63_MiCH16-09	289.2	0.282631	0.000017	0.000624	0.000039	0.282628	0.282785	0.033600	0.283250	0.038400	0.015	-5.4	0.6	0.9	870.6	1224.6
Zircon_64_MiCH16-09	110.8	0.282953	0.000036	0.002603	0.000091	0.282948	0.282785	0.033600	0.283250	0.038400	0.015	5.9	1.3	8.2	442.6	617.5
Zircon_65_MiCH16-09	114.5	0.283018	0.000021	0.001386	0.000028	0.283015	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.7	10.7	334.7	462.4
Zircon_66_MiCH16-09	114.9	0.282933	0.000028	0.001505	0.000009	0.282930	0.282785	0.033600	0.283250	0.038400	0.015	5.2	1.0	7.7	458.2	655.2
Zircon_68_MiCH16-09	107.5	0.282973	0.000022	0.001006	0.000004	0.282971	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.8	9.0	395.3	566.7
Zircon_69_MiCH16-09	737.0	0.282211	0.000024	0.001845	0.000032	0.282185	0.282785	0.033600	0.283250	0.038400	0.015	-20.3	0.8	-4.7	1501.2	1926.0
Zircon_70_MiCH16-09	1054.0	0.281927	0.000020	0.001579	0.000047	0.281896	0.282785	0.033600	0.283250	0.038400	0.015	-30.3	0.7	-7.9	1890.7	2364.8
Zircon_71_MiCH16-09	1971.0	0.281371	0.000026	0.001416	0.000027	0.281318	0.282785	0.033600	0.283250	0.038400	0.015	-50.0	0.9	-7.4	2654.4	3047.1
Zircon_72_MiCH16-09	169.5	0.282725	0.000027	0.002000	0.000110	0.282719	0.282785	0.033600	0.283250	0.038400	0.015	-2.1	1.0	1.4	767.0	1096.1
Zircon_73_MiCH16-09	114.6	0.282952	0.000019	0.000864	0.000012	0.282950	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.7	8.4	423.6	609.3
Zircon_74_MiCH16-09	109.6	0.283052	0.000024	0.001016	0.000041	0.283050	0.282785	0.033600	0.283250	0.038400	0.015	9.4	0.8	11.8	282.9	386.3
Zircon_75_MiCH16-09	108.9	0.282895	0.000020	0.000836	0.000007	0.282893	0.282785	0.033600	0.283250	0.038400	0.015	3.9	0.7	6.2	503.8	741.4
Zircon_76_MiCH16-09	115.1	0.282984	0.000026	0.002145	0.000026	0.282979	0.282785	0.033600	0.283250	0.038400	0.015	7.0	0.9	9.4	391.5	542.8
Zircon_77_MiCH16-09	127.7	0.282948	0.000036	0.001259	0.000024	0.282945	0.282785	0.033600	0.283250	0.038400	0.015	5.8	1.3	8.5	433.8	612.7
Zircon_78_MiCH16-09	100.2	0.283016	0.000022	0.001321	0.000014	0.283014	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.8	10.3	337.0	474.9
Zircon_79_MiCH16-09	111.3	0.282973	0.000021	0.000922	0.000012	0.282971	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.7	9.1	394.4	564.0
Zircon_80_MiCH16-09	56.1	0.283014	0.000018	0.000953	0.000019	0.283013	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.6	9.3	336.5	504.1
Zircon_81_MiCH16-09	231.5	0.282696	0.000022	0.000869	0.000012	0.282692	0.282785	0.033600	0.283250	0.038400	0.015	-3.1	0.8	1.9	784.9	1116.3
Zircon_82_MiCH16-09	1022.0	0.282218	0.000017	0.000392	0.000001	0.282210	0.282785	0.033600	0.283250	0.038400	0.015	-20.1	0.6	2.6	1434.9	1691.1
Zircon_83_MiCH16-09	120.1	0.282991	0.000016	0.000959	0.000009	0.282989	0.282785	0.033600	0.283250	0.038400	0.015	7.3	0.6	9.9	369.2	518.2
Zircon_84_MiCH16-09	160.9	0.282626	0.000024	0.001889	0.000010	0.282620	0.282785	0.033600	0.283250	0.038400	0.015	-5.6	0.8	-2.2	907.7	1321.6
Zircon_85_MiCH16-09	165.7	0.282691	0.000026	0.002244	0.000020	0.282684	0.282785	0.033600	0.283250	0.038400	0.015	-3.3	0.9	0.1	821.8	1176.1
Zircon_86_MiCH16-09	114.2	0.282976	0.000019	0.000703	0.000009	0.282974	0.282785	0.033600	0.283250	0.038400	0.015	6.8	0.7	9.2	387.9	554.4
Zircon_87_MiCH16-09	400.0	0.282237	0.000020	0.000652	0.000005	0.282232	0.282785	0.033600	0.283250	0.038400	0.015	-19.4	0.7	-10.7	1418.4	2033.4
Zircon_88_MiCH16-09	67.9	0.283037	0.000020	0.000726	0.000006	0.283036	0.282785	0.033600	0.283250	0.038400	0.015	8.9	0.7	10.4	302.0	444.3
Zircon_89_MiCH16-09	162.8	0.282741	0.000027	0.001874	0.000009	0.282735	0.282785	0.033600	0.283250	0.038400	0.015	-1.6	1.0	1.9	741.3	1063.0
Zircon_90_MiCH16-09	60.3	0.283051	0.000022	0.000840	0.000004	0.283050	0.282785	0.033600	0.283250	0.038400	0.015	9.4	0.8	10.7	283.0	417.4
Zircon_91_MiCH16-09	107.0	0.282952	0.000025	0.001325	0.000022	0.282949	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.9	8.2	428.8	616.0
Zircon_92_MiCH16-09	164.8	0.282674	0.000019	0.002728	0.000021	0.282666	0.282785	0.033600	0.283250	0.038400	0.015	-3.9	0.7	-0.6	858.0	1217.9
Zircon_93_MiCH16-09	107.8	0.283019	0.000019	0.001247	0.000015	0.283016	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.7	10.6	332.0	463.3
Zircon_94_MiCH16-09	122.1	0.282945	0.000021	0.001507	0.000025	0.282942	0.282785	0.033600	0.283250	0.038400	0.015	5.7	0.7	8.3	441.0	624.0
Zircon_95_MiCH16-09	161.2	0.282670	0.000026	0.002557	0.000037	0.282662	0.282785	0.033600	0.283250	0.038400	0.015	-4.1	0.9	-0.8	859.8	1227.6
Zircon_96_MiCH16-09	105.2	0.283005	0.000021	0.001169	0.000017	0.283003	0.282785	0.033600	0.283250	0.038400	0.015	7.8	0.7	10.0	351.3	496.2
Zircon_98_MiCH16-09	113.0	0.282872	0.000021	0.001353	0.000008	0.282869	0.282785	0.033600	0.283250	0.038400	0.015	3.1	0.7	5.5	543.7	793.4
Zircon_99_MiCH16-09	110.0	0.282978	0.000029	0.002072	0.000013	0.282974	0.282785	0.033600	0.283250	0.038400	0.015	6.8	1.0	9.1	399.5	558.8
Zircon_100_MiCH16-09	116.8	0.282925	0.000020	0.000924	0.000015	0.282923	0.282785	0.033600	0.283250	0.038400	0.015	5.0	0.7	7.5	462.5	669.4
Zircon_101_MiCH16-09	747.0	0.282443	0.000023	0.000899	0.000024	0.282430	0.282785	0.033600	0.283250	0.038400	0.015	-12.1	0.8	4.2	1140.4	1376.1
Zircon_102_MiCH16-09	112.1	0.283024	0.000021	0.000671	0.000042	0.283023	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.7	10.9	319.9	446.7
Zircon_103_MiCH16-09	104.4	0.282968	0.000026	0.001583	0.000050	0.282965	0.282785	0.033600	0.283250	0.038400	0.015	6.5	0.9	8.7	408.7	582.4
Zircon_104_MiCH16-09	99.1	0.283004	0.000018	0.000884	0.000009	0.283002	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.6	9.9	350.1	500.9

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{Zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{Zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_i$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_c$	$\epsilon\text{Hf}(t)$	$\pm 2\text{SE } \epsilon\text{Hf}(t)$	$\epsilon\text{Hf}(t)$	T_{DM} (Ma)	T_{DM}^c (Ma)
MICH16-15 (Mi15*) Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																
Zircon_01_MiCH16-15	115.6	0.282978	0.000031	0.003520	0.000100	0.282970	0.282785	0.033600	0.283250	0.038400	0.015	6.8	1.1	9.1	416.1	562.9
Zircon_02_MiCH16-15	165.0	0.282797	0.000020	0.000991	0.000021	0.282794	0.282785	0.033600	0.283250	0.038400	0.015	0.4	0.7	4.0	644.7	929.9
Zircon_03_MiCH16-15	110.8	0.282940	0.000023	0.001024	0.000020	0.282938	0.282785	0.033600	0.283250	0.038400	0.015	5.5	0.8	7.9	442.4	639.5
Zircon_04_MiCH16-15	116.0	0.282785	0.000018	0.000533	0.000002	0.282784	0.282785	0.033600	0.283250	0.038400	0.015	0.0	0.6	2.5	653.7	983.5
Zircon_05_MiCH16-15	110.8	0.282879	0.000027	0.002658	0.000061	0.282873	0.282785	0.033600	0.283250	0.038400	0.015	3.3	1.0	5.6	553.1	784.9
Zircon_06_MiCH16-15	109.5	0.282924	0.000029	0.001678	0.000016	0.282921	0.282785	0.033600	0.283250	0.038400	0.015	4.9	1.0	7.2	473.4	679.5
Zircon_07_MiCH16-15	162.6	0.282766	0.000025	0.001193	0.000027	0.282762	0.282785	0.033600	0.283250	0.038400	0.015	-0.7	0.9	2.8	692.3	1002.3
Zircon_08_MiCH16-15	906.0	0.282190	0.000022	0.000531	0.000004	0.282181	0.282785	0.033600	0.283250	0.038400	0.015	-21.0	0.8	-1.1	1478.7	1829.7
Zircon_09_MiCH16-15	113.3	0.282987	0.000024	0.001484	0.000019	0.282984	0.282785	0.033600	0.283250	0.038400	0.015	7.1	0.8	9.6	380.2	533.8
Zircon_10_MiCH16-15	114.9	0.282914	0.000025	0.001875	0.000027	0.282910	0.282785	0.033600	0.283250	0.038400	0.015	4.6	0.9	7.0	490.5	700.0
Zircon_11_MiCH16-15	110.2	0.282963	0.000024	0.002405	0.000074	0.282958	0.282785	0.033600	0.283250	0.038400	0.015	6.3	0.8	8.6	425.4	594.2
Zircon_12_MiCH16-15	119.4	0.282914	0.000024	0.002174	0.000080	0.282909	0.282785	0.033600	0.283250	0.038400	0.015	4.6	0.8	7.0	494.5	699.0
Zircon_14_MiCH16-15	158.4	0.282744	0.000027	0.002372	0.000027	0.282737	0.282785	0.033600	0.283250	0.038400	0.015	-1.4	1.0	1.8	747.0	1062.0
Zircon_15_MiCH16-15	108.8	0.283012	0.000022	0.001171	0.000008	0.283010	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.8	10.4	341.3	478.3
Zircon_16_MiCH16-15	119.1	0.282949	0.000022	0.000763	0.000013	0.282947	0.282785	0.033600	0.283250	0.038400	0.015	5.8	0.8	8.4	426.7	612.9
Zircon_17_MiCH16-15	99.7	0.283005	0.000020	0.001110	0.000012	0.283003	0.282785	0.033600	0.283250	0.038400	0.015	7.8	0.7	9.9	350.8	499.2
Zircon_18_MiCH16-15	162.5	0.282661	0.000023	0.001604	0.000017	0.282656	0.282785	0.033600	0.283250	0.038400	0.015	-4.4	0.8	-0.9	850.6	1240.6
Zircon_19_MiCH16-15	977.0	0.282212	0.000022	0.000282	0.000000	0.282207	0.282785	0.033600	0.283250	0.038400	0.015	-20.3	0.8	1.4	1439.1	1727.6
Zircon_20_MiCH16-15	118.6	0.282977	0.000020	0.000720	0.000012	0.282975	0.282785	0.033600	0.283250	0.038400	0.015	6.8	0.7	9.4	386.7	549.6
Zircon_21_MiCH16-15	57.8	0.282970	0.000021	0.000709	0.000020	0.282969	0.282785	0.033600	0.283250	0.038400	0.015	6.5	0.7	7.8	396.4	602.2
Zircon_23_MiCH16-15	301.0	0.282516	0.000018	0.000727	0.000008	0.282512	0.282785	0.033600	0.283250	0.038400	0.015	-9.5	0.6	-3.0	1033.5	1475.5
Zircon_24_MiCH16-15	115.2	0.282988	0.000025	0.001259	0.000027	0.282985	0.282785	0.033600	0.283250	0.038400	0.015	7.2	0.9	9.6	376.5	529.4
Zircon_25_MiCH16-15	126.0	0.283012	0.000022	0.001107	0.000048	0.283009	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.8	10.7	340.7	467.8
Zircon_26_MiCH16-15	116.2	0.282955	0.000024	0.001444	0.000027	0.282952	0.282785	0.033600	0.283250	0.038400	0.015	6.0	0.8	8.5	425.9	604.4
Zircon_27_MiCH16-15	162.6	0.282793	0.000024	0.001262	0.000035	0.282789	0.282785	0.033600	0.283250	0.038400	0.015	0.3	0.8	3.8	655.1	942.1
Zircon_28_MiCH16-15	640.0	0.282433	0.000021	0.000896	0.000024	0.282422	0.282785	0.033600	0.283250	0.038400	0.015	-12.4	0.7	1.5	1154.3	1461.9
Zircon_29_MiCH16-15	109.0	0.282882	0.000027	0.003162	0.000083	0.282876	0.282785	0.033600	0.283250	0.038400	0.015	3.4	1.0	5.6	556.5	781.4
Zircon_30_MiCH16-15	1172.0	0.282155	0.000017	0.000358	0.000032	0.282147	0.282785	0.033600	0.283250	0.038400	0.015	-22.3	0.6	3.7	1520.0	1736.5
Zircon_31_MiCH16-15	121.8	0.282933	0.000020	0.001056	0.000016	0.282931	0.282785	0.033600	0.283250	0.038400	0.015	5.2	0.7	7.9	452.7	649.0
Zircon_32_MiCH16-15	155.3	0.282832	0.000022	0.001135	0.000026	0.282829	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.8	5.0	597.5	857.7
Zircon_33_MiCH16-15	246.6	0.282818	0.000020	0.000556	0.000019	0.282815	0.282785	0.033600	0.283250	0.038400	0.015	1.2	0.7	6.6	608.0	829.8
Zircon_34_MiCH16-15	117.3	0.283026	0.000023	0.000979	0.000021	0.283024	0.282785	0.033600	0.283250	0.038400	0.015	8.5	0.8	11.1	319.7	440.6
Zircon_35_MiCH16-15	163.9	0.282799	0.000026	0.001332	0.000025	0.282795	0.282785	0.033600	0.283250	0.038400	0.015	0.5	0.9	4.0	647.7	928.4
Zircon_36_MiCH16-15	105.6	0.283041	0.000025	0.000969	0.000033	0.283039	0.282785	0.033600	0.283250	0.038400	0.015	9.1	0.9	11.3	298.2	413.4
Zircon_38_MiCH16-15	112.0	0.282840	0.000027	0.000926	0.000004	0.282838	0.282785	0.033600	0.283250	0.038400	0.015	1.9	1.0	4.4	582.8	864.0
Zircon_39_MiCH16-15	115.4	0.282834	0.000034	0.003880	0.000140	0.282826	0.282785	0.033600	0.283250	0.038400	0.015	1.7	1.2	4.0	641.6	889.9
Zircon_40_MiCH16-15	1073.0	0.282168	0.000015	0.000047	0.000007	0.282167	0.282785	0.033600	0.283250	0.038400	0.015	-21.8	0.5	2.2	1490.1	1755.0
Zircon_41_MiCH16-15	112.1	0.282933	0.000017	0.000766	0.000023	0.282931	0.282785	0.033600	0.283250	0.038400	0.015	5.2	0.6	7.7	449.3	653.3
Zircon_42_MiCH16-15	248.2	0.282848	0.000023	0.001102	0.000032	0.282843	0.282785	0.033600	0.283250	0.038400	0.015	2.2	0.8	7.6	574.2	766.9
Zircon_43_MiCH16-15	1134.0	0.282119	0.000023	0.000883	0.000003	0.282100	0.282785	0.033600	0.283250	0.038400	0.015	-23.6	0.8	1.2	1590.8	1864.6
Zircon_44_MiCH16-15	161.8	0.282834	0.000019	0.001054	0.000028	0.282831	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.7	5.2	593.3	848.9
Zircon_45_MiCH16-15	159.7	0.282751	0.000026	0.001335	0.000030	0.282747	0.282785	0.033600	0.283250	0.038400	0.015	-1.2	0.9	2.2	716.3	1038.7
Zircon_46_MiCH16-15	110.9	0.282988	0.000025	0.001550	0.000039	0.282985	0.282785	0.033600	0.283250	0.038400	0.015	7.2	0.9	9.5	379.5	533.2
Zircon_48_MiCH16-15	116.6	0.282933	0.000023	0.001675	0.000012	0.282929	0.282785	0.033600	0.283250	0.038400	0.015	5.2	0.8	7.7	460.3	655.1
Zircon_49_MiCH16-15	112.8	0.282943	0.000023	0.001504	0.000025	0.282940	0.282785	0.033600	0.283250	0.038400	0.015	5.6	0.8	8.0	443.8	633.8
Zircon_50_MiCH16-15	122.2	0.282937	0.000022	0.001589	0.000010	0.282933	0.282785	0.033600	0.283250	0.038400	0.015	5.4	0.8	8.0	453.5	642.5
Zircon_51_MiCH16-15	121.8	0.283000	0.000020	0.000630	0.000008	0.282999	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.7	10.3	353.4	495.1
Zircon_52_MiCH16-15	104.5	0.283010	0.000027	0.001745	0.000021	0.283007	0.282785	0.033600	0.283250	0.038400	0.015	8.0	1.0	10.2	349.6	487.9
Zircon_53_MiCH16-15	129.5	0.282988	0.000021	0.000961	0.000012	0.282986	0.282785	0.033600	0.283250	0.038400	0.015	7.2	0.7	10.0	373.5	519.4
Zircon_54_MiCH16-15	108.2	0.283000	0.000020	0.000938	0.000007	0.282998	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.7	9.9	356.3	504.8

Zircon_55_MiCH16-15	318.0	0.282691	0.000025	0.001224	0.000008	0.282684	0.282785	0.033600	0.283250	0.038400	0.015	-3.3	0.9	3.5	799.4	1080.8
Zircon_56_MiCH16-15	2511.0	0.281060	0.000024	0.001023	0.000005	0.281011	0.282785	0.033600	0.283250	0.038400	0.015	-61.0	0.8	-5.7	3049.8	3369.1
Zircon_58_MiCH16-15	111.1	0.283023	0.000022	0.001111	0.000041	0.283021	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.8	10.8	325.1	451.7
Zircon_60_MiCH16-15	115.4	0.282877	0.000024	0.002394	0.000034	0.282872	0.282785	0.033600	0.283250	0.038400	0.015	3.3	0.8	5.6	552.0	785.8
Zircon_61_MiCH16-15	58.1	0.282967	0.000030	0.001804	0.000020	0.282965	0.282785	0.033600	0.283250	0.038400	0.015	6.4	1.1	7.7	412.6	611.5
Zircon_62_MiCH16-15	434.0	0.282765	0.000026	0.001566	0.000012	0.282752	0.282785	0.033600	0.283250	0.038400	0.015	-0.7	0.9	8.5	700.7	853.1
Zircon_63_MiCH16-15	121.0	0.282890	0.000023	0.001357	0.000045	0.282887	0.282785	0.033600	0.283250	0.038400	0.015	3.7	0.8	6.3	518.0	748.2
Zircon_64_MiCH16-15	1358.0	0.282186	0.000022	0.001405	0.000006	0.282150	0.282785	0.033600	0.283250	0.038400	0.015	-21.2	0.8	8.1	1518.7	1611.9
Zircon_65_MiCH16-15	1155.0	0.282222	0.000025	0.000544	0.000007	0.282210	0.282785	0.033600	0.283250	0.038400	0.015	-19.9	0.9	5.6	1435.1	1607.4
Zircon_66_MiCH16-15	110.9	0.282898	0.000020	0.000804	0.000014	0.282896	0.282785	0.033600	0.283250	0.038400	0.015	4.0	0.7	6.4	499.2	733.3
Zircon_67_MiCH16-15	116.6	0.282938	0.000020	0.001768	0.000045	0.282934	0.282785	0.033600	0.283250	0.038400	0.015	5.4	0.7	7.9	454.3	644.3
Zircon_68_MiCH16-15	506.0	0.282375	0.000018	0.000165	0.000010	0.282373	0.282785	0.033600	0.283250	0.038400	0.015	-14.5	0.6	-3.3	1211.9	1654.7
Zircon_69_MiCH16-15	115.8	0.282945	0.000021	0.000915	0.000009	0.282943	0.282785	0.033600	0.283250	0.038400	0.015	5.7	0.7	8.2	434.1	624.7
Zircon_70_MiCH16-15	462.0	0.282188	0.000020	0.000384	0.000010	0.282185	0.282785	0.033600	0.283250	0.038400	0.015	-21.1	0.7	-10.9	1475.8	2099.4
Zircon_71_MiCH16-15	119.9	0.282878	0.000026	0.001080	0.000036	0.282876	0.282785	0.033600	0.283250	0.038400	0.015	3.3	0.9	5.9	531.3	774.5
Zircon_72_MiCH16-15	177.4	0.282816	0.000024	0.001218	0.000043	0.282812	0.282785	0.033600	0.283250	0.038400	0.015	1.1	0.8	4.9	621.6	881.5
Zircon_73_MiCH16-15	468.0	0.282519	0.000023	0.000606	0.000007	0.282514	0.282785	0.033600	0.283250	0.038400	0.015	-9.4	0.8	0.8	1026.1	1366.5
Zircon_74_MiCH16-15	94.9	0.282955	0.000019	0.001400	0.000009	0.282953	0.282785	0.033600	0.283250	0.038400	0.015	6.0	0.7	8.0	425.4	616.5
Zircon_75_MiCH16-15	117.4	0.282785	0.000019	0.000844	0.000022	0.282783	0.282785	0.033600	0.283250	0.038400	0.015	0.0	0.7	2.5	659.1	984.2
Zircon_76_MiCH16-15	116.7	0.282899	0.000022	0.001292	0.000012	0.282896	0.282785	0.033600	0.283250	0.038400	0.015	4.0	0.8	6.5	504.3	730.0
Zircon_77_MiCH16-15	111.0	0.282938	0.000025	0.001174	0.000031	0.282936	0.282785	0.033600	0.283250	0.038400	0.015	5.4	0.9	7.8	447.0	644.6
Zircon_78_MiCH16-15	58.9	0.282914	0.000022	0.000735	0.000007	0.282913	0.282785	0.033600	0.283250	0.038400	0.015	4.6	0.8	5.8	475.7	728.2
Zircon_79_MiCH16-15	120.7	0.282880	0.000029	0.002220	0.000170	0.282875	0.282785	0.033600	0.283250	0.038400	0.015	3.4	1.0	5.9	545.0	775.3
Zircon_81_MiCH16-15	114.0	0.282948	0.000026	0.002008	0.000006	0.282944	0.282785	0.033600	0.283250	0.038400	0.015	5.8	0.9	8.1	442.6	624.3
Zircon_82_MiCH16-15	113.2	0.282911	0.000025	0.001430	0.000009	0.282908	0.282785	0.033600	0.283250	0.038400	0.015	4.5	0.9	6.9	488.9	705.6
Zircon_83_MiCH16-15	114.9	0.282998	0.000023	0.000864	0.000023	0.282996	0.282785	0.033600	0.283250	0.038400	0.015	7.5	0.8	10.0	358.4	504.9
Zircon_85_MiCH16-15	118.8	0.282979	0.000018	0.001090	0.000044	0.282977	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.6	9.4	387.6	546.8
Zircon_86_MiCH16-15	115.1	0.282889	0.000020	0.000913	0.000046	0.282887	0.282785	0.033600	0.283250	0.038400	0.015	3.7	0.7	6.2	513.3	751.7
Zircon_87_MiCH16-15	113.5	0.282786	0.000025	0.000904	0.000015	0.282784	0.282785	0.033600	0.283250	0.038400	0.015	0.0	0.9	2.5	658.7	984.5
Zircon_88_MiCH16-15	120.5	0.282859	0.000027	0.001875	0.000059	0.282855	0.282785	0.033600	0.283250	0.038400	0.015	2.6	1.0	5.1	570.3	821.0
Zircon_89_MiCH16-15	477.0	0.282355	0.000026	0.002420	0.000110	0.282333	0.282785	0.033600	0.283250	0.038400	0.015	-15.2	0.9	-5.3	1316.0	1761.7
Zircon_90_MiCH16-15	250.1	0.282656	0.000025	0.000875	0.000040	0.282652	0.282785	0.033600	0.283250	0.038400	0.015	-4.6	0.9	0.9	841.2	1194.9
Zircon_91_MiCH16-15	117.3	0.282964	0.000023	0.001581	0.000024	0.282961	0.282785	0.033600	0.283250	0.038400	0.015	6.3	0.8	8.8	414.4	584.1
Zircon_92_MiCH16-15	1019.0	0.281971	0.000018	0.000342	0.000017	0.281964	0.282785	0.033600	0.283250	0.038400	0.015	-28.8	0.6	-6.2	1770.4	2235.8
Zircon_93_MiCH16-15	114.8	0.282905	0.000020	0.001979	0.000039	0.282901	0.282785	0.033600	0.283250	0.038400	0.015	4.2	0.7	6.6	505.0	720.9
Zircon_94_MiCH16-15	162.4	0.282791	0.000022	0.001261	0.000030	0.282787	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.8	3.7	657.9	946.7
Zircon_95_MiCH16-15	119.0	0.282959	0.000024	0.001341	0.000031	0.282956	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.8	8.7	418.9	593.3
Zircon_96_MiCH16-15	114.9	0.282983	0.000022	0.000972	0.000005	0.282981	0.282785	0.033600	0.283250	0.038400	0.015	7.0	0.8	9.5	380.7	539.5
Zircon_97_MiCH16-15	256.0	0.282573	0.000022	0.000835	0.000018	0.282569	0.282785	0.033600	0.283250	0.038400	0.015	-7.5	0.8	-1.9	956.7	1376.5
Zircon_98_MiCH16-15	117.6	0.282926	0.000029	0.002086	0.000029	0.282921	0.282785	0.033600	0.283250	0.038400	0.015	5.0	1.0	7.4	475.8	672.4
Zircon_99_MiCH16-15	101.0	0.282952	0.000026	0.001871	0.000041	0.282948	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.9	8.0	435.2	621.8
Zircon_100_MiCH16-15	123.1	0.282975	0.000020	0.000639	0.000017	0.282974	0.282785	0.033600	0.283250	0.038400	0.015	6.7	0.7	9.4	388.7	551.0

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_t$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_1}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_1}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_c$	$\epsilon\text{Hf}(t)$	$\pm 2\text{SE } \epsilon\text{Hf}(t)$	$\epsilon\text{Hf}(t)$	$T_{\text{DM}} (\text{Ma})$	$T_{\text{DM}}^c (\text{Ma})$
MiCH16-20 (Mi20*) Batolito Arteaga, Suite Zihuatanejo, Complejo Arteaga																
Zircon_01_MiCH16-20	50.3	0.282908	0.000024	0.000860	0.000015	0.282907	0.282785	0.033600	0.283250	0.038400	0.015	4.3	0.8	5.4	485.8	747.2
Zircon_02_MiCH16-20	48.7	0.282884	0.000022	0.000953	0.000009	0.282883	0.282785	0.033600	0.283250	0.038400	0.015	3.5	0.8	4.6	521.0	802.5
Zircon_03_MiCH16-20	111.2	0.282970	0.000019	0.000957	0.000013	0.282968	0.282785	0.033600	0.283250	0.038400	0.015	6.5	0.7	8.9	399.0	571.1
Zircon_05_MiCH16-20	51.1	0.282883	0.000024	0.000891	0.000010	0.282882	0.282785	0.033600	0.283250	0.038400	0.015	3.5	0.8	4.6	521.5	803.2
Zircon_06_MiCH16-20	49.2	0.282922	0.000020	0.000838	0.000045	0.282921	0.282785	0.033600	0.283250	0.038400	0.015	4.8	0.7	5.9	465.7	716.2
Zircon_08_MiCH16-20	49.7	0.282859	0.000023	0.000779	0.000008	0.282858	0.282785	0.033600	0.283250	0.038400	0.015	2.6	0.8	3.7	553.8	857.9
Zircon_10_MiCH16-20	47.3	0.282874	0.000022	0.000996	0.000011	0.282873	0.282785	0.033600	0.283250	0.038400	0.015	3.1	0.8	4.2	535.7	825.9

Zircon_11_MiCH16-20	107.4	0.282961	0.000024	0.001257	0.000019	0.282958	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.8	8.5	415.1	595.1
Zircon_12_MiCH16-20	51.6	0.282870	0.000020	0.000961	0.000004	0.282869	0.282785	0.033600	0.283250	0.038400	0.015	3.0	0.7	4.1	540.9	832.3
Zircon_13_MiCH16-20	52.0	0.282889	0.000020	0.000796	0.000033	0.282888	0.282785	0.033600	0.283250	0.038400	0.015	3.7	0.7	4.8	511.7	788.9
Zircon_15_MiCH16-20	1104.0	0.282106	0.000024	0.000549	0.000011	0.282095	0.282785	0.033600	0.283250	0.038400	0.015	-24.0	0.8	0.3	1594.9	1895.8
Zircon_16_MiCH16-20	48.9	0.282879	0.000024	0.000947	0.000012	0.282878	0.282785	0.033600	0.283250	0.038400	0.015	3.3	0.8	4.4	528.0	813.6
Zircon_18_MiCH16-20	67.0	0.283030	0.000022	0.000653	0.000019	0.283029	0.282785	0.033600	0.283250	0.038400	0.015	8.7	0.8	10.1	311.3	460.5
Zircon_19_MiCH16-20	52.5	0.282870	0.000019	0.000716	0.000028	0.282869	0.282785	0.033600	0.283250	0.038400	0.015	3.0	0.7	4.1	537.4	831.3
Zircon_20_MiCH16-20	123.5	0.282932	0.000020	0.001581	0.000059	0.282928	0.282785	0.033600	0.283250	0.038400	0.015	5.2	0.7	7.8	460.6	653.0
Zircon_22_MiCH16-20	50.2	0.282943	0.000021	0.000779	0.000007	0.282942	0.282785	0.033600	0.283250	0.038400	0.015	5.6	0.7	6.7	435.3	668.0
Zircon_24_MiCH16-20	51.7	0.282901	0.000021	0.000701	0.000002	0.282900	0.282785	0.033600	0.283250	0.038400	0.015	4.1	0.7	5.2	493.6	761.8
Zircon_25_MiCH16-20	51.8	0.282916	0.000019	0.000960	0.000004	0.282915	0.282785	0.033600	0.283250	0.038400	0.015	4.6	0.7	5.7	475.7	728.4
Zircon_26_MiCH16-20	51.2	0.282928	0.000023	0.000752	0.000020	0.282927	0.282785	0.033600	0.283250	0.038400	0.015	5.1	0.8	6.2	456.2	701.2
Zircon_27_MiCH16-20	50.5	0.282908	0.000022	0.000783	0.000016	0.282907	0.282785	0.033600	0.283250	0.038400	0.015	4.3	0.8	5.4	484.8	746.9
Zircon_29_MiCH16-20	51.0	0.282924	0.000020	0.000631	0.000002	0.282923	0.282785	0.033600	0.283250	0.038400	0.015	4.9	0.7	6.0	460.3	710.1
Zircon_31_MiCH16-20	107.5	0.282971	0.000025	0.001148	0.000017	0.282969	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.9	8.9	399.7	571.9
Zircon_32_MiCH16-20	110.1	0.282953	0.000019	0.001835	0.000013	0.282949	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.7	8.3	433.3	614.3
Zircon_33_MiCH16-20	109.1	0.283041	0.000020	0.000985	0.000022	0.283039	0.282785	0.033600	0.283250	0.038400	0.015	9.1	0.7	11.4	298.4	411.4
Zircon_34_MiCH16-20	60.7	0.283062	0.000023	0.000888	0.000016	0.283061	0.282785	0.033600	0.283250	0.038400	0.015	9.8	0.8	11.1	267.8	392.3
Zircon_35_MiCH16-20	54.7	0.282920	0.000021	0.000785	0.000014	0.282919	0.282785	0.033600	0.283250	0.038400	0.015	4.8	0.7	6.0	467.9	717.3
Zircon_36_MiCH16-20	49.4	0.282874	0.000023	0.000863	0.000009	0.282873	0.282785	0.033600	0.283250	0.038400	0.015	3.1	0.8	4.2	533.8	824.4
Zircon_37_MiCH16-20	295.3	0.282585	0.000022	0.000777	0.000010	0.282581	0.282785	0.033600	0.283250	0.038400	0.015	-7.1	0.8	-0.7	938.4	1325.6
Zircon_39_MiCH16-20	52.0	0.282891	0.000021	0.000643	0.000001	0.282890	0.282785	0.033600	0.283250	0.038400	0.015	3.7	0.7	4.9	506.9	784.1
Zircon_40_MiCH16-20	112.2	0.282805	0.000024	0.001873	0.000040	0.282801	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.8	3.1	648.6	947.2
Zircon_41_MiCH16-20	57.4	0.283019	0.000027	0.001278	0.000017	0.283018	0.282785	0.033600	0.283250	0.038400	0.015	8.3	1.0	9.5	332.3	492.8
Zircon_43_MiCH16-20	104.4	0.283032	0.000020	0.000861	0.000038	0.283030	0.282785	0.033600	0.283250	0.038400	0.015	8.7	0.7	11.0	310.1	434.1
Zircon_44_MiCH16-20	48.3	0.282892	0.000024	0.000793	0.000012	0.282891	0.282785	0.033600	0.283250	0.038400	0.015	3.8	0.8	4.8	507.5	784.3
Zircon_45_MiCH16-20	51.2	0.282907	0.000021	0.000717	0.000005	0.282906	0.282785	0.033600	0.283250	0.038400	0.015	4.3	0.7	5.4	485.3	748.6
Zircon_46_MiCH16-20	105.9	0.283005	0.000024	0.001250	0.000012	0.283003	0.282785	0.033600	0.283250	0.038400	0.015	7.8	0.8	10.0	352.1	496.2
Zircon_47_MiCH16-20	51.5	0.282866	0.000027	0.000929	0.000016	0.282865	0.282785	0.033600	0.283250	0.038400	0.015	2.9	1.0	4.0	546.1	841.3
Zircon_48_MiCH16-20	49.9	0.282897	0.000016	0.000708	0.000016	0.282896	0.282785	0.033600	0.283250	0.038400	0.015	4.0	0.6	5.0	499.3	771.9
Zircon_49_MiCH16-20	60.1	0.283047	0.000021	0.000507	0.000004	0.283046	0.282785	0.033600	0.283250	0.038400	0.015	9.3	0.7	10.6	286.2	425.7
Zircon_50_MiCH16-20	51.6	0.282944	0.000026	0.001066	0.000009	0.282943	0.282785	0.033600	0.283250	0.038400	0.015	5.6	0.9	6.7	437.2	665.5
Zircon_51_MiCH16-20	53.3	0.282897	0.000020	0.000705	0.000018	0.282896	0.282785	0.033600	0.283250	0.038400	0.015	4.0	0.7	5.1	499.3	769.9
Zircon_52_MiCH16-20	48.9	0.282929	0.000019	0.000720	0.000009	0.282928	0.282785	0.033600	0.283250	0.038400	0.015	5.1	0.7	6.2	454.4	700.3
Zircon_53_MiCH16-20	48.2	0.282919	0.000025	0.001041	0.000005	0.282918	0.282785	0.033600	0.283250	0.038400	0.015	4.7	0.9	5.8	472.5	724.0
Zircon_54_MiCH16-20	61.2	0.283023	0.000020	0.000989	0.000031	0.283022	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.7	9.7	324.0	480.8
Zircon_55_MiCH16-20	1082.0	0.282340	0.000024	0.001406	0.000008	0.282311	0.282785	0.033600	0.283250	0.038400	0.015	-15.7	0.8	7.5	1301.6	1428.8
Zircon_56_MiCH16-20	49.6	0.282939	0.000021	0.000568	0.000002	0.282938	0.282785	0.033600	0.283250	0.038400	0.015	5.4	0.7	6.5	438.5	677.0
Zircon_57_MiCH16-20	49.0	0.282875	0.000021	0.000616	0.000007	0.282874	0.282785	0.033600	0.283250	0.038400	0.015	3.2	0.7	4.3	529.0	821.9
Zircon_58_MiCH16-20	50.1	0.282836	0.000021	0.000751	0.000040	0.282835	0.282785	0.033600	0.283250	0.038400	0.015	1.8	0.7	2.9	585.8	909.3
Zircon_59_MiCH16-20	108.7	0.283032	0.000024	0.001009	0.000017	0.283030	0.282785	0.033600	0.283250	0.038400	0.015	8.7	0.8	11.1	311.4	432.2
Zircon_60_MiCH16-20	52.0	0.282918	0.000021	0.000521	0.000016	0.282917	0.282785	0.033600	0.283250	0.038400	0.015	4.7	0.7	5.8	467.4	722.8
Zircon_61_MiCH16-20	50.3	0.282907	0.000020	0.000909	0.000006	0.282906	0.282785	0.033600	0.283250	0.038400	0.015	4.3	0.7	5.4	487.8	749.5
Zircon_62_MiCH16-20	52.4	0.282866	0.000024	0.000851	0.000006	0.282865	0.282785	0.033600	0.283250	0.038400	0.015	2.9	0.8	4.0	545.0	840.6
Zircon_63_MiCH16-20	50.0	0.282886	0.000020	0.000927	0.000004	0.282885	0.282785	0.033600	0.283250	0.038400	0.015	3.6	0.7	4.7	517.8	797.1
Zircon_64_MiCH16-20	51.7	0.282924	0.000023	0.000524	0.000012	0.282923	0.282785	0.033600	0.283250	0.038400	0.015	4.9	0.8	6.0	459.0	709.5
Zircon_65_MiCH16-20	50.3	0.282915	0.000022	0.001004	0.000009	0.282914	0.282785	0.033600	0.283250	0.038400	0.015	4.6	0.8	5.7	477.7	731.7
Zircon_66_MiCH16-20	50.0	0.282876	0.000026	0.000712	0.000012	0.282875	0.282785	0.033600	0.283250	0.038400	0.015	3.2	0.9	4.3	528.9	819.2
Zircon_67_MiCH16-20	50.3	0.282890	0.000023	0.000511	0.000003	0.282890	0.282785	0.033600	0.283250	0.038400	0.015	3.7	0.8	4.8	506.5	787.1
Zircon_68_MiCH16-20	66.5	0.283014	0.000023	0.000361	0.000010	0.283014	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.8	9.6	331.3	496.3
Zircon_69_MiCH16-20	49.7	0.282890	0.000019	0.000607	0.000016	0.282889	0.282785	0.033600	0.283250	0.038400	0.015	3.7	0.7	4.8	507.8	787.6
Zircon_70_MiCH16-20	49.6	0.282942	0.000022	0.000802	0.000009	0.282941	0.282785	0.033600	0.283250	0.038400	0.015	5.6	0.8	6.6	437.0	670.7
Zircon_71_MiCH16-20	49.9	0.282913	0.000018	0.000744	0.000012	0.282912	0.282785	0.033600	0.283250	0.038400	0.015	4.5	0.6	5.6	477.2	735.9
Zircon_72_MiCH16-20	49.4	0.282900	0.000023	0.000914	0.000012	0.282899	0.282785	0.033600	0.283250	0.038400	0.015	4.1	0.8	5.1	497.8	765.9

Zircon_73_MiCH16-20	56.3	0.282999	0.000026	0.000380	0.000004	0.282999	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.9	8.8	352.4	536.6
Zircon_74_MiCH16-20	106.9	0.282956	0.000024	0.001052	0.000034	0.282954	0.282785	0.033600	0.283250	0.038400	0.015	6.0	0.8	8.3	420.0	605.7
Zircon_77_MiCH16-20	51.1	0.282896	0.000022	0.000730	0.000020	0.282895	0.282785	0.033600	0.283250	0.038400	0.015	3.9	0.8	5.0	501.0	773.5
Zircon_78_MiCH16-20	49.8	0.282981	0.000022	0.000883	0.000011	0.282980	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.8	8.0	382.7	582.5
Zircon_79_MiCH16-20	110.0	0.282990	0.000028	0.001219	0.000012	0.282987	0.282785	0.033600	0.283250	0.038400	0.015	7.2	1.0	9.6	373.2	527.7
Zircon_80_MiCH16-20	49.4	0.282880	0.000020	0.000924	0.000001	0.282879	0.282785	0.033600	0.283250	0.038400	0.015	3.4	0.7	4.4	526.2	811.0
Zircon_81_MiCH16-20	48.8	0.282933	0.000017	0.000437	0.000002	0.282933	0.282785	0.033600	0.283250	0.038400	0.015	5.2	0.6	6.3	445.4	690.7
Zircon_82_MiCH16-20	49.2	0.282915	0.000026	0.000991	0.000021	0.282914	0.282785	0.033600	0.283250	0.038400	0.015	4.6	0.9	5.7	477.5	732.3
Zircon_83_MiCH16-20	51.9	0.282935	0.000025	0.001009	0.000005	0.282934	0.282785	0.033600	0.283250	0.038400	0.015	5.3	0.9	6.4	449.3	685.6
Zircon_86_MiCH16-20	48.9	0.282913	0.000023	0.000903	0.000003	0.282912	0.282785	0.033600	0.283250	0.038400	0.015	4.5	0.8	5.6	479.2	736.8
Zircon_88_MiCH16-20	47.7	0.282943	0.000026	0.001032	0.000010	0.282942	0.282785	0.033600	0.283250	0.038400	0.015	5.6	0.9	6.6	438.2	670.0
Zircon_90_MiCH16-20	50.5	0.282959	0.000020	0.000793	0.000018	0.282958	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.7	7.2	412.9	631.7
Zircon_91_MiCH16-20	48.6	0.282863	0.000020	0.000749	0.000010	0.282862	0.282785	0.033600	0.283250	0.038400	0.015	2.8	0.7	3.8	547.7	849.4
Zircon_93_MiCH16-20	50.6	0.282883	0.000024	0.000683	0.000044	0.282882	0.282785	0.033600	0.283250	0.038400	0.015	3.5	0.8	4.6	518.7	803.0
Zircon_94_MiCH16-20	289.4	0.282653	0.000017	0.000556	0.000004	0.282650	0.282785	0.033600	0.283250	0.038400	0.015	-4.7	0.6	1.7	838.4	1174.4
Zircon_95_MiCH16-20	52.7	0.282878	0.000021	0.000673	0.000009	0.282877	0.282785	0.033600	0.283250	0.038400	0.015	3.3	0.7	4.4	525.6	813.0
Zircon_96_MiCH16-20	50.5	0.282893	0.000017	0.000354	0.000007	0.282893	0.282785	0.033600	0.283250	0.038400	0.015	3.8	0.6	4.9	500.3	779.8
Zircon_97_MiCH16-20	49.4	0.282856	0.000021	0.000890	0.000012	0.282855	0.282785	0.033600	0.283250	0.038400	0.015	2.5	0.7	3.6	559.7	865.0
Zircon_98_MiCH16-20	52.3	0.282887	0.000022	0.001019	0.000004	0.282886	0.282785	0.033600	0.283250	0.038400	0.015	3.6	0.8	4.7	517.6	793.7
Zircon_99_MiCH16-20	98.2	0.282979	0.000024	0.000959	0.000030	0.282977	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.8	9.0	386.3	558.4

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_t$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_1}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_1}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_C$	$\epsilon\text{Hf}(0)$	$\pm 2\text{SE } \epsilon\text{Hf}(0)$	$\epsilon\text{Hf}(0)$	T_{DM} (Ma)	T_{DM}^C (Ma)
GUE16-01 (Gr01*) Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																
Zircon_02_GUE16-01	538.4	0.282348	0.000025	0.001318	0.000024	0.282335	0.282785	0.033600	0.283250	0.038400	0.015	-15.5	0.9	-3.9	1287.3	1720.3
Zircon_03_GUE16-01	1141.0	0.282125	0.000025	0.000714	0.000004	0.282110	0.282785	0.033600	0.283250	0.038400	0.015	-23.3	0.9	1.7	1575.5	1839.1
Zircon_04_GUE16-01	0.9	0.282818	0.000023	0.001189	0.000020	0.282818	0.282785	0.033600	0.283250	0.038400	0.015	1.2	0.8	1.2	618.2	979.3
Zircon_05_GUE16-01	1082.0	0.281939	0.000025	0.000870	0.000014	0.281921	0.282785	0.033600	0.283250	0.038400	0.015	-29.9	0.9	-6.3	1839.1	2291.1
Zircon_06_GUE16-01	35.1	0.282890	0.000029	0.000576	0.000017	0.282890	0.282785	0.033600	0.283250	0.038400	0.015	3.7	1.0	4.5	507.4	796.4
Zircon_07_GUE16-01	114.2	0.282970	0.000032	0.001404	0.000006	0.282967	0.282785	0.033600	0.283250	0.038400	0.015	6.5	1.1	9.0	403.9	571.4
Zircon_09_GUE16-01	126.0	0.282983	0.000031	0.002022	0.000048	0.282978	0.282785	0.033600	0.283250	0.038400	0.015	7.0	1.1	9.6	391.7	538.5
Zircon_10_GUE16-01	933.0	0.282281	0.000030	0.000502	0.000002	0.282272	0.282785	0.033600	0.283250	0.038400	0.015	-17.8	1.1	2.7	1352.3	1610.4
Zircon_12_GUE16-01	1798.0	0.281402	0.000023	0.000425	0.000003	0.281387	0.282785	0.033600	0.283250	0.038400	0.015	-48.9	0.8	-8.9	2545.1	3005.2
Zircon_13_GUE16-01	1273.0	0.282221	0.000023	0.000719	0.000001	0.282204	0.282785	0.033600	0.283250	0.038400	0.015	-19.9	0.8	8.0	1443.0	1546.6
Zircon_15_GUE16-01	53.6	0.282961	0.000024	0.000985	0.000019	0.282960	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.8	7.4	412.1	625.7
Zircon_17_GUE16-01	3233.0	0.280849	0.000030	0.002737	0.000075	0.280679	0.282785	0.033600	0.283250	0.038400	0.015	-68.5	1.1	-0.6	3489.8	3623.9
Zircon_18_GUE16-01	1049.0	0.282059	0.000050	0.000704	0.000020	0.282045	0.282785	0.033600	0.283250	0.038400	0.015	-25.7	1.8	-2.7	1666.1	2039.6
Zircon_19_GUE16-01	84.9	0.282791	0.000025	0.001224	0.000059	0.282789	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.9	2.0	657.3	991.4
Zircon_20_GUE16-01	36.4	0.282727	0.000021	0.000724	0.000002	0.282727	0.282785	0.033600	0.283250	0.038400	0.015	-2.1	0.7	-1.3	738.4	1162.2
Zircon_21_GUE16-01	117.4	0.282954	0.000025	0.000824	0.000013	0.282952	0.282785	0.033600	0.283250	0.038400	0.015	6.0	0.9	8.5	420.3	602.9
Zircon_25_GUE16-01	1174.0	0.282196	0.000029	0.001164	0.000012	0.282170	0.282785	0.033600	0.283250	0.038400	0.015	-20.8	1.0	4.6	1495.1	1684.0
Zircon_27_GUE16-01	1048.0	0.282135	0.000022	0.000606	0.000009	0.282123	0.282785	0.033600	0.283250	0.038400	0.015	-23.0	0.8	0.1	1557.3	1868.2
Zircon_28_GUE16-01	65.4	0.282850	0.000025	0.000709	0.000007	0.282849	0.282785	0.033600	0.283250	0.038400	0.015	2.3	0.9	3.7	565.4	868.5
Zircon_29_GUE16-01	122.2	0.283027	0.000027	0.001005	0.000024	0.283025	0.282785	0.033600	0.283250	0.038400	0.015	8.6	1.0	11.2	318.5	435.5
Zircon_30_GUE16-01	64.0	0.282791	0.000028	0.001155	0.000014	0.282790	0.282785	0.033600	0.283250	0.038400	0.015	0.2	1.0	1.6	656.1	1003.3
Zircon_31_GUE16-01	1533.0	0.281927	0.000026	0.001040	0.000002	0.281897	0.282785	0.033600	0.283250	0.038400	0.015	-30.3	0.9	3.1	1864.0	2060.4
Zircon_32_GUE16-01	1220.0	0.282115	0.000026	0.000560	0.000001	0.282102	0.282785	0.033600	0.283250	0.038400	0.015	-23.7	0.9	3.2	1582.9	1805.7
Zircon_33_GUE16-01	72.1	0.282826	0.000019	0.000383	0.000010	0.282825	0.282785	0.033600	0.283250	0.038400	0.015	1.4	0.7	3.0	594.1	917.6
Zircon_34_GUE16-01	64.9	0.282780	0.000023	0.000645	0.000007	0.282779	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	0.8	1.2	662.7	1026.1
Zircon_35_GUE16-01	825.0	0.282436	0.000027	0.000556	0.000062	0.282427	0.282785	0.033600	0.283250	0.038400	0.015	-12.3	1.0	5.8	1139.9	1333.3
Zircon_39_GUE16-01	96.8	0.283029	0.000034	0.001650	0.000110	0.283026	0.282785	0.033600	0.283250	0.038400	0.015	8.6	1.2	10.7	321.1	448.7
Zircon_40_GUE16-01	121.4	0.283010	0.000030	0.000977	0.000020	0.283008	0.282785	0.033600	0.283250	0.038400	0.015	8.0	1.1	10.6	342.4	474.4
Zircon_41_GUE16-01	1055.0	0.282180	0.000025	0.000135	0.000002	0.282177	0.282785	0.033600	0.283250	0.038400	0.015	-21.4	0.9	2.2	1477.2	1743.7

Zircon_43_GUE16-01	145.0	0.282699	0.000028	0.001734	0.000057	0.282694	0.282785	0.033600	0.283250	0.038400	0.015	-3.0	1.0	0.0	798.9	1166.1
Zircon_44_GUE16-01	110.2	0.282918	0.000031	0.001835	0.000045	0.282914	0.282785	0.033600	0.283250	0.038400	0.015	4.7	1.1	7.0	484.1	693.4
Zircon_45_GUE16-01	66.5	0.282866	0.000037	0.000961	0.000014	0.282865	0.282785	0.033600	0.283250	0.038400	0.015	2.9	1.3	4.3	546.6	832.5
Zircon_47_GUE16-01	1009.0	0.282066	0.000035	0.000269	0.000002	0.282061	0.282785	0.033600	0.283250	0.038400	0.015	-25.4	1.2	-3.0	1637.9	2030.0
Zircon_48_GUE16-01	103.9	0.283080	0.000027	0.000845	0.000004	0.283078	0.282785	0.033600	0.283250	0.038400	0.015	10.4	1.0	12.7	241.9	325.2
Zircon_49_GUE16-01	58.2	0.282963	0.000027	0.000459	0.000013	0.282963	0.282785	0.033600	0.283250	0.038400	0.015	6.3	1.0	7.6	403.6	617.2
Zircon_51_GUE16-01	1167.0	0.282245	0.000025	0.000640	0.000013	0.282231	0.282785	0.033600	0.283250	0.038400	0.015	-19.1	0.9	6.6	1406.9	1553.6
Zircon_52_GUE16-01	456.5	0.282431	0.000033	0.003253	0.000027	0.282403	0.282785	0.033600	0.283250	0.038400	0.015	-12.5	1.2	-3.3	1233.8	1619.8
Zircon_53_GUE16-01	64.2	0.282948	0.000025	0.000696	0.000026	0.282947	0.282785	0.033600	0.283250	0.038400	0.015	5.8	0.9	7.2	427.3	648.1
Zircon_55_GUE16-01	61.8	0.282963	0.000022	0.000361	0.000004	0.282963	0.282785	0.033600	0.283250	0.038400	0.015	6.3	0.8	7.7	402.6	614.7
Zircon_56_GUE16-01	609.0	0.282371	0.000021	0.000481	0.000000	0.282366	0.282785	0.033600	0.283250	0.038400	0.015	-14.6	0.7	-1.2	1227.4	1607.6
Zircon_57_GUE16-01	65.7	0.282805	0.000021	0.000421	0.000011	0.282804	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.7	2.1	623.9	968.8
Zircon_58_GUE16-01	64.1	0.282785	0.000024	0.000839	0.000013	0.282784	0.282785	0.033600	0.283250	0.038400	0.015	0.0	0.8	1.4	659.0	1015.9
Zircon_59_GUE16-01	122.6	0.282966	0.000036	0.001656	0.000014	0.282962	0.282785	0.033600	0.283250	0.038400	0.015	6.4	1.3	9.0	412.4	577.0
Zircon_60_GUE16-01	118.1	0.283053	0.000025	0.000906	0.000020	0.283051	0.282785	0.033600	0.283250	0.038400	0.015	9.5	0.9	12.0	280.7	378.4
Zircon_61_GUE16-01	66.3	0.282782	0.000028	0.001220	0.000025	0.282780	0.282785	0.033600	0.283250	0.038400	0.015	-0.1	1.0	1.3	670.0	1022.4
Zircon_62_GUE16-01	66.0	0.282778	0.000023	0.000789	0.000009	0.282777	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	0.8	1.2	668.0	1030.3
Zircon_63_GUE16-01	64.7	0.282794	0.000026	0.000832	0.000007	0.282793	0.282785	0.033600	0.283250	0.038400	0.015	0.3	0.9	1.7	646.2	995.3
Zircon_64_GUE16-01	1262.0	0.281957	0.000029	0.001410	0.000075	0.281923	0.282785	0.033600	0.283250	0.038400	0.015	-29.3	1.0	-2.1	1840.3	2173.3
Zircon_65_GUE16-01	56.4	0.282973	0.000025	0.000821	0.000008	0.282972	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.9	7.9	393.4	596.5
Zircon_66_GUE16-01	1171.0	0.282159	0.000032	0.000637	0.000004	0.282145	0.282785	0.033600	0.283250	0.038400	0.015	-22.1	1.1	3.6	1525.5	1741.9
Zircon_67_GUE16-01	63.7	0.282945	0.000028	0.000555	0.000004	0.282944	0.282785	0.033600	0.283250	0.038400	0.015	5.7	1.0	7.0	429.9	654.8
Zircon_68_GUE16-01	61.6	0.282963	0.000027	0.000802	0.000030	0.282962	0.282785	0.033600	0.283250	0.038400	0.015	6.3	1.0	7.6	407.3	616.0
Zircon_70_GUE16-01	111.8	0.283109	0.000025	0.001410	0.000043	0.283106	0.282785	0.033600	0.283250	0.038400	0.015	11.5	0.9	13.8	203.8	257.1
Zircon_71_GUE16-01	104.3	0.282992	0.000027	0.000744	0.000011	0.282991	0.282785	0.033600	0.283250	0.038400	0.015	7.3	1.0	9.6	365.7	524.4
Zircon_73_GUE16-01	35.9	0.282717	0.000031	0.000907	0.000021	0.282716	0.282785	0.033600	0.283250	0.038400	0.015	-2.4	1.1	-1.6	756.1	1185.2
Zircon_74_GUE16-01	34.8	0.282749	0.000022	0.000946	0.000001	0.282748	0.282785	0.033600	0.283250	0.038400	0.015	-1.3	0.8	-0.5	711.7	1114.2
Zircon_75_GUE16-01	51.2	0.282778	0.000033	0.000930	0.000013	0.282777	0.282785	0.033600	0.283250	0.038400	0.015	-0.2	1.2	0.9	670.5	1039.4
Zircon_76_GUE16-01	85.4	0.283007	0.000037	0.001676	0.000016	0.283004	0.282785	0.033600	0.283250	0.038400	0.015	7.9	1.3	9.7	353.2	505.2
Zircon_77_GUE16-01	62.3	0.282880	0.000026	0.000481	0.000010	0.282879	0.282785	0.033600	0.283250	0.038400	0.015	3.4	0.9	4.7	520.1	802.2
Zircon_78_GUE16-01	1230.0	0.282266	0.000031	0.001145	0.000007	0.282239	0.282785	0.033600	0.283250	0.038400	0.015	-18.4	1.1	8.3	1396.3	1494.6
Zircon_80_GUE16-01	989.0	0.282119	0.000023	0.000475	0.000002	0.282110	0.282785	0.033600	0.283250	0.038400	0.015	-23.6	0.8	-1.7	1574.0	1933.9
Zircon_82_GUE16-01	122.8	0.282981	0.000026	0.000577	0.000009	0.282980	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.9	9.6	379.6	537.3
Zircon_83_GUE16-01	1016.0	0.282291	0.000025	0.000519	0.000012	0.282281	0.282785	0.033600	0.283250	0.038400	0.015	-17.5	0.9	4.9	1339.1	1538.1
Zircon_85_GUE16-01	122.0	0.283052	0.000027	0.001088	0.000014	0.283050	0.282785	0.033600	0.283250	0.038400	0.015	9.4	1.0	12.1	283.5	379.3
Zircon_87_GUE16-01	1149.0	0.282117	0.000026	0.000357	0.000001	0.282109	0.282785	0.033600	0.283250	0.038400	0.015	-23.6	0.9	1.9	1571.9	1834.8
Zircon_88_GUE16-01	121.7	0.282986	0.000024	0.000812	0.000043	0.282984	0.282785	0.033600	0.283250	0.038400	0.015	7.1	0.8	9.7	374.9	527.8
Zircon_89_GUE16-01	37.5	0.282931	0.000044	0.002298	0.000007	0.282929	0.282785	0.033600	0.283250	0.038400	0.015	5.2	1.6	5.9	471.2	705.2
Zircon_91_GUE16-01	166.7	0.282762	0.000031	0.001111	0.000007	0.282759	0.282785	0.033600	0.283250	0.038400	0.015	-0.8	1.1	2.8	696.4	1008.4
Zircon_92_GUE16-01	1066.0	0.282137	0.000030	0.000622	0.000018	0.282124	0.282785	0.033600	0.283250	0.038400	0.015	-22.9	1.1	0.5	1555.2	1853.6
Zircon_93_GUE16-01	39.1	0.283041	0.000038	0.002053	0.000012	0.283040	0.282785	0.033600	0.283250	0.038400	0.015	9.1	1.3	9.9	307.1	454.8
Zircon_96_GUE16-01	184.2	0.282630	0.000034	0.001246	0.000066	0.282626	0.282785	0.033600	0.283250	0.038400	0.015	-5.5	1.2	-1.5	886.4	1294.9
Zircon_97_GUE16-01	522.9	0.282302	0.000037	0.001544	0.000027	0.282287	0.282785	0.033600	0.283250	0.038400	0.015	-17.1	1.3	-6.0	1360.3	1836.0
Zircon_98_GUE16-01	102.7	0.283028	0.000035	0.001669	0.000035	0.283025	0.282785	0.033600	0.283250	0.038400	0.015	8.6	1.2	10.8	322.8	447.7
Zircon_99_GUE16-01	38.9	0.282948	0.000029	0.000876	0.000020	0.282947	0.282785	0.033600	0.283250	0.038400	0.015	5.8	1.0	6.6	429.4	663.7
Zircon_100_GUE16-01	59.5	0.282997	0.000028	0.000422	0.000011	0.282997	0.282785	0.033600	0.283250	0.038400	0.015	7.5	1.0	8.8	355.6	539.3
Zircon_101_GUE16-01	39.9	0.282736	0.000033	0.002090	0.000096	0.282734	0.282785	0.033600	0.283250	0.038400	0.015	-1.7	1.2	-0.9	752.9	1142.2
Zircon_102_GUE16-01	171.8	0.282774	0.000031	0.000919	0.000015	0.282771	0.282785	0.033600	0.283250	0.038400	0.015	-0.4	1.1	3.3	675.9	977.0
Zircon_104_GUE16-01	1002.0	0.282217	0.000026	0.000343	0.000003	0.282211	0.282785	0.033600	0.283250	0.038400	0.015	-20.1	0.9	2.1	1434.5	1703.6

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{Zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{Zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_i$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_i}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_c$	$\epsilon\text{Hf}(0)$	$\pm 2\text{SE } \epsilon\text{Hf}(0)$	$\epsilon\text{Hf}(t)$	T_{DM} (Ma)	T_{DM}^c (Ma)
GUE16-06 (Gr06*) Ensablaje El Camalote, Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																
Zircon_01_GUE16-06	176.0	0.282593	0.000015	0.000329	0.000020	0.282592	0.282785	0.033600	0.283250	0.038400	0.015	-6.8	0.5	-2.9	916.4	1375.5
Zircon_02_GUE16-06	499.0	0.282265	0.000016	0.000311	0.000001	0.282262	0.282785	0.033600	0.283250	0.038400	0.015	-18.4	0.6	-7.4	1367.5	1905.6
Zircon_03_GUE16-06	471.0	0.282466	0.000025	0.000931	0.000003	0.282458	0.282785	0.033600	0.283250	0.038400	0.015	-11.3	0.9	-1.1	1109.2	1489.2
Zircon_04_GUE16-06	44.5	0.282962	0.000027	0.002184	0.000045	0.282960	0.282785	0.033600	0.283250	0.038400	0.015	6.3	1.0	7.2	424.3	631.1
Zircon_05_GUE16-06	46.6	0.282971	0.000021	0.002520	0.000016	0.282969	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.7	7.5	414.9	610.3
Zircon_06_GUE16-06	45.1	0.282958	0.000024	0.001548	0.000061	0.282957	0.282785	0.033600	0.283250	0.038400	0.015	6.1	0.8	7.1	422.7	638.6
Zircon_07_GUE16-06	45.5	0.282871	0.000018	0.000928	0.000009	0.282870	0.282785	0.033600	0.283250	0.038400	0.015	3.0	0.6	4.0	539.0	833.6
Zircon_08_GUE16-06	37.5	0.283004	0.000020	0.001204	0.000020	0.283003	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.7	8.5	353.1	538.3
Zircon_09_GUE16-06	64.0	0.282862	0.000020	0.000903	0.000051	0.282861	0.282785	0.033600	0.283250	0.038400	0.015	2.7	0.7	4.1	551.4	842.9
Zircon_10_GUE16-06	38.1	0.283017	0.000020	0.001583	0.000072	0.283016	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.7	9.0	337.9	509.0
Zircon_11_GUE16-06	162.2	0.282910	0.000055	0.001411	0.000006	0.282906	0.282785	0.033600	0.283250	0.038400	0.015	4.4	1.9	7.9	490.1	679.6
Zircon_12_GUE16-06	42.3	0.282912	0.000022	0.000985	0.000019	0.282911	0.282785	0.033600	0.283250	0.038400	0.015	4.5	0.8	5.4	481.7	743.1
Zircon_13_GUE16-06	54.5	0.282836	0.000025	0.001213	0.000030	0.282835	0.282785	0.033600	0.283250	0.038400	0.015	1.8	0.9	3.0	593.0	907.8
Zircon_14_GUE16-06	45.6	0.282944	0.000025	0.001271	0.000021	0.282943	0.282785	0.033600	0.283250	0.038400	0.015	5.6	0.9	6.6	439.6	669.5
Zircon_15_GUE16-06	47.3	0.283015	0.000021	0.001265	0.000018	0.283014	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.7	9.1	337.9	507.7
Zircon_16_GUE16-06	36.3	0.283051	0.000021	0.001725	0.000039	0.283050	0.282785	0.033600	0.283250	0.038400	0.015	9.4	0.7	10.2	289.8	433.1
Zircon_17_GUE16-06	1011.0	0.282086	0.000016	0.000331	0.000017	0.282080	0.282785	0.033600	0.283250	0.038400	0.015	-24.7	0.6	-2.3	1613.2	1987.2
Zircon_18_GUE16-06	54.8	0.282927	0.000022	0.001178	0.000068	0.282926	0.282785	0.033600	0.283250	0.038400	0.015	5.0	0.8	6.2	462.8	702.3
Zircon_19_GUE16-06	42.2	0.283002	0.000018	0.000762	0.000013	0.283001	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.6	8.6	351.8	539.3
Zircon_22_GUE16-06	42.0	0.282980	0.000028	0.000896	0.000010	0.282979	0.282785	0.033600	0.283250	0.038400	0.015	6.9	1.0	7.8	384.2	589.4
Zircon_23_GUE16-06	35.8	0.283023	0.000020	0.001458	0.000020	0.283022	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.7	9.2	328.1	496.6
Zircon_24_GUE16-06	42.3	0.282961	0.000022	0.000876	0.000032	0.282960	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.8	7.1	410.9	632.2
Zircon_25_GUE16-06	45.4	0.282995	0.000026	0.002374	0.000035	0.282993	0.282785	0.033600	0.283250	0.038400	0.015	7.4	0.9	8.4	377.8	556.3
Zircon_26_GUE16-06	46.6	0.282995	0.000027	0.001393	0.000041	0.282994	0.282785	0.033600	0.283250	0.038400	0.015	7.4	1.0	8.4	367.8	553.7
Zircon_27_GUE16-06	40.2	0.283018	0.000028	0.001628	0.000039	0.283017	0.282785	0.033600	0.283250	0.038400	0.015	8.2	1.0	9.1	336.9	505.7
Zircon_28_GUE16-06	126.0	0.282988	0.000018	0.000653	0.000005	0.282986	0.282785	0.033600	0.283250	0.038400	0.015	7.2	0.6	9.9	370.5	519.8
Zircon_29_GUE16-06	46.1	0.282956	0.000027	0.002316	0.000020	0.282954	0.282785	0.033600	0.283250	0.038400	0.015	6.0	1.0	7.0	434.6	644.1
Zircon_30_GUE16-06	55.8	0.282920	0.000022	0.002167	0.000018	0.282918	0.282785	0.033600	0.283250	0.038400	0.015	4.8	0.8	5.9	485.6	719.9
Zircon_31_GUE16-06	54.8	0.282834	0.000025	0.001976	0.000020	0.282832	0.282785	0.033600	0.283250	0.038400	0.015	1.7	0.9	2.9	608.3	913.9
Zircon_32_GUE16-06	41.1	0.282985	0.000021	0.001328	0.000007	0.282984	0.282785	0.033600	0.283250	0.038400	0.015	7.1	0.7	7.9	381.5	579.4
Zircon_33_GUE16-06	286.6	0.282821	0.000022	0.001111	0.000008	0.282815	0.282785	0.033600	0.283250	0.038400	0.015	1.3	0.8	7.4	612.7	805.3
Zircon_34_GUE16-06	44.7	0.282973	0.000021	0.000910	0.000009	0.282972	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.7	7.6	394.3	603.7
Zircon_35_GUE16-06	43.7	0.282964	0.000021	0.000911	0.000021	0.282963	0.282785	0.033600	0.283250	0.038400	0.015	6.3	0.7	7.3	407.1	624.7
Zircon_36_GUE16-06	64.9	0.282887	0.000020	0.001051	0.000023	0.282886	0.282785	0.033600	0.283250	0.038400	0.015	3.6	0.7	5.0	518.1	786.4
Zircon_37_GUE16-06	50.1	0.283042	0.000022	0.000915	0.000003	0.283041	0.282785	0.033600	0.283250	0.038400	0.015	9.1	0.8	10.2	296.4	444.1
Zircon_39_GUE16-06	42.8	0.282910	0.000025	0.002359	0.000069	0.282908	0.282785	0.033600	0.283250	0.038400	0.015	4.4	0.9	5.3	502.9	749.8
Zircon_40_GUE16-06	47.7	0.282901	0.000019	0.000812	0.000006	0.282900	0.282785	0.033600	0.283250	0.038400	0.015	4.1	0.7	5.1	495.0	764.4
Zircon_41_GUE16-06	55.1	0.282909	0.000021	0.001103	0.000067	0.282908	0.282785	0.033600	0.283250	0.038400	0.015	4.4	0.7	5.6	487.5	742.6
Zircon_43_GUE16-06	42.0	0.282977	0.000017	0.000816	0.000062	0.282976	0.282785	0.033600	0.283250	0.038400	0.015	6.8	0.6	7.7	387.7	596.1
Zircon_45_GUE16-06	42.0	0.282992	0.000025	0.001283	0.000023	0.282991	0.282785	0.033600	0.283250	0.038400	0.015	7.3	0.9	8.2	371.0	563.0
Zircon_46_GUE16-06	252.3	0.282813	0.000019	0.000757	0.000006	0.282809	0.282785	0.033600	0.283250	0.038400	0.015	1.0	0.7	6.5	618.2	839.7
Zircon_47_GUE16-06	42.9	0.282956	0.000022	0.001081	0.000023	0.282955	0.282785	0.033600	0.283250	0.038400	0.015	6.0	0.8	7.0	420.3	643.5
Zircon_49_GUE16-06	39.4	0.283002	0.000025	0.001786	0.000029	0.283001	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.9	8.5	361.6	542.6
Zircon_50_GUE16-06	45.5	0.282981	0.000015	0.000862	0.000005	0.282980	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.5	7.9	382.5	585.0
Zircon_51_GUE16-06	44.5	0.282942	0.000028	0.002900	0.000130	0.282940	0.282785	0.033600	0.283250	0.038400	0.015	5.6	1.0	6.5	462.7	677.7
Zircon_52_GUE16-06	42.0	0.283009	0.000024	0.001384	0.000010	0.283008	0.282785	0.033600	0.283250	0.038400	0.015	7.9	0.8	8.8	347.6	524.6
Zircon_54_GUE16-06	63.6	0.282897	0.000016	0.000548	0.000006	0.282896	0.282785	0.033600	0.283250	0.038400	0.015	4.0	0.6	5.4	497.2	763.2
Zircon_55_GUE16-06	42.2	0.282975	0.000019	0.000946	0.000006	0.282974	0.282785	0.033600	0.283250	0.038400	0.015	6.7	0.7	7.6	391.8	600.7
Zircon_56_GUE16-06	42.8	0.282973	0.000017	0.000542	0.000002	0.282973	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.6	7.6	390.5	604.2
Zircon_57_GUE16-06	44.4	0.283019	0.000022	0.001295	0.000052	0.283018	0.282785	0.033600	0.283250	0.038400	0.015	8.3	0.8	9.2	332.4	500.4

Zircon_58_GUE16-06	41.2	0.282981	0.000024	0.001881	0.000051	0.282980	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.8	7.8	393.1	589.4
Zircon_59_GUE16-06	43.9	0.282970	0.000023	0.001155	0.000012	0.282969	0.282785	0.033600	0.283250	0.038400	0.015	6.5	0.8	7.5	401.2	611.4
Zircon_60_GUE16-06	1129.0	0.282176	0.000020	0.000507	0.000013	0.282165	0.282785	0.033600	0.283250	0.038400	0.015	-21.5	0.7	3.4	1497.0	1723.6
Zircon_61_GUE16-06	46.2	0.282953	0.000021	0.000840	0.000008	0.282952	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.7	6.9	421.9	647.9
Zircon_62_GUE16-06	43.0	0.282981	0.000024	0.001533	0.000084	0.282980	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.8	7.8	389.4	587.7
Zircon_64_GUE16-06	44.9	0.282941	0.000020	0.000701	0.000016	0.282940	0.282785	0.033600	0.283250	0.038400	0.015	5.5	0.7	6.5	437.2	675.6
Zircon_65_GUE16-06	40.7	0.282972	0.000020	0.000994	0.000016	0.282971	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.7	7.5	396.6	608.5
Zircon_66_GUE16-06	42.4	0.282960	0.000020	0.001020	0.000007	0.282959	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.7	7.1	413.9	634.7
Zircon_67_GUE16-06	46.5	0.283011	0.000018	0.000799	0.000008	0.283010	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.6	9.0	339.4	516.3
Zircon_68_GUE16-06	43.9	0.282931	0.000028	0.000961	0.000054	0.282930	0.282785	0.033600	0.283250	0.038400	0.015	5.2	1.0	6.1	454.4	699.2
Zircon_69_GUE16-06	33.1	0.283018	0.000023	0.001594	0.000043	0.283017	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.8	8.9	336.6	509.6
Zircon_70_GUE16-06	34.7	0.283027	0.000017	0.001199	0.000022	0.283026	0.282785	0.033600	0.283250	0.038400	0.015	8.6	0.6	9.3	320.1	487.7
Zircon_71_GUE16-06	43.8	0.282981	0.000018	0.000905	0.000002	0.282980	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.6	7.9	382.9	586.1
Zircon_72_GUE16-06	45.3	0.282941	0.000022	0.001276	0.000039	0.282940	0.282785	0.033600	0.283250	0.038400	0.015	5.5	0.8	6.5	444.0	676.4
Zircon_75_GUE16-06	41.1	0.282978	0.000018	0.000912	0.000011	0.282977	0.282785	0.033600	0.283250	0.038400	0.015	6.8	0.6	7.7	387.2	594.5
Zircon_77_GUE16-06	45.0	0.282985	0.000030	0.003790	0.000140	0.282982	0.282785	0.033600	0.283250	0.038400	0.015	7.1	1.1	8.0	408.5	581.8
Zircon_78_GUE16-06	40.9	0.282975	0.000019	0.000533	0.000002	0.282975	0.282785	0.033600	0.283250	0.038400	0.015	6.7	0.7	7.6	387.6	600.8
Zircon_79_GUE16-06	42.5	0.282999	0.000033	0.003417	0.000098	0.282996	0.282785	0.033600	0.283250	0.038400	0.015	7.6	1.2	8.4	382.9	550.6
Zircon_80_GUE16-06	50.6	0.282899	0.000020	0.000771	0.000012	0.282898	0.282785	0.033600	0.283250	0.038400	0.015	4.0	0.7	5.1	497.3	767.1
Zircon_81_GUE16-06	48.2	0.282928	0.000027	0.002142	0.000041	0.282926	0.282785	0.033600	0.283250	0.038400	0.015	5.1	1.0	6.1	473.6	705.9
Zircon_82_GUE16-06	43.5	0.282929	0.000022	0.000811	0.000007	0.282928	0.282785	0.033600	0.283250	0.038400	0.015	5.1	0.8	6.0	455.5	703.7
Zircon_83_GUE16-06	46.5	0.283003	0.000020	0.001203	0.000018	0.283002	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.7	8.7	354.5	535.3
Zircon_84_GUE16-06	44.0	0.282971	0.000019	0.000631	0.000008	0.282970	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.7	7.5	394.2	608.1
Zircon_85_GUE16-06	43.0	0.282957	0.000022	0.000843	0.000011	0.282956	0.282785	0.033600	0.283250	0.038400	0.015	6.1	0.8	7.0	416.2	640.8
Zircon_86_GUE16-06	44.1	0.282972	0.000019	0.001198	0.000020	0.282971	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.7	7.6	398.8	606.9
Zircon_87_GUE16-06	43.9	0.282976	0.000022	0.000988	0.000017	0.282975	0.282785	0.033600	0.283250	0.038400	0.015	6.8	0.8	7.7	390.8	597.5
Zircon_88_GUE16-06	47.7	0.283022	0.000024	0.001420	0.000170	0.283021	0.282785	0.033600	0.283250	0.038400	0.015	8.4	0.8	9.4	329.2	491.9
Zircon_89_GUE16-06	41.7	0.282942	0.000024	0.001761	0.000056	0.282941	0.282785	0.033600	0.283250	0.038400	0.015	5.6	0.8	6.4	448.4	677.1
Zircon_90_GUE16-06	41.6	0.282976	0.000017	0.000818	0.000013	0.282975	0.282785	0.033600	0.283250	0.038400	0.015	6.8	0.6	7.7	389.1	598.6
Zircon_93_GUE16-06	41.3	0.282985	0.000018	0.000715	0.000002	0.282984	0.282785	0.033600	0.283250	0.038400	0.015	7.1	0.6	8.0	375.3	578.2
Zircon_95_GUE16-06	41.0	0.282999	0.000019	0.000492	0.000003	0.282999	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.7	8.5	353.5	546.3
Zircon_96_GUE16-06	44.3	0.282988	0.000024	0.001020	0.000090	0.282987	0.282785	0.033600	0.283250	0.038400	0.015	7.2	0.8	8.1	374.1	570.2
Zircon_97_GUE16-06	44.6	0.282979	0.000022	0.001428	0.000015	0.282978	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.8	7.8	391.2	591.2
Zircon_98_GUE16-06	42.0	0.282973	0.000025	0.003110	0.000130	0.282971	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.9	7.5	418.8	609.2
Zircon_99_GUE16-06	47.0	0.282951	0.000016	0.001296	0.000022	0.282950	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.6	6.9	429.9	652.9
Zircon_100_GUE16-06	49.6	0.282994	0.000019	0.001294	0.000024	0.282993	0.282785	0.033600	0.283250	0.038400	0.015	7.4	0.7	8.5	368.3	554.0
Zircon_101_GUE16-06	45.7	0.282981	0.000023	0.000943	0.000024	0.282980	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.8	7.9	383.3	585.1
Zircon_102_GUE16-06	42.0	0.282970	0.000022	0.000779	0.000006	0.282969	0.282785	0.033600	0.283250	0.038400	0.015	6.5	0.8	7.5	397.2	611.9
Zircon_104_GUE16-06	40.8	0.283012	0.000020	0.001279	0.000021	0.283011	0.282785	0.033600	0.283250	0.038400	0.015	8.0	0.7	8.9	342.3	518.3

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_t$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_1}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_1}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_C$	$\epsilon\text{Hf}(0)$	$\pm 2\text{SE } \epsilon\text{Hf}(0)$	$\epsilon\text{Hf}(t)$	T_{DM} (Ma)	T_{DM}^C (Ma)
GUE16-07 (Gr07*) Ensamblaje El Camalote, Suite Cuale-Macias, Complejo Artega																
Zircon_01_GUE16-07	51.4	0.282939	0.000025	0.001116	0.000071	0.282938	0.282785	0.033600	0.283250	0.038400	0.015	5.4	0.9	6.5	444.9	677.1
Zircon_02_GUE16-07	44.3	0.283017	0.000025	0.000874	0.000022	0.283016	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.9	9.2	331.5	504.2
Zircon_03_GUE16-07	274.0	0.282608	0.000021	0.000738	0.000007	0.282604	0.282785	0.033600	0.283250	0.038400	0.015	-6.3	0.7	-0.3	905.3	1286.5
Zircon_04_GUE16-07	48.2	0.282930	0.000023	0.001591	0.000015	0.282929	0.282785	0.033600	0.283250	0.038400	0.015	5.1	0.8	6.1	463.6	700.2
Zircon_05_GUE16-07	40.3	0.283001	0.000019	0.000689	0.000024	0.283000	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.7	8.5	352.5	542.5
Zircon_06_GUE16-07	40.1	0.283001	0.000023	0.001070	0.000003	0.283000	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.8	8.5	356.1	543.3
Zircon_07_GUE16-07	44.5	0.282828	0.000045	0.007096	0.000015	0.282822	0.282785	0.033600	0.283250	0.038400	0.015	1.5	1.6	2.3	717.2	942.6
Zircon_08_GUE16-07	38.5	0.282993	0.000018	0.000762	0.000016	0.282992	0.282785	0.033600	0.283250	0.038400	0.015	7.4	0.6	8.2	364.5	561.9
Zircon_09_GUE16-07	53.4	0.282922	0.000026	0.001604	0.000020	0.282920	0.282785	0.033600	0.283250	0.038400	0.015	4.8	0.9	6.0	475.3	715.4
Zircon_11_GUE16-07	165.3	0.282735	0.000022	0.001532	0.000016	0.282730	0.282785	0.033600	0.283250	0.038400	0.015	-1.8	0.8	1.7	743.0	1072.7

Zircon_12_GUE16-07	52.8	0.282921	0.000027	0.001339	0.000031	0.282920	0.282785	0.033600	0.283250	0.038400	0.015	4.8	1.0	5.9	473.4	717.4
Zircon_14_GUE16-07	161.5	0.282635	0.000020	0.000336	0.000008	0.282634	0.282785	0.033600	0.283250	0.038400	0.015	-5.3	0.7	-1.8	858.5	1290.7
Zircon_15_GUE16-07	51.7	0.282942	0.000027	0.001527	0.000051	0.282941	0.282785	0.033600	0.283250	0.038400	0.015	5.6	1.0	6.6	445.5	671.0
Zircon_16_GUE16-07	40.7	0.282995	0.000021	0.001063	0.000019	0.282994	0.282785	0.033600	0.283250	0.038400	0.015	7.4	0.7	8.3	364.6	556.5
Zircon_17_GUE16-07	1035.0	0.282184	0.000022	0.001759	0.000072	0.282150	0.282785	0.033600	0.283250	0.038400	0.015	-21.3	0.8	0.7	1536.0	1817.5
Zircon_18_GUE16-07	42.2	0.282992	0.000021	0.000938	0.000002	0.282991	0.282785	0.033600	0.283250	0.038400	0.015	7.3	0.7	8.2	367.6	562.2
Zircon_19_GUE16-07	40.6	0.282962	0.000026	0.001390	0.000032	0.282961	0.282785	0.033600	0.283250	0.038400	0.015	6.3	0.9	7.1	415.2	631.9
Zircon_20_GUE16-07	61.6	0.282889	0.000020	0.000537	0.000008	0.282888	0.282785	0.033600	0.283250	0.038400	0.015	3.7	0.7	5.0	508.3	782.5
Zircon_21_GUE16-07	40.9	0.282969	0.000026	0.002164	0.000026	0.282967	0.282785	0.033600	0.283250	0.038400	0.015	6.5	0.9	7.4	413.8	617.2
Zircon_23_GUE16-07	275.0	0.282786	0.000021	0.000943	0.000011	0.282781	0.282785	0.033600	0.283250	0.038400	0.015	0.0	0.7	6.0	659.4	889.0
Zircon_24_GUE16-07	53.1	0.282930	0.000026	0.001556	0.000031	0.282928	0.282785	0.033600	0.283250	0.038400	0.015	5.1	0.9	6.3	463.2	697.4
Zircon_25_GUE16-07	40.7	0.282995	0.000026	0.001155	0.000034	0.282994	0.282785	0.033600	0.283250	0.038400	0.015	7.4	0.9	8.3	365.5	556.7
Zircon_26_GUE16-07	1025.0	0.282235	0.000019	0.000389	0.000005	0.282227	0.282785	0.033600	0.283250	0.038400	0.015	-19.4	0.7	3.2	1411.5	1651.4
Zircon_28_GUE16-07	160.0	0.282512	0.000024	0.000467	0.000006	0.282511	0.282785	0.033600	0.283250	0.038400	0.015	-9.7	0.8	-6.2	1032.1	1566.6
Zircon_29_GUE16-07	50.2	0.282961	0.000024	0.001293	0.000012	0.282960	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.8	7.3	415.5	628.4
Zircon_30_GUE16-07	39.2	0.283044	0.000019	0.000606	0.000029	0.283044	0.282785	0.033600	0.283250	0.038400	0.015	9.2	0.7	10.0	291.2	445.5
Zircon_32_GUE16-07	51.4	0.282987	0.000018	0.000606	0.000026	0.282986	0.282785	0.033600	0.283250	0.038400	0.015	7.1	0.6	8.3	371.4	567.4
Zircon_33_GUE16-07	263.1	0.282890	0.000025	0.001046	0.000024	0.282885	0.282785	0.033600	0.283250	0.038400	0.015	3.7	0.9	9.4	513.7	662.6
Zircon_36_GUE16-07	55.3	0.282950	0.000026	0.001120	0.000026	0.282949	0.282785	0.033600	0.283250	0.038400	0.015	5.8	0.9	7.0	429.3	649.9
Zircon_37_GUE16-07	48.6	0.282986	0.000030	0.002018	0.000018	0.282984	0.282785	0.033600	0.283250	0.038400	0.015	7.1	1.1	8.1	387.3	574.2
Zircon_38_GUE16-07	51.8	0.282941	0.000017	0.001126	0.000029	0.282940	0.282785	0.033600	0.283250	0.038400	0.015	5.5	0.6	6.6	442.2	672.3
Zircon_39_GUE16-07	49.9	0.282959	0.000023	0.000742	0.000007	0.282958	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.8	7.2	412.3	631.9
Zircon_40_GUE16-07	51.3	0.282945	0.000026	0.001557	0.000029	0.282944	0.282785	0.033600	0.283250	0.038400	0.015	5.7	0.9	6.7	441.6	664.5
Zircon_41_GUE16-07	69.3	0.282886	0.000030	0.000763	0.000016	0.282885	0.282785	0.033600	0.283250	0.038400	0.015	3.6	1.1	5.1	515.5	785.2
Zircon_43_GUE16-07	40.0	0.282999	0.000025	0.001493	0.000018	0.282998	0.282785	0.033600	0.283250	0.038400	0.015	7.6	0.9	8.4	363.0	548.6
Zircon_44_GUE16-07	39.4	0.282993	0.000028	0.001318	0.000015	0.282992	0.282785	0.033600	0.283250	0.038400	0.015	7.4	0.8	8.2	369.9	562.3
Zircon_45_GUE16-07	879.0	0.282170	0.000016	0.000470	0.000039	0.282162	0.282785	0.033600	0.283250	0.038400	0.015	-21.7	0.6	-2.4	1503.8	1888.1
Zircon_46_GUE16-07	52.5	0.282910	0.000026	0.001439	0.000031	0.282909	0.282785	0.033600	0.283250	0.038400	0.015	4.4	0.9	5.5	490.5	742.6
Zircon_47_GUE16-07	53.2	0.282888	0.000028	0.002663	0.000076	0.282885	0.282785	0.033600	0.283250	0.038400	0.015	3.6	1.0	4.7	539.8	794.6
Zircon_49_GUE16-07	44.1	0.283016	0.000021	0.000765	0.000023	0.283015	0.282785	0.033600	0.283250	0.038400	0.015	8.2	0.7	9.1	332.0	506.4
Zircon_50_GUE16-07	53.2	0.282921	0.000028	0.001800	0.000012	0.282919	0.282785	0.033600	0.283250	0.038400	0.015	4.8	1.0	5.9	479.3	718.2
Zircon_51_GUE16-07	50.8	0.282945	0.000020	0.000941	0.000015	0.282944	0.282785	0.033600	0.283250	0.038400	0.015	5.7	0.7	6.8	434.3	663.5
Zircon_52_GUE16-07	1006.0	0.282226	0.000022	0.000718	0.000002	0.282212	0.282785	0.033600	0.283250	0.038400	0.015	-19.8	0.8	2.3	1436.1	1696.9
Zircon_53_GUE16-07	1032.0	0.282202	0.000019	0.000580	0.000019	0.282191	0.282785	0.033600	0.283250	0.038400	0.015	-20.6	0.7	2.1	1464.0	1728.5
Zircon_54_GUE16-07	53.0	0.282924	0.000030	0.002239	0.000006	0.282922	0.282785	0.033600	0.283250	0.038400	0.015	4.9	1.1	6.0	480.7	712.5
Zircon_55_GUE16-07	49.4	0.282987	0.000020	0.000540	0.000006	0.282987	0.282785	0.033600	0.283250	0.038400	0.015	7.1	0.7	8.2	370.8	568.4
Zircon_58_GUE16-07	152.3	0.282578	0.000024	0.000789	0.000004	0.282576	0.282785	0.033600	0.283250	0.038400	0.015	-7.3	0.8	-4.0	948.5	1426.4
Zircon_60_GUE16-07	38.2	0.282905	0.000032	0.002095	0.000067	0.282904	0.282785	0.033600	0.283250	0.038400	0.015	4.2	1.1	5.0	506.6	763.2
Zircon_61_GUE16-07	52.0	0.282832	0.000038	0.002421	0.000076	0.282830	0.282785	0.033600	0.283250	0.038400	0.015	1.7	1.3	2.7	618.7	920.9
Zircon_62_GUE16-07	55.1	0.282970	0.000021	0.000518	0.000019	0.282969	0.282785	0.033600	0.283250	0.038400	0.015	6.5	0.7	7.7	394.4	603.4
Zircon_63_GUE16-07	937.0	0.282452	0.000023	0.001514	0.000048	0.282425	0.282785	0.033600	0.283250	0.038400	0.015	-11.8	0.8	8.3	1146.4	1266.7
Zircon_64_GUE16-07	38.3	0.282972	0.000026	0.001722	0.000019	0.282971	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.9	7.4	404.4	611.1
Zircon_65_GUE16-07	54.2	0.282955	0.000023	0.001137	0.000017	0.282954	0.282785	0.033600	0.283250	0.038400	0.015	6.0	0.8	7.2	422.4	639.3
Zircon_66_GUE16-07	40.4	0.282974	0.000023	0.001156	0.000021	0.282973	0.282785	0.033600	0.283250	0.038400	0.015	6.7	0.8	7.5	395.5	604.4
Zircon_67_GUE16-07	273.9	0.282631	0.000025	0.001132	0.000015	0.282625	0.282785	0.033600	0.283250	0.038400	0.015	-5.4	0.9	0.4	882.3	1239.7
Zircon_68_GUE16-07	2855.0	0.280971	0.000040	0.001617	0.000021	0.280882	0.282785	0.033600	0.283250	0.038400	0.015	-64.1	1.4	-2.2	3219.8	3427.4
Zircon_69_GUE16-07	49.8	0.282958	0.000024	0.000914	0.000003	0.282957	0.282785	0.033600	0.283250	0.038400	0.015	6.1	0.8	7.2	415.6	634.6
Zircon_70_GUE16-07	1156.0	0.282133	0.000022	0.000704	0.000023	0.282118	0.282785	0.033600	0.283250	0.038400	0.015	-23.1	0.8	2.3	1564.1	1811.9
Zircon_71_GUE16-07	55.8	0.282925	0.000029	0.001490	0.000007	0.282923	0.282785	0.033600	0.283250	0.038400	0.015	5.0	1.0	6.1	469.6	707.0
Zircon_75_GUE16-07	39.9	0.283009	0.000021	0.000777	0.000002	0.283008	0.282785	0.033600	0.283250	0.038400	0.015	7.9	0.7	8.8	342.0	524.8
Zircon_76_GUE16-07	1113.0	0.282133	0.000025	0.000965	0.000004	0.282113	0.282785	0.033600	0.283250	0.038400	0.015	-23.1	0.9	1.2	1574.8	1849.9
Zircon_77_GUE16-07	257.9	0.282790	0.000019	0.000495	0.000003	0.282788	0.282785	0.033600	0.283250	0.038400	0.015	0.2	0.7	5.8	646.1	885.3
Zircon_78_GUE16-07	206.9	0.282707	0.000024	0.001865	0.000019	0.282700	0.282785	0.033600	0.283250	0.038400	0.015	-2.8	0.8	1.6	790.2	1114.9
Zircon_79_GUE16-07	53.2	0.282950	0.000026	0.000947	0.000019	0.282949	0.282785	0.033600	0.283250	0.038400	0.015	5.8	0.9	7.0	427.3	650.8

Zircon_80_GUE16-07	55.4	0.282951	0.000026	0.000985	0.000016	0.282950	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.9	7.1	426.3	647.3
Zircon_82_GUE16-07	62.4	0.282893	0.000020	0.000438	0.000013	0.282892	0.282785	0.033600	0.283250	0.038400	0.015	3.8	0.7	5.2	501.3	772.7
Zircon_83_GUE16-07	50.5	0.282914	0.000027	0.001491	0.000064	0.282913	0.282785	0.033600	0.283250	0.038400	0.015	4.6	1.0	5.6	485.4	734.9
Zircon_85_GUE16-07	42.3	0.282979	0.000022	0.000961	0.000005	0.282978	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.8	7.8	386.3	591.6
Zircon_86_GUE16-07	39.3	0.283037	0.000024	0.001186	0.000023	0.283036	0.282785	0.033600	0.283250	0.038400	0.015	8.9	0.8	9.8	305.7	462.3
Zircon_87_GUE16-07	54.0	0.282849	0.000036	0.003579	0.000022	0.282845	0.282785	0.033600	0.283250	0.038400	0.015	2.3	1.3	3.3	613.3	884.2
Zircon_88_GUE16-07	52.1	0.282914	0.000029	0.001792	0.000035	0.282912	0.282785	0.033600	0.283250	0.038400	0.015	4.6	1.0	5.7	489.4	734.6
Zircon_89_GUE16-07	40.5	0.282986	0.000023	0.000759	0.000007	0.282985	0.282785	0.033600	0.283250	0.038400	0.015	7.1	0.8	8.0	374.3	576.5
Zircon_90_GUE16-07	51.8	0.282827	0.000034	0.003707	0.000050	0.282823	0.282785	0.033600	0.283250	0.038400	0.015	1.5	1.2	2.5	649.1	935.0
Zircon_91_GUE16-07	52.5	0.282923	0.000025	0.001410	0.000028	0.282922	0.282785	0.033600	0.283250	0.038400	0.015	4.9	0.9	6.0	471.4	713.2
Zircon_92_GUE16-07	1088.0	0.282221	0.000022	0.000578	0.000019	0.282209	0.282785	0.033600	0.283250	0.038400	0.015	-19.9	0.8	4.0	1437.8	1652.2
Zircon_93_GUE16-07	52.0	0.282912	0.000027	0.001049	0.000022	0.282911	0.282785	0.033600	0.283250	0.038400	0.015	4.5	1.0	5.6	482.5	737.6
Zircon_94_GUE16-07	728.0	0.282166	0.000017	0.000344	0.000002	0.282161	0.282785	0.033600	0.283250	0.038400	0.015	-21.9	0.6	-5.8	1504.4	1984.9
Zircon_95_GUE16-07	1066.0	0.282287	0.000020	0.000595	0.000028	0.282275	0.282785	0.033600	0.283250	0.038400	0.015	-17.6	0.7	6.3	1347.3	1507.5
Zircon_96_GUE16-07	285.5	0.282841	0.000022	0.001161	0.000004	0.282835	0.282785	0.033600	0.283250	0.038400	0.015	2.0	0.8	8.1	585.1	761.5
Zircon_98_GUE16-07	164.6	0.282402	0.000038	0.003837	0.000037	0.282390	0.282785	0.033600	0.283250	0.038400	0.015	-13.5	1.3	-10.3	1298.3	1830.8
Zircon_99_GUE16-07	39.7	0.282926	0.000028	0.001974	0.000013	0.282925	0.282785	0.033600	0.283250	0.038400	0.015	5.0	1.0	5.8	474.3	714.7
Zircon_100_GUE16-07	249.3	0.282807	0.000017	0.000470	0.000003	0.282805	0.282785	0.033600	0.283250	0.038400	0.015	0.8	0.6	6.2	621.9	852.0
Zircon_101_GUE16-07	51.2	0.282895	0.000026	0.001177	0.000040	0.282894	0.282785	0.033600	0.283250	0.038400	0.015	3.9	0.9	5.0	508.4	776.7
Zircon_103_GUE16-07	52.1	0.282938	0.000026	0.001177	0.000029	0.282937	0.282785	0.033600	0.283250	0.038400	0.015	5.4	0.9	6.5	447.1	679.0

SAMPLE	Age (Ma)	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$	2SE	$^{176}\text{Hf}/^{177}\text{Hf}_t$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}_1}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}_1}$	$^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$	$^{176}\text{Lu}/^{177}\text{Hf}_C$	$\epsilon\text{Hf}(0)$	$\pm 2\text{SE } \epsilon\text{Hf}(0)$	$\epsilon\text{Hf}(0)$	$T_{\text{DM}} \text{ (Ma)}$	$T_{\text{DM}}^C \text{ (Ma)}$
BAL17-01 (Bal*) Batolito Jilotlán, Suite Zihuatanejo, Complejo Arteaga																
Zircon_02_BAL17-01	106.3	0.282919	0.000020	0.000827	0.000028	0.282917	0.282785	0.033600	0.283250	0.038400	0.015	4.7	0.7	7.0	469.8	688.8
Zircon_03_BAL17-01	96.1	0.282993	0.000026	0.002142	0.000014	0.282989	0.282785	0.033600	0.283250	0.038400	0.015	7.4	0.9	9.4	378.3	532.8
Zircon_06_BAL17-01	56.9	0.282937	0.000019	0.000624	0.000010	0.282936	0.282785	0.033600	0.283250	0.038400	0.015	5.4	0.7	6.6	442.0	677.2
Zircon_07_BAL17-01	52.9	0.282964	0.000020	0.000790	0.000008	0.282963	0.282785	0.033600	0.283250	0.038400	0.015	6.3	0.7	7.5	405.8	618.9
Zircon_08_BAL17-01	117.8	0.282972	0.000020	0.000887	0.000016	0.282970	0.282785	0.033600	0.283250	0.038400	0.015	6.6	0.7	9.2	395.5	562.2
Zircon_09_BAL17-01	118.0	0.282981	0.000019	0.001012	0.000023	0.282979	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.7	9.5	384.0	542.4
Zircon_11_BAL17-01	859.0	0.282231	0.000022	0.000297	0.000007	0.282226	0.282785	0.033600	0.283250	0.038400	0.015	-19.6	0.8	-0.6	1413.6	1759.2
Zircon_15_BAL17-01	107.1	0.282930	0.000022	0.000784	0.000018	0.282928	0.282785	0.033600	0.283250	0.038400	0.015	5.1	0.8	7.5	453.7	663.2
Zircon_16_BAL17-01	58.3	0.282906	0.000022	0.001211	0.000030	0.282905	0.282785	0.033600	0.283250	0.038400	0.015	4.3	0.8	5.5	493.2	747.8
Zircon_17_BAL17-01	116.0	0.282967	0.000020	0.000868	0.000029	0.282965	0.282785	0.033600	0.283250	0.038400	0.015	6.4	0.7	8.9	402.4	574.6
Zircon_18_BAL17-01	122.7	0.283015	0.000023	0.001253	0.000022	0.283012	0.282785	0.033600	0.283250	0.038400	0.015	8.1	0.8	10.8	337.8	463.7
Zircon_19_BAL17-01	84.6	0.282957	0.000021	0.001100	0.000008	0.282955	0.282785	0.033600	0.283250	0.038400	0.015	6.1	0.7	7.9	419.1	616.8
Zircon_20_BAL17-01	61.3	0.282909	0.000020	0.000914	0.000022	0.282908	0.282785	0.033600	0.283250	0.038400	0.015	4.4	0.7	5.7	485.0	738.5
Zircon_22_BAL17-01	115.0	0.283002	0.000021	0.001097	0.000038	0.283000	0.282785	0.033600	0.283250	0.038400	0.015	7.7	0.7	10.1	354.9	497.0
Zircon_24_BAL17-01	55.9	0.282959	0.000025	0.001189	0.000067	0.282958	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.9	7.4	417.2	629.4
Zircon_25_BAL17-01	111.4	0.282947	0.000022	0.000993	0.000004	0.282945	0.282785	0.033600	0.283250	0.038400	0.015	5.7	0.8	8.1	432.1	623.2
Zircon_26_BAL17-01	139.0	0.282966	0.000020	0.000912	0.000026	0.282964	0.282785	0.033600	0.283250	0.038400	0.015	6.4	0.7	9.4	404.2	563.3
Zircon_27_BAL17-01	116.7	0.282952	0.000022	0.001015	0.000015	0.282950	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.8	8.4	425.3	608.8
Zircon_30_BAL17-01	111.1	0.282967	0.000021	0.000700	0.000024	0.282966	0.282785	0.033600	0.283250	0.038400	0.015	6.4	0.7	8.9	400.6	576.7
Zircon_32_BAL17-01	115.9	0.282988	0.000027	0.001560	0.000100	0.282985	0.282785	0.033600	0.283250	0.038400	0.015	7.2	1.0	9.6	379.6	530.4
Zircon_33_BAL17-01	56.5	0.282974	0.000019	0.001040	0.000039	0.282973	0.282785	0.033600	0.283250	0.038400	0.015	6.7	0.7	7.9	394.2	594.7
Zircon_34_BAL17-01	55.5	0.282805	0.000018	0.000635	0.000019	0.282804	0.282785	0.033600	0.283250	0.038400	0.015	0.7	0.6	1.9	627.5	975.6
Zircon_35_BAL17-01	58.3	0.282980	0.000015	0.000476	0.000004	0.282979	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.5	8.2	380.0	578.7
Zircon_36_BAL17-01	56.5	0.282947	0.000019	0.000756	0.000019	0.282946	0.282785	0.033600	0.283250	0.038400	0.015	5.7	0.7	7.0	429.4	655.1
Zircon_37_BAL17-01	58.7	0.282937	0.000019	0.001030	0.000010	0.282936	0.282785	0.033600	0.283250	0.038400	0.015	5.4	0.7	6.6	446.7	677.1
Zircon_38_BAL17-01	59.5	0.282970	0.000016	0.000396	0.000011	0.282970	0.282785	0.033600	0.283250	0.038400	0.015	6.5	0.6	7.8	393.2	600.4
Zircon_39_BAL17-01	119.3	0.282945	0.000019	0.000851	0.000011	0.282943	0.282785	0.033600	0.283250	0.038400	0.015	5.7	0.7	8.2	433.3	623.3
Zircon_41_BAL17-01	59.7	0.282960	0.000021	0.000546	0.000013	0.282959	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.7	7.5	408.8	623.3
Zircon_42_BAL17-01	59.3	0.282991	0.000016	0.000857	0.000037	0.282990	0.282785	0.033600	0.283250	0.038400	0.015	7.3	0.6	8.6	368.2	554.1

Zircon_44_BAL17-01	61.7	0.282967	0.000019	0.000477	0.000019	0.282966	0.282785	0.033600	0.283250	0.038400	0.015	6.4	0.7	7.8	398.2	606.0
Zircon_45_BAL17-01	106.0	0.282951	0.000018	0.001201	0.000028	0.282949	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.6	8.1	428.8	618.2
Zircon_47_BAL17-01	84.4	0.282940	0.000022	0.000768	0.000018	0.282939	0.282785	0.033600	0.283250	0.038400	0.015	5.5	0.8	7.3	439.4	654.2
Zircon_48_BAL17-01	60.2	0.282960	0.000018	0.000339	0.000006	0.282960	0.282785	0.033600	0.283250	0.038400	0.015	6.2	0.6	7.5	406.6	622.4
Zircon_49_BAL17-01	115.3	0.282981	0.000017	0.000935	0.000035	0.282979	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.6	9.4	383.2	543.6
Zircon_50_BAL17-01	55.7	0.282947	0.000020	0.000645	0.000036	0.282946	0.282785	0.033600	0.283250	0.038400	0.015	5.7	0.7	6.9	428.1	655.3
Zircon_52_BAL17-01	110.1	0.282981	0.000024	0.001537	0.000020	0.282978	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.8	9.3	389.4	549.5
Zircon_55_BAL17-01	466.6	0.282556	0.000024	0.000724	0.000034	0.282550	0.282785	0.033600	0.283250	0.038400	0.015	-8.1	0.8	2.1	977.6	1287.0
Zircon_57_BAL17-01	116.1	0.282937	0.000018	0.000836	0.000018	0.282935	0.282785	0.033600	0.283250	0.038400	0.015	5.4	0.6	7.9	444.5	642.2
Zircon_59_BAL17-01	56.0	0.282975	0.000010	0.001011	0.000008	0.282974	0.282785	0.033600	0.283250	0.038400	0.015	6.7	0.3	7.9	391.9	591.8
Zircon_66_BAL17-01	61.4	0.282944	0.000018	0.000494	0.000009	0.282943	0.282785	0.033600	0.283250	0.038400	0.015	5.6	0.6	7.0	430.6	658.3
Zircon_67_BAL17-01	25.4	0.282870	0.000021	0.001091	0.000024	0.282869	0.282785	0.033600	0.283250	0.038400	0.015	3.0	0.7	3.6	542.8	848.0
Zircon_69_BAL17-01	115.7	0.282976	0.000021	0.001156	0.000017	0.282974	0.282785	0.033600	0.283250	0.038400	0.015	6.8	0.7	9.2	392.6	555.8
Zircon_70_BAL17-01	56.4	0.282921	0.000022	0.000823	0.000018	0.282920	0.282785	0.033600	0.283250	0.038400	0.015	4.8	0.8	6.0	466.9	714.1
Zircon_71_BAL17-01	117.1	0.282946	0.000019	0.000742	0.000004	0.282944	0.282785	0.033600	0.283250	0.038400	0.015	5.7	0.7	8.2	430.6	620.8
Zircon_72_BAL17-01	56.6	0.282952	0.000018	0.000933	0.000025	0.282951	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.6	7.1	424.3	644.2
Zircon_73_BAL17-01	121.8	0.282977	0.000016	0.000910	0.000021	0.282975	0.282785	0.033600	0.283250	0.038400	0.015	6.8	0.6	9.4	388.6	548.6
Zircon_74_BAL17-01	120.1	0.282956	0.000018	0.001038	0.000044	0.282954	0.282785	0.033600	0.283250	0.038400	0.015	6.0	0.6	8.6	419.8	597.9
Zircon_77_BAL17-01	58.9	0.282885	0.000023	0.001310	0.000140	0.282884	0.282785	0.033600	0.283250	0.038400	0.015	3.5	0.8	4.8	524.5	795.1
Zircon_80_BAL17-01	101.6	0.282967	0.000024	0.001470	0.000110	0.282964	0.282785	0.033600	0.283250	0.038400	0.015	6.4	0.8	8.6	408.9	585.8
Zircon_81_BAL17-01	85.1	0.282915	0.000021	0.000684	0.000011	0.282914	0.282785	0.033600	0.283250	0.038400	0.015	4.6	0.7	6.4	473.6	710.0
Zircon_84_BAL17-01	122.1	0.282974	0.000020	0.001024	0.000027	0.282972	0.282785	0.033600	0.283250	0.038400	0.015	6.7	0.7	9.3	394.1	555.9
Zircon_87_BAL17-01	59.0	0.282954	0.000022	0.000760	0.000007	0.282953	0.282785	0.033600	0.283250	0.038400	0.015	6.0	0.8	7.3	419.6	637.8
Zircon_88_BAL17-01	60.1	0.282951	0.000021	0.000998	0.000020	0.282950	0.282785	0.033600	0.283250	0.038400	0.015	5.9	0.7	7.2	426.5	644.5
Zircon_93_BAL17-01	121.7	0.282950	0.000023	0.000883	0.000048	0.282948	0.282785	0.033600	0.283250	0.038400	0.015	5.8	0.8	8.5	426.6	609.7
Zircon_94_BAL17-01	1067.8	0.282096	0.000018	0.001086	0.000006	0.282074	0.282785	0.033600	0.283250	0.038400	0.015	-24.4	0.6	-1.2	1631.4	1963.7
Zircon_95_BAL17-01	124.9	0.282898	0.000025	0.001159	0.000040	0.282895	0.282785	0.033600	0.283250	0.038400	0.015	4.0	0.9	6.7	503.9	726.8
Zircon_96_BAL17-01	70.9	0.282909	0.000018	0.001159	0.000058	0.282907	0.282785	0.033600	0.283250	0.038400	0.015	4.4	0.6	5.9	488.2	733.5
Zircon_97_BAL17-01	66.9	0.282986	0.000022	0.000606	0.000015	0.282985	0.282785	0.033600	0.283250	0.038400	0.015	7.1	0.8	8.6	372.8	560.2
Zircon_99_BAL17-01	70.2	0.282906	0.000023	0.001095	0.000048	0.282905	0.282785	0.033600	0.283250	0.038400	0.015	4.3	0.8	5.8	491.6	740.5
Zircon_104_BAL17-01	58.1	0.282980	0.000024	0.001117	0.000012	0.282979	0.282785	0.033600	0.283250	0.038400	0.015	6.9	0.8	8.1	386.5	580.4

$^{176}\text{Hf}/^{177}\text{Hf}_{\text{zircon}}$ y $^{176}\text{Lu}/^{177}\text{Hf}_{\text{zircon}}$ representan los valores medidos de las muestras de zircón y "2SE" es el *standard error*. $^{176}\text{Hf}/^{177}\text{Hf}_t$ es el valor calculado de la relación isotópica, respecto al tiempo. $^{176}\text{Hf}/^{177}\text{Hf}_{\text{CHUR}}$ y $^{176}\text{Lu}/^{177}\text{Hf}_{\text{CHUR}}$ representan los valores isotópicos del reservorio condrítico uniforme (CHUR, por sus siglas en inglés), propuestos por [Bouvier et al., \(2008\)](#). $^{176}\text{Hf}/^{177}\text{Hf}_{\text{DM}}$ y $^{176}\text{Lu}/^{177}\text{Hf}_{\text{DM}}$ son los valores del manto empobrecido (DM, por sus siglas en inglés) de acuerdo con [Blichert-Toft y Albarede \(1997\)](#). $^{176}\text{Lu}/^{177}\text{Hf}_C$ es el valor considerado como promedio de la corteza continental, de acuerdo con [Griffin et al., \(2002\)](#). Las notaciones $\epsilon\text{Hf}(0)$ y $\epsilon\text{Hf}(t)$, representan los valores de épsilon Hf actuales y los valores de épsilon Hf respecto al tiempo, sucesivamente. T_{DM} (Ma), edad modelo Hf en una etapa, obtenida a partir de la relación $^{176}\text{Lu}/^{177}\text{Hf}$ medida en el zircón. $T_{\text{DM}}^{C^*}$ (Ma), edad modelo cortical de Hf o en dos etapas, obtenida a partir del promedio de la corteza continental, relación $^{176}\text{Lu}/^{177}\text{Hf}_C = 0.015$. En el presente trabajo, el valor de la constante de decaimiento de ^{176}Lu utilizada para los cálculos es de 1.867×10^{-11} años, propuesta por [Söderlund et al., \(2004\)](#).

Apéndice 5. Datos Analíticos de Elementos Traza en zircón obtenidos por LA-ICPMS

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
CHI-15-01 (Chi*)	Batolito Puerto Vallarta, Suite Cuale Macías																			
Zircon-002_CHI15-01	7.63	902	0.96		10.37	0.039	0.76	2.0	0.703	13.9	5.4	69.3	29.3	145.8	340	75.3	7600	2.470	93	194.0
Zircon-003_CHI15-01	8.26	1410	0.77	0.110	9.59	0.215	3.70	6.5	2.250	34.9	11.2	132.0	49.4	221.0	424	88.0	7670	2.798	124	222.0
Zircon-004_CHI15-01	12.12	490	0.82		9.05	0.040	0.89	1.8	0.630	10.6	3.4	41.3	16.1	75.4	158.2	35.7	7410	2.658	82.4	175.6
Zircon-005_CHI15-01	8.69	1072	2.53	1.680	16.6	0.580	3.76	3.5	0.590	19.0	6.8	86.8	35.7	171.4	367	78.7	8440	3.800	111.8	308.0
Zircon-006_CHI15-01	9.36	1190	1.12	0.310	11.6	0.186	2.18	3.9	1.410	21.5	8.0	99.0	40.1	189.0	421	91.6	6350	2.975	107	226.0
Zircon-007_CHI15-01	6.91	843	1.59		5.59	0.025	0.60	2.0	0.137	13.8	5.1	67.6	28.5	136.3	300	63.3	8400	2.405	90.8	227.0
Zircon-008_CHI15-01	6.89	1562	4.57	0.002	15.1	0.038	0.89	3.3	0.180	24.0	9.5	127.0	52.7	253.8	527	109.7	9250	8.175	212	651.0
Zircon-009_CHI15-01	14.60	1402	2.08	1.540	40.3	0.533	4.76	6.3	3.160	27.3	8.8	107.8	44.5	219.8	549	127.2	5910	15.975	775	1175.0
Zircon-010_CHI15-01	6.94	1090	1.17	0.050	17.7	0.094	2.00	4.4	1.240	24.1	7.7	92.0	36.1	167.0	347	74.0	8320	8.975	345	595.0
Zircon-011_CHI15-01	13.08	743	0.66	0.030	9.79	0.116	2.31	4.4	0.950	20.1	6.2	67.8	24.7	108.0	204	41.1	8070	2.548	118.7	185.4
Zircon-012_CHI15-01	8.19	1407	2.54	0.007	16.1	0.132	2.18	4.6	0.980	25.7	9.3	116.3	46.0	221.0	462	99.2	8490	1.245	196.9	377.0
Zircon-014_CHI15-01	15.50	2060	5.40	18.200	74.2	8.160	45.60	18.7	1.650	60.1	18.0	204.0	73.7	316.0	566	113.9	6860	11.850	700	899.0
Zircon-015_CHI15-01	9.70	1943	2.44	0.460	12.6	0.349	2.97	5.7	1.470	36.4	13.2	163.7	65.4	294.0	585	120.1	8010	6.250	210	509.0
Zircon-016_CHI15-01	8.09	1124	4.17	0.017	17.52	0.047	0.85	3.3	0.291	20.6	7.7	96.7	38.0	178.4	360	73.6	8730	7.975	241.2	619.0
Zircon-017_CHI15-01	10.54	521	0.60	0.014	4.62	0.055	0.94	1.7	0.552	9.8	3.5	41.3	16.1	79.6	182.5	40.4	7400	1.283	52.4	115.4
Zircon-019_CHI15-01	19.70	502	0.70	14.000	34	3.600	14.40	4.3	0.590	11.0	3.4	37.3	15.3	76.5	191.8	45.1	9770	2.308	81.7	225.0
Zircon-020_CHI15-01	7.72	1772	1.17	0.141	10.08	0.273	4.32	7.8	1.780	40.8	13.4	157.7	60.2	270.0	536	110.6	6760	6.650	229	491.0
Zircon-021_CHI15-01	10.69	854	1.85	10.100	33.4	3.600	18.20	6.2	0.428	19.3	6.4	75.6	29.7	134.2	251.4	52.2	8340	4.743	127.8	370.0
Zircon-022_CHI15-01	11.80	598	0.71	7.500	26.5	2.370	8.40	3.0	1.060	12.3	4.0	46.9	19.1	93.3	223.9	52.2	7880	3.843	129.9	268.0
Zircon-023_CHI15-01	7.99	1631	7.00	1.180	24.5	0.400	3.11	4.1	0.323	25.2	9.4	126.9	53.3	258.0	551	117.4	9620	7.125	189	583.0
Zircon-024_CHI15-01	8.17	664	0.91	1.060	7.2	0.310	1.84	1.6	0.452	9.6	3.6	50.1	21.5	107.6	256.7	58.2	7600	2.283	48	174.0
Zircon-027_CHI15-01	7.56	514	0.93	0.074	7.48	0.033	0.55	1.1	0.443	7.4	2.8	36.0	15.5	81.7	221	53.5	8450	5.788	144.3	412.0
Zircon-028_CHI15-01	11.16	1414	0.62	0.019	7.49	0.176	3.12	5.9	1.250	33.8	11.4	133.3	48.7	212.3	370	75.5	7410	1.598	115.7	146.2
Zircon-029_CHI15-01	14.70	488	1.00	13.500	31.8	2.580	10.90	2.7	0.499	8.1	2.8	34.6	14.7	79.5	209.6	49.4	9560	4.703	103.4	348.0
Zircon-030_CHI15-01	13.60	677	0.65	8.600	26.6	2.600	11.10	4.5	0.827	15.7	4.9	56.8	21.6	99.0	217.5	47.2	8140	3.348	115.8	285.0
Zircon-031_CHI15-01	8.46	4250	4.74	0.143	26.9	0.630	11.80	22.0	2.330	107.0	34.5	397.0	148.7	642.0	1222	258.0	6520	16.900	1190	1500.0
Zircon-033_CHI15-01	7.80	1480	1.64	0.018	18.5	0.176	2.92	5.9	1.040	31.5	10.6	128.0	49.1	228.0	467	98.0	6660	6.250	360	459.0
Zircon-034_CHI15-01	6.75	2310	2.60	0.064	4.86	0.071	1.26	4.4	0.277	31.9	13.9	186.1	76.7	365.0	746	155.8	9490	9.400	201	850.0
Zircon-035_CHI15-01	9.52	1874	3.72	0.021	18.3	0.089	2.12	6.1	1.370	40.1	14.3	170.4	64.1	283.0	511	105.0	6850	13.400	764	1034.0
Zircon-036_CHI15-01	8.84	1590	0.98		12.9	0.234	4.41	8.3	2.960	39.4	13.1	149.0	56.5	245.0	461	94.0	6950	2.800	136	221.0
Zircon-037_CHI15-01	7.87	706	1.05	0.010	6.32	0.016	0.44	1.3	0.368	9.1	3.8	52.3	22.1	113.3	271	60.2	8670	2.713	59	216.0
Zircon-038_CHI15-01	9.30	452	0.69		4.53	0.025	0.74	1.2	0.445	7.2	2.7	33.1	14.3	71.5	170	39.1	7470	2.120	61.1	159.2
Zircon-039_CHI15-01	7.60	1335	2.08		9.45	0.103	1.76	4.4	0.661	26.4	9.4	111.1	43.5	201.5	411	87.4	8340	8.475	300	724.0
Zircon-041_CHI15-01	6.86	2630	3.51		22.2	0.131	2.49	8.2	0.354	51.3	18.3	230.0	88.3	397.0	748	153.9	9310	11.350	364	860.0
Zircon-042_CHI15-01	6.74	557	1.32		7.11	0.014	0.30	0.8	0.141	6.9	2.8	39.3	17.3	89.1	224.4	50.5	8830	5.790	131.4	406.0
Zircon-043_CHI15-01	7.95	568	0.57	1.250	9.6	0.310	1.75	1.5	0.540	9.5	3.2	42.7	17.7	88.9	223	52.7	8070	5.808	162	398.0
Zircon-044_CHI15-01	20.90	727	0.81	25.900	61	6.100	28.30	6.8	1.190	16.5	4.9	56.9	23.1	110.2	265	60.4	8550	4.050	138	292.0
Zircon-046_CHI15-01	9.20	377	0.76		9.03	0.010	0.35	0.9	0.236	7.0	2.5	31.6	12.0	55.9	127.8	27.6	7740	2.148	62.7	142.7
Zircon-047_CHI15-01	7.43	1005	1.71	0.014	8.34	0.050	0.89	2.1	0.474	15.8	6.2	80.2	32.5	157.5	340	74.2	7310	0.993	86	207.0
Zircon-048_CHI15-01	10.41	1665	1.32	0.013	2.14	0.188	3.82	7.8	0.653	44.8	14.3	164.1	60.8	258.9	433	87.4	7380	5.500	113.7	193.0
Zircon-049_CHI15-01	7.04	1242	3.02	0.007	11.63	0.046	1.06	3.1	0.245	20.9	8.1	105.2	42.1	195.9	386	80.4	8060	6.818	206.4	482.0
Zircon-050_CHI15-01	6.62	934	1.97		6.08	0.005	0.44	1.5	0.258	11.7	5.2	69.8	30.5	150.5	342	75.4	8900	7.400	144.6	572.0
Zircon-051_CHI15-01	8.06	326	0.76	0.007	4.23	0.024	0.34	0.8	0.185	4.8	1.7	22.1	9.5	50.3	141.4	34.2	8860	3.015	82.5	272.0
Zircon-052_CHI15-01	13.44	708	0.70		10.21	0.119	2.59	4.7	0.767	21.6	6.4	66.6	23.6	98.7	179.8	35.8	8420	1.910	85.7	130.3
Zircon-053_CHI15-01	13.18	662	0.81		6.33	0.064	1.39	2.8	0.526	16.1	5.1	58.9	22.4	98.7	189.6	38.5	7290	1.725	63.4	134.5
Zircon-054_CHI15-01	10.86	1601	1.60	3.100	17.4	1.060	8.70	9.1	2.230	41.5	12.9	145.1	54.4	242.9	455	92.8	7020	1.010	213.2	291.2

Zircon-055_CHI15-01	18.90	688	0.57	19.400	46	4.000	15.60	5.2	1.260	15.6	5.0	55.6	22.0	107.3	250.8	57.8	8900	4.845	170.5	363.0
Zircon-056_CHI15-01	6.61	1347	5.51		25.3	0.073	1.62	4.1	0.420	23.6	8.7	109.7	43.4	210.0	455	94.8	7690	8.200	282.9	508.0
Zircon-057_CHI15-01	9.43	411	0.83	0.004	8.66	0.026	0.63	1.1	0.551	6.5	2.5	30.7	12.5	60.6	153	36.2	7660	2.945	85	222.0
Zircon-058_CHI15-01	10.44	1132	3.06	0.019	14.2	0.064	0.62	2.3	0.590	15.0	6.5	85.2	36.4	181.0	421	90.8	9210	4.700	130	380.0
Zircon-059_CHI15-01	8.01	2290	3.04	0.148	46.6	0.460	6.30	11.9	2.790	60.0	19.2	215.0	77.0	336.0	616	123.0	8040	22.000	1180	1470.0
Zircon-060_CHI15-01	7.53	709	1.06		2.96	0.014	0.46	1.5	0.280	10.9	4.4	57.4	22.9	112.8	239	51.3	7980	2.450	44	191.0
Zircon-061_CHI15-01	10.32	1212	2.36	0.570	20.44	0.255	2.56	4.0	1.220	22.5	8.0	98.0	39.1	189.3	409	88.3	7280	4.850	255	366.0
Zircon-062_CHI15-01	9.43	436	0.89	0.077	10.94	0.041	0.57	1.5	0.377	8.0	2.8	32.3	13.5	65.8	154.4	34.7	8570	4.975	147	319.0
Zircon-063_CHI15-01	7.82	1924	5.13	0.246	12.44	0.239	2.16	5.2	0.600	33.3	12.3	157.7	61.4	279.0	581	120.9	10070	11.625	332	1134.0
Zircon-064_CHI15-01	40.10	3540	4.57	40.100	150.8	15.700	81.00	27.8	2.920	84.2	25.8	304.0	116.8	531.0	1109	230.0	8190	14.750	945	1169.0
Zircon-065_CHI15-01	8.68	690	1.23		9.56	0.021	0.58	1.5	0.403	10.4	3.9	49.5	21.4	110.1	277.6	64.6	8670	7.525	209	558.0
Zircon-066_CHI15-01	10.79	316	0.49		5.68	0.023	0.40	0.9	0.232	6.1	2.1	26.1	10.2	46.8	97.7	20.5	7920	1.348	40.6	92.8
Zircon-067_CHI15-01	9.52	844	1.04	1.030	9.9	0.390	2.00	2.1	0.630	12.8	4.9	63.3	26.7	133.0	312	68.4	7150	2.020	64.4	155.5
Zircon-069_CHI15-01	7.27	1649	4.59		15.06	0.032	0.96	3.2	0.610	23.3	9.5	124.9	53.1	258.0	551	118.0	8620	10.575	270.2	914.0
Zircon-070_CHI15-01	6.98	1741	1.95	0.023	13.93	0.076	1.48	5.2	0.432	32.9	12.3	154.3	60.7	277.0	525	105.7	8890	8.025	237	629.0
Zircon-071_CHI15-01	9.74	698	0.78		10.68	0.060	1.46	3.2	0.850	14.6	5.1	60.5	23.0	103.6	212	45.3	8530	3.735	133	260.0
Zircon-072_CHI15-01	13.20	431	0.63		7	0.029	0.94	2.0	0.420	10.0	3.3	37.8	14.1	63.4	124.5	26.4	7760	1.443	50.2	98.5
Zircon-073_CHI15-01	7.97	617	0.92		4.96	0.019	0.52	1.4	0.299	9.2	3.4	44.5	18.6	96.1	224.8	52.4	7220	2.255	64.1	193.5
Zircon-074_CHI15-01	7.87	513	1.10	0.034	5.55	0.021	0.52	1.3	0.226	7.5	3.0	39.0	16.3	80.6	191	43.4	8490	0.430	45.6	125.3
Zircon-075_CHI15-01	10.53	1781	4.63	0.207	9.66	0.182	2.07	4.3	0.833	29.8	11.9	149.0	59.4	273.0	579	120.8	9270	12.750	332	1025.0
Zircon-076_CHI15-01	8.26	1646	5.53	0.630	25.6	0.410	3.20	5.2	1.400	28.2	10.6	134.9	53.7	256.1	544	113.6	9620	14.500	502	1338.0
Zircon-077_CHI15-01	7.82	1682	3.59	2.620	47.7	1.860	12.30	10.7	3.530	39.0	12.0	141.0	50.6	233.0	514	112.9	7650	18.975	1145	1463.0
Zircon-078_CHI15-01	12.90	1007	1.55	9.000	30.6	2.800	13.30	4.3	0.600	15.0	5.9	77.2	32.4	159.7	369	81.1	7930	3.823	101.2	295.0
Zircon-079_CHI15-01	7.76	1137	2.53	0.410	13.61	0.164	1.51	2.5	0.697	17.1	6.8	88.5	37.1	178.0	372	78.8	6900	1.118	160.4	328.0
Zircon-080_CHI15-01	8.39	800	1.48		8.68	0.048	0.93	2.0	0.575	10.7	4.2	55.2	24.9	128.8	304	70.8	7570	4.400	129	345.0
Zircon-081_CHI15-01	8.99	768	0.78	4.300	20	0.890	4.50	4.2	1.340	16.7	5.5	63.0	24.7	114.1	262	60.3	9110	6.375	250	475.0
Zircon-082_CHI15-01	7.38	927	1.08	0.012	7.33	0.075	1.34	3.5	0.618	20.1	6.9	80.1	31.5	143.5	278	58.1	8790	3.790	122.2	293.0
Zircon-083_CHI15-01	7.49	932	0.69		10.9	0.030	1.33	3.4	1.060	19.0	6.0	75.2	30.0	142.6	317	70.6	8990	4.688	181.8	334.0
Zircon-084_CHI15-01	210.00	1317	3.22	0.019	9.14	0.067	1.72	3.8	0.700	22.2	8.4	109.5	44.5	207.0	429	90.5	7070	5.950	146	434.0
Zircon-085_CHI15-01	7.11	2169	8.88	0.005	23.9	0.059	1.11	3.9	0.672	28.8	12.3	168.8	69.6	337.0	718	150.2	8620	15.575	422	1298.0
Zircon-086_CHI15-01	7.52	1610	6.31	2.110	20.2	0.730	5.50	6.7	0.061	38.9	13.5	156.0	57.7	245.0	414	81.2	8340	11.850	308	879.0
Zircon-087_CHI15-01	9.09	797	1.01	0.013	11.8	0.063	0.94	2.7	0.656	15.2	5.3	64.0	24.8	119.6	272	60.4	8530	6.900	192	476.0
Zircon-088_CHI15-01	12.72	494	0.58		6.86	0.054	0.94	2.3	0.571	10.7	3.9	42.4	15.9	71.0	142.3	30.2	7660	1.565	56.8	110.2
Zircon-089_CHI15-01	8.95	578	0.83		6.49	0.031	0.62	1.5	0.354	8.3	3.3	42.0	17.7	91.8	227	52.2	7590	2.598	80.2	200.8
Zircon-090_CHI15-01	7.07	1900	6.38		22.1	0.075	1.55	4.4	0.303	32.0	11.8	152.0	62.3	292.0	594	122.6	9070	9.600	276	748.0
Zircon-091_CHI15-01	10.56	688	0.60		10.78	0.032	0.58	2.2	0.698	14.3	5.0	58.6	22.4	101.0	200	41.6	8800	2.850	111.2	188.0
Zircon-092_CHI15-01	10.52	1084	0.90	0.013	13.3	0.124	3.07	4.9	1.250	23.4	8.1	97.1	36.3	163.0	315	63.5	9180	5.175	206	383.0
Zircon-093_CHI15-01	6.89	1199	1.29	0.002	7.5	0.111	1.91	4.3	0.797	23.8	8.2	100.8	39.5	180.2	367	76.5	7970	5.515	183.1	475.0
Zircon-094_CHI15-01	9.23	562	0.75	0.029	10.6	0.053	1.02	2.2	1.010	10.0	3.7	45.5	17.6	83.6	202	47.2	8900	3.100	87.6	225.0
Zircon-095_CHI15-01	11.56	1610	3.30	0.022	23.1	0.053	1.53	2.5	1.300	21.7	8.5	116.4	51.5	254.0	563	123.4	6660	3.738	184.6	235.0
Zircon-096_CHI15-01	14.90	372	0.70	10.800	25	2.000	8.90	2.1	0.429	6.7	1.9	25.0	10.9	59.9	171.9	43.9	8460	4.255	100.3	305.9
Zircon-097_CHI15-01	9.23	1046	0.46	0.009	7.2	0.105	2.19	4.5	0.889	21.0	7.4	87.4	34.1	158.4	320.8	69.2	8290	1.805	119.2	161.5
Zircon-098_CHI15-01	6.72	789	1.43		5.23	0.014	0.35	1.3	0.114	10.2	4.4	59.8	25.1	123.0	287	62.6	10140	5.800	125.2	535.0
Zircon-099_CHI15-01	10.20	1077	4.09	5.800	30.2	2.100	8.90	3.9	0.313	16.4	6.0	80.9	34.6	173.4	412	91.1	9210	7.025	240	579.0
Zircon-100_CHI15-01	7.12	824	1.57		7.43	0.031	0.60	2.0	0.218	13.2	5.2	68.6	27.3	133.0	278	59.6	8470	4.433	105.3	303.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
LIT15-01 (Lit*) Batolito Puerto Vallarta, Suite Cuale Macias, Complejo Arteaga																				
Zircon-001_LIT15-01	8.51	2070	3.34	0.095	14.1	0.091	1.50	5.2	0.309	35.7	13.7	179.0	70.6	326.0	633	130.0	11550	8.300	263	687.0
Zircon-002_LIT15-01	8.88	3810	7.80	0.500	74.3	0.430	6.17	12.5	1.830	75.5	28.6	346.0	130.9	576.0	973	185.7	8590	1.325	268	415.0
Zircon-003_LIT15-01	7.85	766	1.44	0.003	7.43	0.008	0.45	1.3	0.209	9.0	3.7	53.0	24.1	123.5	307	68.9	9810	5.525	132.8	409.0
Zircon-004_LIT15-01	9.74	851	0.70	0.007	3.87	0.170	2.40	4.1	1.020	21.0	6.6	76.7	28.4	133.0	247	54.0	6180	1.483	53.4	120.8

Zircon-005_LIT15-01	19.07	1067	0.62	0.055	9.37	0.378	5.43	8.4	1.309	33.7	10.2	107.8	36.7	144.5	217	40.9	7600	1.693	83.9	125.5
Zircon-006_LIT15-01	24.50	1028	1.29	13.400	49	5.800	33.00	10.4	0.800	23.9	7.5	88.2	34.2	159.0	330	70.3	8730	3.700	140	285.0
Zircon-007_LIT15-01	8.06	1780	2.05	0.039	26.5	0.379	6.08	10.7	4.570	45.0	14.0	160.0	57.9	273.0	571	126.0	7440	7.125	317	542.0
Zircon-008_LIT15-01	8.17	566	1.01	0.027	4.71	0.030	0.46	1.3	0.231	7.8	2.9	40.0	17.1	94.0	239	55.9	9510	6.950	138	530.0
Zircon-009_LIT15-01	9.04	2800	2.70	0.108	17.67	0.617	10.37	17.4	2.510	74.9	23.8	274.0	98.4	435.0	797	163.8	8020	7.550	421	618.0
Zircon-010_LIT15-01	7.87	652	1.67		6.76	0.007	0.36	0.9	0.159	7.2	3.1	44.3	19.3	103.9	274	63.2	10770	12.025	228	877.0
Zircon-011_LIT15-01	8.52	1544	7.38	0.100	23.7	0.105	1.80	3.9	0.506	26.9	10.0	128.7	52.2	245.0	495	101.1	10170	10.900	480	855.0
Zircon-012_LIT15-01	9.46	929	0.61	0.015	2.81	0.131	2.30	3.4	1.320	19.0	6.3	75.3	30.3	148.0	315	73.9	9560	8.300	295	655.0
Zircon-013_LIT15-01	9.52	1679	0.81	0.032	7.23	0.322	5.83	8.7	2.040	43.5	13.7	154.4	57.6	259.0	501	108.2	7680	2.588	110.1	194.0
Zircon-014_LIT15-01	24.20	1560	5.09	20.700	62	9.000	48.00	15.5	0.308	31.1	9.9	121.3	50.7	252.0	552	118.9	11030	11.575	248	897.0
Zircon-015_LIT15-01	11.13	1132	1.46		14	0.060	1.15	3.0	0.518	20.2	7.6	94.2	36.8	174.0	348	73.9	10260	4.550	137	311.0
Zircon-016_LIT15-01	8.86	1620	4.37	0.016	4.08	0.034	0.53	2.1	0.037	17.2	8.1	118.0	50.6	256.0	608	131.0	13550	33.250	351	2830.0
Zircon-017_LIT15-01	8.50	1061	3.40	0.028	14.54	0.046	0.72	1.8	0.338	14.5	5.8	81.5	35.0	175.0	399	88.1	9800	4.228	121.1	348.0
Zircon-019_LIT15-01	8.31	1676	2.43		6.65	0.015	0.60	2.3	0.190	17.2	8.3	120.2	53.1	264.2	586	116.7	12500	18.450	230.4	1485.0
Zircon-022_LIT15-01	7.27	1490	2.48		9.26	0.038	1.03	2.6	0.293	19.4	7.9	105.9	45.0	232.0	566	129.9	10210	28.625	658	2030.0
Zircon-023_LIT15-01	9.90	881	0.53	0.002	7.78	0.169	3.04	4.2	1.340	19.7	6.0	70.6	27.7	129.8	293	65.0	9460	3.545	172.6	277.0
Zircon-024_LIT15-01	8.64	891	1.84	0.057	8.74	0.051	0.81	1.6	0.363	11.9	4.8	62.6	27.1	144.3	357	80.6	11790	16.050	397	1230.0
Zircon-025_LIT15-01	15.40	1980	2.54	0.213	5.37	0.410	4.90	8.3	2.260	44.0	15.5	182.0	67.8	295.0	513	100.0	12010	14.200	295	577.0
Zircon-026_LIT15-01	8.60	1566	1.33	0.001	7.82	0.197	3.55	6.8	1.120	35.5	12.0	140.8	52.5	234.5	461	94.6	9730	7.453	254	591.0
Zircon-027_LIT15-01	25.20	1782	1.19	0.024	1.65	0.046	1.09	3.6	0.094	27.4	11.4	150.7	61.0	280.0	537	106.4	9640	9.300	113.3	380.0
Zircon-029_LIT15-01	8.70	1349	1.19	1.600	12.3	0.440	4.80	5.5	0.727	32.9	10.8	129.4	47.7	213.2	373	73.2	8920	3.713	131.7	292.0
Zircon-030_LIT15-01	11.37	1836	1.56	0.058	17.75	0.390	6.08	8.4	4.350	40.7	13.4	157.5	57.5	269.0	596	133.7	6060	4.598	278	366.0
Zircon-031_LIT15-01	6.77	323	0.73	0.010	5.58		0.11	0.4	0.102	3.4	1.5	21.0	9.5	50.8	136.5	32.8	11880	15.225	217	1192.0
Zircon-032_LIT15-01	8.60	184	0.31		1.46		0.00	0.5	0.164	2.7	1.0	12.3	5.9	28.3	86.1	22.9	11320	3.500	50.1	285.0
Zircon-033_LIT15-01	9.33	523	0.82	0.123	4.26	0.063	0.65	1.2	0.369	6.4	2.6	35.0	15.8	83.8	221.4	53.4	9490	6.375	107.4	465.0
Zircon-034_LIT15-01	8.97	2270	1.72	0.019	15.6	0.268	5.77	11.2	1.740	53.0	17.0	204.0	76.1	339.0	648	133.9	8890	5.250	263	400.0
Zircon-035_LIT15-01	10.25	1800	0.85	0.013	5.31	0.150	3.28	5.9	1.520	31.2	11.1	142.0	59.2	291.0	629	138.9	9810	4.000	137	317.0
Zircon-036_LIT15-01	10.30	302	0.53	0.008	4.09	0.022	0.30	0.5	0.500	3.8	1.5	21.2	9.1	50.8	146	38.9	9410	5.425	97	413.0
Zircon-038_LIT15-01	8.95	254	0.64		4.95		0.09	0.4	0.171	3.2	1.3	16.9	7.8	41.3	116.7	27.9	11060	4.280	59.3	339.0
Zircon-039_LIT15-01	14.14	1206	4.39	0.200	10.67	0.182	2.47	4.5	0.400	27.9	9.3	109.9	42.3	189.2	360	75.1	10270	24.275	137.7	260.0
Zircon-040_LIT15-01	8.64	137.2	0.48		2.07		0.01	0.1	0.057	1.2	0.6	8.1	3.8	23.5	74.4	21.1	13250	15.225	49.8	1222.0
Zircon-041_LIT15-01	10.40	278	0.44	0.004	3.84	0.018	0.46	1.2	0.390	5.5	1.8	22.5	9.1	46.2	115.1	27.1	10130	2.475	34.5	184.0
Zircon-042_LIT15-01	25.00	845	1.70	19.300	48	5.500	23.00	6.0	1.120	16.4	5.1	66.2	27.0	133.5	304	67.6	8130	3.305	100.1	248.0
Zircon-043_LIT15-01	20.00	2060	2.79	13.400	47	4.900	25.00	10.2	0.850	36.6	13.1	158.0	63.7	316.0	726	155.0	11220	21.200	720	1710.0
Zircon-044_LIT15-01	8.05	1850	5.15	0.250	38.2	0.195	2.58	5.2	0.568	30.4	11.5	150.1	61.3	293.0	609	131.8	8980	7.275	378	633.0
Zircon-045_LIT15-01	21.50	497	0.50	6.900	25.2	2.250	9.80	3.3	1.580	10.3	3.0	37.5	15.6	76.5	190.2	48.5	6580	5.998	180.8	469.0
Zircon-046_LIT15-01	9.58	1760	1.47	0.770	18.9	0.630	5.90	7.9	1.180	38.2	12.1	143.0	57.7	258.0	550	117.0	8240	7.875	415	620.0
Zircon-047_LIT15-01	12.68	395	0.53	0.015	1.9	0.017	0.41	0.7	0.331	5.6	2.1	27.0	11.9	63.9	166.7	40.4	7990	1.718	28.7	125.0
Zircon-048_LIT15-01	9.36	329	0.43		5.96	0.065	0.71	1.3	0.763	6.9	2.3	25.6	10.6	52.2	127.7	30.9	10560	3.175	58.7	271.0
Zircon-049_LIT15-01	10.54	1446	3.41		3.17	0.044	1.04	3.2	0.194	22.9	9.1	120.4	49.4	234.1	458	96.0	9890	9.125	107.5	344.0
Zircon-050_LIT15-01	8.90	379	0.39		1.46	0.008	0.24	0.9	0.354	6.0	2.1	28.1	11.8	57.6	138.2	32.5	9740	5.923	108.1	488.0
Zircon-051_LIT15-01	11.93	979	0.80	0.076	10.14	0.261	4.18	6.0	1.130	26.5	8.7	92.4	32.8	139.1	249	50.5	8550	3.850	130	239.0
Zircon-052_LIT15-01	13.22	730	0.79		7.1	0.058	1.47	2.7	0.625	16.8	5.3	62.7	23.3	108.7	215.6	47.3	6960	2.075	63	143.5
Zircon-056_LIT15-01	13.15	802	0.39		3.43	0.128	2.20	3.9	1.270	19.0	6.2	73.5	27.3	121.6	233	47.6	8840	2.245	95.2	159.3
Zircon-057_LIT15-01	8.90	2150	11.56	0.113	6.71	0.170	1.93	3.6	0.139	22.4	10.1	145.4	66.8	358.0	905	199.0	12950	54.050	1100	3840.0
Zircon-058_LIT15-01	10.74	247	0.44		1.279	0.017	0.19	0.5	0.332	3.5	1.4	17.3	7.7	39.2	105.1	27.8	11060	5.025	66.5	401.0
Zircon-059_LIT15-01	15.80	950	1.03		10.19	0.107	2.02	3.9	0.780	23.7	7.7	87.3	31.4	135.0	251	51.3	10430	1.845	65.8	136.0
Zircon-060_LIT15-01	25.90	3610	5.99	24.200	87	10.400	60.00	27.1	0.411	90.6	29.4	337.0	128.4	563.0	975	191.7	12400	13.825	492	1091.0
Zircon-061_LIT15-01	8.58	1147	1.53	0.066	8.42	0.117	2.10	4.4	1.190	25.9	8.4	102.5	39.2	180.5	354	75.1	6770	3.713	115.2	288.0
Zircon-062_LIT15-01	7.03	567	0.62	0.000	6.7	0.049	1.08	2.0	0.406	10.5	3.7	45.8	19.1	89.7	197.1	43.5	6260	1.575	62	124.8
Zircon-063_LIT15-01	9.85	200.7	0.26	0.000	0.529	0.016	0.20	0.8	0.304	3.9	1.3	17.1	6.5	30.5	70.9	16.7	7030	1.315	38.9	97.6
Zircon-064_LIT15-01	8.70	396	0.54	0.000	5.11	0.054	0.81	1.5	0.810	8.4	2.6	30.0	12.1	61.8	160	39.2	10240	7.925	85.6	643.0
Zircon-065_LIT15-01	8.97	443	0.77	0.000	3.52	0.014	0.26	0.8	0.296	6.6	2.5	32.7	14.0	70.6	182.7	44.6	12720	4.750	81.7	356.0
Zircon-066_LIT15-01	9.04	1001	1.66	0.033	10.23	0.163	2.64	4.4	0.880	22.0	7.1	84.5	33.2	153.6	316	67.5	9740	3.790	166	280.0

Zircon-067_LIT15-01	13.10	2390	47.90	0.228	5.23	0.230	2.27	2.8	0.610	15.2	7.6	124.8	61.2	378.0	1396	349.0	26000	71.500	310	5820.0
Zircon-068_LIT15-01	26.00	1925	0.93	36.300	97	11.700	60.00	21.7	3.210	63.7	18.1	193.0	68.7	288.0	489	99.6	8220	3.125	194	251.0
Zircon-069_LIT15-01	13.20	1920	5.64	3.170	24.7	1.510	9.40	7.2	0.380	36.7	12.0	165.8	64.0	299.0	599	124.1	12910	8.950	267	767.0
Zircon-070_LIT15-01	9.18	1120	2.14	0.028	9.2	0.087	1.80	3.8	0.600	22.6	7.9	96.1	38.1	176.0	336	70.0	8970	3.800	130	293.0
Zircon-073_LIT15-01	12.45	1440	1.59	6.800	27.1	2.530	13.70	7.5	0.970	31.1	10.6	123.0	47.8	222.0	438	90.7	9920	4.475	136	349.0
Zircon-074_LIT15-01	9.20	3320	24.50	0.180	5.9	0.187	1.31	5.0	0.062	43.7	18.6	261.0	110.0	545.0	1299	296.0	18400	50.500	660	3820.0
Zircon-075_LIT15-01	9.56	3200	2.65	0.014	66	0.277	4.42	9.2	4.440	56.5	19.6	243.0	97.2	471.0	1054	236.0	8150	36.750	1710	2500.0
Zircon-076_LIT15-01	8.71	940	0.96	0.020	6.4	0.248	4.38	7.9	1.650	35.0	10.3	99.0	29.3	111.0	191	39.2	9340	6.400	249	483.0
Zircon-077_LIT15-01	10.85	2024	0.99	0.128	7.89	0.267	4.90	9.3	2.290	48.3	16.4	188.8	70.4	305.0	559	114.1	7670	3.103	159.5	247.4
Zircon-078_LIT15-01	8.14	342	0.31	0.000	3.43	0.068	1.06	1.6	0.687	8.1	2.5	27.6	10.8	49.3	110.7	24.8	9860	2.910	64.4	214.6
Zircon-079_LIT15-01	11.26	4330	3.50	0.092	30	0.912	15.30	25.8	8.580	118.7	36.2	394.0	140.6	621.0	1287	273.0	7590	12.825	907	999.0
Zircon-081_LIT15-01	7.73	393	0.41	0.011	6.39	0.033	0.72	0.7	0.403	4.8	1.6	21.7	10.4	59.1	183	53.4	8550	5.225	156	393.0
Zircon-083_LIT15-01	10.80	2720	1.81	0.080	3.99	0.117	2.83	7.4	0.133	54.4	20.2	246.0	96.0	417.0	720	141.0	11710	12.075	230	492.0
Zircon-084_LIT15-01	8.22	6300	21.00	0.000	22	0.084	2.22	10.8	0.124	98.0	41.1	536.0	215.0	970.0	1800	354.0	13890	50.000	1550	3840.0
Zircon-085_LIT15-01	9.74	1720	2.22	0.003	4.7	0.147	2.80	7.9	0.960	42.6	14.6	159.0	62.1	260.0	448	90.0	10010	47.250	245	608.0
Zircon-086_LIT15-01	9.60	498	0.31	0.000	4.74	0.081	1.46	2.1	0.990	10.0	3.3	39.3	15.5	73.9	165	39.7	8140	2.623	105.5	175.0
Zircon-087_LIT15-01	7.94	1372	1.98	0.031	12.28	0.114	2.32	4.7	0.920	28.2	9.4	116.3	45.4	210.9	447	97.9	8910	7.775	256	562.0
Zircon-088_LIT15-01	11.80	1043	0.99	2.200	17.6	0.710	4.30	4.5	0.960	20.3	7.0	81.8	33.8	157.8	366	83.8	9600	2.440	139	198.0
Zircon-089_LIT15-01	9.89	1909	5.47	0.170	22.9	0.205	2.33	5.3	0.752	34.0	12.5	158.1	64.7	299.0	603	127.6	9510	11.525	394	897.0
Zircon-090_LIT15-01	10.26	1210	0.48	0.019	3.98	0.143	3.14	5.3	1.370	26.6	8.8	107.2	40.9	183.5	350	73.3	7860	2.478	92.4	189.2
Zircon-091_LIT15-01	8.78	227	0.95	0.000	4.51	0.013	0.16	0.6	0.072	3.5	1.2	15.6	6.6	35.3	100.4	24.4	10390	11.250	126.8	824.0
Zircon-092_LIT15-01	9.95	785	0.72	0.032	7.84	0.095	2.09	3.0	1.480	16.3	4.9	60.4	24.8	119.1	292	70.5	6390	1.713	62.5	125.7
Zircon-093_LIT15-01	9.92	486	0.53	0.000	5.25	0.039	0.79	2.0	0.580	10.4	3.4	41.0	15.6	71.3	152.4	33.2	8330	1.505	50.8	113.4
Zircon-094_LIT15-01	7.21	684	1.64	0.000	7.72	0.014	0.45	1.4	0.209	10.4	4.0	53.0	22.7	109.5	235.2	53.5	8410	2.673	70.1	200.0
Zircon-095_LIT15-01	11.00	655	1.48	5.700	23.5	1.680	7.50	2.6	0.306	10.1	3.9	50.8	21.3	106.4	238	54.9	8500	1.735	59.7	136.0
Zircon-096_LIT15-01	8.44	920	0.61	0.010	6.95	0.117	2.29	4.0	1.130	19.5	6.6	76.0	30.0	138.0	295	66.1	8070	2.625	110	200.0
Zircon-098_LIT15-01	12.63	1314	0.64	0.027	8.53	0.260	4.13	6.2	1.160	32.7	10.5	120.0	44.6	192.7	340	70.5	7800	3.468	168.7	243.2
Zircon-099_LIT15-01	9.46	243.7	0.45	0.001	1.275	0.016	0.15	0.5	0.128	3.6	1.4	17.3	8.0	40.4	106.6	25.6	7970	6.775	47	548.0
Zircon-100_LIT15-01	12.16	1082	0.58	0.017	6.53	0.233	3.46	5.5	1.110	26.8	8.7	97.6	36.8	157.1	273.3	56.2	7710	3.268	126	250.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
BUR-15-01 (Bur*) Batolito Puerto Vallarta, Suite Zihuatanejo, Complejo Arteaga																				
Zircon-001_BUR15-01	12.40	2360	2.14	0.050	24.2	0.375	6.95	13.1	6.140	58.0	17.5	195.0	72.6	342.0	809	173.0	7380	1.975	658	625.0
Zircon-002_BUR15-01	11.50	583	1.85	0.000	15.6	0.007	0.32	1.0	0.484	6.3	2.6	36.0	16.9	97.4	305	80.5	12090	2.231	230	701.0
Zircon-003_BUR15-01	12.40	1110	5.79	0.540	10.78	0.390	2.07	2.4	0.320	13.2	5.8	82.3	36.3	182.0	420	92.0	11080	1.663	130	540.0
Zircon-004_BUR15-01	12.50	1500	1.36	0.006	9.93	0.193	3.24	6.9	1.230	33.5	11.2	135.0	51.7	231.0	421	86.7	8900	0.572	118	189.0
Zircon-005_BUR15-01	10.60	1100	3.50	0.018	8.26	0.032	0.58	2.5	0.535	17.6	6.4	87.8	37.5	178.0	365	78.0	8850	0.775	77.5	223.0
Zircon-006_BUR15-01	10.40	3050	5.49	0.001	33.2	0.338	5.77	12.2	1.420	68.3	22.5	270.0	104.3	467.0	867	176.0	8260	1.956	416	590.0
Zircon-007_BUR15-01	12.40	302	1.07	0.034	6.3	0.036	0.39	1.0	0.359	4.9	1.8	22.2	9.8	48.4	126	32.1	9770	1.113	54	108.7
Zircon-008_BUR15-01	13.10	654	1.09	0.000	5.2	0.087	1.74	2.9	0.910	13.6	4.7	53.3	21.1	101.0	223	51.5	8940	0.377	61.4	114.0
Zircon-009_BUR15-01	9.60	3230	21.90	0.250	19.5	0.140	1.35	4.2	0.126	35.3	16.5	241.0	102.5	533.0	1210	258.0	17000	13.063	932	4240.0
Zircon-010_BUR15-01	18.10	640	1.42	0.000	4.06	0.056	0.99	2.1	0.720	10.7	4.1	50.1	20.5	103.0	226	51.4	7850	0.430	48	134.0
Zircon-011_BUR15-01	10.25	1910	10.60	0.089	19.5	0.095	1.33	4.6	0.105	31.9	12.8	166.0	65.9	304.0	571	117.0	10830	3.225	354	1030.0
Zircon-012_BUR15-01	13.20	1197	1.16	0.002	12.9	0.082	1.80	5.2	0.960	31.3	10.0	112.8	41.1	173.0	300	60.1	10810	0.689	134	198.0
Zircon-013_BUR15-01	23.80	1145	1.78	20.700	63	6.300	27.80	7.9	1.020	25.1	7.9	93.7	37.9	177.0	380	82.8	9460	0.603	116	194.0
Zircon-014_BUR15-01	21.50	2950	7.09	16.500	67.9	7.000	37.50	16.4	1.030	55.5	20.1	248.0	99.7	462.0	924	190.0	10970	4.200	574	1300.0
Zircon-016_BUR15-01	17.90	1080	2.51	16.400	52	4.700	21.20	6.0	0.790	20.7	7.0	86.4	35.4	171.0	361	78.5	8850	0.956	167	333.0
Zircon-017_BUR15-01	9.88	2550	9.72	0.000	4.33	0.021	0.74	3.1	0.157	24.7	11.7	175.0	80.5	416.0	915	190.0	11430	7.750	270	2450.0
Zircon-018_BUR15-01	11.10	1670	2.02	0.022	11.08	0.163	3.15	7.3	1.380	37.4	12.6	150.0	57.5	259.0	499	103.9	9420	0.963	167	293.0
Zircon-019_BUR15-01	11.59	935	1.59	0.000	6.74	0.025	0.87	2.6	0.396	16.9	6.5	78.9	31.6	145.9	288	61.2	8600	0.399	47.1	123.3
Zircon-020_BUR15-01	11.48	1135	3.48	0.000	14.45	0.060	1.65	3.2	0.836	21.0	7.7	97.4	39.9	183.0	354	75.1	8020	0.843	132.7	247.0
Zircon-021_BUR15-01	13.70	1118	2.14	0.660	9.8	0.540	4.70	3.7	0.485	19.4	6.9	90.0	37.0	179.0	384	82.2	10000	0.894	103.8	287.0

Zircon-022_BUR15-01	10.90	567	1.88	0.000	10.02	0.017	0.34	1.1	0.152	7.1	3.0	41.7	17.6	90.0	198	43.8	10930	14.438	112.6	353.0
Zircon-023_BUR15-01	11.17	1002	3.66	0.000	14	0.039	0.67	2.2	0.322	13.9	5.5	76.2	32.0	161.0	379	85.2	10000	1.119	124	358.0
Zircon-024_BUR15-01	12.60	1750	3.10	0.008	12.82	0.154	2.24	4.7	0.990	29.9	10.9	137.0	55.9	268.0	551	119.6	8570	1.519	215	447.0
Zircon-026_BUR15-01	9.49	1440	8.96	0.000	7.78	0.017	0.35	2.1	0.041	19.8	8.5	116.2	49.0	234.0	457	93.9	12040	2.631	207	793.0
Zircon-027_BUR15-01	28.00	2290	2.86	18.900	66	7.700	39.60	16.5	3.880	57.4	17.8	208.0	77.7	347.0	635	131.0	6940	1.638	281	521.0
Zircon-028_BUR15-01	34.10	1601	2.20	16.300	48.7	3.260	15.50	7.1	1.680	31.3	10.4	127.3	50.9	249.0	555	122.5	9790	1.494	240	463.0
Zircon-029_BUR15-01	15.10	3780	6.35	7.700	109	4.600	38.00	36.1	4.110	146.0	40.7	399.0	134.9	549.0	866	167.0	7390	2.925	1060	952.0
Zircon-030_BUR15-01	88.40	990	2.46	61.100	194	29.900	162.00	47.4	1.670	60.4	12.0	102.0	33.1	140.0	281	59.2	11500	0.944	119	330.0
Zircon-031_BUR15-01	12.30	850	1.61	0.610	6.91	0.195	1.61	2.2	0.407	13.7	4.7	64.9	27.4	137.0	312	70.7	9700	0.813	74	239.0
Zircon-032_BUR15-01	10.85	1161	3.93	0.004	8.56	0.024	0.46	1.7	0.188	14.3	6.2	85.5	37.2	188.0	425	90.8	11770	1.656	136	523.0
Zircon-033_BUR15-01	10.48	1085	2.78	0.000	9.72	0.024	0.67	1.9	0.426	14.7	5.9	80.3	34.9	175.0	411	90.8	9820	1.019	102.2	313.0
Zircon-034_BUR15-01	9.19	1367	2.89	0.000	9.16	0.024	0.66	2.4	0.319	19.0	8.1	106.4	44.3	220.0	478	104.5	10970	2.925	275	895.0
Zircon-035_BUR15-01	10.60	2550	4.29	0.165	23	0.189	2.75	5.8	1.110	43.5	15.9	207.0	85.0	400.0	820	175.0	8630	2.850	570	930.0
Zircon-036_BUR15-01	17.20	1430	1.73	9.300	35.4	3.500	21.40	10.2	1.140	37.3	11.4	128.0	47.9	216.0	413	84.0	9600	1.018	153	304.0
Zircon-037_BUR15-01	9.00	575	1.32	0.007	4.58	0.015	0.58	0.9	0.085	9.2	3.6	44.3	19.1	94.0	194	41.6	10400	12.625	50.2	234.0
Zircon-038_BUR15-01	10.28	1950	4.01	0.000	19.1	0.111	2.31	5.9	0.482	37.1	13.7	173.0	66.3	305.0	599	123.0	10040	2.044	302	658.0
Zircon-039_BUR15-01	37.90	680	1.90	32.900	96	11.200	55.00	14.8	0.970	21.5	5.7	57.5	21.9	104.4	229	49.5	9410	1.019	127.5	305.0
Zircon-040_BUR15-01	9.57	1113	1.38	0.450	11.3	0.291	2.90	4.4	0.699	22.3	7.9	95.3	37.2	174.0	352	74.6	9030	0.869	109	278.0
Zircon-041_BUR15-01	10.63	1359	1.46	0.000	11.67	0.090	1.79	4.4	0.770	26.4	9.6	114.0	45.8	210.0	421	87.8	10060	0.943	152	289.0
Zircon-042_BUR15-01	10.81	319	0.91	0.007	4.55	0.021	0.29	0.7	0.305	3.4	1.3	18.5	9.4	52.4	149.6	37.8	9760	0.667	50.5	216.0
Zircon-044_BUR15-01	13.50	1261	4.83	3.300	21	0.720	4.50	3.5	0.213	18.6	7.3	95.4	40.9	200.0	442	96.1	10740	1.750	199	528.0
Zircon-045_BUR15-01	15.40	1270	1.64	3.700	20.9	1.440	7.50	6.2	0.720	27.4	9.1	109.0	42.5	197.0	391	82.5	10420	1.025	162	306.0
Zircon-046_BUR15-01	12.80	1580	1.55	2.210	16.3	0.870	7.03	7.6	1.070	37.7	12.8	145.8	54.9	242.0	428	88.9	9120	0.571	98.7	183.0
Zircon-047_BUR15-01	11.90	1500	1.60	0.006	10	0.099	2.63	6.2	0.860	34.2	11.6	136.0	51.9	230.0	423	87.0	9600	0.569	91.1	180.0
Zircon-048_BUR15-01	10.53	1220	0.97	0.013	7.93	0.184	3.29	6.6	1.060	28.0	9.0	105.0	40.2	187.0	368	79.4	8610	0.652	106	209.0
Zircon-050_BUR15-01	21.80	1817	5.89	21.300	74	8.200	38.00	12.0	0.530	36.8	12.9	152.9	61.1	279.0	559	114.0	10240	2.306	278	733.0
Zircon-051_BUR15-01	11.54	1158	1.47	0.131	14	0.132	1.62	3.9	0.810	21.8	7.7	92.8	37.7	175.0	374	82.3	10310	0.596	108	192.0
Zircon-052_BUR15-01	10.36	1790	6.85	0.005	16.7	0.053	1.37	4.7	0.309	33.3	12.3	152.2	61.7	276.0	529	105.6	11050	2.688	334	879.0
Zircon-053_BUR15-01	12.13	1529	4.15	2.230	21	0.800	5.00	4.1	0.413	23.1	9.2	121.7	50.2	235.0	504	109.2	10060	1.625	202	543.0
Zircon-054_BUR15-01	11.20	1750	5.93	1.400	13.9	0.890	5.80	3.3	0.187	20.9	9.2	124.8	55.4	284.0	640	136.0	12190	3.813	283	1177.0
Zircon-055_BUR15-01	11.10	952	3.39	0.290	10.4	0.153	1.29	1.9	0.174	13.6	5.5	72.0	30.6	153.0	339	71.8	11340	1.300	117.3	378.0
Zircon-056_BUR15-01	31.00	1890	12.00	2.290	42.1	2.140	15.00	10.2	0.990	33.9	12.3	152.0	61.4	290.0	604	124.5	10830	3.969	776	1250.0
Zircon-058_BUR15-01	9.11	800	1.41	0.015	6.53	0.070	1.52	3.0	0.390	18.5	6.2	70.0	27.6	124.0	242	48.0	8340	0.644	97	186.0
Zircon-059_BUR15-01	13.30	1142	1.85	0.000	12.02	0.077	1.59	3.4	0.820	20.0	7.8	95.2	38.6	176.0	342	70.9	8610	0.587	115	193.0
Zircon-060_BUR15-01	8.94	1660	2.22	0.003	1.52	0.019	0.26	1.5	0.109	13.2	7.1	113.0	53.6	301.0	900	197.0	12100	5.700	86	1800.0
Zircon-061_BUR15-01	17.20	1432	2.24	12.100	47.6	4.000	20.80	9.2	0.830	31.2	10.3	120.7	48.9	220.0	431	88.4	10010	0.838	158	265.0
Zircon-062_BUR15-01	9.75	237	0.90	0.000	3.89	0.011	0.14	0.3	0.077	3.3	1.4	18.0	8.1	40.0	91.4	20.8	9770	0.283	18.4	79.0
Zircon-064_BUR15-01	40.20	2650	3.95	39.000	124	16.100	82.00	26.2	1.270	65.7	20.1	235.0	90.2	410.0	780	158.0	11290	2.838	386	880.0
Zircon-065_BUR15-01	14.18	876	1.45	0.000	10	0.051	0.96	2.4	0.592	15.4	5.6	71.3	28.7	139.1	301	65.5	8270	0.470	63.3	149.9
Zircon-066_BUR15-01	9.59	811	2.24	0.033	8.54	0.055	0.75	2.1	0.354	12.8	5.0	63.5	26.7	128.0	280	60.5	9110	0.736	76.8	225.0
Zircon-067_BUR15-01	30.50	830	2.07	42.000	115	14.200	63.00	12.5	0.880	23.3	6.0	68.7	27.8	127.9	281	60.0	9320	0.705	113.6	220.0
Zircon-068_BUR15-01	9.68	1072	2.73	0.540	10.3	0.230	1.89	2.5	0.282	15.1	5.9	81.4	35.4	173.9	386	83.9	9460	1.413	129.3	449.0
Zircon-069_BUR15-01	10.10	576	1.79	0.000	6.94	0.008	0.47	1.5	0.167	9.5	3.6	47.5	19.3	91.7	200	42.2	8940	0.738	75.4	215.0
Zircon-070_BUR15-01	11.15	1086	1.29	0.000	14.29	0.056	1.34	3.7	0.576	19.7	7.3	88.8	35.9	171.0	356	77.1	9430	0.577	111.2	180.0
Zircon-071_BUR15-01	12.00	1080	2.02	0.750	10.7	0.380	2.46	3.3	0.670	19.5	7.0	87.0	35.5	172.0	375	82.0	9030	1.013	119	305.0
Zircon-072_BUR15-01	26.60	572	0.75	9.500	36	4.500	23.00	7.5	0.770	12.7	3.6	42.7	17.2	88.8	233	58.9	8160	0.676	25.9	68.9
Zircon-073_BUR15-01	9.79	931	3.05	0.000	8.21	0.037	1.04	2.4	0.326	21.2	7.1	88.0	34.0	147.0	247	48.6	7810	0.833	60.1	165.0
Zircon-074_BUR15-01	11.10	1610	1.71	0.400	17.1	0.460	4.54	7.0	0.920	36.6	12.1	148.0	56.2	246.0	451	91.8	9140	0.617	123.9	195.0
Zircon-075_BUR15-01	10.57	1640	4.00	0.012	21.2	0.144	2.20	4.9	0.790	31.4	11.1	138.0	54.9	253.0	515	108.1	8440	1.500	296	514.0
Zircon-076_BUR15-01	12.17	920	0.89	0.001	8.39	0.121	2.25	3.7	0.890	19.5	6.7	78.0	30.4	144.0	309	68.8	10390	0.781	135	262.0
Zircon-077_BUR15-01	10.06	1230	3.45	0.042	12.3	0.079	1.25	3.0	0.396	17.8	7.0	92.4	39.1	193.0	421	91.5	9230	1.163	126	357.0
Zircon-078_BUR15-01	13.40	1166	1.85	2.100	19.1	0.710	6.60	4.4	0.455	22.2	7.8	97.2	38.7	179.0	386	80.4	10640	0.944	159	325.0
Zircon-079_BUR15-01	11.50	1470	5.02	2.600	15.3	1.310	5.70	3.3	0.120	17.6	7.4	106.4	47.4	247.0	550	117.4	12400	2.613	201	900.0
Zircon-080_BUR15-01	8.90	1128	3.19	0.093	8.4	0.036	0.80	1.8	0.206	14.9	6.3	85.8	35.6	179.0	401	85.6	10530	1.656	147	519.0

Zircon-081_BUR15-01	15.20	721	1.10	0.002	2.5	0.042	0.97	2.2	0.379	11.5	3.9	53.3	23.3	116.9	263	59.9	7860	0.872	56.1	286.0
Zircon-082_BUR15-01	11.12	1164	1.46	0.920	17	0.212	1.94	3.6	0.630	22.8	8.0	96.4	38.9	183.0	381	82.1	9720	0.601	127.6	200.0
Zircon-083_BUR15-01	9.32	816	1.07	0.008	7.87	0.067	1.30	2.4	0.432	14.8	5.3	64.5	26.4	131.1	294	64.5	8740	0.691	82.1	224.0
Zircon-084_BUR15-01	9.26	1550	4.67	0.036	11.81	0.062	1.15	3.6	0.218	24.9	9.8	129.4	51.9	248.0	500	101.5	11010	2.125	226	678.0
Zircon-085_BUR15-01	9.98	2000	2.05	0.000	13.32	0.215	4.43	8.6	1.300	46.6	15.3	175.8	68.1	309.0	601	122.7	9830	2.088	338	694.0
Zircon-086_BUR15-01	10100	1580	30.30	0.402	10.2	0.188	2.97	5.5	1.040	33.2	11.5	139.0	53.5	242.0	465	95.7	9760	0.938	146	286.0
Zircon-087_BUR15-01	11.32	442	0.61	0.002	5.74	0.102	1.41	2.1	1.010	8.6	2.9	32.9	13.7	68.5	178	42.0	8340	0.428	68.5	133.8
Zircon-088_BUR15-01	12.70	1122	1.29	3.100	20.3	0.560	3.50	4.2	0.670	22.1	7.3	91.6	37.1	174.0	375	80.1	9590	0.602	122.6	190.0
Zircon-089_BUR15-01	10.20	1148	2.66	0.190	9.97	0.119	1.20	2.4	0.243	14.6	6.5	88.0	37.7	187.0	424	91.3	10880	1.431	129	455.0
Zircon-090_BUR15-01	51.00	825	1.02	60.000	135	14.400	61.00	12.2	1.720	21.6	6.0	66.3	26.2	124.0	289	65.6	10200	0.456	89.4	140.0
Zircon-091_BUR15-01	11.44	128	0.52	0.000	0.437	0.019	0.15	0.4	0.082	1.6	0.7	9.6	4.1	21.1	53.2	13.0	7920	0.503	50.7	162.0
Zircon-092_BUR15-01	9.23	1280	2.50	0.000	6.49	0.021	0.71	2.5	0.285	18.2	7.5	97.8	42.2	203.6	450	96.2	10940	2.319	201.2	759.0
Zircon-093_BUR15-01	10.29	1201	1.33	0.000	15.69	0.065	1.33	3.4	0.511	22.3	7.9	98.3	40.1	188.8	398	83.2	9650	0.660	119.7	200.0
Zircon-094_BUR15-01	29.60	1312	1.56	33.600	65	4.900	22.00	7.3	1.270	30.6	10.2	115.3	45.6	208.0	388	79.4	10670	0.501	101.3	165.5
Zircon-095_BUR15-01	11.80	951	2.05	2.500	23.3	0.780	4.40	4.1	0.480	18.0	6.4	79.4	32.1	149.0	302	62.3	8920	0.581	88.3	168.0
Zircon-096_BUR15-01	10.46	903	1.24	0.000	7.54	0.060	1.21	3.1	0.570	18.1	6.5	78.5	30.8	141.0	275	59.0	8590	0.775	86.5	227.0
Zircon-097_BUR15-01	11.54	949	2.27	0.175	16.1	0.076	1.05	2.3	0.335	15.9	6.2	76.7	31.7	149.6	313	67.1	9670	0.627	96.1	193.0
Zircon-098_BUR15-01	48.50	1890	11.80	61.800	179	22.900	105.30	26.2	1.120	46.0	12.6	151.0	63.4	301.0	677	141.0	10920	3.869	340	1140.0
Zircon-099_BUR15-01	10.89	1230	1.53	0.570	16.5	0.228	2.20	4.3	0.595	23.2	8.3	100.5	41.1	191.0	410	86.7	10410	0.675	128	216.0
Zircon-100_BUR15-01	11.20	1078	2.24	0.970	18.5	0.260	2.28	3.2	0.420	18.6	7.0	87.8	35.4	169.0	356	76.7	9850	0.663	103.4	204.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
AME-15-01a (Ame-a*) Batolito Puerto Vallarta, Suite Zihuatanejo, Complejo Arteaga																				
Zircon-001_AME15-01a	20.90	650	1.85		10.99	0.041	0.73	2.1	0.334	13.1	4.9	55.3	21.5	95.7	182.9	36.5	8700	1.500	92.8	146.2
Zircon-002_AME15-01a	13.30	1410	7.54		15.57	0.020	0.66	2.1	0.216	18.3	8.0	111.1	46.3	228.2	492	104.4	9920	11.800	312	897.0
Zircon-003_AME15-01a	13.99	592	2.26		8.08	0.039	0.60	1.6	0.294	9.6	3.5	45.5	18.6	93.4	212.3	45.3	8630	2.900	89	242.1
Zircon-004_AME15-01a	18.10	1042	2.05		15.13	0.060	1.33	3.3	0.439	18.8	7.2	85.3	33.6	155.2	301	61.5	8690	3.100	222.4	301.0
Zircon-005_AME15-01a	13.75	1121	5.28		14.82	0.034	0.52	2.0	0.216	13.4	5.8	81.0	34.8	179.0	420.6	88.9	10020	8.300	236	680.0
Zircon-006_AME15-01a	13.64	1810	10.71		21.53	0.090	1.69	5.0	0.125	34.8	13.3	164.1	62.9	276.2	483.6	91.7	9020	10.600	465.3	913.0
Zircon-007_AME15-01a	17.03	987	2.83		9.01	0.058	1.25	3.1	0.970	19.7	7.2	85.1	33.5	152.0	299.6	62.4	7060	4.000	198	309.0
Zircon-008_AME15-01a	13.70	1406	3.76	0.008	33	0.121	2.57	4.8	0.720	29.9	11.0	126.5	48.7	218.0	424	87.8	7590	6.200	490	509.0
Zircon-009_AME15-01a	13.72	1890	4.58	0.012	16.79	0.187	3.70	7.7	0.880	44.5	14.2	177.0	67.3	292.0	559	109.3	8340	5.400	207	440.0
Zircon-010_AME15-01a	13.90	2212	13.94		20.81	0.021	0.70	3.2	0.209	26.9	11.7	167.2	70.7	362.0	794	168.3	11690	18.600	425	1515.0
Zircon-012_AME15-01a	13.35	1266	9.72		10.35	0.019	0.45	1.9	0.091	17.3	7.5	102.6	42.2	201.6	404.4	80.7	11100	13.800	353	1034.0
Zircon-013_AME15-01a	17.00	578	3.21	2.400	13.5	0.870	5.00	2.5	0.305	8.5	3.2	43.1	18.1	90.0	226	49.2	9560	3.000	83	244.0
Zircon-014_AME15-01a	12.27	709	2.34		10.86	0.045	0.60	1.6	0.390	9.7	3.7	49.7	22.1	114.9	303	69.4	8830	4.100	120.2	302.1
Zircon-015_AME15-01a	12.50	1332	6.97	0.044	14.79	0.029	0.74	2.1	0.058	17.8	7.3	98.1	43.4	215.0	498	106.1	11620	11.000	276	896.0
Zircon-017_AME15-01a	24.90	1602	2.85	5.000	29.1	2.770	16.20	7.1	1.270	30.9	10.6	129.5	52.8	256.0	545	113.9	8350	6.400	192	505.0
Zircon-018_AME15-01a	23.52	1672	2.81		8.97	0.065	1.75	3.7	1.220	24.0	9.0	122.2	54.5	267.4	549	115.7	7700	2.800	150.8	302.9
Zircon-019_AME15-01a	17.80	1048	3.80	1.830	32.3	0.690	3.60	4.0	0.970	22.3	7.7	89.7	33.5	148.0	302	62.3	9990	2.100	159.1	231.0
Zircon-020_AME15-01a	15.30	1012	3.33		9.71	0.041	0.86	2.4	0.690	14.9	5.8	78.6	32.7	159.3	347	75.2	10160	7.700	214.1	537.0
Zircon-021_AME15-01a	14.10	1570	6.57	0.039	27.4	0.053	0.92	2.7	0.730	21.1	8.1	112.9	49.2	255.6	628	140.2	10980	11.300	337	919.0
Zircon-022_AME15-01a	14.83	1246	6.01		15.38	0.016	0.44	1.8	0.340	16.0	6.3	90.5	39.7	209.0	508	110.4	10510	7.100	166.9	535.0
Zircon-023_AME15-01a	12.90	1267	3.84		21.7	0.106	1.83	4.2	0.840	28.4	9.4	110.8	43.5	193.0	365	75.2	8590	7.800	612	582.0
Zircon-024_AME15-01a	17.09	1552	3.27	0.002	10.43	0.098	2.02	4.3	1.160	26.4	10.0	126.1	51.9	246.2	500	102.8	8210	6.100	298	487.6
Zircon-025_AME15-01a	14.85	1389	7.92		18.17	0.029	0.71	2.2	0.184	16.9	7.5	103.3	44.9	224.1	527	111.3	11440	10.400	318.4	861.0
Zircon-026_AME15-01a	16.20	307	1.74	1.550	9.6	0.390	2.20	1.3	0.196	4.7	1.7	22.3	9.6	50.1	133	30.6	11020	1.500	43.1	113.0
Zircon-027_AME15-01a	36.80	1453	2.84	31.000	88	9.100	51.00	16.3	1.410	43.4	13.1	138.9	49.4	208.2	362	70.2	10700	4.900	178.8	343.0
Zircon-028_AME15-01a	17.95	844	2.47	1.630	14.8	0.600	4.00	2.7	0.466	16.1	5.9	72.0	28.8	140.2	277.3	57.9	10120	1.800	60.8	141.1
Zircon-029_AME15-01a	14.84	844	3.12		18.2	0.073	1.37	2.9	0.870	17.6	5.8	72.1	28.5	134.0	301	63.7	10330	20.100	171	322.0
Zircon-030_AME15-01a	21.80	817	1.56		12.82	0.064	1.43	2.9	0.563	16.6	6.2	70.2	27.3	125.1	245.5	48.5	10470	2.500	134.9	203.9
Zircon-031_AME15-01a	16.00	1125	5.60		11.19	0.015	0.32	1.8	0.153	12.1	5.4	77.5	33.9	180.0	455	97.3	11940	6.600	151.1	553.0

Zircon-032_AME15-01a	15.00	1047	2.05		6.3	0.034	0.86	2.9	0.690	15.9	6.2	80.5	34.1	166.6	365.1	76.6	8590	3.300	82	243.3
Zircon-033_AME15-01a	27.20	1114	2.71	19.700	58.6	5.550	26.80	7.6	1.000	19.1	6.6	83.1	35.0	174.5	447	100.5	10800	4.200	133.1	332.0
Zircon-034_AME15-01a	19.90	1250	2.47	0.310	20.9	0.316	4.15	7.0	1.800	34.7	10.6	115.0	40.9	178.0	330	67.7	10350	1.500	124	160.0
Zircon-035_AME15-01a	44.00	947	2.17	23.800	77	11.000	61.00	20.8	1.780	34.0	8.3	86.0	30.5	142.2	314.7	65.8	9450	2.500	92.8	190.6
Zircon-036_AME15-01a	14.17	305	1.22	0.036	3.6	0.033	0.23	0.8	0.126	4.6	1.6	22.1	9.6	48.5	120.1	27.4	10480	1.400	31.4	93.9
Zircon-037_AME15-01a	15.40	1736	6.48	3.100	29.8	1.100	7.10	5.0	0.380	27.0	10.8	142.0	57.5	275.8	563	112.3	12220	13.000	334.2	1044.0
Zircon-038_AME15-01a	17.10	2416	7.48		35.3	0.189	3.93	10.0	0.590	60.9	20.4	234.0	86.2	370.0	635	116.4	8190	8.900	513	783.0
Zircon-039_AME15-01a	16.58	1050	3.28		9.1	0.056	0.97	2.5	0.409	14.6	5.9	77.2	32.3	163.0	357	74.2	8650	3.300	93	254.0
Zircon-040_AME15-01a	16.11	759	2.75	0.460	16.04	0.200	1.37	1.8	0.317	11.6	4.5	59.1	24.2	119.5	272.3	58.2	11130	2.600	103	208.5
Zircon-041_AME15-01a	18.80	1189	2.34	0.400	19.27	0.282	2.70	4.3	0.766	22.6	7.9	98.5	39.5	190.0	373	79.2	10070	6.300	425	530.0
Zircon-042_AME15-01a	18.39	1861	4.34	1.930	17.99	0.952	6.78	7.3	1.520	36.2	12.8	158.9	65.3	300.8	571	116.9	7040	5.200	172.4	410.7
Zircon-043_AME15-01a	14.80	3449	3.79	0.124	16.23	0.520	9.88	19.7	4.060	102.5	33.3	368.0	137.0	575.0	990	190.0	9230	7.900	372	678.0
Zircon-044_AME15-01a	17.60	969	2.99	4.800	20	1.700	10.10	4.3	0.570	15.4	5.7	76.1	31.0	152.5	330	69.4	9850	5.500	164.8	457.0
Zircon-045_AME15-01a	19.10	261	1.36		4.67	0.015	0.42	0.7	0.245	4.3	1.5	18.0	8.1	40.6	110.8	25.2	9330	0.800	25.89	61.1
Zircon-046_AME15-01a	16.84	548	1.81		10.07	0.050	0.75	1.4	0.554	7.7	2.9	36.7	16.2	84.0	217	51.3	9150	3.900	140.6	305.0
Zircon-047_AME15-01a	23.40	3210	11.02	11.500	57.7	4.800	25.50	11.3	0.540	46.7	18.8	250.0	104.0	514.0	1137	231.9	12050	25.800	959	1919.0
Zircon-048_AME15-01a	13.10	1457	5.90		12.7	0.033	0.84	3.0	0.164	22.9	9.3	121.5	49.5	229.2	454	92.4	10070	10.000	302	771.0
Zircon-049_AME15-01a	28.40	1570	8.65	14.700	54	5.300	25.00	7.6	0.510	23.1	8.5	108.9	49.1	253.7	611	133.8	11850	10.800	278.5	868.0
Zircon-050_AME15-01a	18.30	1523	3.99		12.67	0.109	1.75	4.0	0.990	29.4	10.5	131.3	51.9	233.8	455.9	91.9	9060	8.500	531	696.0
Zircon-051_AME15-01a	31.00	2290	3.32	11.800	47	5.300	31.00	19.9	1.380	67.3	20.9	228.0	86.5	364.0	645	126.3	8730	5.400	243	427.0
Zircon-052_AME15-01a	18.60	632	1.59	0.013	9.95	0.031	0.81	1.6	0.374	11.4	4.1	52.7	21.0	95.5	194.1	41.5	9920	1.400	87	142.5
Zircon-053_AME15-01a	12.80	977	4.35		13.06	0.021	0.65	1.8	0.212	13.3	5.7	73.1	31.5	161.5	381	79.3	11020	4.900	132	423.0
Zircon-054_AME15-01a	15.00	834	2.60		7.83	0.020	0.60	1.9	0.168	13.6	5.1	68.2	26.4	128.0	287	58.7	11400	6.100	130	481.0
Zircon-055_AME15-01a	14.70	1020	2.99		8.8	0.043	0.80	2.7	0.142	17.2	7.0	85.0	34.2	162.0	341	70.4	11760	6.600	161	543.0
Zircon-057_AME15-01a	13.00	1462	9.13	0.006	15.17	0.036	1.02	2.9	0.119	24.4	9.2	121.9	49.4	230.6	433	86.8	11320	10.600	342	809.0
Zircon-058_AME15-01a	16.70	2100	6.48	0.540	20.1	0.390	2.58	4.5	0.460	34.7	14.7	184.3	68.6	314.0	659	125.3	13720	32.000	642	2320.0
Zircon-059_AME15-01a	16.53	1200	2.62	0.131	9.22	0.104	1.47	3.3	0.762	19.5	7.3	96.4	39.6	187.6	390.1	81.6	8350	4.800	169.8	373.8
Zircon-060_AME15-01a	15.11	1159	3.73		16.66	0.055	1.01	2.7	0.681	17.1	6.2	82.7	36.3	186.7	458	101.0	10200	5.800	204	447.0
Zircon-061_AME15-01a	13.02	1153	3.53		20.4	0.081	1.24	3.0	0.446	19.3	7.3	90.2	37.0	176.6	382	80.5	9590	5.900	340	462.0
Zircon-062_AME15-01a	14.75	1716	2.07	0.010	12.76	0.202	3.86	6.9	1.170	39.7	13.4	153.6	59.5	268.0	510	102.0	9020	4.100	167.9	318.0
Zircon-063_AME15-01a	15.60	949	3.57	2.050	16.2	0.660	3.73	2.2	0.222	13.6	5.4	71.9	30.7	152.0	342.6	71.9	10860	4.800	132.6	361.4
Zircon-064_AME15-01a	20.40	1910	2.47	2.200	16.3	0.970	8.50	8.6	1.960	43.1	13.8	162.0	63.3	290.0	582	121.8	8810	5.500	234	443.0
Zircon-065_AME15-01a	14.10	3230	8.89	0.009	30.4	0.071	2.26	6.9	0.611	50.8	21.0	268.0	112.0	542.0	1160	233.0	12030	24.800	1040	1890.0
Zircon-066_AME15-01a	12.14	1352	3.87	0.039	13.8	0.053	0.58	2.3	0.272	16.6	6.9	92.7	41.9	213.0	540	119.7	10870	10.600	271	865.0
Zircon-067_AME15-01a	17.30	2160	2.05	0.031	4.7	0.293	6.78	12.5	4.790	63.2	20.1	216.0	79.0	321.0	563	110.7	6470	2.700	117.2	220.3
Zircon-068_AME15-01a	14.61	1660	3.22	0.270	27.8	0.200	2.83	6.0	1.250	32.2	11.5	136.0	53.4	247.0	538	113.0	10820	17.900	628	1140.0
Zircon-069_AME15-01a	21.50	1205	3.01	14.300	55.8	4.500	18.40	5.9	0.850	21.1	7.0	88.0	37.5	187.3	449	98.7	11560	11.700	657	1130.0
Zircon-070_AME15-01a	15.02	2007	5.77	0.084	29.8	0.192	2.87	6.0	1.085	38.7	14.2	172.7	68.3	313.6	618	123.8	8820	11.100	604	902.0
Zircon-071_AME15-01b	14.00	847	2.43		18.3	0.077	1.14	2.6	0.500	14.9	5.3	64.5	27.0	130.1	297	64.9	11110	5.500	275	454.0
Zircon-072_AME15-01b	15.10	1889	5.41		51.8	0.114	2.70	6.5	2.810	40.6	12.9	154.0	60.5	284.5	631	137.4	9250	22.500	1801	1697.0
Zircon-073_AME15-01b	16.90	1956	2.00	0.103	3.09	0.172	3.23	7.8	0.357	46.4	15.3	182.3	68.1	295.0	558	106.5	9760	8.300	127.5	436.0
Zircon-074_AME15-01b	15.47	877	1.80		7.6	0.036	0.95	2.5	0.590	14.5	5.5	68.0	27.9	133.9	294	65.3	9350	3.100	74.5	228.0
Zircon-075_AME15-01b	34.00	436	1.31	8.900	27.4	4.000	21.50	6.8	2.110	14.3	3.6	36.6	13.2	60.5	151.7	35.6	8090	1.200	40.4	91.4
Zircon-076_AME15-01b	13.90	242.9	1.59		3.3		0.10	0.3	0.014	3.3	1.1	17.7	7.8	39.2	91.2	19.1	9850	1.700	21.95	127.1
Zircon-077_AME15-01b	17.30	1335	8.62	5.200	26.7	2.130	10.70	5.0	0.268	19.5	7.6	101.3	44.5	209.0	460	96.9	12280	15.900	385.5	1150.0
Zircon-078_AME15-01b	14.18	746	2.12		9.17	0.013	0.34	1.4	0.228	9.9	4.0	54.4	23.8	119.0	282.9	62.3	9520	3.100	78.3	240.0
Zircon-079_AME15-01b	13.12	1052	5.10		16.32	0.015	0.53	1.9	0.273	14.5	5.6	78.6	34.1	169.4	398	84.2	10290	9.800	315.8	817.0
Zircon-080_AME15-01b	14.40	1420	2.73		33	0.088	2.39	4.6	1.380	26.6	8.5	106.0	43.4	209.0	527	112.0	12770	23.800	750	1580.0
Zircon-081_AME15-01b	19.30	704	1.63		9.97	0.023	0.51	1.7	0.263	13.5	4.6	58.1	23.0	106.2	202.2	40.9	10320	1.400	95.8	149.9
Zircon-082_AME15-01b	15.80	378	1.34	0.052	5.13	0.037	0.38	0.9	0.258	6.1	2.2	28.9	12.1	60.1	143.7	32.3	8970	3.000	89.7	239.4
Zircon-085_AME15-01b	14.72	822	2.59	0.660	22.68	0.311	2.38	3.7	0.883	19.9	6.5	71.9	27.0	117.2	228.3	46.9	10130	1.700	168.3	192.6
Zircon-086_AME15-01b	14.60	1200	6.06	0.012	15.6	0.015	0.63	1.9	0.225	14.6	6.2	87.9	38.6	193.0	456	96.2	10790	10.200	269	817.0
Zircon-087_AME15-01b	27.40	1405	5.36	29.000	86.1	8.500	39.10	11.1	1.460	34.0	10.7	128.6	49.0	215.7	411	80.9	8780	7.900	442	670.0
Zircon-088_AME15-01b	19.80	840	1.49	0.013	6.76	0.093	1.36	3.6	0.470	15.9	5.9	74.0	28.4	130.0	263	53.5	7920	2.400	76	183.0

Zircon-089_AME15-01b	18.70	813	1.59	0.170	10.26	0.104	1.18	2.8	0.506	14.7	5.0	63.0	25.4	125.1	279	61.1	10110	2.900	158.2	272.0
Zircon-090_AME15-01b	14.95	2120	4.36	0.116	30.4	0.209	3.62	9.3	0.688	45.8	15.4	190.0	75.1	337.0	643	130.3	10220	7.000	275	550.0
Zircon-091_AME15-01b	42.80	852	2.63	46.000	123	14.000	65.00	13.9	1.020	22.2	5.9	65.4	26.5	136.0	339	78.4	10020	4.300	155.8	324.1
Zircon-092_AME15-01b	12.50	1078	2.60		15.9	0.025	1.12	3.2	0.490	14.7	5.8	79.9	34.0	177.8	433	98.0	10030	5.100	162	392.0
Zircon-093_AME15-01b	15.28	2170	4.50	0.036	32.3	0.274	3.96	8.1	1.840	41.1	14.8	178.0	71.8	338.0	732	157.7	8970	7.700	474	615.0
Zircon-094_AME15-01b	20.40	1985	3.24	2.900	21.8	1.470	9.50	8.9	2.230	45.8	15.3	179.6	69.5	307.9	587	115.4	8850	5.200	250	414.0
Zircon-095_AME15-01b	17.70	1510	2.27	0.700	15.6	0.360	3.27	6.5	0.890	34.3	11.6	138.0	53.3	236.0	439	87.1	9730	2.400	116	195.0
Zircon-096_AME15-01b	17.10	754	1.94		13.75	0.040	0.44	2.1	0.266	13.6	5.3	64.5	25.0	115.7	221.5	45.8	10870	2.400	128.5	226.5
Zircon-097_AME15-01b	15.14	1115	3.82	1.520	15.5	0.660	3.50	3.0	0.433	15.5	6.6	85.4	36.9	184.8	447	96.9	11060	6.400	177	522.0
Zircon-098_AME15-01b	15.20	594	1.76	0.380	10.45	0.151	1.34	1.8	0.519	9.2	3.2	42.0	18.1	92.6	240	56.8	10050	5.600	188.2	427.9
Zircon-099_AME15-01b	13.21	1302	4.60		13.46	0.025	0.59	2.2	0.236	17.8	6.9	96.8	42.1	208.0	487	102.8	11270	9.000	270	779.0
Zircon-100_AME15-01b	23.00	1779	3.10	0.106	15.16	0.365	5.52	8.6	1.520	36.1	12.4	148.1	58.9	280.0	609	131.5	7030	6.500	245	526.0
Zircon-101_AME15-01b	15.38	1184	5.00	1.450	33.2	0.520	4.00	4.0	1.390	17.7	6.2	82.1	35.5	184.0	466	108.9	7900	6.800	355	561.0
Zircon-102_AME15-01b	15.51	599.9	1.66		9.51	0.044	0.66	1.6	0.488	9.3	3.4	45.3	19.1	95.5	219.9	49.4	8740	2.700	103.1	208.6
Zircon-103_AME15-01b	15.20	1399	2.75	0.089	16.1	0.124	1.95	4.2	1.060	24.5	8.2	107.5	45.2	218.0	501	109.0	9440	6.700	325	517.0
Zircon-104_AME15-01b	18.30	3277	7.87	9.500	62.5	3.540	22.00	18.9	3.370	94.2	29.4	331.4	121.4	511.3	898	177.0	8800	17.000	1120	1422.0
Zircon-105_AME15-01b	12.50	985	3.71		14.54	0.025	0.45	1.7	0.332	11.9	5.1	68.5	30.3	154.7	384.2	85.4	10600	6.700	192.5	512.0
Zircon-107_AME15-01b	14.90	1360	3.58	0.017	20.9	0.062	1.31	3.5	0.834	21.6	8.1	107.1	45.3	215.0	493	104.0	9310	4.900	206	397.0
Zircon-108_AME15-01b	13.70	1639	7.16	0.013	25	0.052	0.96	2.8	0.421	22.0	9.1	123.5	54.6	270.0	627	133.7	10090	11.100	432	907.0
Zircon-109_AME15-01b	16.61	1001	1.95		5.39	0.068	1.24	3.2	0.815	16.8	6.3	82.6	33.8	163.7	343	75.3	7210	2.200	67.7	182.5
Zircon-110_AME15-01b	14.44	1700	6.00	0.031	16	0.063	1.43	3.6	0.214	26.6	10.3	135.0	58.6	285.0	657	138.0	11510	12.800	530	1130.0
Zircon-111_AME15-01b	14.00	1798	8.35	7.900	42.6	3.300	17.30	8.4	0.427	37.0	13.1	161.3	62.7	285.8	526	105.9	9690	12.600	477	991.0
Zircon-112_AME15-01b	16.50	2031	10.75	2.480	36.7	1.370	7.30	5.8	0.495	31.3	12.3	164.4	68.2	329.7	750	155.1	11390	25.900	1132	1885.0
Zircon-113_AME15-01b	13.81	1360	2.40		11.08	0.105	2.15	4.8	0.610	29.2	10.0	122.0	48.6	214.0	430	87.4	9950	4.400	144	360.0
Zircon-114_AME15-01b	14.00	939	2.97	1.100	18.2	0.380	1.90	2.3	0.406	13.9	5.4	69.2	30.3	155.4	369	83.2	8800	3.600	109.4	284.0
Zircon-115_AME15-01b	12.71	1170	3.99		15.1	0.044	1.31	2.9	0.397	17.8	6.7	96.0	39.5	186.0	434	90.4	9410	8.500	285	705.0
Zircon-116_AME15-01b	13.15	857	2.20	0.078	23.38	0.037	0.66	1.8	0.674	11.8	4.6	61.5	26.9	139.2	348	82.1	10310	24.400	378	601.0
Zircon-117_AME15-01b	13.80	1800	8.38	0.006	22.1	0.146	2.34	6.6	0.490	34.1	13.2	159.0	62.6	279.0	528	106.8	9520	15.000	930	1125.0
Zircon-118_AME15-01b	13.24	686	1.62		7.76	0.012	0.47	1.1	0.348	8.6	3.6	46.7	21.9	112.5	293	66.3	9710	2.900	73.8	221.0
Zircon-119_AME15-01b	15.60	699	1.94	0.042	8.51	0.044	0.98	2.1	0.434	12.2	4.6	58.2	23.7	110.4	233.7	48.2	8950	2.800	82.7	229.4
Zircon-120_AME15-01b	13.64	507	1.26		5.05	0.024	0.32	1.0	0.447	6.4	2.4	33.1	15.2	84.8	222	55.7	9760	2.800	59.2	214.7
Zircon-121_AME15-01b	15.95	2860	19.70	0.180	47	0.244	3.04	5.9	0.784	44.4	18.1	249.0	104.2	509.0	1138	225.0	10400	24.900	1040	1930.0
Zircon-122_AME15-01b	13.30	946	5.50	0.220	35.9	0.163	1.00	2.0	0.452	12.6	4.7	62.4	27.9	150.3	465	107.0	14580	45.300	720	3130.0
Zircon-123_AME15-01b	11.99	605	2.82		23.5	0.026	0.41	1.3	0.307	8.6	3.2	41.8	18.4	94.7	261	59.6	12660	26.800	553	1710.0
Zircon-124_AME15-01b	17.20	893	3.28	2.670	28.7	0.940	4.80	3.8	0.850	19.8	6.7	76.5	29.1	132.4	276	56.2	10410	1.600	117.4	188.5
Zircon-125_AME15-01b	17.42	2169	3.93		10.38	0.087	2.03	4.9	1.270	33.0	13.0	177.6	75.2	348.0	673	137.2	6880	6.500	223.4	504.0
Zircon-126_AME15-01b	13.90	1160	2.82	0.008	11.41	0.077	1.38	3.5	0.888	21.9	8.1	98.7	39.3	180.5	352.3	71.4	8200	8.300	388	637.0
Zircon-127_AME15-01b	13.57	1024	2.33		14.79	0.053	1.05	2.6	0.643	15.4	5.9	78.3	33.3	165.7	407	89.7	9590	4.300	158.5	342.0
Zircon-128_AME15-01b	21.30	808	1.64	9.200	32.3	2.900	12.80	4.9	0.750	17.8	5.8	69.4	27.9	128.2	264	55.3	8850	1.500	55.5	112.6
Zircon-129_AME15-01b	35.00	1007	4.44	34.000	97	12.200	53.00	13.0	0.690	24.3	6.9	82.7	34.8	171.2	379	79.4	10430	5.800	131.7	458.0
Zircon-130_AME15-01b	25.30	697	1.56	0.021	11.99	0.055	0.96	2.4	0.300	15.1	5.1	61.6	23.5	105.1	192.8	38.3	9980	1.600	111.7	149.2
Zircon-131_AME15-01b	14.31	1405	1.71		14.71	0.081	1.57	4.6	0.671	30.1	10.3	124.8	47.8	214.7	402	79.0	8770	1.900	93.3	156.8
Zircon-132_AME15-01b	14.40	684	2.18		13.27	0.023	0.56	1.7	0.259	10.4	4.1	54.6	22.2	106.4	231	49.2	9850	2.000	69.1	158.0
Zircon-133_AME15-01b	14.80	2049	9.77	0.990	48.4	0.680	6.50	9.2	0.930	42.2	14.5	177.5	70.1	321.0	635	127.3	9190	13.300	978	1066.0
Zircon-134_AME15-01b	14.80	385	1.20	0.031	8.51	0.003	0.27	0.9	0.151	5.2	2.0	27.1	11.4	61.1	154.4	36.0	9890	1.700	86.3	172.0
Zircon-136_AME15-01b	12.83	1128	3.16	0.047	8.82	0.086	1.07	2.5	0.285	15.9	6.8	88.6	37.8	179.0	384	76.7	10500	7.900	173.4	623.0
Zircon-137_AME15-01b	13.14	792	1.72		10.52	0.037	0.90	2.0	0.532	11.1	4.1	59.8	25.4	129.5	332.6	74.6	9350	2.900	95.2	238.1
Zircon-138_AME15-01b	12.60	1871	6.58		53.6	0.066	1.53	4.2	1.030	27.6	11.5	143.5	58.6	286.0	668	139.7	10230	45.600	1725	2920.0
Zircon-140_AME15-01b	13.10	1914	4.21	0.700	17.9	0.410	5.21	8.0	1.040	44.6	15.0	176.8	67.6	297.4	543	107.3	7660	8.300	340	617.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
AME-15-03 (Ame-b*) Batolito Puerto Vallarta, Suite Zihuatajejo, Complejo Artega																				
Zircon-001_AME15-03	11.20	661	1.17	0.240	8	0.107	0.58	1.5	0.415	9.7	3.7	46.8	19.4	105.0	277	60.4	9760	3.550	111	284.0
Zircon-002_AME15-03	8.70	801	2.49	0.750	14.5	0.290	1.88	1.4	0.288	11.1	4.4	59.7	25.9	124.8	309	68.2	11420	7.350	219	564.0
Zircon-003_AME15-03	29.10	4870	25.30	3.100	233	2.300	22.60	27.5	5.320	118.7	37.5	428.0	159.0	688.0	1331	257.0	9360	50.750	6890	4370.0
Zircon-004_AME15-03	13.20	925	3.19	7.900	34.3	2.100	10.50	3.9	0.440	13.4	5.3	68.3	28.8	145.2	346	78.7	9110	8.200	234	626.0
Zircon-005_AME15-03	11.26	2660	2.17	0.085	44.7	0.716	11.70	18.1	6.120	74.5	21.5	233.0	85.6	377.0	775	162.0	8800	6.225	629	548.0
Zircon-006_AME15-03	9.11	1139	2.41		10.3	0.015	0.44	1.9	0.204	14.2	5.8	80.8	35.9	183.0	440	97.6	10340	10.150	256	799.0
Zircon-007_AME15-03	15.90	942	1.06	0.002	11.48	0.120	2.36	4.4	0.595	24.7	7.8	86.9	31.8	134.7	232	45.1	8880	1.835	137	153.2
Zircon-009_AME15-03	13.50	1890	2.11	0.048	33.5	0.459	7.10	10.6	3.570	49.3	15.5	171.0	63.5	285.0	551	110.5	8560	4.825	338	358.0
Zircon-010_AME15-03	8.07	1133	2.61	0.002	12.64	0.021	0.87	2.4	0.415	15.6	6.0	83.2	35.5	178.0	437	97.0	10410	8.975	255	716.0
Zircon-012_AME15-03	14.20	6730	11.10	1.160	133.5	2.070	26.10	39.4	8.230	172.0	55.5	627.0	226.0	968.0	1705	326.0	6120	33.050	4710	2900.0
Zircon-013_AME15-03	8.89	1076	4.15	0.380	18	0.095	0.77	1.8	0.404	13.0	5.4	72.9	33.2	173.6	437	98.2	10700	7.825	223	660.0
Zircon-015_AME15-03	14.40	8470	11.31	1.390	123.1	1.710	21.90	34.2	7.280	166.0	56.2	672.0	269.0	1240.0	2350	462.0	5620	43.000	5650	3260.0
Zircon-016_AME15-03	12.40	960	2.35	1.200	25.3	0.570	3.20	4.3	0.840	23.6	7.1	80.0	30.0	136.0	258	52.5	8110	1.610	110	177.0
Zircon-017_AME15-03	31.30	1380	1.60	48.000	123	16.800	88.00	23.8	1.530	47.4	12.5	126.8	46.8	200.0	351	68.1	7700	5.600	300	477.0
Zircon-018_AME15-03	8.45	906	3.16		12.12	0.001	0.32	1.4	0.175	10.3	4.5	64.3	28.4	149.8	377	86.4	10480	6.725	155.8	556.0
Zircon-019_AME15-03	17.70	4610	7.04	16.100	79.8	8.930	55.60	36.9	5.220	145.5	43.6	467.0	165.7	679.0	1095	211.0	5910	17.025	1182	1223.0
Zircon-020_AME15-03	11.15	1656	2.80	1.080	23.5	0.464	3.70	4.8	1.130	30.5	11.1	133.4	53.0	246.0	503	106.3	7160	9.250	872	878.0
Zircon-021_AME15-03	9.41	1149	2.09	0.400	16.5	0.216	2.96	3.9	0.890	20.0	7.1	85.4	35.4	172.0	413	94.6	8320	9.625	455	770.0
Zircon-022_AME15-03	10.30	2810	9.21	3.300	15.1	1.200	4.50	5.3	0.174	43.0	17.9	236.0	98.8	447.0	835	164.9	11700	21.675	569	1636.0
Zircon-023_AME15-03	10.10	1155	2.55	0.120	18.5	0.084	1.59	2.8	0.810	18.6	7.0	84.7	35.6	176.0	424	95.4	9120	7.725	258	613.0
Zircon-024_AME15-03	9.16	873	2.50	0.006	16.8	0.049	1.21	2.4	0.940	16.1	5.9	73.9	28.4	128.0	258	53.1	8720	2.275	99	181.0
Zircon-025_AME15-03	7.81	275	2.20		7.75	0.008	0.06	0.3	0.027	1.9	0.9	14.2	6.8	47.2	206	57.2	20020	16.400	70.7	1573.0
Zircon-026_AME15-03	10.29	1634	1.79	0.010	7.84	0.153	2.92	5.5	1.680	34.2	12.1	141.2	54.8	242.8	463	95.0	7130	5.003	158	367.0
Zircon-027_AME15-03	12.88	1046	0.76		10.69	0.144	2.99	6.3	0.933	28.0	9.1	99.4	35.0	144.6	253	50.0	8670	1.598	122.1	150.2
Zircon-029_AME15-03	10.07	2750	4.90	2.310	25.4	1.160	8.70	8.9	0.602	51.5	19.4	236.0	94.9	429.0	821	162.6	9450	15.300	471	1193.0
Zircon-030_AME15-03	7.78	1499	2.11	0.009	13.49	0.108	2.19	4.5	0.600	28.0	10.2	128.6	49.8	231.9	471	98.1	8800	8.100	310	638.0
Zircon-031_AME15-03	15.00	3350	17.42	25.000	159	9.800	52.00	21.8	1.710	76.2	25.4	296.0	113.3	502.0	936	186.2	8130	23.000	1748	1798.0
Zircon-032_AME15-03	720.00	1244	1.32	0.135	9.2	0.220	2.77	5.4	1.340	27.0	9.1	107.7	41.9	195.0	394	80.5	6980	3.568	136.6	268.0
Zircon-033_AME15-03	11.61	585	1.15	0.200	13.81	0.091	0.80	1.7	0.282	10.1	3.8	45.0	18.7	87.8	192.1	39.7	8040	3.393	188.5	288.7
Zircon-034_AME15-03	8.52	1108	3.33	1.270	18.3	0.450	2.98	2.9	0.273	17.0	6.7	88.1	36.7	177.0	368	75.4	9180	7.850	181.9	598.0
Zircon-035_AME15-03	7.61	1135	4.83		10.71	0.015	0.57	1.7	0.213	15.4	6.2	87.8	37.2	181.7	400	84.6	8360	7.275	133.1	534.0
Zircon-036_AME15-03	8.72	226	0.60	0.018	3.88	0.002	0.23	0.4	0.113	3.6	1.3	16.2	6.9	36.3	89.1	20.4	8670	1.893	42.8	138.0
Zircon-037_AME15-03	11.10	2451	5.90		47.4	0.138	3.22	7.1	0.950	49.9	18.0	212.9	81.1	358.0	647	126.2	9010	24.075	2285	2381.0
Zircon-038_AME15-03	9.78	1483	1.05	0.024	15.22	0.345	5.41	9.0	2.940	38.2	12.2	137.2	50.6	219.8	429	88.1	5600	0.355	82.5	102.4
Zircon-039_AME15-03	9.80	1928	2.43	0.121	11.23	0.348	4.85	8.6	0.980	48.7	15.9	184.5	66.9	292.0	504	102.7	6400	7.125	279	497.0
Zircon-042_AME15-03	12.15	524	0.73		6	0.020	0.57	1.5	0.261	9.6	3.6	42.9	17.4	77.0	152.6	31.5	8280	0.868	54.4	83.3
Zircon-044_AME15-03	12.02	1920	2.94	3.860	52.1	1.280	9.10	9.1	1.910	42.6	14.4	166.0	64.6	287.0	561	115.7	7950	5.600	494	434.0
Zircon-045_AME15-03	9.92	618	0.66		4.91	0.047	1.21	2.1	0.790	10.3	3.6	45.0	19.1	94.1	224	53.6	6290	1.155	64.8	112.4
Zircon-046_AME15-03	8.78	978	0.82	0.021	7.44	0.172	3.19	5.0	1.500	22.7	7.3	83.4	31.8	148.7	330	74.0	7390	4.025	196	342.0
Zircon-047_AME15-03	9.70	1276	1.38	0.079	9.01	0.117	1.85	4.3	0.974	22.5	8.0	99.8	41.1	195.3	426	91.4	7350	4.025	215	373.0
Zircon-048_AME15-03	8.36	1048	1.69	0.040	5.37	0.041	1.03	2.7	0.542	16.2	6.5	83.1	34.3	164.3	352	75.3	6540	3.353	95	252.0
Zircon-049_AME15-03	9.30	3650	2.38	0.059	27.9	0.410	6.50	12.1	1.320	80.0	28.7	332.0	126.0	540.0	890	175.0	6790	10.075	559	1000.0
Zircon-050_AME15-03	13.24	1243	1.32		8.48	0.070	1.61	3.3	0.960	21.9	8.2	100.4	41.1	190.0	370	76.5	6740	2.815	179	287.0
Zircon-051_AME15-03	9.20	910	0.96	0.024	7.65	0.081	1.86	3.2	0.810	17.7	6.5	73.5	29.7	138.7	308	67.1	8000	3.825	163	320.0
Zircon-052_AME15-03	500.00	1120	2.25	9.200	34	3.700	19.20	7.1	0.680	25.2	8.5	99.2	38.9	173.0	323	65.4	7530	3.785	116.5	282.0
Zircon-053_AME15-03	12.40	1855	2.00	1.960	18.41	0.720	6.58	7.9	1.360	44.5	14.8	173.1	64.7	284.0	502	99.1	6420	4.340	199	290.0
Zircon-054_AME15-03	10.09	1900	1.57	0.074	19.9	0.259	4.50	7.8	1.850	43.3	14.5	166.0	63.2	281.0	533	109.3	6850	4.988	444	459.0
Zircon-055_AME15-03	9.34	811	1.44	2.400	19.9	0.770	4.90	3.4	0.671	14.3	4.9	59.8	24.7	125.8	322	73.9	8490	6.500	272	548.0
Zircon-056_AME15-03	10.43	1700	2.84		16.7	0.081	1.33	3.8	0.929	24.6	10.1	129.2	54.7	261.0	567	121.1	6920	7.050	509	678.0
Zircon-057_AME15-03	8.59	3210	4.16	0.008	30.4	0.184	3.56	7.9	2.180	52.2	19.8	254.0	107.4	502.0	1044	217.0	6420	8.475	297	381.0

Zircon-058_AME15-03	19.50	447	0.68		6.55	0.004	0.40	1.6	0.147	7.8	3.0	37.0	14.4	67.5	132.8	27.7	7830	1.245	58.1	103.6
Zircon-059_AME15-03	14.07	644	0.77		6.47	0.044	1.04	2.3	0.307	13.4	4.8	55.5	21.3	96.0	175.3	35.1	7220	0.933	58.6	85.8
Zircon-060_AME15-03	25.90	1727	2.14	17.900	52	5.500	29.00	9.1	1.630	33.3	11.5	139.5	56.0	263.0	550	116.1	7170	5.625	435	530.0
Zircon-061_AME15-03	7.62	1079	3.79		18.84	0.017	0.49	2.0	0.195	15.1	6.3	83.8	35.6	172.6	382	80.4	9630	5.035	140.6	409.0
Zircon-062_AME15-03	7.22	644	1.64		9.81		0.47	1.3	0.130	10.6	4.2	51.9	21.4	101.1	198.7	41.8	8160	21.350	43.8	114.0
Zircon-063_AME15-03	7.20	1780	4.06	0.043	12.47	0.102	2.05	5.2	0.454	33.0	12.6	153.0	59.8	273.0	543	110.7	8460	11.400	354	893.0
Zircon-064_AME15-03	12.80	1113	2.62	0.155	10.09	0.137	1.57	3.1	0.271	19.0	7.2	90.7	36.6	175.0	353	74.1	7910	5.450	150	404.0
Zircon-065_AME15-03	15.00	861	0.95	0.004	13.06	0.096	1.41	3.4	0.396	18.9	6.5	75.6	28.7	124.8	234	45.7	8420	2.093	149.1	179.6
Zircon-067_AME15-03	14.05	1883	1.38	0.135	10.53	0.269	3.98	7.3	1.970	40.8	13.9	164.0	63.3	275.0	512	104.2	6750	3.675	239	352.0
Zircon-068_AME15-03	9.56	1730	1.41	0.045	6.53	0.178	2.91	7.6	1.570	42.9	13.8	159.5	60.2	258.6	464	92.0	6840	4.560	157.7	350.0
Zircon-069_AME15-03	10.88	800	0.58	0.004	7.21	0.128	1.76	2.9	0.740	15.2	5.5	65.5	26.2	118.9	249	50.9	6900	1.360	91.7	122.8
Zircon-073_AME15-03	7.05	1034	1.30		7.39	0.036	0.73	2.4	0.389	16.9	6.4	80.8	34.5	165.6	354	77.2	8110	3.805	110.3	294.6
Zircon-074_AME15-03	8.46	1110	1.24	0.015	7	0.105	1.24	3.1	0.850	19.6	7.3	91.0	35.3	169.0	354	76.8	7020	3.550	130	282.0
Zircon-075_AME15-03	8.48	984	0.97	0.046	9.8	0.196	3.53	5.3	1.560	25.1	8.0	85.7	31.8	146.0	296	64.2	7710	4.600	223	337.0
Zircon-076_AME15-03	8.40	1790	2.15	0.025	17.9	0.190	3.86	6.7	1.680	37.1	12.9	155.0	59.8	273.0	562	115.8	8150	6.425	294	514.0
Zircon-077_AME15-03	8.88	525	0.43		4.21	0.020	0.54	1.4	0.628	8.5	2.8	36.5	15.9	83.2	220.5	54.0	6130	1.800	67.7	140.2
Zircon-078_AME15-03	8.20	898	1.04	0.014	7.57	0.062	0.94	2.4	0.754	13.4	5.2	67.4	28.7	140.1	342	78.5	6770	3.693	117.9	283.8
Zircon-079_AME15-03	11.70	1010	0.80		10.29	0.171	2.75	5.0	2.030	24.5	7.9	90.1	35.5	157.0	335	68.4	7200	1.178	79.8	93.4
Zircon-080_AME15-03	8.09	695	1.08	0.035	4	0.036	0.53	1.6	0.430	10.7	4.4	56.4	23.8	111.0	251	53.4	6520	3.175	72	146.0
Zircon-081_AME15-03	13.80	2320	2.63	1.650	36	0.780	9.30	14.2	1.900	64.4	21.4	225.0	81.7	342.0	562	110.9	6340	5.725	688	456.0
Zircon-082_AME15-03	7.39	871	1.15	0.084	9.6	0.122	1.52	3.0	0.910	15.4	5.5	66.4	27.6	137.2	328	74.3	7570	3.593	155	271.0
Zircon-083_AME15-03	12.70	1245	0.82	0.004	13.33	0.158	3.10	5.9	0.414	31.8	10.6	115.9	41.9	174.3	292	57.0	7360	2.285	190	186.8
Zircon-084_AME15-03	17.93	1284	0.84	0.033	13.95	0.326	5.13	7.0	0.855	33.2	10.6	117.7	42.7	178.6	305	61.1	7550	2.618	217.8	247.5
Zircon-085_AME15-03	7.55	4360	9.15	4.900	41.8	0.990	4.70	8.8	0.629	63.5	26.4	346.0	143.2	670.0	1352	275.0	8450	19.750	772	1499.0
Zircon-088_AME15-03	8.29	1609	6.66	0.016	22.7	0.041	1.56	4.0	0.169	28.1	10.9	134.5	53.9	250.9	500	101.2	9760	11.600	379	949.0
Zircon-089_AME15-03	8.62	1420	2.48	0.740	18.4	0.360	3.50	4.4	0.373	23.7	9.2	121.3	47.5	220.0	459	94.4	8590	7.375	215	533.0
Zircon-090_AME15-03	9.43	620	0.63		4.44	0.039	1.06	2.4	0.696	11.8	4.3	52.2	20.9	97.5	204.4	45.0	5880	1.255	45.8	95.1
Zircon-091_AME15-03	9.78	1540	1.62	1.460	19.9	0.710	6.02	7.7	1.380	33.6	11.8	134.0	51.0	233.0	478	101.1	6360	8.900	417	641.0
Zircon-092_AME15-03	8.60	2600	2.21	0.062	16.21	0.363	5.63	11.0	2.990	65.9	23.0	254.3	91.0	377.0	652	130.4	6780	6.825	566	642.0
Zircon-093_AME15-03	6.99	4690	22.40	0.168	82.6	0.379	7.55	15.7	0.554	89.6	34.4	411.0	160.0	688.0	1265	246.0	8150	0.688	874	1084.0
Zircon-094_AME15-03	7.30	675	1.06		6.02	0.022	0.58	1.3	0.374	9.7	4.0	49.9	21.9	106.6	269	62.5	8120	4.013	91.8	313.0
Zircon-095_AME15-03	7.09	1124	0.99	0.023	9.09	0.134	2.06	4.6	1.010	22.1	8.0	92.3	35.6	168.2	380.2	83.2	7820	5.505	199.1	405.0
Zircon-096_AME15-03	10.13	586	0.48		6.07	0.101	1.84	4.0	0.726	22.1	6.3	58.2	19.4	72.9	132.3	26.2	7710	0.528	45.6	52.8
Zircon-098_AME15-03	8.03	2730	5.18	0.203	64.1	0.217	3.07	6.7	2.140	41.4	16.6	208.0	87.1	419.0	953	206.0	7060	22.125	1820	1890.0
Zircon-099_AME15-03	17.00	1076	2.86	0.165	21	0.122	1.59	3.4	0.330	19.5	7.8	89.9	36.8	160.0	320	64.3	9530	6.575	352	592.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
CUA-15-01 (Cua*) Batolito Puerto Vallarta, Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																				
Zircon-001_CUA15-01	11.59	314.0	0.43		1.8	0.027	0.37	0.8	0.420	4.7	1.9	23.0	10.4	52.6	135.0	31.8	8430.0	2.900	70.0	111.0
Zircon-003_CUA15-01	15.20	525.0	0.73		7.1	0.025	0.30	1.1	0.344	8.0	2.9	37.6	16.6	83.3	185.0	44.0	10980.0	7.100	90.6	167.0
Zircon-006_CUA15-01	12.40	2240.0	3.13	3.600	18.6	1.400	8.90	10.6	1.920	53.8	18.3	215.0	80.1	342.0	568.0	114.5	7800.0	4.100	148.3	286.0
Zircon-007_CUA15-01	14.20	1800.0	1.94	0.005	1.6	0.071	1.63	4.3	0.160	29.8	11.7	152.0	61.3	289.0	579.0	118.6	11030.0	53.300	53.2	244.0
Zircon-009_CUA15-01	10.46	4690.0	4.20	0.058	21.4	0.553	10.30	21.1	4.430	118.7	41.2	469.0	171.0	741.0	1200.0	229.0	8770.0	6.900	367.0	557.0
Zircon-010_CUA15-01	11.01	211.0	0.53	0.061	4.4	0.024	0.29	0.6	0.262	3.3	1.3	15.2	6.3	32.0	81.6	19.9	8320.0	1.000	10.5	24.1
Zircon-011_CUA15-01	9.41	1270.0	2.92	0.039	14.9	0.210	3.08	5.4	0.830	29.6	9.6	115.0	43.7	194.0	363.0	74.4	7890.0	3.500	168.0	250.0
Zircon-012_CUA15-01	9.60	1050.0	2.04	0.033	7.0	0.059	1.50	3.4	0.630	22.6	8.1	96.0	37.5	161.0	279.0	56.3	9020.0	2.200	68.7	161.0
Zircon-014_CUA15-01	11.40	2250.0	2.66	0.840	15.1	0.430	4.40	8.9	1.040	56.6	18.5	210.0	81.4	348.0	583.0	118.0	10650.0	4.700	179.0	358.0
Zircon-015_CUA15-01	10.15	1380.0	4.70		12.1	0.108	1.53	4.6	0.660	28.9	10.3	127.2	49.2	215.0	364.0	72.5	8530.0	4.800	227.0	350.0
Zircon-017_CUA15-01	12.40	1770.0	9.14	0.027	82.9	0.070	1.33	3.1	0.660	23.3	9.4	132.2	57.9	289.0	676.0	150.7	13380.0	107.300	133.6	497.0
Zircon-019_CUA15-01	19.10	4380.0	14.24	2830.000	4800.0	520.000	1990.00	221.0	5.300	193.0	36.2	381.0	146.0	664.0	1280.0	258.0	10930.0	18.100	1134.0	1440.0
Zircon-021_CUA15-01	12.10	1632.0	4.97		13.9	0.063	1.80	4.9	0.990	32.8	12.4	147.7	56.5	253.0	439.0	88.5	8970.0	4.900	263.0	391.0
Zircon-023_CUA15-01	11.81	1153.0	2.99	2.140	21.1	0.870	5.80	5.3	0.840	25.2	8.5	104.0	41.0	184.0	332.0	69.4	8160.0	3.900	194.0	288.0

Zircon-027_CUA15-01	23.10	479.0	1.08	14.700	43.8	4.300	17.90	5.1	0.412	13.2	3.5	40.7	15.8	73.4	156.0	33.8	10940.0	7.300	86.5	316.0
Zircon-028_CUA15-01	11.20	2800.0	4.42	0.069	25.0	0.111	2.52	7.6	0.560	55.4	20.1	252.0	99.5	445.0	791.0	158.0	10700.0	7.500	250.0	511.0
Zircon-029_CUA15-01	9.83	1340.0	2.59		4.3	0.045	0.88	2.4	0.156	22.5	8.5	112.0	47.4	220.0	424.0	86.3	9800.0	6.100	87.1	230.0
Zircon-030_CUA15-01	11.17	2740.0	2.88	0.260	9.7	0.346	5.45	11.3	2.310	70.1	23.6	273.0	102.7	432.0	703.0	138.6	8920.0	4.500	195.0	341.0
Zircon-031_CUA15-01	14.57	599.0	0.45		1.1	0.029	0.62	1.5	0.418	10.4	4.2	52.5	20.8	95.8	189.0	40.8	7650.0	0.800	12.1	30.6
Zircon-032_CUA15-01	9.25	2500.0	2.87	0.003	13.9	0.228	4.31	10.0	2.140	59.7	20.0	237.0	89.2	385.0	668.0	130.2	8890.0	4.000	152.0	304.0
Zircon-033_CUA15-01	10.64	2070.0	2.92	3.000	22.3	1.460	8.70	10.0	0.930	47.9	16.5	199.0	75.1	318.0	544.0	104.8	9930.0	4.600	175.0	338.0
Zircon-035_CUA15-01	9.68	875.0	2.88		19.0	0.014	0.76	1.4	0.419	12.1	4.8	65.8	29.1	143.0	317.0	71.4	10790.0	2.700	99.0	200.0
Zircon-036_CUA15-01	10.10	3280.0	5.30	0.290	56.1	0.337	5.77	10.0	2.500	54.3	20.1	248.0	100.0	478.0	1010.0	211.0	7640.0	9.700	480.0	690.0
Zircon-037_CUA15-01	11.20	1420.0	1.07	0.021	7.5	0.309	3.86	7.2	3.360	34.9	11.4	126.0	46.9	211.0	444.0	100.1	6350.0	8.700	361.0	636.0
Zircon-038_CUA15-01	10.93	2510.0	5.83		4.7	0.031	0.53	3.1	0.160	31.1	14.1	200.0	85.5	411.0	168.0	14460.0	8.600	112.3	674.0	
Zircon-039_CUA15-01	15.50	5070.0	2.83	0.008	42.1	0.251	4.93	14.1	3.790	101.9	37.5	455.0	172.6	753.0	1271.0	238.0	7850.0	17.500	761.0	693.0
Zircon-041_CUA15-01	13.00	372.0	0.51	0.710	9.3	0.179	1.58	1.6	0.770	6.8	2.4	27.5	11.6	58.4	154.5	38.4	8930.0	4.100	48.8	106.1
Zircon-042_CUA15-01	10.01	401.0	2.11	0.152	4.6	0.059	0.81	1.5	0.138	8.2	2.9	36.3	13.5	62.3	118.2	25.5	8700.0	13.800	18.8	66.7
Zircon-043_CUA15-01	18.80	4020.0	3.51	11.600	50.2	4.910	32.70	25.7	4.530	112.9	36.3	406.0	148.0	624.0	1026.0	200.0	9910.0	6.500	295.0	492.0
Zircon-044_CUA15-01	10.60	1211.0	4.22	2.270	19.9	0.780	5.40	4.3	0.466	23.2	8.5	106.3	41.7	194.0	362.0	72.1	10110.0	3.900	127.0	288.0
Zircon-046_CUA15-01	13.17	715.0	1.13		1.0	0.018	0.64	1.8	0.035	11.8	4.9	61.2	24.6	117.5	226.0	47.3	10040.0	3.200	43.9	118.6
Zircon-049_CUA15-01	13.20	1550.0	2.23	4.700	20.2	1.660	9.00	7.0	0.930	35.0	12.8	149.0	54.5	243.0	406.0	82.7	9700.0	2.800	94.0	206.0
Zircon-050_CUA15-01	30.50	7000.0	30.20	0.940	78.9	0.700	9.00	19.7	0.980	134.9	52.0	637.0	251.0	1091.0	1840.0	350.0	10950.0	35.600	1161.0	1490.0
Zircon-052_CUA15-01	118.00	977.0	2.57	0.048	25.3	0.078	1.51	3.2	0.920	18.5	6.4	78.5	31.5	151.0	318.0	68.7	9960.0	14.200	500.0	687.0
Zircon-053_CUA15-01	9.83	1630.0	4.42	0.099	17.8	0.132	1.91	4.6	0.860	30.0	11.4	145.5	57.0	259.0	478.0	99.2	9040.0	4.500	172.0	331.0
Zircon-054_CUA15-01	16.15	2400.0	4.64	6.400	44.0	2.040	13.20	11.1	2.120	50.2	17.0	206.0	80.0	357.0	720.0	149.0	8210.0	4.900	280.0	382.0
Zircon-056_CUA15-01	10.66	1440.0	1.60	0.056	9.8	0.118	2.38	5.0	0.990	30.2	10.5	126.0	49.9	225.0	438.0	91.5	9200.0	3.200	130.1	243.0
Zircon-057_CUA15-01	10.70	775.0	0.73		7.1	0.063	1.01	2.0	0.580	10.7	4.1	54.4	23.5	124.0	336.0	85.8	10300.0	23.300	185.0	466.0
Zircon-058_CUA15-01	8.76	1230.0	2.67		13.2	0.046	0.99	2.9	0.592	20.0	7.9	100.0	40.2	192.0	396.0	83.4	9840.0	4.300	150.0	306.0
Zircon-059_CUA15-01	12.50	4390.0	7.40	0.043	18.9	0.850	16.70	30.8	1.790	142.0	43.3	468.0	165.0	660.0	1020.0	192.0	7300.0	13.700	740.0	518.0
Zircon-060_CUA15-01	12.20	993.0	1.41	4.300	18.6	1.230	5.00	2.7	0.576	14.0	5.2	71.0	31.1	161.5	388.0	90.1	8700.0	13.400	127.4	306.0
Zircon-061_CUA15-01	11.74	2330.0	1.88	3.090	2.5	0.291	3.10	7.4	0.352	47.1	17.1	213.0	83.8	370.0	671.0	132.0	10160.0	8.300	146.0	342.0
Zircon-062_CUA15-01	13.40	797.0	1.24	3.800	14.4	1.310	7.70	3.1	0.790	14.3	5.1	65.2	26.9	128.1	270.0	58.6	7880.0	1.800	37.7	117.6
Zircon-063_CUA15-01	16.10	1254.0	4.66	17.200	56.8	6.500	34.40	10.8	0.681	30.6	9.5	112.6	44.0	198.0	363.0	73.1	10900.0	4.000	133.7	307.0
Zircon-064_CUA15-01	8.74	810.0	2.23		10.2	0.018	0.46	1.6	0.223	10.3	4.1	56.8	25.4	129.1	313.0	69.8	10820.0	7.000	187.1	505.0
Zircon-065_CUA15-01	18.20	1033.0	0.86	0.036	10.2	0.246	4.44	7.4	0.816	29.7	9.0	96.5	33.8	150.8	276.0	55.1	8930.0	6.100	226.0	281.0
Zircon-069_CUA15-01	12.40	449.0	0.57		10.0	0.051	1.42	2.0	0.710	9.4	2.8	32.9	13.7	69.7	177.8	43.5	9280.0	4.500	56.5	104.4
Zircon-070_CUA15-01	13.80	1790.0	3.58	0.082	11.5	0.134	1.81	6.5	0.730	35.9	13.4	161.0	61.7	280.0	505.0	101.9	9490.0	4.000	140.0	310.0
Zircon-072_CUA15-01	9.92	4840.0	13.56	0.009	39.9	0.183	3.89	12.5	0.637	87.4	34.3	433.0	170.3	766.0	1313.0	252.0	11210.0	20.900	553.0	845.0
Zircon-074_CUA15-01	17.40	265.0	0.59	8.500	26.0	2.010	8.90	2.1	0.464	5.7	1.6	19.6	7.9	41.4	111.4	27.9	9440.0	5.900	60.7	136.5
Zircon-075_CUA15-01	12.80	4020.0	27.50	1.260	64.6	0.690	6.80	13.1	0.880	85.0	30.7	375.0	143.0	621.0	1040.0	200.0	9490.0	43.500	1800.0	1470.0
Zircon-076_CUA15-01	10.72	4160.0	7.26	0.190	21.4	0.211	4.06	11.8	0.930	79.4	29.2	370.0	149.0	665.0	1139.0	216.0	11090.0	13.100	329.0	491.0
Zircon-080_CUA15-01	9.84	1602.0	4.44	0.420	13.7	0.290	2.69	5.9	0.630	34.7	12.3	148.2	57.2	252.0	441.0	89.0	9120.0	4.000	131.8	300.0
Zircon-081_CUA15-01	9.05	1840.0	2.99	0.010	14.8	0.044	1.04	4.0	0.394	32.0	12.6	165.0	65.2	302.0	543.0	107.5	10920.0	4.400	126.1	317.0
Zircon-082_CUA15-01	22.10	2140.0	3.53	38.000	114.0	12.800	63.00	18.7	1.370	52.5	16.0	194.0	72.3	330.0	607.0	121.1	10190.0	6.100	302.0	461.0
Zircon-083_CUA15-01	11.89	2660.0	5.35	0.500	18.5	0.480	5.90	10.9	2.090	65.5	22.6	266.0	97.3	417.0	681.0	133.4	7910.0	6.400	343.0	478.0
Zircon-084_CUA15-01	9.76	1609.0	4.68	0.017	21.3	0.060	1.55	4.0	0.760	26.3	9.9	130.1	53.4	260.0	527.0	109.6	10660.0	5.200	183.0	379.0
Zircon-087_CUA15-01	11.09	1820.0	1.25	2.180	13.1	0.920	7.80	9.7	1.240	46.3	15.7	179.0	65.4	278.0	491.0	95.9	8910.0	3.400	162.0	255.0
Zircon-088_CUA15-01	8.92	4720.0	23.70	0.009	54.3	0.163	3.92	11.0	0.541	88.6	32.8	416.0	163.0	719.0	1237.0	236.0	9250.0	33.300	836.0	1150.0
Zircon-089_CUA15-01	9.93	3010.0	1.93	0.005	4.7	0.284	4.60	12.0	1.180	72.6	24.5	291.0	107.4	464.0	785.0	152.1	6820.0	7.400	191.1	278.0
Zircon-090_CUA15-01	14.00	892.0	2.33	1.300	15.4	0.750	4.10	4.1	0.630	17.7	6.4	76.0	29.8	141.0	274.0	56.6	7940.0	13.200	93.8	143.0
Zircon-091_CUA15-01	10.49	1959.0	3.86	0.032	6.9	0.118	1.95	4.9	0.483	34.5	12.8	164.3	67.4	315.0	583.0	119.4	8050.0	8.800	187.0	334.0
Zircon-092_CUA15-01	9.99	2800.0	4.15	0.880	21.1	0.390	4.60	7.6	0.645	49.3	19.0	239.0	95.0	441.0	804.0	158.5	9980.0	9.500	229.0	350.0
Zircon-093_CUA15-01	10.98	1679.0	4.77	0.024	18.7	0.106	1.61	4.9	0.505	32.4	11.6	145.1	56.5	269.0	507.0	100.5	11110.0	5.200	186.0	400.0
Zircon-094_CUA15-01	14.00	3040.0	5.25	2.010	32.3	0.890	8.30	12.8	1.940	61.9	22.5	270.0	101.0	475.0	940.0	193.0	9150.0	8.600	482.0	648.0
Zircon-095_CUA15-01	13.80	6300.0	10.10	8.000	58.6	3.300	20.80	23.7	2.420	143.0	49.8	591.0	221.0	980.0	1600.0	299.0	9370.0	20.200	742.0	821.0
Zircon-096_CUA15-01	11.05	4040.0	1.34	0.031	15.9	0.445	6.62	15.5	3.610	92.0	31.4	375.0	138.9	599.0	995.0	181.7	8190.0	9.400	326.0	343.0
Zircon-097_CUA15-01	10.60	2990.0	4.20	0.008	25.6	0.225	4.20	8.7	2.090	53.4	19.1	240.0	96.0	466.0	986.0	209.0	8100.0	9.600	543.0	807.0

Zircon-099_CUA15-01	8.61	1014.0	3.55		13.6	0.045	0.84	2.4	0.290	17.5	6.5	81.6	33.3	160.7	325.0	66.2	10120.0	4.000	113.9	276.0
Zircon-100_CUA15-01	17.10	3490.0	4.18	0.020	15.4	0.279	4.18	10.2	2.220	68.9	26.0	320.0	121.0	532.0	916.0	175.0	7320.0	5.300	257.0	203.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
JUN-15-01 (Jun*) Batolito Puerto Vallarta, Suite Cuale-Macias, Complejo Arteaga																				
Zircon-001_JUN15-01	14.90	2730	4.27	4.300	34.7	1.510	9.50	8.4	1.420	46.6	17.0	214.0	89.4	431.0	924	198.0	9350	8.600	467	669.0
Zircon-002_JUN15-01	10.70	1184	3.09	0.004	14.93	0.060	1.27	4.1	0.670	22.7	8.6	103.7	42.3	193.0	359	72.3	10090	4.240	180	338.0
Zircon-003_JUN15-01	10.80	2110	2.67	1.640	18.8	0.530	5.10	6.8	1.200	36.4	13.4	171.0	70.0	334.0	730	157.0	8860	6.950	279	518.0
Zircon-004_JUN15-01	13.40	1980	12.70	1.620	17.6	1.080	6.80	7.7	0.670	33.7	13.0	171.0	69.0	313.0	587	119.0	11900	21.000	650	850.0
Zircon-005_JUN15-01	11.80	1431	3.45	0.099	14.09	0.137	2.11	4.7	0.897	28.7	10.4	129.7	52.4	229.6	423	86.8	8730	4.375	207.6	340.0
Zircon-006_JUN15-01	9.28	1255	3.41		11.61	0.022	0.89	2.6	0.421	17.7	7.1	96.0	41.4	208.0	473	104.3	9770	4.058	117.9	322.0
Zircon-007_JUN15-01	8.48	1830	2.19	0.011	10.8	0.193	3.52	7.0	1.290	40.2	13.7	167.0	66.0	293.0	543	110.4	8210	4.350	178	318.0
Zircon-008_JUN15-01	10.80	3640	9.35	1.230	20	1.020	8.30	11.1	0.880	60.1	24.3	314.0	125.4	576.0	1089	221.2	12270	22.075	641	1703.0
Zircon-009_JUN15-01	8.61	4930	42.80	0.140	24.4	0.115	1.84	6.6	0.281	69.0	30.6	420.0	173.0	803.0	1466	296.0	12820	46.750	1042	3450.0
Zircon-010_JUN15-01	11.90	4840	7.59	0.263	62.8	0.690	10.00	17.8	3.880	92.2	32.2	385.0	155.3	729.0	1540	325.0	7380	24.950	1990	1830.0
Zircon-011_JUN15-01	10.22	1541	5.44	0.142	12.7	0.085	1.60	3.9	0.661	26.0	10.0	130.3	53.6	251.0	502	104.8	10550	5.200	139.7	387.0
Zircon-013_JUN15-01	9.70	3860	7.98	0.044	19.1	0.088	2.26	7.0	0.601	56.7	24.4	321.0	129.9	609.0	1170	234.0	11710	22.725	743	1680.0
Zircon-014_JUN15-01	7.94	2740	19.60	0.029	15.46	0.075	0.93	4.0	0.158	36.9	16.7	229.0	93.9	439.0	838	169.8	12770	23.750	565	1715.0
Zircon-015_JUN15-01	11.31	1960	2.53	0.078	15.5	0.286	5.28	8.7	1.640	49.7	16.6	190.0	72.4	305.0	538	107.4	9230	3.583	200	281.0
Zircon-016_JUN15-01	11.40	1930	1.72	2.100	14.2	0.910	5.80	6.4	0.710	39.3	14.1	174.0	69.0	311.0	562	114.6	10190	7.150	145	268.0
Zircon-017_JUN15-01	13.30	4190	20.80	0.380	19.9	0.345	3.25	8.4	0.307	69.8	29.3	377.0	149.0	675.0	1228	237.0	13120	35.750	1160	2460.0
Zircon-018_JUN15-01	12.80	4110	34.50	0.770	21.2	0.400	3.58	6.7	0.447	56.4	25.3	349.0	143.0	663.0	1280	254.0	14030	41.000	871	2980.0
Zircon-019_JUN15-01	8.87	973	2.29		8.26	0.035	0.38	1.7	0.322	12.6	5.5	76.0	32.2	154.0	348	76.3	9570	3.628	107.1	276.0
Zircon-020_JUN15-01	12.70	1174	1.47		1.22	0.028	1.33	3.0	0.054	20.8	8.0	102.4	41.1	189.0	366	75.5	10250	5.425	76.2	205.0
Zircon-021_JUN15-01	9.22	1025	1.31	0.006	7.2	0.032	0.88	2.6	0.462	15.3	6.2	80.1	33.8	164.0	355	76.7	9490	2.975	87.8	224.0
Zircon-022_JUN15-01	8.88	1578	5.34		10.74	0.030	0.66	2.4	0.281	20.4	8.4	119.2	52.4	264.0	579	125.9	11110	8.450	194	646.0
Zircon-023_JUN15-01	16.60	7500	8.40	0.800	9.6	0.600	10.90	20.2	0.390	134.0	55.0	720.0	280.0	1230.0	2020	388.0	9700	44.750	800	1750.0
Zircon-024_JUN15-01	8.13	2010	12.47	0.164	11.16	0.072	0.75	2.7	0.199	27.5	12.3	173.0	71.7	333.0	643	138.8	11990	15.825	328	1137.0
Zircon-025_JUN15-01	1200	2540	24.40	32.000	30	8.800	45.00	12.6	1.280	44.2	16.1	215.0	89.0	404.0	790	158.0	10600	26.250	1290	2080.0
Zircon-026_JUN15-01	23.10	3350	20.90	97.000	282	39.000	201.00	57.0	2.620	100.0	26.6	305.0	114.0	517.0	940	189.0	12000	23.500	620	1770.0
Zircon-027_JUN15-01	11.58	1793	3.02	0.243	14.26	0.157	2.33	5.1	1.130	32.7	12.1	156.2	63.8	286.0	529	110.7	7770	3.383	130.7	238.0
Zircon-028_JUN15-01	8.49	1980	4.25	0.008	7.99	0.045	0.81	3.0	0.378	26.0	11.2	158.0	66.8	320.0	635	134.0	10040	8.775	211	653.0
Zircon-029_JUN15-01	8.32	2790	12.00	0.223	10.32	0.103	1.41	3.7	0.168	34.1	16.0	225.0	93.7	449.0	879	180.0	13340	21.850	446	1530.0
Zircon-030_JUN15-01	8.40	1430	6.97	1.100	13.8	0.720	3.90	2.9	0.200	19.9	8.5	114.8	47.6	233.0	496	105.7	11850	11.050	245	843.0
Zircon-031_JUN15-01	10.43	1280	1.15	0.029	7.5	0.096	1.68	3.8	0.800	24.0	9.0	112.0	44.6	207.0	415	87.3	8720	3.130	118	231.0
Zircon-034_JUN15-01	8.74	958	2.05		7.64	0.015	0.43	1.9	0.282	14.5	5.5	72.9	31.0	165.0	369	82.7	9970	3.750	95.7	276.0
Zircon-035_JUN15-01	9.27	942	2.55	0.970	10.84	0.480	2.75	2.5	0.214	13.9	5.4	69.7	30.6	157.2	353	81.1	10140	4.275	97.3	309.0
Zircon-036_JUN15-01	9.40	1530	3.03		20.3	0.098	2.24	4.8	1.140	28.0	10.0	128.0	50.6	252.0	508	112.0	10210	3.950	146	286.0
Zircon-037_JUN15-01	13.50	3010	6.50	0.147	25.2	0.237	4.13	10.2	2.080	58.4	21.7	265.0	106.0	493.0	960	211.0	7520	14.725	960	1080.0
Zircon-038_JUN15-01	11.80	1160	2.34	3.800	16.4	2.100	7.90	3.6	0.490	17.1	6.7	89.0	36.7	188.0	430	94.0	10470	6.525	138	468.0
Zircon-039_JUN15-01	14.30	1560	2.32	0.034	2.19	0.243	4.26	8.1	0.730	44.1	14.0	159.1	61.7	254.0	449	93.4	8760	3.350	99.4	142.5
Zircon-040_JUN15-01	33.40	2330	6.24	0.022	8.59	0.071	1.17	3.5	0.393	34.6	13.7	186.0	80.9	376.0	750	153.0	12010	12.825	259	980.0
Zircon-041_JUN15-01	11.88	720	2.06	0.232	8.06	0.178	1.52	1.9	0.353	9.9	4.2	55.7	24.0	119.5	273	60.3	11000	4.320	120.3	331.0
Zircon-042_JUN15-01	64.00	1863	5.58	0.347	19.9	0.170	2.38	5.6	1.010	35.5	13.0	162.8	66.2	299.0	544	111.2	8680	6.375	299	470.0
Zircon-043_JUN15-01	8.92	3350	29.80	1.310	19.7	0.630	3.43	4.9	0.336	42.8	19.4	273.0	115.3	547.0	1058	214.0	14980	35.375	661	2510.0
Zircon-044_JUN15-01	8.68	3230	11.95	0.096	11.72	0.076	1.16	4.6	0.167	45.4	19.5	269.0	108.7	521.0	971	201.5	13800	21.225	508	1585.0
Zircon-045_JUN15-01	11.30	773	1.99	0.052	8.3	0.031	0.49	1.6	0.259	11.0	4.6	62.1	25.3	125.0	286	63.0	10200	5.175	166	398.0
Zircon-047_JUN15-01	8.49	2050	2.67	0.165	13.67	0.234	3.98	7.5	1.150	42.2	15.2	186.0	72.6	328.0	579	117.5	9080	5.750	212.5	403.0
Zircon-048_JUN15-01	21.70	1350	1.39	17.800	55	6.600	34.00	11.2	1.050	32.7	10.2	118.2	46.6	217.0	428	90.3	10810	4.025	133	294.0
Zircon-049_JUN15-01	8.24	1373	2.82	0.163	9.9	0.103	1.49	3.6	0.560	25.5	9.3	121.0	48.0	226.0	438	92.5	9360	4.200	115.3	294.0
Zircon-050_JUN15-01	25.90	1307	1.42	17.300	53.8	6.400	31.90	10.0	1.150	29.4	9.4	114.2	44.0	206.0	420	90.0	9710	4.375	152	313.0
Zircon-051_JUN15-01	9.17	2780	12.15	0.136	7.87	0.072	0.91	3.6	0.151	34.8	15.8	222.8	95.6	462.0	904	182.9	12670	18.250	340	1379.0

Zircon-052_JUN15-01	8.15	1154	2.16	0.016	6.96	0.024	0.71	2.5	0.373	17.3	6.6	93.0	38.8	189.0	402	85.3	9150	4.250	115	320.0
Zircon-053_JUN15-01	9.33	1456	1.47	0.220	11.72	0.237	3.19	5.5	0.800	29.8	10.7	126.7	49.9	228.9	442	93.5	9530	4.400	168.1	334.0
Zircon-054_JUN15-01	11.20	1640	1.38	0.025	9.99	0.216	4.31	7.3	1.730	36.7	12.3	142.6	54.3	246.0	499	104.2	8830	3.375	199	261.0
Zircon-055_JUN15-01	9.41	1400	3.47		22.1	0.043	1.16	2.6	0.830	19.1	7.8	103.3	44.5	225.0	514	117.6	10370	4.300	185	337.0
Zircon-056_JUN15-01	8.49	2900	16.84	0.109	13.72	0.064	1.18	4.1	0.174	39.0	17.3	243.0	101.9	475.0	914	185.9	12750	22.700	506	1681.0
Zircon-057_JUN15-01	10.40	2350	4.43	1.230	16.8	0.600	4.78	7.8	1.370	47.0	16.1	207.0	81.2	373.0	746	158.0	10190	9.925	359	717.0
Zircon-058_JUN15-01	10.08	3470	3.63	0.305	18.9	0.622	10.28	19.1	3.340	103.0	33.0	375.0	132.4	544.0	884	171.2	8470	6.650	336	462.0
Zircon-059_JUN15-01	8.70	2430	9.72		9.64	0.032	0.72	4.1	0.207	34.3	15.7	207.0	85.0	397.0	758	151.0	13670	13.100	309	1014.0
Zircon-060_JUN15-01	9.88	1072	1.46		8.5	0.047	1.02	3.4	0.702	19.4	7.4	92.3	36.4	173.0	358	76.9	9510	2.775	100	213.0
Zircon-061_JUN15-01	11.80	6510	7.34	0.099	71.8	1.240	21.30	37.6	8.010	190.0	60.7	666.0	240.0	996.0	1696	323.0	8610	10.400	1004	867.0
Zircon-062_JUN15-01	11.40	1734	1.58	0.025	11.22	0.292	4.77	8.6	2.430	43.1	14.5	162.6	60.6	264.0	485	100.1	8190	3.058	141.6	219.0
Zircon-063_JUN15-01	8.95	1159	3.42		13.34	0.045	1.28	3.1	0.599	22.8	8.2	101.9	41.2	191.0	363	76.7	8570	4.225	169	306.0
Zircon-064_JUN15-01	8.17	1650	2.32	0.026	15.71	0.125	2.72	5.0	1.070	29.1	10.8	131.4	53.8	256.0	551	115.1	9380	6.450	315	479.0
Zircon-065_JUN15-01	8.79	2030	4.28	0.016	21.4	0.154	2.25	6.0	0.980	39.6	13.9	172.0	69.0	329.0	670	143.0	8740	6.650	327	498.0
Zircon-066_JUN15-01	9.06	1740	2.19	0.011	11.3	0.144	2.94	5.9	1.490	35.8	12.8	155.0	59.5	276.0	539	109.3	8910	4.450	181	340.0
Zircon-067_JUN15-01	20.80	1703	1.40	2.070	18.4	1.720	14.10	11.2	1.780	41.3	12.9	152.7	58.9	261.0	528	111.8	9050	4.480	219	348.0
Zircon-068_JUN15-01	12.10	1550	5.02	0.010	18	0.077	1.46	3.4	1.040	23.0	9.2	124.4	52.9	253.0	515	107.8	9490	4.625	162	360.0
Zircon-069_JUN15-01	18.80	1281	4.46	20.500	63	8.200	40.00	11.3	0.780	26.8	8.4	108.1	44.2	208.0	445	95.0	10380	6.125	150	439.0
Zircon-070_JUN15-01	9.04	1061	5.02	0.188	7.23	0.152	1.18	1.7	1.010	13.9	6.2	84.7	36.5	176.0	347	71.5	12060	8.725	167	613.0
Zircon-071_JUN15-01	9.52	1070	3.16	0.420	12.84	0.198	1.47	2.7	0.415	17.2	6.6	88.0	37.1	179.1	382	83.9	9620	3.060	74.9	216.0
Zircon-072_JUN15-01	10.40	2110	12.90	0.156	11.47	0.175	1.58	3.4	0.306	29.0	12.6	174.0	73.9	351.0	688	140.3	13150	17.625	368	1250.0
Zircon-073_JUN15-01	8.33	2810	9.34	0.105	7.56	0.093	0.92	3.5	0.188	36.1	16.1	230.0	98.5	458.0	905	187.0	12420	19.850	377	1390.0
Zircon-074_JUN15-01	10.89	1340	2.20	0.430	11.2	0.210	2.27	3.3	0.648	21.6	8.3	109.1	45.2	218.0	454	98.4	8740	4.775	139	322.0
Zircon-075_JUN15-01	19.70	2970	4.00	35.000	105	13.100	58.00	20.6	0.960	60.0	20.6	257.0	103.3	476.0	901	183.0	10550	16.250	340	644.0
Zircon-076_JUN15-01	8.68	1180	3.07	0.067	10.2	0.118	1.37	2.8	0.518	21.0	7.9	100.0	41.1	192.0	374	77.8	9870	3.675	98	249.0
Zircon-077_JUN15-01	8.32	2670	6.08	0.260	12.39	0.153	2.34	5.9	0.412	44.7	18.2	232.0	94.0	429.0	797	160.0	10910	13.275	360	950.0
Zircon-078_JUN15-01	9.44	1165	2.38	0.075	10.5	0.124	1.48	3.0	0.501	19.2	7.3	90.6	38.7	191.0	417	92.1	10680	4.075	134	311.0
Zircon-080_JUN15-01	10.24	1176	1.50	0.014	8.7	0.120	2.17	4.8	0.990	27.3	9.1	108.9	42.7	189.0	337	70.3	8540	2.145	85.8	154.2
Zircon-081_JUN15-01	8.43	1934	14.51	0.008	11.06	0.026	0.82	3.2	0.207	27.7	11.8	163.0	68.7	312.0	597	121.5	11330	20.225	505	1434.0
Zircon-082_JUN15-01	11.97	399	1.11	0.030	14.3	0.049	0.77	1.5	0.249	7.8	2.6	32.9	12.7	61.7	138.1	29.0	10240	14.650	85	151.0
Zircon-083_JUN15-01	39.00	11400	87.30	46.000	211	40.000	258.00	105.0	14.100	273.0	87.0	1049.0	413.0	1730.0	2820	508.0	13700	89.250	6200	7330.0
Zircon-084_JUN15-01	9.44	1253	4.57	0.078	19.3	0.038	0.65	2.5	0.550	17.5	7.4	98.9	41.2	202.0	436	94.4	11100	3.875	141	289.0
Zircon-085_JUN15-01	58.00	5840	45.80	245.000	155	67.000	360.00	141.0	20.200	269.0	62.9	599.0	204.0	842.0	1487	308.0	13180	81.000	13600	7200.0
Zircon-086_JUN15-01	9.12	3600	10.25	0.035	12.27	0.080	1.49	6.5	0.237	57.8	24.9	320.0	128.4	586.0	1079	214.0	12540	19.550	593	1507.0
Zircon-087_JUN15-01	85.30	18500	86.20	362.000	297	121.000	608.00	206.0	23.700	501.0	145.0	1650.0	632.0	2670.0	4290	843.0	12200	141.000	13200	10690.0
Zircon-088_JUN15-01	8.82	1980	5.39	0.002	24.7	0.092	1.84	5.0	0.960	35.7	13.1	167.0	67.1	312.0	655	137.7	9700	9.500	497	728.0
Zircon-089_JUN15-01	8.49	821	2.41		8.09	0.033	0.53	1.8	0.339	12.9	4.9	67.4	28.1	133.0	281	59.9	9460	2.953	87.4	214.0
Zircon-090_JUN15-01	8.30	3640	10.90	0.015	12.4	0.053	1.16	6.9	0.264	58.1	24.4	316.0	127.1	573.0	1086	218.0	12630	21.650	567	1630.0
Zircon-091_JUN15-01	61.50	10230	106.20	86.300	247	44.700	256.00	95.0	11.700	209.0	67.3	831.0	344.0	1564.0	2870	565.0	11230	200.250	12500	12880.0
Zircon-092_JUN15-01	8.74	1351	4.27	0.165	15.5	0.151	1.65	3.7	0.760	22.2	8.6	111.3	46.4	224.0	477	104.2	8360	3.925	103	279.0
Zircon-093_JUN15-01	9.71	2119	1.59	0.009	14.2	0.299	5.99	10.5	1.910	58.6	18.9	216.0	79.3	341.0	569	114.1	8740	3.460	180.2	258.0
Zircon-095_JUN15-01	12.30	1745	7.62	0.211	12.73	0.119	1.42	3.1	0.520	25.4	10.3	141.4	58.7	287.0	593	128.1	9670	10.975	254	752.0
Zircon-096_JUN15-01	9.82	1520	2.53	0.950	15.06	0.450	3.49	5.3	0.770	29.7	11.1	135.0	51.6	238.0	461	96.0	9400	4.050	146	276.0
Zircon-097_JUN15-01	9.54	998	1.34	0.008	6.22	0.038	0.77	2.5	0.309	13.9	5.8	77.2	32.3	164.0	378	81.1	11400	3.983	100.3	313.0
Zircon-098_JUN15-01	9.15	3150	7.96	0.700	43.5	0.820	8.60	13.5	1.640	72.2	23.3	275.0	108.6	490.0	925	191.0	7880	13.050	1160	928.0
Zircon-099_JUN15-01	16.50	1350	5.89	0.670	10.18	0.327	2.26	3.1	0.730	21.6	8.5	116.0	47.5	220.0	424	89.5	9560	6.400	143	398.0
Zircon-100_JUN15-01	12.16	1001	1.80	0.291	22.6	0.148	1.86	3.7	0.785	19.1	6.7	79.5	32.1	153.5	334	72.6	9430	18.050	316	320.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
TEC-15-01 (Tec*) Batolito Puerto Vallarta, Suite Cuale-Macias, Complejo Artega																				
Zircon-001_TEC15-01	8.23	800	2.49		12.6	0.026	0.76	1.7	0.332	12.1	4.7	60.4	25.9	126.0	284	59.0	10720	4.100	141	299.0
Zircon-002_TEC15-01	11.27	948	0.55		5.69	0.155	3.26	5.3	1.580	22.9	7.4	86.0	32.3	141.0	278.3	58.8	8280	3.058	97.5	231.6

Zircon-003_TEC15-01	10.77	2980	2.38	1.540	15.5	0.850	7.70	11.5	1.990	66.1	22.5	270.0	101.7	445.0	800	159.2	8000	4.958	228	350.0
Zircon-004_TEC15-01	8.49	1145	4.01	1.130	12.5	0.600	3.60	2.3	0.257	14.3	6.1	83.5	36.8	189.0	428	93.9	9890	6.025	118	420.0
Zircon-005_TEC15-01	19.50	892	2.53	11.200	35.8	3.770	20.50	5.7	0.433	16.0	5.2	66.5	28.2	146.1	343	77.1	9490	4.175	91.2	311.0
Zircon-006_TEC15-01	8.10	1451	1.84	0.230	4.51	0.320	2.09	4.1	0.235	26.2	9.7	125.2	49.8	231.3	448	90.9	9270	15.050	165.2	557.0
Zircon-007_TEC15-01	12.39	1011	2.82	0.358	9.59	0.196	2.50	3.6	1.040	21.0	7.2	87.1	33.7	162.0	330	71.4	8120	3.528	98.9	259.0
Zircon-008_TEC15-01	8.79	994	1.86	0.200	8.11	0.149	1.51	2.6	0.547	17.4	6.7	84.0	34.0	159.0	334	69.7	9720	2.835	82.6	217.9
Zircon-009_TEC15-01	8.88	1752	5.93	2.770	34.4	2.230	17.30	9.2	1.500	31.0	10.5	134.3	57.0	285.0	645	141.9	10860	19.725	603	1536.0
Zircon-011_TEC15-01	8.47	1462	9.57	0.690	17.5	0.450	3.00	4.1	0.130	27.7	10.1	126.8	51.2	227.0	404	80.6	10070	8.225	233	577.0
Zircon-012_TEC15-01	9.61	1119	6.26	0.284	17.96	0.115	1.15	2.2	0.426	14.2	6.0	82.7	36.1	184.0	416	90.1	11560	5.783	162.3	415.0
Zircon-014_TEC15-01	15.50	1724	3.41	0.265	26.5	0.188	2.75	6.5	1.590	33.6	11.4	134.1	53.3	251.0	560	119.8	8170	16.100	840	1122.0
Zircon-015_TEC15-01	9.37	1618	2.18	0.035	11.17	0.135	2.82	5.8	1.260	33.5	11.8	142.2	55.8	256.7	498	103.2	8750	2.940	100.1	209.0
Zircon-016_TEC15-01	10.27	3360	5.89	0.770	26.5	0.510	5.40	10.5	0.500	65.9	23.7	285.0	113.9	516.0	967	194.0	10180	10.925	470	832.0
Zircon-019_TEC15-01	9.80	1920	2.41	0.054	13.97	0.240	3.89	8.3	1.840	42.9	15.1	175.0	65.1	292.0	561	112.2	9240	4.420	211	335.0
Zircon-020_TEC15-01	8.25	523	1.21	0.034	5.08	0.017	0.71	1.8	0.217	9.7	3.6	43.6	17.4	83.2	167	34.3	11180	3.625	80	260.0
Zircon-021_TEC15-01	9.50	1205	2.22		11.77	0.046	1.39	3.2	0.603	21.3	7.9	102.0	41.0	193.2	379	79.5	8810	3.733	123	258.0
Zircon-022_TEC15-01	10.02	1995	9.00	1.810	46.5	0.734	5.01	5.8	0.635	35.7	13.5	171.0	67.2	309.8	625	126.1	10660	12.300	527	888.0
Zircon-023_TEC15-01	7.76	3500	2.72	0.080	30.9	0.597	9.36	16.2	3.220	77.4	25.8	295.0	111.6	515.0	1071	220.0	7920	14.475	928	1092.0
Zircon-024_TEC15-01	12.50	1764	4.90	7.900	33.4	2.790	16.00	8.2	2.160	33.9	11.8	141.1	57.9	274.0	610	133.9	9220	24.500	1920	1730.0
Zircon-025_TEC15-01	8.30	2928	6.87	0.117	38.5	0.277	4.62	10.5	1.220	57.7	19.5	241.1	94.7	442.0	892	184.3	8290	16.325	1190	1228.0
Zircon-026_TEC15-01	9.98	2555	8.41	0.071	46.3	0.188	3.19	8.4	1.480	53.6	18.2	220.5	85.7	382.0	722	144.0	9000	12.350	952	917.0
Zircon-027_TEC15-01	10.17	1030	2.45	0.130	19.52	0.224	3.25	5.6	1.490	26.2	8.5	97.1	37.1	162.5	288	58.7	6660	2.600	100.8	181.7
Zircon-028_TEC15-01	10.69	1191	2.11	0.600	19.6	0.260	2.37	4.2	0.900	20.7	7.4	96.9	39.6	187.0	384	81.4	8090	3.340	171.6	250.4
Zircon-029_TEC15-01	41.80	6400	22.90	32.800	177	26.200	179.00	62.0	9.200	132.0	39.9	491.0	196.0	970.0	2130	455.0	9210	93.000	5920	7110.0
Zircon-030_TEC15-01	13.10	831	9.51	2.150	9.9	0.970	5.30	2.0	0.680	6.6	2.5	37.5	20.9	157.8	803	222.0	14200	45.150	460	1950.0
Zircon-031_TEC15-01	11.60	1807	2.81	2.020	23.3	0.610	4.60	4.2	1.030	29.6	10.7	137.8	58.2	286.0	661	144.3	8840	11.925	443	890.0
Zircon-032_TEC15-01	8.93	1600	5.60	0.018	75	0.202	3.80	6.5	1.830	36.3	11.8	143.0	55.4	249.0	498	99.0	8710	5.725	800	399.0
Zircon-033_TEC15-01	10.56	1274	2.24		7.28	0.109	1.92	4.6	0.773	27.1	9.6	114.5	44.1	199.4	365	74.2	8100	3.450	111.5	225.0
Zircon-034_TEC15-01	8.78	2290	3.02	0.236	15	0.211	2.57	5.4	0.990	36.1	13.2	173.0	73.7	361.0	793	168.0	10510	18.775	666	1449.0
Zircon-035_TEC15-01	12.18	2110	2.88	0.020	23.98	0.220	3.71	8.4	2.020	49.5	17.1	200.3	74.4	322.0	565	112.7	7420	5.758	423	420.0
Zircon-036_TEC15-01	9.53	946	1.64	0.003	8.82	0.076	1.39	3.3	0.670	18.7	7.0	81.0	31.8	149.4	304.2	63.4	8440	2.758	111.7	190.9
Zircon-038_TEC15-01	10.23	1768	2.19	0.004	15.67	0.190	3.51	7.2	1.580	39.8	13.8	160.6	62.7	277.0	520	104.0	7360	3.030	155.5	225.1
Zircon-039_TEC15-01	8.29	1413	4.90	0.310	17.68	0.141	1.14	2.9	0.391	20.3	8.1	108.0	45.8	221.3	488	103.7	11280	17.575	586	1289.0
Zircon-040_TEC15-01	8.21	947	0.87	0.002	8.09	0.095	1.52	2.8	0.600	15.7	5.7	72.0	29.9	147.8	345	79.5	8910	5.725	214	402.0
Zircon-041_TEC15-01	11.05	598	1.39		2.41	0.003	0.34	1.5	0.128	10.2	3.9	49.4	19.1	92.1	185	39.3	9400	36.450	40.1	185.4
Zircon-042_TEC15-01	12.00	1018	3.30	1.750	16.2	1.330	7.80	3.0	2.130	14.0	5.5	74.7	32.6	168.0	398	93.1	10560	12.200	271	756.0
Zircon-043_TEC15-01	7.72	2400	3.87	0.193	19.9	0.268	5.20	9.9	1.050	53.3	18.3	212.0	80.6	362.0	675	135.1	8970	8.300	395	629.0
Zircon-044_TEC15-01	15.40	5430	28.10	4.800	81.1	3.800	24.00	20.9	2.260	94.9	34.3	436.0	177.9	846.0	1756	353.0	9790	45.250	1766	3230.0
Zircon-046_TEC15-01	8.80	2040	5.76		15.1	0.099	2.70	7.2	1.010	47.3	15.8	196.2	73.5	319.0	534	105.0	8120	5.925	285	434.0
Zircon-047_TEC15-01	9.67	3200	5.59		5.23	0.073	1.52	5.0	0.323	41.4	18.5	255.0	100.9	469.0	926	188.0	10080	22.975	330	1774.0
Zircon-048_TEC15-01	8.67	1293	4.45		17.28	0.042	1.22	2.8	0.329	23.2	8.5	111.2	44.8	203.3	399	80.5	10160	4.853	170.8	358.0
Zircon-049_TEC15-01	9.03	874	2.24	2.070	14.2	0.810	4.50	3.0	0.273	16.0	5.7	72.5	29.5	140.1	288.2	59.3	9890	4.465	129.9	328.0
Zircon-051_TEC15-01	8.78	1627	2.70	0.008	14.4	0.087	1.55	4.1	0.920	26.7	9.8	125.9	52.3	257.0	572	124.6	8470	5.158	235	401.0
Zircon-053_TEC15-01	12.80	1322	4.56	1.020	9.2	0.580	4.60	3.9	0.207	22.1	8.1	109.2	44.9	213.6	450	94.7	10470	29.650	435	1144.0
Zircon-054_TEC15-01	11.80	2190	1.31	0.025	19.5	0.426	7.01	11.9	4.280	59.3	17.6	210.0	77.1	335.0	623	125.5	7030	2.503	176	178.8
Zircon-055_TEC15-01	8.83	288	0.65	0.020	5.54	0.037	0.56	0.8	0.250	4.7	1.7	21.7	9.0	46.9	118.5	27.9	9740	2.045	52.1	135.6
Zircon-056_TEC15-01	9.34	475	0.64		12.94	0.046	0.47	1.3	0.495	6.7	2.3	31.4	14.0	76.8	225	56.2	8670	12.375	160.6	284.0
Zircon-057_TEC15-01	34.30	909	2.75		2.69	0.025	0.91	2.5	0.198	16.8	6.4	78.2	31.2	146.6	281	57.9	8680	8.875	127.5	314.0
Zircon-058_TEC15-01	9.40	3050	10.23	0.066	19.13	0.130	2.75	8.8	0.418	61.4	22.5	277.0	108.8	471.0	799	152.3	9990	16.875	592	1233.0
Zircon-060_TEC15-01	14.10	3180	14.73	2.760	24.1	1.390	9.00	10.8	1.110	57.0	21.5	284.0	110.8	507.0	932	184.3	11300	16.975	579	1379.0
Zircon-061_TEC15-01	22.20	3500	8.10	1.420	22.4	0.980	5.80	10.6	2.200	56.2	22.9	302.0	111.3	507.0	1007	204.0	9770	43.500	672	3210.0
Zircon-062_TEC15-01	10.29	1950	1.97	0.022	18.4	0.123	3.06	6.8	2.160	35.7	12.3	151.0	61.1	298.0	691	153.0	7950	8.875	430	663.0
Zircon-063_TEC15-01	12.80	3620	0.70	0.016	1.35	0.241	5.31	13.4	0.292	85.8	29.6	353.0	125.7	512.0	829	157.4	11700	12.400	133	352.0
Zircon-064_TEC15-01	8.84	1625	2.61	0.054	19.9	0.227	3.37	6.8	1.410	34.1	11.9	133.3	52.8	249.0	510	111.0	9600	6.875	327	480.0
Zircon-065_TEC15-01	11.70	3600	18.10	11.600	52	2.300	10.60	8.9	0.650	59.7	24.4	313.0	124.0	570.0	1046	210.0	10840	21.900	1000	1720.0

Zircon-066_TEC15-01	11.90	960	1.08	5.800	23.8	1.640	9.30	4.0	0.540	16.8	5.9	75.1	31.0	151.9	362	81.9	11990	5.043	147.8	363.0
Zircon-067_TEC15-01	10.11	1409	2.45	4.400	22.3	1.250	7.10	4.6	0.533	21.7	8.2	107.8	45.2	223.2	514	112.2	9850	10.750	325	788.0
Zircon-068_TEC15-01	9.85	2500	8.82	1.520	50.3	0.361	3.41	5.7	0.980	38.2	15.9	207.0	83.0	385.0	788	157.2	10440	9.700	492	752.0
Zircon-069_TEC15-01	28.10	3240	12.40	7.110	71.4	3.910	22.80	16.5	2.300	69.1	23.2	272.0	105.1	491.0	964	203.0	9160	34.475	2280	2420.0
Zircon-070_TEC15-01	7.66	2820	8.30	0.043	23.4	0.097	2.06	6.7	0.770	49.4	19.1	241.0	93.9	446.0	869	173.1	12010	14.475	464	1070.0
Zircon-071_TEC15-01	11.80	2383	1.45	0.920	14.3	0.760	11.00	15.1	5.110	73.6	22.2	243.4	88.1	366.0	615	123.8	7210	3.348	147.7	223.0
Zircon-072_TEC15-01	8.19	596	2.58	0.940	13.31	1.050	7.67	3.7	1.380	9.0	3.3	42.6	18.7	96.1	247.2	55.7	11120	10.700	79.3	664.0
Zircon-073_TEC15-01	11.95	12920	23.94	0.171	555	1.767	31.20	59.9	15.530	324.0	109.7	1242.0	430.0	1709.0	2674	482.0	7600	60.400	11160	4330.0
Zircon-075_TEC15-01	7.31	2570	15.50	0.004	28.5	0.042	0.96	4.1	0.420	38.4	15.4	215.0	85.2	417.0	884	183.0	10610	35.025	1183	2580.0
Zircon-076_TEC15-01	7.71	1232	8.66	0.045	14.29	0.033	0.63	2.0	0.156	15.6	7.0	94.3	40.5	203.2	435	93.1	12800	6.308	157.5	464.0
Zircon-077_TEC15-01	7.18	2202	9.64	0.250	21.7	0.290	2.38	6.6	0.312	47.0	16.9	206.4	80.5	345.0	580	112.8	9230	10.225	348	713.0
Zircon-078_TEC15-01	26.80	1420	5.96	38.100	112	12.700	62.20	15.5	1.190	35.1	10.3	122.0	47.8	224.6	436	90.1	10480	7.565	296	556.0
Zircon-079_TEC15-01	9.35	835	1.84	0.174	8.94	0.096	1.05	1.7	0.495	12.2	4.7	60.8	26.3	134.4	339	78.9	10830	7.678	226	551.0
Zircon-080_TEC15-01	10.19	3510	4.05	0.108	20.5	1.150	18.00	24.2	5.030	98.3	30.5	333.0	115.8	495.0	931	186.0	7650	8.525	479	621.0
Zircon-082_TEC15-01	7.68	1796	5.91		16.8	0.038	0.86	3.0	0.610	23.5	10.1	138.0	60.0	296.0	641	136.2	10840	7.270	167	524.0
Zircon-083_TEC15-01	23.60	1990	4.65	9.400	43.5	4.750	29.60	11.9	2.560	32.4	11.2	143.3	58.9	302.0	718	158.0	9650	28.375	840	2030.0
Zircon-084_TEC15-01	8.37	1289	2.75	0.580	14	0.360	3.29	4.2	0.662	21.4	7.9	101.5	41.3	203.8	470	103.8	9950	13.550	830	1030.0
Zircon-085_TEC15-01	9.40	3310	6.18	0.115	45.8	0.496	7.88	16.2	2.530	93.2	30.0	342.0	122.2	510.0	808	153.2	7260	9.375	512	699.0
Zircon-086_TEC15-01	10.93	627	0.56	0.033	5.45	0.050	0.82	1.6	0.800	10.2	3.8	46.9	19.8	98.1	249.4	57.8	7650	1.585	58.8	106.5
Zircon-087_TEC15-01	12.61	2286	4.32	0.011	69.5	0.159	3.45	7.1	3.270	47.7	16.5	202.1	78.2	355.0	700	142.6	7930	4.000	412	297.5
Zircon-089_TEC15-01	10.80	1146	4.83	1.380	30.3	0.650	4.20	3.5	0.610	19.5	7.5	93.0	37.3	180.0	383	80.4	10520	6.175	215	395.0
Zircon-090_TEC15-01	7.60	1780	3.60		10.94	0.014	0.62	2.4	0.293	22.6	9.7	134.6	58.6	291.0	653	139.7	11620	17.750	444	1310.0
Zircon-091_TEC15-01	25.50	2680	12.11	5.850	49.7	4.590	32.40	13.1	4.860	51.7	17.2	219.2	85.2	406.0	862	179.3	12630	41.025	1822	3240.0
Zircon-092_TEC15-01	10.15	2040	3.41	1.890	17.6	1.130	8.20	7.7	1.660	46.4	16.2	197.0	75.4	324.0	550	109.4	9010	4.375	193	339.0
Zircon-094_TEC15-01	51.00	4260	39.30	39.700	82	16.200	98.00	47.6	13.600	117.0	36.0	378.0	138.7	586.0	903	181.0	8830	48.000	7060	2940.0
Zircon-095_TEC15-01	7.04	1114	3.07	0.032	14.05	0.065	0.98	2.0	0.270	15.1	6.3	83.4	35.0	179.1	406	87.7	10660	17.725	600	1214.0
Zircon-096_TEC15-01	7.26	1268	1.08		11.04	0.071	1.56	4.1	0.640	24.1	8.3	102.7	42.0	203.6	453	99.0	11050	6.975	244	527.0
Zircon-097_TEC15-01	18.50	4590	63.90	5.430	140	3.620	20.80	16.7	1.530	78.6	30.9	395.0	157.1	712.0	1373	267.0	13100	51.950	2120	4280.0
Zircon-099_TEC15-01	11.70	6490	29.40	0.507	153.6	0.980	16.70	32.7	4.530	158.4	54.2	615.0	226.0	1005.0	1813	353.0	6530	27.275	2740	1967.0
Zircon-100_TEC15-01	8.47	2050	7.43	0.059	36	0.155	2.73	5.7	1.190	36.8	13.6	172.0	68.0	321.0	619	125.0	10490	10.825	510	782.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
IPA-15-01 (Ipa*) Batolito Puerto Vallarta, Suite Zihuatanejo, Complejo Arteaga																				
Zircon-001_IPA15-01	20.50	1780	4.26	46.000	143	14.300	64.00	17.2	2.300	47.1	14.0	169.0	62.6	279.0	527	108.1	9710	3.700	164	259.0
Zircon-002_IPA15-01	11.44	940	0.86	0.017	9.43	0.215	3.27	4.8	1.990	21.8	6.9	77.9	30.4	140.0	329	77.2	8690	1.833	123	132.2
Zircon-003_IPA15-01	20.90	4580	4.71	0.049	69.6	0.394	6.70	12.9	7.400	71.7	25.7	334.0	145.3	726.0	1659	370.0	6400	10.350	786	777.0
Zircon-004_IPA15-01	31.60	925	1.06	29.000	81	10.700	54.00	14.2	1.180	28.7	8.0	85.9	31.7	141.0	267	55.5	9820	1.900	67.7	147.0
Zircon-005_IPA15-01	11.77	3970	11.20	0.031	161	0.326	6.35	14.0	4.540	77.7	27.7	342.0	133.1	601.0	1156	231.0	8480	9.975	940	717.0
Zircon-006_IPA15-01	14.40	2020	9.84	12.600	74	5.400	29.20	10.0	1.330	35.7	13.2	165.0	66.9	324.0	681	143.8	9510	9.850	560	740.0
Zircon-007_IPA15-01	17.30	1564	1.18	6.700	34.5	2.500	16.80	10.0	3.070	44.3	13.3	146.0	54.4	238.0	454	95.1	8400	1.838	106.2	131.4
Zircon-008_IPA15-01	9.77	5550	19.61		71.1	0.154	3.24	10.7	1.450	84.8	33.9	453.0	183.4	851.0	1634	325.0	8030	21.175	1214	1561.0
Zircon-009_IPA15-01	11.94	1464	1.55		17.6	0.107	2.33	4.9	1.810	33.1	11.2	135.9	51.6	228.0	426	89.4	9030	1.865	91	141.0
Zircon-010_IPA15-01	8.96	352	1.94		8.07	0.003	0.10	0.5	0.130	3.7	1.6	25.2	11.4	60.3	153.1	35.0	10640	1.498	35.1	109.3
Zircon-012_IPA15-01	11.15	1418	1.33	0.014	19.53	0.169	3.30	5.6	1.900	31.1	10.3	124.4	47.6	221.0	438	93.5	9030	2.350	126.1	180.0
Zircon-013_IPA15-01	15.00	2760	5.39	11.700	67.2	4.200	21.60	11.2	1.390	52.8	19.1	240.0	94.2	430.0	826	165.0	10690	8.525	446	648.0
Zircon-014_IPA15-01	9.43	788	2.10		21.4	0.031	0.85	2.1	0.609	12.5	5.0	62.0	25.9	126.8	284	63.3	8620	2.065	89.4	145.0
Zircon-015_IPA15-01	12.37	919	1.49	5.500	35.9	1.540	7.10	4.2	1.030	16.7	5.9	75.8	30.6	148.0	342	75.3	8660	2.500	128	180.0
Zircon-016_IPA15-01	10.53	1159	2.76	0.002	11.96	0.045	1.08	3.5	0.182	21.0	8.1	100.8	39.7	178.0	332	66.7	9600	46.250	100	215.0
Zircon-018_IPA15-01	8.42	767	1.99	0.029	6.08	0.036	0.52	1.2	0.180	11.7	4.6	61.1	25.8	122.5	267	58.4	9520	3.190	71.3	217.0
Zircon-019_IPA15-01	9.26	813	2.06	0.960	23.6	0.299	2.14	2.5	0.660	14.4	5.0	64.8	26.2	125.1	288	65.4	8670	3.500	208	248.0
Zircon-021_IPA15-01	9.13	1398	5.49	0.006	27.5	0.049	1.21	3.4	0.840	25.8	9.5	121.4	48.7	227.0	445	92.6	10660	4.178	149.9	302.0
Zircon-022_IPA15-01	13.00	382	0.72	0.137	4.06	0.090	1.13	1.0	0.560	7.7	2.3	27.9	12.1	60.1	148	36.5	7790	0.968	37.3	65.2

Zircon-024_IPA15-01	10.73	2390	2.42	0.390	13.3	0.460	6.00	10.9	1.960	62.5	20.6	237.0	86.0	358.0	600	117.9	8130	5.250	217	374.0
Zircon-025_IPA15-01	11.28	452	0.73		7.46	0.012	0.28	1.0	0.488	6.8	2.3	31.4	14.1	72.5	197	48.2	9460	1.058	30.4	82.9
Zircon-026_IPA15-01	9.30	278	0.80	0.003	5.87	0.016	0.34	0.6	0.182	4.1	1.6	20.5	9.2	44.4	112	25.4	10410	0.863	21.7	61.8
Zircon-027_IPA15-01	15.30	1331	2.51	12.100	47.8	3.800	19.20	6.8	1.300	26.9	9.5	114.1	46.1	210.0	429	88.6	10170	3.025	126	229.0
Zircon-028_IPA15-01	10.12	1730	2.71		32.8	0.117	2.63	6.9	1.780	37.2	13.3	155.0	60.5	268.0	504	104.6	9810	2.770	141	201.0
Zircon-029_IPA15-01	82.00	3790	4.74	42.200	155	17.600	97.00	44.8	6.520	136.9	37.6	407.0	141.7	577.0	902	175.0	7530	7.650	389	544.0
Zircon-030_IPA15-01	13.50	1096	3.15	4.000	36	2.700	10.50	4.9	4.300	19.4	6.4	85.0	35.6	174.0	421	97.7	9770	9.875	210	569.0
Zircon-031_IPA15-01	9.78	1810	2.44	0.058	16.85	0.123	2.44	6.1	0.990	34.9	12.3	152.4	60.9	278.0	571	115.9	9870	4.975	188	348.0
Zircon-032_IPA15-01	8.61	2410	4.30	0.001	11.25	0.062	1.45	5.7	0.224	43.2	16.7	211.0	84.0	371.0	639	129.0	10760	11.100	389	860.0
Zircon-033_IPA15-01	11.60	2206	2.44	0.850	23.6	0.470	5.65	9.9	1.940	53.3	18.1	210.3	78.2	340.0	594	119.0	9010	4.398	204	315.0
Zircon-034_IPA15-01	9.13	837	4.19	0.004	18.8	0.014	0.54	1.5	0.274	12.1	5.0	66.3	28.4	140.7	329	73.3	10890	3.130	95.4	231.9
Zircon-035_IPA15-01	17.90	2070	14.40	5.200	51.6	2.280	11.70	6.1	1.040	28.0	10.9	159.0	67.3	339.0	763	161.0	12290	8.575	335	701.0
Zircon-036_IPA15-01	9.88	369	1.18		2.96	0.003	0.27	0.9	0.076	5.6	2.3	30.3	12.0	56.4	126.2	27.4	11050	3.580	42.9	259.5
Zircon-037_IPA15-01	10.54	886	0.99	0.400	7.93	0.215	1.76	2.9	0.451	17.7	6.1	74.4	30.1	138.0	284	61.0	9060	2.373	76.2	169.0
Zircon-039_IPA15-01	9.81	1380	2.61	0.006	21.5	0.093	1.80	4.3	1.140	26.0	9.5	116.0	45.9	217.0	447	93.2	9740	2.975	136	228.0
Zircon-040_IPA15-01	9.05	839	6.79		13.6		0.20	1.2	0.153	11.7	4.8	67.0	28.3	141.0	296	62.6	12830	3.250	76.3	239.0
Zircon-042_IPA15-01	10.06	1200	4.14	0.030	27.2	0.028	0.72	2.5	0.740	17.9	7.3	96.9	39.1	188.0	409	84.0	9800	3.550	142	255.0
Zircon-043_IPA15-01	14.55	1910	2.39	0.012	32.1	0.207	4.00	7.8	3.840	46.1	14.9	181.0	68.0	299.0	537	110.4	7380	1.753	120.8	121.3
Zircon-045_IPA15-01	10.97	2250	1.48	0.065	30.3	0.710	12.20	17.5	8.500	74.0	20.4	223.0	77.0	315.0	649	143.0	7090	4.425	461	327.0
Zircon-047_IPA15-01	13.20	1184	2.67	0.166	26.9	0.135	1.81	4.7	1.250	25.0	8.7	107.6	40.9	185.0	352	73.1	8510	3.510	236	252.0
Zircon-048_IPA15-01	10.52	1710	3.51	0.190	13.24	0.380	4.80	8.5	1.010	46.4	14.5	163.4	61.2	265.0	470	97.3	9100	4.033	163.7	303.0
Zircon-049_IPA15-01	8.89	875	3.25		8.63	0.024	0.86	1.9	0.279	13.6	5.5	69.8	29.3	140.3	293	61.4	9910	4.098	111.6	300.0
Zircon-050_IPA15-01	10.01	810	2.56	0.066	13.18	0.028	0.56	1.4	0.385	10.0	4.4	57.9	26.1	130.9	310.2	69.8	10440	2.548	77	201.3
Zircon-051_IPA15-01	10.09	1549	8.34	0.023	26.4	0.047	0.90	2.9	0.554	21.3	9.1	122.3	50.8	251.0	534	111.9	10910	6.375	227	452.0
Zircon-052_IPA15-01	14.60	1660	11.60	8.000	45.3	3.070	16.70	7.2	0.640	27.3	9.8	126.4	53.7	268.0	605	131.3	10990	16.925	790	1210.0
Zircon-053_IPA15-01	34.30	3750	14.00	55.000	208	25.000	132.00	47.0	5.300	127.0	36.3	397.0	135.0	550.0	862	166.0	8240	14.500	665	1051.0
Zircon-054_IPA15-01	8.75	812	1.26	0.137	8.06	0.146	1.54	2.4	0.508	12.4	4.7	59.0	25.4	127.2	331	78.0	9680	5.875	170	416.0
Zircon-055_IPA15-01	15.50	6000	6.80	3.200	114	1.320	14.30	23.2	11.600	126.0	44.1	530.0	200.0	870.0	1610	332.0	6690	8.250	1400	610.0
Zircon-056_IPA15-01	11.70	1468	1.54	0.034	25.1	0.185	3.58	7.2	1.510	33.5	11.0	131.4	50.1	227.0	451	95.8	8960	2.895	174	230.0
Zircon-057_IPA15-01	10.50	1440	3.46	0.035	32.2	0.113	1.89	4.8	0.940	28.8	10.4	127.0	48.9	212.0	426	88.6	10370	3.425	172	248.0
Zircon-058_IPA15-01	14.80	1604	2.32	0.013	21.7	0.090	1.88	4.1	1.670	28.7	10.7	133.7	53.8	253.0	509	108.6	7890	2.243	138	169.0
Zircon-059_IPA15-01	13.37	2160	1.29	0.045	18.5	0.444	7.25	13.0	4.650	56.4	18.1	201.5	74.6	325.0	627	132.7	7700	2.143	143.2	155.1
Zircon-060_IPA15-01	15.70	2060	1.51	1.430	33.9	0.840	10.60	14.5	6.300	61.9	18.9	206.0	73.3	309.0	538	108.2	7190	1.635	144	121.6
Zircon-062_IPA15-01	11.67	3560	3.98	0.106	52.1	0.640	10.70	18.2	6.050	91.0	29.4	334.0	123.0	518.0	970	196.0	7540	4.700	349	347.0
Zircon-063_IPA15-01	25.90	1839	2.80	14.900	67.7	6.880	36.00	15.8	1.710	41.2	13.5	161.0	63.1	282.0	546	112.6	10540	4.855	246	383.0
Zircon-065_IPA15-01	131.90	2730	12.75	211.000	356	49.000	202.00	37.3	8.700	69.2	19.3	231.0	92.8	446.0	952	204.0	11490	25.450	755	1949.0
Zircon-066_IPA15-01	10.32	1290	4.17	0.059	29	0.053	1.21	2.5	0.680	18.1	7.1	97.4	41.7	207.7	492	110.2	10090	4.050	176	305.0
Zircon-067_IPA15-01	9.74	1970	5.27	0.090	51.6	0.166	3.27	7.4	2.000	42.7	15.1	177.0	69.3	307.0	562	113.7	9720	4.925	270	352.0
Zircon-068_IPA15-01	14.13	2470	4.98	0.342	27.6	0.546	7.78	11.4	3.010	56.7	18.8	218.0	83.4	376.0	782	168.8	9900	8.300	289	588.0
Zircon-069_IPA15-01	11.70	2330	6.56	1.210	34	0.540	3.40	5.7	0.830	42.1	16.0	209.0	81.5	376.0	696	142.0	12320	7.900	304	565.0
Zircon-070_IPA15-01	11.02	2010	12.33	1.120	46.6	0.430	3.67	5.0	0.810	31.1	12.6	164.0	66.1	319.0	670	142.6	10790	13.325	777	968.0
Zircon-073_IPA15-01	16.10	4850	11.55	7.300	97	4.100	26.90	22.8	2.420	103.0	36.3	434.0	165.0	715.0	1300	257.0	8000	14.375	1480	1000.0
Zircon-074_IPA15-01	12.30	2380	2.69	1.300	35.9	0.790	6.90	10.4	2.780	53.1	17.8	212.0	80.3	364.0	733	154.7	9490	4.878	299	376.0
Zircon-075_IPA15-01	11.17	1402	1.10	0.002	8.41	0.241	3.36	5.8	1.680	32.9	10.8	123.1	46.5	210.0	434	94.3	8790	4.500	183	309.0
Zircon-076_IPA15-01	9.33	2350	4.28	0.950	63	0.500	7.10	10.1	2.620	56.0	18.4	219.0	83.0	371.0	690	145.0	9460	5.900	530	426.0
Zircon-077_IPA15-01	9.16	1190	2.42		21.1	0.037	0.70	2.2	0.610	19.1	7.1	94.0	40.1	187.0	400	86.1	9530	2.900	125	214.0
Zircon-078_IPA15-01	12.90	2000	4.03	4.100	33.7	1.410	9.00	7.3	1.250	36.6	13.1	160.0	67.1	314.0	645	138.0	7360	9.425	432	671.0
Zircon-079_IPA15-01	10.26	1872	1.97	0.023	11.83	0.306	5.45	10.3	2.050	45.9	15.4	172.6	65.1	287.0	545	112.7	7500	4.385	237	329.0
Zircon-080_IPA15-01	15.00	1420	2.55	7.400	37.1	4.000	25.50	13.9	0.690	38.5	11.4	131.0	49.2	220.0	414	83.6	11210	5.200	198	397.0
Zircon-081_IPA15-01	16.80	7980	57.40	15.500	110	9.100	59.00	39.5	2.480	196.0	67.2	798.0	296.0	1234.0	1969	374.0	9210	42.700	2054	3150.0
Zircon-082_IPA15-01	8.87	2180	2.34		10.65	0.125	2.51	6.9	0.860	42.8	16.1	192.0	74.9	334.0	618	125.8	9640	7.950	224	565.0
Zircon-083_IPA15-01	12.56	2210	4.85	0.178	34.1	0.276	4.57	10.1	1.770	50.0	17.2	192.0	76.9	339.0	658	140.0	8140	9.700	786	757.0
Zircon-085_IPA15-01	9.37	1441	4.86	0.033	16.9	0.028	0.42	2.0	0.323	19.5	8.1	110.8	47.1	229.0	489	101.5	12130	5.318	172	407.0
Zircon-086_IPA15-01	10.17	993	2.59	0.039	16.07	0.198	3.04	5.3	1.460	25.2	8.2	93.9	36.2	157.0	299	63.1	7320	2.723	91.8	195.0

Zircon-088_IPA15-01	10.16	955	1.47	0.047	22.9	0.082	1.42	3.3	1.320	18.0	5.9	77.4	31.0	147.2	326	72.9	9540	2.325	122.3	172.0
Zircon-089_IPA15-01	10.57	350	0.48		4.7	0.017	0.31	0.6	0.468	4.8	1.8	24.3	10.7	55.7	153.8	39.6	8150	0.535	17.54	37.8
Zircon-090_IPA15-01	22.20	1219	1.96	0.068	21.5	0.088	1.94	4.1	0.870	21.9	8.0	97.8	39.8	188.0	404	87.3	9000	3.020	147	219.0
Zircon-091_IPA15-01	9.61	1853	7.40	0.320	40.2	0.247	2.73	4.9	1.070	31.2	11.7	150.5	61.4	290.0	607	128.7	10230	6.275	295	443.0
Zircon-093_IPA15-01	13.70	3040	3.16	0.013	39.2	0.228	4.15	8.5	3.930	52.1	18.4	237.0	99.4	490.0	1117	249.0	7320	4.450	289	337.0
Zircon-094_IPA15-01	14.80	1594	2.81	30.300	93.8	9.680	49.20	17.0	2.910	50.8	14.7	161.0	59.5	245.0	418	84.6	8670	3.598	177	265.0
Zircon-095_IPA15-01	15.70	1450	2.86	5.800	35	1.980	10.30	5.6	1.620	24.8	9.3	113.4	46.6	229.0	477	101.6	9250	2.455	108	180.0
Zircon-096_IPA15-01	11.15	2120	5.78	0.004	71.1	0.147	2.66	6.6	2.380	40.3	14.5	180.0	73.3	333.0	653	135.0	9380	4.655	288	326.0
Zircon-097_IPA15-01	9.34	1820	5.45	0.216	15.7	0.108	2.31	6.7	0.420	40.8	14.1	172.0	66.7	284.0	477	95.8	9860	5.875	185	412.0
Zircon-098_IPA15-01	48.90	4120	29.80	0.149	32.2	0.181	2.56	9.6	0.565	77.5	29.7	373.0	144.9	635.0	1098	214.0	11490	27.925	1243	2030.0
Zircon-099_IPA15-01	12.69	2040	2.44	0.470	14.8	0.364	4.44	9.4	1.580	47.3	15.4	186.3	70.4	316.0	564	114.4	8930	3.703	183	290.0
Zircon-100_IPA15-01	11.98	3960	19.50	0.094	58.7	0.151	3.16	8.6	1.110	67.3	26.4	330.0	137.2	616.0	1201	246.0	11910	21.775	1026	1645.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
MAG-15-01 (Mag*) Batolito Puerto Vallarta																				
Zircon-001_MAG15-01	7.63	726	1.08		11.78	0.070	0.95	2.6	1.000	14.8	5.0	57.1	22.5	105.4	242	56.0	7730	1.670	76.2	127.7
Zircon-002_MAG15-01	34.90	1280	6.12	40.000	147	14.500	63.00	14.8	1.460	26.8	8.2	98.2	40.3	200.0	460	101.5	8450	5.025	298	384.0
Zircon-003_MAG15-01	8.66	1007	1.08	0.013	16.1	0.160	2.68	4.7	1.850	23.9	7.5	85.4	32.5	149.2	327	74.5	8030	1.665	100.2	137.3
Zircon-005_MAG15-01	7.29	886	0.95		13.74	0.040	1.05	2.4	0.810	15.8	5.7	71.1	28.4	137.0	302	68.1	8800	2.385	93.6	155.0
Zircon-006_MAG15-01	7.76	920	1.66		12.4	0.037	0.76	2.3	0.820	13.3	5.3	69.3	29.3	141.0	321	73.0	11360	3.600	175	299.0
Zircon-007_MAG15-01	7.55	908	0.87		11.38	0.120	1.85	3.8	1.170	17.4	6.3	72.7	29.9	139.7	313	69.9	7240	1.928	91	137.9
Zircon-008_MAG15-01	8.80	803	1.14	1.600	14.7	0.480	2.90	1.9	0.620	11.4	4.4	60.5	25.0	125.4	311	71.7	9130	2.388	84.7	179.6
Zircon-009_MAG15-01	16.90	753	1.75	0.290	8.54	0.168	1.46	2.9	0.461	12.4	4.6	62.3	25.1	117.9	248	53.9	7560	3.075	65.9	228.0
Zircon-010_MAG15-01	6.96	1318	3.93	0.006	18.01	0.033	0.79	2.3	0.608	19.2	7.8	106.3	44.7	216.0	448	93.3	9210	4.045	105.4	298.0
Zircon-011_MAG15-01	15.50	1600	1.34	5.900	27	1.900	10.50	8.4	2.300	37.4	11.6	135.8	52.5	249.0	548	118.2	8030	2.703	152.2	224.0
Zircon-012_MAG15-01	19.30	1121	7.87	0.530	15.81	0.153	1.22	2.4	0.158	16.6	6.7	90.9	37.3	177.0	358	73.2	7900	9.125	379	629.0
Zircon-013_MAG15-01	7.56	1259	5.80		44.4	0.048	1.30	3.3	0.890	22.7	8.6	110.2	43.1	195.7	390	78.6	9330	7.900	462	564.0
Zircon-014_MAG15-01	23.00	1540	9.34	32.000	108	11.300	61.00	14.5	1.070	35.4	10.9	135.0	53.0	244.1	465	94.2	10060	6.723	243.1	498.0
Zircon-015_MAG15-01	8.00	603	1.50	0.021	10.79	0.022	0.31	1.3	0.298	7.8	3.1	41.6	18.6	97.5	252.4	58.4	8230	1.745	58	126.5
Zircon-016_MAG15-01	6.55	1595	1.51	0.069	24.26	0.216	3.57	7.0	1.760	34.6	11.9	140.4	53.4	242.1	472	97.9	7310	2.913	174.4	215.0
Zircon-017_MAG15-01	7.78	1227	6.68	0.133	19.46	0.085	1.22	2.6	0.433	17.3	7.0	93.5	39.7	196.2	434	91.7	8940	6.505	193.9	433.0
Zircon-018_MAG15-01	7.25	194.8	0.49	0.087	6.88	0.005	0.18	0.4	0.235	2.1	0.9	13.6	5.9	31.0	89.3	23.1	10590	1.060	29.5	75.6
Zircon-019_MAG15-01	7.91	734	0.71		6.7	0.060	0.81	2.0	0.760	12.1	4.2	55.5	23.4	118.0	291	68.9	7500	1.553	57.4	114.9
Zircon-020_MAG15-01	7.19	1282	6.14	0.011	21.3	0.038	0.73	2.3	0.462	16.0	6.8	94.0	41.3	214.0	480	107.1	8820	4.495	145	327.0
Zircon-023_MAG15-01	8.24	1190	1.86	0.002	10.23	0.127	2.00	4.1	0.835	23.6	8.4	103.6	40.9	192.2	373	76.5	8220	2.640	100	201.3
Zircon-024_MAG15-01	7.51	1501	4.61	0.140	19.81	0.145	1.61	3.3	0.458	21.9	9.1	119.9	50.1	241.0	481	99.6	9770	4.975	203	394.0
Zircon-025_MAG15-01	9.30	421	0.72	0.260	6.27	0.093	0.67	1.4	0.540	6.9	2.3	29.3	12.9	65.5	180.3	45.0	9930	4.000	102.1	319.0
Zircon-026_MAG15-01	8.82	3240	12.08	0.211	17.39	0.186	2.57	5.3	0.219	43.4	18.4	249.0	107.0	518.0	1059	219.9	10900	25.475	744	1854.0
Zircon-027_MAG15-01	8.78	2140	5.88	0.038	32.2	0.150	3.03	7.0	0.900	37.2	14.4	174.7	70.2	338.0	663	136.6	9860	7.825	400	598.0
Zircon-031_MAG15-01	7.60	2470	1.67	0.055	16.3	0.534	7.85	14.0	2.340	69.5	22.4	242.6	87.7	374.0	635	124.6	6720	4.995	266	358.0
Zircon-033_MAG15-01	9.40	2570	11.80	0.740	74.9	0.440	5.30	9.6	1.730	54.5	19.2	227.0	82.9	396.0	709	144.2	7170	13.100	1470	895.0
Zircon-034_MAG15-01	7.29	686	1.88	0.014	13.35	0.045	0.73	1.1	0.399	9.0	3.4	48.0	21.8	110.6	274.3	63.6	8630	2.015	76.6	165.4
Zircon-036_MAG15-01	29.70	744	2.54	31.000	79	6.600	28.00	5.4	0.870	12.9	4.7	55.7	23.3	117.4	281	63.3	8530	5.850	168.2	374.0
Zircon-038_MAG15-01	7.04	1060	0.95		12.81	0.105	2.21	4.1	1.290	21.4	7.3	85.4	34.4	164.2	360	79.2	7990	2.470	113.1	172.0
Zircon-039_MAG15-01	7.84	1049	1.83	0.047	20.17	0.079	1.43	3.3	0.890	17.3	6.7	80.8	33.9	163.4	374	83.2	8550	2.523	131.6	191.1
Zircon-040_MAG15-01	7.16	624	1.06	0.026	9.55	0.030	0.53	1.2	0.406	7.8	3.2	42.7	18.9	101.0	262	63.1	9260	2.155	68.9	165.3
Zircon-041_MAG15-01	15.90	1445	1.61	1.150	40.2	1.070	9.40	9.2	2.560	38.0	11.3	128.9	48.6	219.0	449	96.9	7350	2.858	228	206.0
Zircon-042_MAG15-01	10.60	1144	1.61	0.082	18.85	0.098	1.72	4.4	1.880	26.1	8.9	101.4	37.8	166.6	340	74.5	6910	2.033	134	150.6
Zircon-043_MAG15-01	9.24	1671	2.77	0.029	24.87	0.136	2.93	6.4	1.830	35.2	12.2	148.5	56.7	252.9	481	100.8	7790	4.380	223.4	324.3
Zircon-045_MAG15-01	8.05	985	2.90	0.215	19.3	0.086	1.29	2.2	0.490	12.5	5.2	71.3	31.1	158.6	380	85.3	8250	3.860	150.4	269.0
Zircon-047_MAG15-01	6.56	726	2.00		8.89	0.014	0.61	1.4	0.252	10.0	4.1	54.4	24.0	115.4	268.1	59.4	7590	2.965	85	219.5
Zircon-048_MAG15-01	7.33	1159	4.34	0.049	19.1	0.041	0.89	3.6	0.500	19.8	7.6	97.0	39.4	185.0	368	76.8	7760	5.525	203	355.0

Zircon-049_MAG15-01	14.50	4940	25.40	1.630	27.6	0.930	6.80	9.4	2.310	75.7	30.9	403.0	166.8	772.0	1487	294.0	12630	35.075	1190	2680.0
Zircon-050_MAG15-01	8.40	452	0.54	0.960	9.3	0.290	1.90	1.7	0.640	8.3	2.8	33.1	14.0	68.0	167	41.0	9120	1.120	39.8	85.8
Zircon-052_MAG15-01	7.12	687	0.84		9.34	0.047	1.16	2.4	0.710	11.8	4.2	53.6	22.0	108.0	257	58.0	8060	1.705	66.7	119.1
Zircon-053_MAG15-01	7.27	2120	5.35	0.020	50.5	0.140	2.96	7.1	1.700	39.9	14.9	185.0	72.0	323.0	624	128.0	9080	6.725	433	485.0
Zircon-054_MAG15-01	8.16	1194	4.11	0.210	17.7	0.165	1.92	4.0	0.743	23.1	8.3	102.6	40.6	186.0	382	79.5	8310	5.000	334	378.0
Zircon-055_MAG15-01	8.13	900	0.94	0.380	15.8	0.252	3.56	5.6	1.640	23.4	7.4	79.3	28.9	130.8	268	58.9	8790	1.760	102.9	136.9
Zircon-056_MAG15-01	7.21	1308	4.07	0.730	13.35	0.320	1.70	2.8	0.247	18.4	7.4	101.1	42.9	207.9	442	93.0	9740	5.718	171.9	425.0
Zircon-058_MAG15-01	8.10	559	0.87	0.011	9.97	0.027	0.51	1.8	0.823	10.6	3.6	43.9	17.1	83.9	184.4	43.7	7600	1.060	48.2	78.2
Zircon-059_MAG15-01	10.00	932	1.32	0.580	16.13	0.238	2.75	4.6	1.860	23.7	7.7	84.2	29.8	132.2	269	57.6	7830	1.443	97.2	107.4
Zircon-061_MAG15-01	6.59	1905	5.17	0.125	28.8	0.077	1.23	4.3	0.518	33.3	12.9	166.3	67.0	298.0	554	113.0	10040	5.718	248	406.0
Zircon-062_MAG15-01	6.42	854	4.95		16.55	0.014	0.45	1.7	0.254	13.3	5.2	71.6	29.3	139.6	282.7	58.9	9740	4.698	150.6	319.4
Zircon-063_MAG15-01	8.26	621	0.91	0.119	9.88	0.065	1.02	2.0	0.860	10.5	3.9	47.1	19.0	91.8	211	49.0	7770	1.300	54.4	99.7
Zircon-064_MAG15-01	8.58	7950	26.20	0.054	210.1	0.605	11.52	25.6	4.110	154.1	55.8	687.0	269.0	1192.0	2081	402.0	6040	28.875	3370	2194.0
Zircon-066_MAG15-01	7.51	807	0.75	0.022	13.2	0.148	2.57	4.7	1.760	19.9	6.4	71.4	25.4	116.3	259	59.8	7550	1.783	102.9	137.0
Zircon-067_MAG15-01	10.93	774	2.11	0.013	10.53	0.076	1.15	2.2	0.340	12.8	4.8	61.2	25.7	121.7	271	59.3	10530	5.175	140.7	393.0
Zircon-069_MAG15-01	7.25	632	1.61	0.068	12.98	0.043	0.49	1.5	0.415	8.3	3.5	45.8	18.9	100.0	250	58.3	7790	1.833	70.4	138.6
Zircon-072_MAG15-01	15.10	1390	5.16	14.400	57.9	3.500	15.10	5.0	0.778	20.2	7.8	99.4	43.1	219.6	521	119.2	9080	8.200	544	664.0
Zircon-073_MAG15-01	14.50	1535	6.00	22.400	43.4	4.400	16.70	6.2	1.220	22.6	9.3	117.6	48.3	238.0	492	104.6	7770	10.950	399	655.0
Zircon-074_MAG15-01	7.93	1066	1.16	0.030	20.1	0.163	3.34	6.1	1.950	28.0	8.7	98.2	34.3	149.0	304	66.2	9070	1.745	106.9	148.9
Zircon-076_MAG15-01	8.70	1420	9.60	0.103	24.5	0.095	0.98	2.4	0.600	19.2	8.2	111.0	47.8	238.0	505	105.0	8300	5.025	176	375.0
Zircon-077_MAG15-01	10.83	1578	2.13	0.048	9.83	0.221	3.10	6.2	1.400	34.5	11.9	145.0	56.5	249.0	446	91.6	6840	2.658	106.7	192.7
Zircon-080_MAG15-01	7.63	736	1.46		12.81	0.037	0.83	2.1	0.634	11.8	4.4	56.4	23.3	118.0	287	65.7	8290	2.015	77	147.8
Zircon-081_MAG15-01	8.76	997	1.79	0.260	19.5	0.118	1.80	2.8	1.291	20.6	6.7	80.9	30.8	142.4	301	67.1	8000	1.858	126.1	147.5
Zircon-082_MAG15-01	16.60	4950	11.80	0.249	61.2	0.535	8.40	14.8	2.480	91.5	32.3	417.0	163.0	754.0	1390	276.0	6570	21.300	1900	1450.0
Zircon-083_MAG15-01	18.30	1430	5.13	52.900	190	22.500	128.00	31.9	2.060	51.1	12.8	135.0	51.4	222.0	413	83.6	8820	2.978	138	223.0
Zircon-084_MAG15-01	8.30	958	3.91	0.790	9.33	0.350	1.79	1.7	0.223	11.8	4.6	67.3	29.9	156.6	407	94.7	12480	8.700	146.2	688.0
Zircon-085_MAG15-01	8.30	1654	1.46	0.026	15.8	0.272	4.29	6.9	1.660	38.1	12.8	149.6	57.0	260.0	492	102.5	7520	3.025	150.3	221.0
Zircon-086_MAG15-01	8.34	1414	3.76	0.055	22.8	0.046	0.93	2.7	0.682	18.6	7.6	109.5	46.4	231.5	524	113.1	10050	2.868	119.4	228.6
Zircon-087_MAG15-01	6.44	1178	4.17	0.022	23.13	0.056	1.22	2.4	0.716	16.1	6.4	89.3	37.5	185.4	441	100.2	8620	4.435	223.7	349.0
Zircon-088_MAG15-01	9.20	1400	8.70	0.460	36.2	0.230	1.43	3.1	0.970	16.9	7.1	98.6	43.1	222.0	509	113.0	9790	5.075	186	413.0
Zircon-090_MAG15-01	8.05	1315	1.85	0.016	23.4	0.080	1.76	3.8	1.340	22.3	8.4	104.6	43.5	206.9	458	99.1	8470	2.460	135.7	195.6
Zircon-091_MAG15-01	6.53	557	1.28		10.39	0.056	0.60	1.9	0.462	8.8	3.2	42.5	17.7	90.1	210	46.3	7270	1.760	67.4	126.1
Zircon-092_MAG15-01	9.30	2300	3.44	1.550	51.6	0.770	7.70	10.5	2.470	52.1	17.5	202.0	78.3	358.0	696	145.5	9290	5.283	403	400.0
Zircon-094_MAG15-01	6.99	1838	6.45	0.107	19.84	0.078	1.24	3.8	0.390	26.3	11.0	151.6	62.3	296.0	601	124.2	9390	6.850	227	513.0
Zircon-096_MAG15-01	6.92	1146	2.13	0.079	9.3	0.095	1.34	3.1	0.470	17.9	7.4	93.3	38.7	186.0	375	80.7	8490	3.343	104	245.9
Zircon-097_MAG15-01	19.50	1550	3.15	17.900	76	5.100	25.50	8.3	1.380	29.4	9.7	127.8	50.8	243.0	519	109.6	8480	4.675	348	334.0
Zircon-099_MAG15-01	5.97	1171	2.04	0.015	11.15	0.058	0.94	2.5	0.507	17.4	6.7	90.3	37.5	188.5	416	92.0	7990	4.403	160.1	321.0
Zircon-100_MAG15-01	10.12	5640	8.36	0.054	127.2	0.423	7.58	18.2	7.740	110.9	38.8	480.0	188.1	840.0	1521	301.0	7670	10.325	1168	791.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
PUR-15-01 (Pur*) Batolito Manzanillo, Suite Zihuatanejo																				
Zircon-003_PUR15-01	14.50	348	0.56		5.7	0.009	0.35	1.2	0.326	6.9	2.4	29.7	11.5	50.4	103.5	21.4	8030	0.590	27.3	50.8
Zircon-004_PUR15-01	14.82	390	0.63		5.54	0.015	0.61	1.5	0.155	7.5	2.9	32.7	12.8	58.6	119.7	24.4	8890	0.685	25.4	57.1
Zircon-005_PUR15-01	11.54	153	0.29		2.02	0.002		0.3	0.105	1.7	0.7	9.7	4.3	24.9	76.2	18.5	8300	0.445	13.28	35.1
Zircon-006_PUR15-01	13.10	948	1.89		20.2	0.060	1.28	3.4	0.870	17.1	6.4	75.0	29.4	142.0	318	67.8	8060	2.900	346	274.0
Zircon-007_PUR15-01	19.30	970	1.73	14.200	42.3	4.000	18.80	6.5	0.860	21.8	7.6	85.3	32.1	142.6	284	57.6	8700	4.800	234	351.0
Zircon-009_PUR15-01	120.00	969	3.42	6.300	31.3	2.070	10.50	4.8	0.328	19.3	7.2	83.2	32.1	143.6	277	57.0	8370	10.550	612	719.0
Zircon-011_PUR15-01	13.37	1520	0.76	0.043	8.6	0.248	4.03	7.1	1.230	33.9	11.5	134.6	51.1	221.0	410	81.8	6980	2.913	101.2	145.1
Zircon-012_PUR15-01	11.20	3100	3.26	0.033	25.2	0.362	5.90	12.5	2.540	64.2	23.2	274.0	106.1	464.0	945	186.0	8380	5.083	318	390.0
Zircon-013_PUR15-01	12.10	814	1.26	0.300	13.8	0.124	1.02	2.3	0.757	11.8	4.5	59.0	25.5	127.6	304	68.4	7740	1.608	127	154.0
Zircon-014_PUR15-01	12.40	997	2.89	13.300	43	3.300	15.40	4.4	0.410	15.1	5.7	72.7	31.8	161.0	381	84.7	8790	5.175	126	268.0
Zircon-015_PUR15-01	11.70	694	1.62	3.000	18.5	0.980	4.20	2.1	0.399	10.1	3.9	52.7	21.8	107.6	254	56.0	9120	2.065	92.6	167.8

Zircon-016_PUR15-01	15.16	844	0.80	0.169	10.3	0.132	2.14	3.5	0.380	17.9	6.5	77.4	28.2	122.0	232	46.3	8520	0.755	46.5	64.2
Zircon-020_PUR15-01	11.80	4410	20.33	1.750	81.9	1.180	10.50	16.4	1.320	84.5	30.2	378.0	143.4	681.0	1337	269.0	9530	14.450	802	1220.0
Zircon-021_PUR15-01	18.15	1066	1.14	0.277	12.69	0.179	2.32	4.0	0.910	20.8	7.5	88.6	34.9	159.9	305.9	62.6	7730	1.400	105.9	127.2
Zircon-022_PUR15-01	12.20	1561	0.81	0.012	12.49	0.310	5.08	5.7	1.380	30.5	10.4	127.4	52.1	239.0	440	92.8	8140	2.470	185	200.0
Zircon-023_PUR15-01	13.10	1139	1.94	6.600	27.6	1.660	8.40	3.9	0.550	17.1	6.6	85.1	35.2	183.6	445	98.6	9450	4.058	148.6	308.6
Zircon-024_PUR15-01	55.00	1479	1.86	85.000	221	27.000	122.00	25.0	3.080	42.1	11.6	130.9	49.0	218.0	442	89.5	10540	3.300	196	289.0
Zircon-025_PUR15-01	10.75	472	0.38		3.89	0.035	0.73	1.2	0.691	8.1	3.0	36.6	15.4	75.3	187.2	44.1	8470	0.820	45.4	66.1
Zircon-026_PUR15-01	17.70	2260	2.40		12.65	0.181	3.37	6.6	2.080	43.7	16.1	195.6	76.1	350.0	633	128.2	7290	3.610	197.7	211.3
Zircon-027_PUR15-01	9.74	789	1.86	0.167	10.25	0.049	0.57	1.7	0.400	11.1	4.1	58.4	24.8	127.3	289	64.7	7300	2.490	58.8	131.1
Zircon-030_PUR15-01	14.70	3380	3.03	3.500	33.4	1.610	12.80	15.5	3.260	85.3	27.7	316.0	115.9	488.0	852	161.8	6770	4.360	354	319.0
Zircon-031_PUR15-01	19.60	808	0.95	0.064	6.79	0.232	3.26	4.6	0.500	22.8	7.1	76.5	27.1	113.9	212	40.7	7540	1.930	93	138.3
Zircon-032_PUR15-01	38.10	1121	1.53	14.600	59.6	8.100	44.80	12.7	1.330	29.4	8.2	95.3	37.2	172.4	353	75.2	7580	4.300	128.9	206.0
Zircon-033_PUR15-01	12.59	508	1.13		9.51	0.026	0.53	1.2	0.166	8.0	3.2	40.8	16.1	76.3	156.5	32.6	9730	1.318	60.9	120.7
Zircon-034_PUR15-01	8.25	1320	1.30		8.77	0.025	0.98	2.6	0.770	18.6	7.2	98.0	42.0	213.0	510	115.0	8290	3.125	115	231.0
Zircon-037_PUR15-01	12.63	711	0.97	0.730	10.49	0.292	2.14	2.5	0.478	13.5	4.8	57.5	23.3	107.7	222.3	46.3	10100	1.228	54.1	100.8
Zircon-038_PUR15-01	11.40	1498	2.55	3.820	18.9	1.370	8.90	7.0	0.650	31.1	11.1	136.8	52.1	238.0	436	87.3	7040	1.525	43.1	80.8
Zircon-039_PUR15-01	10.50	761	1.07	0.730	12.8	0.346	1.93	3.4	0.460	17.1	5.2	67.9	24.0	115.0	224	44.2	9920	1.993	82.8	142.0
Zircon-040_PUR15-01	10.20	869	1.77	0.520	18.4	0.233	1.68	2.7	0.570	13.9	5.4	67.1	27.0	134.6	306	67.0	10180	2.650	166	214.0
Zircon-041_PUR15-01	7.92	1380	3.80		16.6	0.030	0.99	2.6	0.465	17.2	7.1	98.0	43.6	222.0	548	124.0	9690	5.000	178	375.0
Zircon-043_PUR15-01	1850	1800	6.40	4.800	17.8	1.480	9.40	7.2	1.360	35.9	12.6	156.0	60.8	280.0	546	112.2	8000	4.525	157	235.0
Zircon-044_PUR15-01	9.86	3340	8.79	0.038	39	0.221	4.48	9.4	0.730	66.4	24.1	285.0	108.9	492.0	956	185.4	8960	13.175	756	1043.0
Zircon-045_PUR15-01	8.10	380	1.55	0.245	7.81	0.051	0.54	0.9	0.138	6.4	1.9	29.8	11.6	61.3	131	28.4	8910	5.100	104.6	351.0
Zircon-046_PUR15-01	13.19	1031	1.01	0.148	12.03	0.129	2.20	3.9	0.800	21.0	7.5	89.4	32.8	153.0	300	61.3	8910	1.340	82.4	116.3
Zircon-048_PUR15-01	2040	586	5.20	0.170	7.76	0.055	0.89	1.9	0.490	11.0	3.7	46.5	18.8	87.9	202	44.4	8790	0.740	32.9	59.2
Zircon-049_PUR15-01	11.38	951	1.68		14.13	0.049	0.76	2.4	0.129	16.3	6.4	79.9	31.1	147.8	300	58.8	12120	5.725	213.1	432.0
Zircon-050_PUR15-01	11.14	953	0.60	0.012	8.41	0.087	1.57	3.0	0.970	15.7	5.7	73.0	30.0	147.0	341	75.1	9230	1.318	72.6	122.0
Zircon-051_PUR15-01	14.24	784	0.59		7.1	0.083	1.65	3.7	0.800	19.1	6.2	71.3	25.4	113.0	207	41.2	8710	0.675	44.9	59.6
Zircon-052_PUR15-01	11.80	1112	2.17		15.39	0.032	0.81	2.6	0.730	18.1	6.9	89.7	35.9	169.1	347	72.5	7560	1.763	128	149.3
Zircon-053_PUR15-01	310.00	1068	15.40	4.800	15.8	1.080	6.40	3.6	0.500	15.6	5.7	78.2	33.2	173.5	422	93.2	10000	12.550	199.3	638.0
Zircon-054_PUR15-01	19.10	974	0.52	0.023	10.24	0.142	2.11	4.3	1.160	21.6	7.3	85.8	31.3	144.7	287	59.9	9400	0.898	65.2	76.8
Zircon-056_PUR15-01	15.30	902	0.85	0.830	8.78	0.340	3.24	4.9	0.670	24.3	7.8	83.9	30.5	130.8	236.5	46.5	8370	2.368	110.6	164.3
Zircon-058_PUR15-01	13.35	566	1.00		6.48	0.030	0.88	2.0	0.221	10.8	4.1	48.0	18.2	82.0	163	33.3	9580	0.785	38.3	68.4
Zircon-059_PUR15-01	11.03	241	0.44	0.520	5.9	0.150	1.06	0.8	0.194	3.9	1.3	16.7	7.3	37.6	97.1	22.5	9140	0.440	17.35	37.4
Zircon-060_PUR15-01	8.65	1068	2.47	0.145	9.83	0.071	0.84	1.4	0.454	11.4	5.1	71.9	32.6	169.9	432	100.0	9840	2.840	102.5	231.9
Zircon-061_PUR15-01	14.00	639	0.95	0.062	8.04	0.089	0.52	1.7	0.609	11.5	4.3	47.9	20.6	99.0	207	46.4	6810	1.938	61.1	117.6
Zircon-062_PUR15-01	11.50	2980	7.21	0.870	45.9	0.590	5.38	11.2	1.880	64.5	22.8	269.0	99.8	437.0	793	157.3	7500	7.600	679	550.0
Zircon-063_PUR15-01	9.80	1459	0.53		5.92	0.090	2.57	6.0	0.900	32.4	10.9	132.9	49.9	217.4	403	78.2	8770	3.480	151.2	238.9
Zircon-064_PUR15-01	10.30	472	1.25		12.3	0.025	0.66	1.6	0.359	9.6	3.2	39.3	15.1	72.0	163	35.5	11150	1.425	187	127.0
Zircon-065_PUR15-01	8.58	1367	4.94	0.002	13.94	0.038	0.89	2.8	0.082	21.9	8.5	111.3	46.0	216.5	433	92.7	7840	3.180	73.8	237.8
Zircon-066_PUR15-01	12.64	1199	0.78	0.025	11.27	0.102	2.60	5.0	1.040	28.2	9.0	106.0	39.2	173.0	318	65.2	10450	1.390	94.1	125.0
Zircon-069_PUR15-01	10.10	1170	1.14	4.000	28.6	1.010	6.40	4.9	1.130	23.4	7.9	92.0	37.4	175.0	386	86.7	9900	1.775	121	152.0
Zircon-072_PUR15-01	13.30	823	0.79	4.200	20.9	1.210	6.90	4.4	1.060	16.3	5.7	65.1	25.8	118.2	268.3	59.6	8540	1.380	79.8	120.6
Zircon-073_PUR15-01	10.12	376	0.70		8.18	0.006	0.35	1.1	0.262	5.6	2.2	28.0	11.6	59.0	137.6	31.6	8960	1.120	62.1	83.9
Zircon-074_PUR15-01	15.11	864	1.40	0.570	9.1	0.253	2.69	3.9	0.401	21.7	6.8	77.0	28.6	125.3	235.4	47.7	8680	2.500	148	191.0
Zircon-075_PUR15-01	8.18	654	1.11		4.89	0.023	0.31	1.2	0.246	8.8	3.4	49.5	20.8	103.7	221	47.6	8880	1.885	31.7	90.7
Zircon-077_PUR15-01	22.05	1298	1.49	0.018	8.53	0.227	3.47	5.7	0.508	32.3	10.2	118.6	44.3	190.0	355	71.1	7980	3.103	166	238.0
Zircon-078_PUR15-01	11.64	409	1.19		7.34	0.016	0.37	1.0	0.124	6.5	2.5	31.5	12.3	63.3	137.6	29.1	10140	2.175	63.3	153.5
Zircon-079_PUR15-01	13.80	2396	2.62	0.029	15.5	0.136	3.22	6.0	2.350	45.4	16.4	203.1	78.4	359.0	684	143.6	7090	4.685	241.6	367.0
Zircon-080_PUR15-01	13.98	641	1.08		6.08	0.068	1.01	2.5	0.291	14.8	4.5	57.3	20.7	98.5	188.9	40.0	8840	1.810	67.5	117.2
Zircon-085_PUR15-01	12.44	1930	2.76	0.002	24	0.211	3.36	6.3	0.787	37.1	13.2	161.0	63.4	292.0	569	115.9	9190	3.035	187	265.0
Zircon-086_PUR15-01	10.87	444	0.61		5.11	0.026	0.32	0.9	0.447	6.6	2.4	29.7	13.5	70.1	189.4	45.3	8940	1.773	50.4	129.2
Zircon-088_PUR15-01	14.70	2020	7.50	1.240	79	0.820	5.94	7.9	3.760	40.8	14.1	161.0	62.4	285.0	617	134.0	10000	5.900	558	427.0

Zircon-089_PUR15-01	11.80	953	1.09	1.520	12.40	0.510	3.12	2.8	0.61	16.9	5.82	74.3	30.5	143.6	301	66.3	8830	1.7375	51.1	94.2
Zircon-090_PUR15-01	11.65	890	1.15		9.51	0.068	1.13	1.6	0.92	14.1	4.94	61.5	25.16	124.9	290	69.8	7280	1.14	76.4	95.8
Zircon-092_PUR15-01	7.51	870	1.39		13.64	0.003	0.3	1.1	0.64	10.75	4.63	61.6	27.8	138.4	331	76	9640	3.1075	125.4	195.4
Zircon-093_PUR15-01	13.70	1269	1.78	7.300	30.10	2.450	11.9	6.7	0.74	27.4	9.24	106.7	40.6	187.4	364	75.9	9730	6.2	280	419
Zircon-095_PUR15-01	15.00	2730	2.76	0.462	20.40	0.481	7.2	13.5	1.5	71.6	24	264	91.4	392	670	130	8660	14.275	940	949
Zircon-096_PUR15-01	8.40	6020	26.6	0.049	103.20	0.620	12.5	26.1	1.85	155.6	51.6	599	216	880	1383	260	8120	3.7	785	1102
Zircon-097_PUR15-01	12.26	890	0.76	1.850	13.90	0.690	3.61	3.8	0.727	19.3	6.42	75	28.8	128.3	252	52.1	10770	1.2025	66.5	101.9
Zircon-098_PUR15-01	14.10	2260	1.26	0.009	8.87	0.198	4.24	7.4	2.13	48.4	16.62	199	76.8	345	640	128.6	8180	2.145	94.7	120.7
Zircon-099_PUR15-01	9.31	1790	2.23	1.150	23.60	0.540	4.75	5.8	0.96	33.7	11.3	145	57.2	273	614	132.2	9830	5.475	343	439
Zircon-100_PUR15-01	10.20	2910	5.85	0.244	42.30	0.303	3.85	8.8	1.48	53.4	19.04	245	95.1	442	870	182.4	9690	9.35	723	772

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
MARA-15-01 (Mara*)	Batolito Manzanillo																			
Zircon-002_MARA15-01	13.15	956	0.56		6.50	0.094	2.01	4.2	0.8	21.9	6.91	86.4	31.8	143	271	54.6	6950	0.99	64.7	92.5
Zircon-003_MARA15-01	16.92	1350	0.951	0.047	5.05	0.309	4.64	7.2	0.723	32.3	10.43	123.1	45.7	197.1	346	68.6	6730	1.465	74	125.4
Zircon-004_MARA15-01	9.13	1201	1.57		10.59	0.046	0.76	2.7	0.405	18.5	7.04	96.1	38.9	192	417	86.5	9180	1.6675	63.1	140.4
Zircon-005_MARA15-01	10.41	639	0.659	0.048	6.77	0.045	0.78	1.9	0.476	11.3	4.04	53.3	20.62	97.9	209.3	44	8090	0.7	30.6	63.3
Zircon-009_MARA15-01	11.03	705	0.839	0.730	13.78	0.173	1.52	2.0	0.89	13.01	4.42	55.9	21.99	103	223.6	50.3	7040	0.8175	54.1	73.2
Zircon-010_MARA15-01	12.54	1322	2.9		11.07	0.056	1.3	3.7	0.743	20.3	7.54	101.2	42.1	210	443	95.2	6290	2.055	94.9	165.6
Zircon-011_MARA15-01	14.48	1000	1.045		8.50	0.104	1.78	3.4	0.598	20.8	6.97	84.5	33.4	150	295	61.1	6980	0.795	36.8	66.3
Zircon-013_MARA15-01	8.25	413	0.514		6.25	0.018	0.42	1.1	0.562	6.77	2.44	31.5	12.5	61.3	148	34	7110	0.3625	18.2	37.3
Zircon-014_MARA15-01	11.16	697	0.724		7.01	0.038	0.95	2.5	0.329	14.48	4.98	58.7	22.81	101.2	196.1	39	8930	3.27	170.6	309.3
Zircon-015_MARA15-01	6.16	1350	5.16		18.90	0.035	0.93	2.7	0.219	20	8.3	111	45.9	223	468	98.7	8350	7.65	414	653
Zircon-018_MARA15-01	10.84	2050	6.98		38.10	0.146	2.71	6.2	0.46	35.1	12.54	165.7	65.3	314	657	133.7	8460	8.725	560	741
Zircon-019_MARA15-01	10.05	684	1.49	0.770	16.06	0.189	1.28	1.9	0.616	9.12	3.6	49.3	20.77	105.1	270.1	61.7	7140	3.13	334	293.6
Zircon-020_MARA15-01	13.09	2662	3.23	0.034	21.79	0.340	6.07	9.9	1.15	47.8	16.72	211.4	86.2	402.8	741	150.3	7760	4.3725	307.2	373.7
Zircon-021_MARA15-01	14.13	248	0.365	0.055	3.25	0.029	0.36	0.5	0.177	3.47	1.4	18.57	7.82	38.8	90.4	19.61	7890	0.44	16.39	38.2
Zircon-022_MARA15-01	20.10	878	0.71		3.02	0.118	2.31	4.9	0.393	22.6	7.37	83.9	29.4	127.4	224	43.7	7070	0.8525	39.3	71.5
Zircon-023_MARA15-01	9.02	1804	2.07	0.012	19.19	0.128	2.51	6.1	0.488	31	11.55	144.6	58.6	281	588	117.3	10160	8.6	373	729
Zircon-024_MARA15-01	125.00	396	0.65		5.93	0.016	0.356	1.0	0.487	6.65	2.37	29.6	12.19	61	148.5	34.1	7690	0.3375	14.9	35.3
Zircon-026_MARA15-01	9.18	355	0.404	0.014	4.98	0.029	0.39	1.3	0.667	7.32	2.28	26.2	10.96	52.3	125.5	29.3	7120	0.4725	37.5	40.4
Zircon-029_MARA15-01	9.14	412	0.317	0.009	6.38	0.052	1.61	2.9	1.23	10.48	3.31	35	13.1	59.8	142.9	33.3	7780	0.498	32	48.2
Zircon-031_MARA15-01	13.19	986	2.6		13.88	0.051	1.07	2.1	0.79	14.34	5.04	69.8	30.2	158.8	367	81.6	6990	2.5875	116.6	218.3
Zircon-032_MARA15-01	10.20	922	0.529		9.68	0.094	2.06	4.9	0.85	22.4	7.47	82.5	30.1	135.4	250.2	52.2	7880	0.805	49.8	77.4
Zircon-033_MARA15-01	8.23	449	0.488		7.02	0.018	0.44	1.3	0.555	7.8	2.8	35	13.73	69.9	168.7	39.4	7830	0.39	16.13	40.3
Zircon-036_MARA15-01	12.89	987	1.51	0.010	16.05	0.127	1.85	4.0	0.361	20.2	6.8	85.4	31.9	143.2	276	54.3	9810	8.125	435	742
Zircon-037_MARA15-01	8.01	1231	1.03	0.430	11.15	0.154	1.46	3.0	0.492	18.7	7.1	94.8	39.1	192.7	424	90.7	8410	3.1275	130.2	259
Zircon-038_MARA15-01	16.50	511	0.98		3.49	0.038	0.8	1.9	0.127	10.48	3.57	42.6	16.49	77.1	154.1	31.3	7600	0.55	20.18	47.9
Zircon-039_MARA15-01	12.60	1558	1.99	0.004	9.52	0.141	2.82	5.7	0.434	34.4	11.76	142	52.7	234.3	437	85.7	7770	3.8775	221.2	320
Zircon-040_MARA15-01	19.40	670	0.945		4.11	0.078	1.22	2.5	0.245	14.2	4.9	59.5	22.1	101.3	188.5	38.6	7550	0.5625	24.2	48.6
Zircon-043_MARA15-01	8.16	398	0.769		6.89	0.003	0.097	0.7	0.267	4.69	1.86	25.59	11.23	63.9	199.7	50.9	11240	2.145	64.1	203.5
Zircon-044_MARA15-01	9.30	1190	4.17	0.026	13.70	0.042	0.98	2.7	0.257	18.2	7	95	38.3	185	392	82.6	7900	2.7725	92	221
Zircon-045_MARA15-01	10.85	1517	1.33	0.300	9.53	0.232	3.64	5.1	1.01	30.7	11	131.6	51	235.3	458	94.2	7710	1.49	71.6	125.6
Zircon-047_MARA15-01	7.86	956	2.28	0.008	11.17	0.044	0.57	1.8	0.201	13.6	5.56	74.1	30.6	151.9	335	70.8	8070	2.925	153	223
Zircon-049_MARA15-01	7.44	239	1.51	0.005	5.10	0.007	0.069	0.3		2.4	0.894	14.84	6.85	39.7	117.7	27.7	9320	12.35	47	1018
Zircon-050_MARA15-01	21.20	610	1.001	16.000	43.60	3.990	16.9	4.2	1.08	10.66	3.41	43.5	18.69	94.6	234.8	55.4	7610	1.165	63.6	110.1
Zircon-052_MARA15-01	13.80	1364	3.51	4.400	34.80	1.060	6.7	4.3	1.25	20.68	7.16	99.2	42.4	215.3	523	119.1	8440	4.6175	383	415
Zircon-054_MARA15-01	12.99	2760	1.9	0.024	11.48	0.367	5.77	12.3	2.43	67.9	22.3	260	94	407	704	138.1	7300	2.12	128.8	179.6
Zircon-055_MARA15-01	9.46	476	0.73		8.53	0.017	0.62	1.7	0.645	8.73	2.94	36.3	14.59	72.5	170.6	39.4	8400	0.5125	28.7	50.8
Zircon-056_MARA15-01	10.47	400	0.849	0.110	6.78	0.016	0.204	1.0	0.142	5.99	2.36	30.9	12.67	63.6	144.4	31.2	9850	0.755	27.2	66.7
Zircon-057_MARA15-01	12.64	910	1.44		13.42	0.034	0.94	2.4	0.698	14.36	5.62	72.3	29.2	145.8	328	67.8	8780	1.5675	81.9	131.6
Zircon-058_MARA15-01	8.87	329	0.485		5.84	0.008	0.266	0.8	0.312	5.4	1.74	22.8	10.06	50.7	129.4	31.3	8660	0.51	20.4	50.9

Zircon-060_MARA15-01	10.50	536	1.01		10.71	0.008	0.42	1.3	0.198	8.7	3.2	41.8	17.1	81.3	174	35.9	10560	2.083	89.4	201.1
Zircon-062_MARA15-01	13.15	1238	0.53		6.52	0.098	2.67	4.9	0.960	25.4	9.1	103.5	41.0	189.0	361	74.9	7400	0.948	45.7	76.1
Zircon-063_MARA15-01	8.49	487	0.84		8.25	0.018	0.46	1.1	0.511	7.3	2.9	35.7	15.0	74.8	182	41.7	8690	0.575	24.9	56.2
Zircon-064_MARA15-01	10.40	628	0.54	0.650	8.5	0.300	3.27	3.6	1.390	14.4	4.5	53.1	20.0	92.6	210	48.2	7130	0.653	41.7	63.5
Zircon-065_MARA15-01	13.09	659	0.82		4.51	0.024	0.57	1.6	0.367	9.8	3.9	51.4	21.2	103.7	229.8	50.8	7520	0.690	20.94	56.7
Zircon-067_MARA15-01	9.95	854	1.88	2.400	17	0.870	4.70	2.6	0.281	13.1	5.0	64.9	27.8	137.8	301.9	64.7	8620	2.778	104.3	220.0
Zircon-068_MARA15-01	10.29	355	0.40		5.6	0.041	0.74	1.2	0.592	7.3	2.2	26.9	10.7	53.8	137.8	33.0	7210	0.475	20.77	43.7
Zircon-070_MARA15-01	16.98	1102	1.18	2.400	13.7	0.870	5.80	5.5	0.907	25.3	8.4	98.7	37.2	166.9	313.6	63.6	7810	0.898	47.5	73.2
Zircon-071_MARA15-01	18.30	3860	22.70	0.380	141.6	0.284	3.82	9.6	2.120	67.6	25.1	318.0	126.1	604.0	1223	249.0	8810	15.425	1171	1344.0
Zircon-072_MARA15-01	13.76	609	1.66		4.62	0.045	0.52	1.5	0.099	10.9	4.1	49.9	20.5	92.2	191.1	36.9	9280	1.495	45.9	125.0
Zircon-073_MARA15-01	11.45	1019	1.03		13.66	0.128	2.25	4.5	0.380	22.7	7.7	89.2	33.6	155.3	296	60.7	10960	4.845	241	471.0
Zircon-074_MARA15-01	14.60	636	1.97		13.36	0.031	0.55	1.7	0.273	10.0	3.8	51.6	20.3	97.1	220.8	46.3	10070	3.275	37.3	255.0
Zircon-077_MARA15-01	500	874	4.20	5.500	23	1.350	7.30	3.7	0.462	16.3	5.9	71.6	28.8	135.7	293	58.1	9060	2.673	116.3	218.0
Zircon-080_MARA15-01	12.11	757	1.06		6.92	0.020	0.42	1.7	0.476	12.2	4.4	58.4	23.9	120.5	275.3	60.7	7420	1.045	35.2	87.8
Zircon-081_MARA15-01	12.69	465	0.59		5.26	0.018	0.50	1.7	0.383	9.1	3.2	39.3	15.5	71.1	146.5	31.2	8050	0.328	15.61	30.0
Zircon-082_MARA15-01	14.21	613	1.89	0.020	4	0.045	0.66	2.1	0.114	12.7	4.2	52.4	20.5	91.7	179.2	36.2	10210	2.728	88.5	234.0
Zircon-084_MARA15-01	14.94	782	1.21	0.002	6.81	0.060	1.14	2.8	0.182	16.3	5.4	66.8	25.6	118.3	237.5	46.1	9300	2.925	117.8	249.1
Zircon-086_MARA15-01	12.57	594	0.53		6.71	0.072	1.28	2.6	0.663	14.2	4.5	52.5	19.5	87.4	169.1	35.4	8190	0.373	21.9	34.8
Zircon-087_MARA15-01	13.48	541	0.51		5.98	0.031	0.74	2.0	0.570	11.8	3.8	48.2	17.7	84.6	168	35.2	7740	0.490	23.4	42.7
Zircon-089_MARA15-01	10.79	1429	0.85	0.015	10.77	0.042	1.23	3.3	0.623	27.5	10.0	125.0	48.0	221.5	411	82.5	9070	1.465	79.8	115.7
Zircon-090_MARA15-01	11.80	1890	1.87	0.660	20.6	0.420	4.27	7.7	2.160	41.7	14.0	165.0	64.3	294.0	578	119.5	7870	1.473	128	146.0
Zircon-093_MARA15-01	26.30	1398	0.92	0.045	4.5	0.373	5.04	7.6	0.820	34.4	11.0	128.5	46.9	197.9	343.1	66.9	7320	1.503	77	130.0
Zircon-094_MARA15-01	16.17	3630	2.92	0.044	18.9	0.347	5.40	10.6	2.570	75.1	26.3	318.0	121.4	531.0	930	184.5	7360	2.413	195	199.7
Zircon-097_MARA15-01	12.00	800	2.94	2.300	20.8	0.880	5.00	2.0	0.491	9.5	3.7	50.9	23.8	131.9	375	90.1	8070	2.613	104.6	215.0
Zircon-098_MARA15-01	17.54	4990	61.40	0.375	207.1	1.430	22.00	32.3	2.710	137.8	45.4	515.0	177.6	741.0	1138	180.5	9360	12.850	4110	1013.0
Zircon-100_MARA15-01	16.99	1260	0.87	0.026	7.64	0.191	3.30	5.2	1.020	27.3	9.2	107.8	42.0	190.7	358.8	72.7	8000	0.595	39.17	56.6

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
ARM-15-01 (Arm*) Batolito Manzanillo, Batolito Puerto Vallarta, Suite Zihuatanejo, Suite Cuale-Macias																				
Zircon-001_ARM15-01	12.00	5400	5.28	0.034	40.8	0.545	8.97	21.6	2.670	120.0	40.7	476.0	174.0	758.0	1360	261.0	7910	6.225	440	544.0
Zircon-003_ARM15-01	14.20	1600	1.43	5.600	22.3	1.990	11.90	7.7	1.360	33.9	11.3	139.0	52.7	240.0	458	92.2	8340	1.638	83	145.0
Zircon-004_ARM15-01	11.50	1510	1.21	0.012	15.5	0.168	3.23	6.4	1.660	35.0	11.4	133.0	50.1	220.0	432	96.0	9630	1.318	107	122.0
Zircon-005_ARM15-01	21.20	1380	1.55	0.009	8.08	0.132	2.04	4.3	1.940	25.9	9.1	113.3	45.4	210.0	449	97.1	8520	0.888	59.7	75.0
Zircon-007_ARM15-01	12.33	1175	1.25	0.008	9.84	0.111	2.12	4.2	0.850	24.4	8.4	99.6	38.1	170.0	328	67.2	8600	1.280	73.6	108.0
Zircon-008_ARM15-01	10.70	1660	2.72	0.038	25.2	0.094	1.66	4.4	1.730	29.7	10.7	135.0	53.5	249.0	531	116.7	9660	7.800	308	401.0
Zircon-009_ARM15-01	25.20	988	1.47	5.500	23.4	2.020	11.20	5.0	0.590	19.9	6.8	78.2	32.3	153.0	306	64.1	8280	5.225	118	206.0
Zircon-010_ARM15-01	13.50	1280	3.43	0.034	59.7	0.176	2.50	5.5	1.550	29.4	9.6	111.8	42.1	187.0	348	70.8	7750	5.200	254	328.0
Zircon-011_ARM15-01	19.10	1014	1.70	12.600	37	3.600	16.90	6.0	0.870	20.3	6.5	79.5	31.8	155.0	331	72.6	10780	5.500	108	250.0
Zircon-012_ARM15-01	16.40	2850	8.60	0.500	57.1	0.720	8.70	16.3	1.750	74.1	23.8	262.0	93.6	402.0	721	141.0	8280	5.975	761	550.0
Zircon-015_ARM15-01	19.20	990	0.92	0.006	11.29	0.132	2.24	4.6	0.844	24.1	7.9	86.9	31.7	137.1	254	51.8	8590	1.873	55.4	195.0
Zircon-016_ARM15-01	19.50	4090	14.30	10.500	153	3.900	23.80	16.3	3.670	80.4	28.5	339.0	132.0	608.0	1182	239.0	8370	7.450	812	566.0
Zircon-017_ARM15-01	16.50	1229	1.44	0.013	13	0.083	1.59	3.5	1.380	20.1	7.4	95.2	39.7	187.0	391	83.7	6680	1.095	73.3	93.4
Zircon-018_ARM15-01	10.57	768	1.84		17	0.008	0.48	1.8	0.544	10.8	4.1	54.6	23.7	119.0	276	61.5	9840	0.730	28.7	73.1
Zircon-019_ARM15-01	19.30	1000	1.82	14.800	44.9	4.100	18.30	5.7	0.790	21.1	6.9	79.9	31.6	148.2	307	66.5	8610	2.198	97.6	178.0
Zircon-020_ARM15-01	11.00	2180	5.59	0.580	30.1	0.220	2.57	5.0	0.555	34.7	12.9	170.0	69.6	340.0	700	148.0	9490	16.000	452	639.0
Zircon-021_ARM15-01	15.80	1350	0.84		12.5	0.189	3.45	7.2	3.080	33.8	10.7	121.0	44.8	199.0	387	79.3	7510	0.908	65.1	69.3
Zircon-025_ARM15-01	13.36	2950	4.39	1.970	27.3	0.980	9.90	13.3	1.490	71.2	24.3	274.0	99.9	425.0	731	141.0	7440	2.930	197	248.0
Zircon-027_ARM15-01	21.20	1880	4.23	1.320	33.2	0.470	3.20	4.5	1.020	28.5	10.7	145.0	60.3	291.0	635	138.0	8640	3.325	214	292.0
Zircon-029_ARM15-01	8.93	495	2.09	0.031	5.3	0.040	0.32	0.9	0.242	6.5	2.6	34.6	15.9	80.2	184	39.6	10610	3.418	74.5	238.0
Zircon-030_ARM15-01	11.70	1950	4.32	1.650	20.8	0.650	4.80	6.2	0.600	34.6	13.5	168.0	66.7	298.0	538	106.8	9670	5.850	241	432.0
Zircon-031_ARM15-01	15.40	1140	1.40	0.041	7.32	0.092	1.22	3.9	0.700	21.5	7.4	91.1	37.4	171.0	323	67.4	6980	1.535	78.5	125.0
Zircon-032_ARM15-01	12.66	2000	2.95	0.320	28.7	0.380	5.10	9.4	1.250	49.0	15.4	175.0	65.5	287.0	505	100.8	7950	3.275	327	293.0

Zircon-035_ARM15-01	9.87	1376	2.58		6.66	0.031	0.58	2.1	0.174	17.2	7.5	100.3	43.2	221.0	481	102.5	9440	9.900	177	563.0
Zircon-038_ARM15-01	33.70	1670	5.63	42.200	133	10.700	46.90	13.3	2.260	35.6	11.2	135.3	52.7	251.0	539	113.0	9830	14.100	500	1044.0
Zircon-039_ARM15-01	9.70	1527	4.55	4.900	44.2	1.620	8.60	7.5	0.750	32.7	10.6	126.5	49.8	234.0	472	98.1	7730	11.350	500	776.0
Zircon-041_ARM15-01	12.08	989	2.48		12.29	0.027	1.05	2.4	0.483	16.6	6.3	79.2	32.4	153.9	311	64.2	8450	2.350	151	222.0
Zircon-044_ARM15-01	18.30	3460	3.27	0.291	51.9	0.472	8.10	15.0	2.100	80.5	28.7	322.0	121.0	503.0	892	166.0	9300	14.950	1290	1180.0
Zircon-045_ARM15-01	8.90	2980	8.59	2.300	19.1	0.830	6.30	6.1	0.168	49.5	20.9	261.0	108.0	481.0	878	174.0	11820	26.625	784	2030.0
Zircon-046_ARM15-01	11.90	1130	1.17	0.176	11.62	0.154	2.44	4.0	0.720	23.2	7.9	95.0	37.0	170.0	336	70.8	8840	1.495	75.8	123.2
Zircon-048_ARM15-01	13.40	1570	1.59	0.011	17.6	0.114	1.52	3.7	1.600	23.1	8.7	112.3	48.6	245.0	580	138.7	8400	5.775	174	285.0
Zircon-049_ARM15-01	24.90	997	1.32	22.700	59	6.200	31.90	9.7	0.960	25.4	7.8	84.5	32.6	148.0	295	62.4	8600	1.513	72.4	116.0
Zircon-050_ARM15-01	9.56	716	1.39	0.200	10.82	0.064	0.88	1.6	0.615	11.0	4.0	51.1	22.3	117.2	294	69.0	9990	8.725	272	652.0
Zircon-052_ARM15-01	12.94	1073	1.24	0.154	10.29	0.149	2.29	4.1	0.820	23.1	7.7	91.6	36.4	163.3	304	63.7	8330	1.268	66.9	108.9
Zircon-054_ARM15-01	9.50	767	1.06		12.76	0.028	0.79	1.8	0.830	13.3	4.7	56.9	24.2	119.2	272	62.2	9390	0.685	34	69.1
Zircon-055_ARM15-01	12.50	1107	1.57	3.600	20.8	1.250	5.90	4.9	0.740	20.8	7.4	91.2	36.7	172.0	354	74.0	8360	2.020	91.1	157.0
Zircon-056_ARM15-01	12.85	1503	4.17	1.050	44.7	0.330	2.97	4.1	0.980	27.3	9.7	121.1	48.8	233.0	491	103.7	7620	5.175	749	469.0
Zircon-057_ARM15-01	12.51	571	1.63		16.59	0.045	0.65	1.7	0.152	10.7	3.8	46.0	18.4	87.4	171.7	35.3	10470	6.200	145.5	446.0
Zircon-059_ARM15-01	14.90	2110	4.87		30.8	0.100	2.20	5.0	1.040	32.4	13.1	160.0	65.8	313.0	627	129.2	9050	4.400	386	416.0
Zircon-060_ARM15-01	18.60	471	0.85	3.100	17	1.070	6.00	2.9	0.328	10.0	3.1	37.8	15.5	73.0	159.5	34.3	9910	2.693	59.6	126.3
Zircon-062_ARM15-01	42.00	1100	4.09	65.000	155	15.100	65.00	12.9	1.190	24.8	7.3	83.3	34.4	169.0	390	83.3	11030	5.925	229	454.0
Zircon-063_ARM15-01	10.50	1490	3.92		19.7	0.071	1.19	3.5	0.371	22.7	9.4	119.0	49.9	240.0	488	104.2	9600	11.275	358	475.0
Zircon-064_ARM15-01	15.70	2100	3.64	0.400	13	0.374	4.24	7.8	0.900	42.9	15.0	182.0	72.3	333.0	624	125.7	8380	2.940	123	218.0
Zircon-065_ARM15-01	12.80	1980	1.95	0.031	5.54	0.364	5.41	10.2	0.562	59.0	18.3	197.0	71.4	300.0	490	95.5	6590	1.198	40.9	101.1
Zircon-066_ARM15-01	39.80	1234	3.36	56.000	147	18.100	86.00	21.3	1.030	33.0	9.2	99.6	41.0	199.0	419	86.8	9800	8.500	226	580.0
Zircon-067_ARM15-01	15.50	1480	2.74		18.1	0.063	1.96	4.7	1.130	28.8	10.5	127.0	53.2	234.0	456	90.3	8650	2.198	139	166.0
Zircon-070_ARM15-01	30.70	1630	2.76	1.100	27.3	0.470	6.22	8.8	1.170	43.8	13.9	159.0	58.2	250.0	449	87.4	9680	4.775	481	447.0
Zircon-071_ARM15-01	35.20	6260	7.11	56.000	194	17.600	94.00	42.8	3.790	152.0	49.1	572.0	221.0	988.0	1790	359.0	8900	26.450	1109	1073.0
Zircon-072_ARM15-01	9.31	1685	4.24	0.650	17.1	0.420	3.91	6.4	0.990	34.0	12.2	149.0	60.0	269.0	491	100.2	8900	4.475	151.5	310.0
Zircon-073_ARM15-01	10.21	705	1.23	0.048	6.78	0.093	0.86	1.8	0.411	11.2	4.5	54.4	23.1	113.9	244	51.2	8500	1.390	49.6	115.9
Zircon-074_ARM15-01	13.85	412	0.72	0.003	7.59	0.037	0.69	1.3	0.210	8.5	2.9	33.4	13.5	64.6	130.5	28.2	9130	6.325	66.7	301.0
Zircon-075_ARM15-01	10.50	1067	3.76	0.018	51.8	0.058	1.17	4.1	1.300	22.8	7.7	88.6	35.0	160.2	358	78.6	9950	3.528	596	369.0
Zircon-078_ARM15-01	12.50	695	2.29	0.022	10.62	0.005	0.25	1.2	0.233	8.3	3.4	48.4	21.8	123.2	322	76.4	10450	6.725	121	670.0
Zircon-080_ARM15-01	12.00	801	2.95	5.700	25.5	1.680	7.70	2.7	0.154	11.3	4.2	55.0	24.2	125.8	318	68.6	12820	10.000	210	733.0
Zircon-082_ARM15-01	10.12	1780	2.08	0.101	19.2	0.161	2.80	5.8	1.660	37.4	13.0	153.0	59.0	274.0	569	119.0	9070	4.275	238	359.0
Zircon-083_ARM15-01	10.19	1827	3.06		34.3	0.080	2.02	4.9	2.220	37.1	13.2	154.2	57.6	266.0	515	109.9	8450	1.308	116.2	135.3
Zircon-084_ARM15-01	12.49	1724	2.79	0.023	25.3	0.109	1.93	4.4	1.320	26.8	9.9	129.7	56.3	282.0	615	135.0	8530	2.715	148.5	226.0
Zircon-085_ARM15-01	12.00	1137	1.15	0.008	22.4	0.161	2.60	5.1	1.710	26.4	8.2	95.0	37.2	176.0	351	73.8	8830	2.643	160	200.0
Zircon-087_ARM15-01	15.40	1035	1.38		11.64	0.045	1.01	2.7	0.872	17.7	6.6	79.3	34.2	165.1	346	73.5	8490	1.105	74	109.9
Zircon-088_ARM15-01	9.11	1180	4.38	0.002	23.9	0.060	1.14	3.4	0.416	19.9	7.3	95.7	40.1	189.1	390	81.0	10980	8.250	321	662.0
Zircon-090_ARM15-01	26.60	2710	14.09	3.400	136.6	1.500	12.10	16.4	6.120	78.1	23.5	250.0	89.9	388.0	695	137.0	9920	8.550	1860	917.0
Zircon-091_ARM15-01	18.40	6130	6.88	3.500	87.3	2.590	20.90	28.3	3.620	148.8	49.5	569.0	211.0	914.0	1589	295.0	10100	24.800	2490	1822.0
Zircon-092_ARM15-01	13.65	543	1.10	0.034	11.17	0.050	0.93	2.0	0.603	11.6	3.9	46.4	18.0	82.5	177.3	37.9	10100	2.818	88.4	191.1
Zircon-093_ARM15-01	10.65	1344	1.75		13.74	0.092	1.42	3.9	0.960	21.1	7.8	99.5	44.0	220.0	484	103.2	8630	4.400	144	323.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
MICH16-01 (Mi01*) Batolito Jilotián, Suite Zihuatanejo, Complejo Arteaga																				
Zircon2_MiCH16-01	2.10	462	1.80	0.086	15	0.045	0.72	1.1	0.660	8.4	2.7	34.9	14.5	71.2	168	39.8	11200	3.000	56	133.0
Zircon3_MiCH16-01	8.80	1920	1.97	0.002	12.3	0.141	3.05	6.9	2.420	40.3	13.5	157.0	61.5	294.0	662	153.0	8270	4.450	252	254.0
Zircon5_MiCH16-01	7.70	807	1.74	0.122	7.01	0.073	0.71	1.0	0.630	9.6	3.9	52.2	24.1	127.0	335	87.0	9860	4.575	116	418.0
Zircon7_MiCH16-01	1.40	698	1.86		20	0.062	0.90	2.0	0.820	14.0	4.8	58.0	21.7	99.0	209	46.4	10200	1.465	120	159.0
Zircon8_MiCH16-01	12.40	516	1.54	0.740	19.5	0.290	1.96	2.0	0.277	10.7	3.7	44.1	16.3	73.9	144	30.0	9620	1.490	122	168.0
Zircon9_MiCH16-01	14.70	516	1.49	0.101	13.4	0.088	1.30	2.5	0.426	12.2	4.1	44.1	16.5	74.3	146	30.7	9200	1.345	105	144.0
Zircon10_MiCH16-01	6.70	1040	2.01	0.380	31	0.290	3.15	5.5	1.550	26.7	8.4	91.7	32.5	141.0	274	58.0	10600	1.645	205	195.0
Zircon11_MiCH16-01	8.20	1570	1.73	0.008	10.3	0.197	3.43	6.2	1.920	35.8	11.6	140.0	52.8	236.0	473	101.5	9210	2.605	197	237.0

Zircon13_MiCH16-01	2.00	3020	4.54	21.900	75	10.200	54.00	21.4	1.360	73.0	22.8	274.0	106.0	475.0	827	165.0	9700	6.950	167	362.0
Zircon15_MiCH16-01	3.40	858	2.61		27	0.030	0.91	2.1	1.320	15.0	5.0	64.8	26.9	136.0	326	76.3	9520	7.575	217	384.0
Zircon16_MiCH16-01	6.30	1300	3.04	0.036	46.5	0.113	2.74	6.5	1.880	35.4	10.9	120.0	42.2	178.0	337	69.9	9180	2.625	542	312.0
Zircon17_MiCH16-01	2.40	793	3.06	0.007	14	0.023	0.52	1.2	0.580	8.8	3.5	52.9	24.4	130.0	342	86.6	10480	4.600	92	274.0
Zircon19_MiCH16-01	8.80	769	1.13	8.300	30.5	2.000	12.20	5.7	1.680	20.7	5.9	63.8	23.7	106.9	237	52.7	8860	2.383	225	264.0
Zircon20_MiCH16-01	0.00	2040	5.63	0.006	11.31	0.060	0.81	2.8	0.122	28.4	11.8	162.0	67.2	324.0	655	136.2	9410	2.243	278	624.0
Zircon22_MiCH16-01	5.10	795	2.81	0.002	11.4	0.032	0.64	1.7	0.401	10.6	4.1	54.9	24.0	128.0	331	76.9	8390	4.675	147	269.0
Zircon23_MiCH16-01	9.20	698	2.25	0.096	12.8	0.057	0.79	1.6	0.362	11.1	4.1	53.8	22.7	108.7	234	52.3	9110	2.838	95	161.0
Zircon24_MiCH16-01	8.10	571	0.98		5.78	0.037	0.81	1.9	0.840	9.5	3.4	44.2	17.5	90.8	233	56.1	8900	1.620	45	89.0
Zircon25_MiCH16-01	0.25	953	3.08		30.9	0.037	1.25	3.1	1.280	17.0	6.0	72.3	28.9	140.0	317	72.0	10170	6.775	235	530.0
Zircon28_MiCH16-01	3.40	429	1.15	0.002	8.7	0.038	0.94	2.2	0.710	9.4	2.8	33.9	12.9	63.4	154	35.3	10480	1.623	116	181.0
Zircon29_MiCH16-01	19.40	864	1.27	0.048	11.85	0.127	2.34	4.1	1.980	21.9	6.8	76.2	28.2	125.7	249	55.2	6590	0.958	73	90.0
Zircon30_MiCH16-01	7.50	2610	2.34	0.072	17.6	0.205	3.69	7.5	1.180	49.9	18.4	231.0	90.2	391.0	678	138.0	8430	3.675	226	205.0
Zircon31_MiCH16-01	6.60	781	1.50	0.072	8.91	0.094	1.16	2.0	0.830	11.1	4.0	55.9	24.2	130.0	326	80.8	9070	2.700	78	147.0
Zircon32_MiCH16-01	12.30	923	3.19	0.134	13.4	0.112	1.10	2.0	0.591	11.4	4.7	62.9	28.2	151.0	381	89.4	8120	4.875	197	302.0
Zircon33_MiCH16-01	3.60	614	1.04		4.66	0.017	0.47	1.3	0.504	8.3	3.3	44.1	19.0	99.8	277	68.1	11380	2.600	72	133.0
Zircon34_MiCH16-01	4.70	900	2.24		32.7	0.089	2.05	6.1	1.730	31.0	8.9	106.0	29.7	124.0	207	42.8	10300	1.475	200	144.0
Zircon35_MiCH16-01	24.60	1350	1.64	0.007	10.66	0.187	3.37	5.7	0.990	27.6	9.7	117.0	44.1	200.0	357	73.8	8640	2.055	100	114.0
Zircon36_MiCH16-01	8.20	1230	9.60	0.069	23.4	0.102	1.79	5.0	0.280	25.8	9.1	117.0	45.0	208.0	385	78.1	11200	46.500	163	245.0
Zircon37_MiCH16-01	3.30	525	1.38		7.51	0.006	0.44	1.2	0.640	7.6	2.6	34.9	15.3	84.5	235	60.7	10040	3.950	42	206.0
Zircon38_MiCH16-01	9.40	1410	2.58	0.004	10.5	0.064	0.92	2.0	0.940	15.6	6.4	93.0	42.3	224.0	578	142.0	7740	2.675	78	156.0
Zircon39_MiCH16-01	6.10	496	0.88		4.85	0.053	0.61	1.7	0.750	7.7	3.0	36.7	14.6	76.2	194	47.6	10130	1.525	39	70.0
Zircon40_MiCH16-01	3.20	930	2.01	0.009	28.1	0.088	1.83	4.7	1.620	26.4	8.2	89.5	30.0	123.5	228	46.6	9230	1.848	201	208.0
Zircon41_MiCH16-01	5.60	455	1.36	0.208	11.2	0.087	1.03	1.8	0.563	7.9	2.7	34.1	13.6	68.1	173	41.0	8680	2.140	146	227.0
Zircon42_MiCH16-01	5.20	1330	1.70	0.036	14.5	0.175	2.37	3.7	2.020	19.7	7.4	94.1	40.3	206.0	552	131.0	7880	5.525	252	318.0
Zircon43_MiCH16-01	11.00	653	1.12	0.012	12	0.110	1.51	3.1	0.661	14.8	5.0	57.6	20.7	97.0	192	41.9	8890	1.323	109	150.0
Zircon44_MiCH16-01	6.80	1680	3.49		23.8	0.106	2.29	5.1	1.700	26.9	10.0	133.0	53.6	259.0	559	123.5	7320	2.700	222	224.0
Zircon45_MiCH16-01	3.90	1770	3.16	0.022	56.8	0.230	5.22	12.3	3.180	54.7	16.4	171.0	57.8	243.0	430	86.9	10060	2.675	507	333.0
Zircon46_MiCH16-01	20.40	1172	1.96	0.590	31.7	0.280	3.46	6.2	1.260	27.5	9.4	107.5	38.7	169.0	316	64.2	8300	4.450	739	465.0
Zircon47_MiCH16-01	16.70	696	1.04		11.63	0.092	2.15	3.6	0.740	18.3	5.3	63.5	23.1	102.1	199	42.4	8460	1.280	100	132.0
Zircon48_MiCH16-01	5.80	1160	1.66	0.510	33.9	0.720	7.90	13.4	3.580	47.1	12.7	122.0	37.7	154.0	271	53.5	9290	2.038	330	276.0
Zircon50_MiCH16-01	3.90	952	1.79		5.91	0.024	0.49	1.1	0.562	9.3	3.9	60.1	29.1	165.0	445	112.5	8090	3.225	46	171.0
Zircon52_MiCH16-01	6.80	581	2.01	0.005	26.7	0.032	0.73	1.9	0.730	13.2	4.4	51.1	18.6	83.4	169	35.5	11240	1.780	184	191.0
Zircon55_MiCH16-01	16.10	1315	1.17	0.056	20.7	0.508	6.54	9.4	1.390	35.4	10.7	119.6	44.1	194.0	359	74.8	8060	8.950	399	460.0
Zircon56_MiCH16-01	2.90	739	1.95		24.9	0.024	1.08	2.3	0.960	16.1	5.5	64.1	24.0	107.8	218	46.1	10900	1.413	143	153.0
Zircon57_MiCH16-01	9.10	1237	0.86		16.6	0.228	4.00	7.9	1.410	34.3	11.0	118.2	41.7	178.0	320	64.9	9210	1.900	178	182.0
Zircon58_MiCH16-01	6.10	580	0.81	0.036	10.64	0.093	1.60	3.8	0.680	16.2	4.9	54.0	18.9	85.8	164	33.9	9510	2.800	94	170.0
Zircon59_MiCH16-01	2.20	618	1.86	0.060	9.44	0.038	0.74	1.3	0.550	8.6	3.3	44.6	18.3	99.8	260	66.2	9000	4.325	98	203.0
Zircon60_MiCH16-01	17.20	1180	1.29		5.77	0.097	2.19	4.7	0.780	25.2	8.6	106.1	40.8	184.0	347	73.2	7670	1.513	48	86.0
Zircon61_MiCH16-01	13.90	2850	1.80	0.028	12.1	0.291	4.55	10.8	2.110	60.8	21.9	254.0	95.0	432.0	748	147.0	7720	4.350	226	218.0
Zircon62_MiCH16-01	2.50	1001	1.48		32.4	0.091	1.40	3.6	2.010	20.2	6.5	80.6	31.1	148.0	331	75.5	7980	3.000	285	286.0
Zircon63_MiCH16-01	7.50	1090	2.24	0.560	18.8	0.299	4.73	6.8	2.530	28.7	8.8	99.0	34.9	164.0	350	78.4	8350	3.025	184	201.0
Zircon64_MiCH16-01	13.70	1144	1.09	0.250	14.2	0.370	5.21	7.8	1.660	35.8	10.5	112.7	38.3	167.0	297	59.1	8470	1.458	171	161.0
Zircon65_MiCH16-01	10.80	574	0.87		8.39	0.083	1.32	2.5	0.595	13.2	4.3	52.5	19.3	84.9	167	36.0	7850	0.913	80	109.0
Zircon66_MiCH16-01	2.10	219	0.54		1.97	0.002	0.12	0.5	0.160	2.0	1.0	14.3	6.6	37.5	136.4	39.5	9880	3.165	59	177.0
Zircon67_MiCH16-01	4.20	621	1.71	1.180	15.7	0.327	2.10	2.4	0.609	11.1	4.0	47.8	19.5	94.8	222	50.4	9440	4.800	213	352.0
Zircon68_MiCH16-01	94.00	1650	3.40		17	0.114	2.39	6.1	0.184	35.8	12.4	146.0	56.2	248.0	452	91.1	10740	49.000	94	248.0
Zircon69_MiCH16-01	5.90	2400	4.34	0.020	5.91	0.297	4.59	10.1	1.960	56.7	18.7	237.0	83.9	368.0	635	118.0	6630	1.733	34	69.0
Zircon70_MiCH16-01	18.90	704	2.05	0.018	26.8	0.071	1.17	3.1	0.434	15.9	5.6	64.1	23.8	106.4	181	37.5	10650	42.750	122	140.0
Zircon71_MiCH16-01	5.90	2700	1.63	0.037	1.47	0.116	2.28	8.8		44.4	17.6	227.0	88.8	407.0	716	136.0	10630	169.750	122	522.0
Zircon73_MiCH16-01	6.50	1304	1.02		17.2	0.244	4.62	8.1	1.430	31.8	10.5	120.3	44.4	193.0	358	74.6	10200	2.338	255	268.0
Zircon74_MiCH16-01	11.90	557	1.17	0.590	18.6	0.290	1.78	2.5	0.395	12.0	4.0	48.1	18.5	83.0	163	33.9	9910	1.938	146	201.0
Zircon75_MiCH16-01	3.40	1254	2.30	0.104	40	0.101	2.13	4.7	1.560	27.9	9.4	108.4	39.5	174.0	339	73.1	10800	2.855	282	280.0
Zircon76_MiCH16-01	4.50	616	1.18		17.5	0.021	0.40	1.4	0.520	12.4	4.4	48.7	19.2	90.5	193	42.8	12500	1.148	88	146.0

Zircon77_MiCH16-01	6.00	1036	1.23		18.7	0.167	2.72	5.4	0.980	25.0	8.1	89.5	35.3	154.0	301	63.9	10670	2.603	262	318.0
Zircon78_MiCH16-01	5.30	652	1.23		7.26	0.026	0.58	1.2	0.690	7.7	3.2	41.3	19.5	105.3	301	76.0	9890	3.750	92	220.0
Zircon79_MiCH16-01	8.20	2640	3.90	0.047	53	0.245	5.14	10.6	4.060	61.9	20.7	240.0	83.3	385.0	681	142.0	8690	6.475	668	596.0
Zircon80_MiCH16-01	3.50	742	1.89		32.3	0.040	0.88	2.8	0.920	17.2	5.6	62.2	23.6	104.7	203	43.5	9990	1.935	260	250.0
Zircon82_MiCH16-01	2.00	1250	2.04		13.4	0.108	1.65	3.6	1.290	23.0	8.6	108.2	40.9	185.0	366	75.9	11280	2.225	107	210.0
Zircon83_MiCH16-01	10.90	3240	7.21	0.121	20.7	0.381	6.31	12.3	0.620	68.7	23.5	291.0	111.4	500.0	808	154.0	9210	3.950	113	205.0
Zircon84_MiCH16-01	6.80	318	0.70		6.67	0.015	0.55	1.2	0.391	6.0	2.1	24.8	9.4	46.7	106	25.5	9360	0.970	51	95.0
Zircon86_MiCH16-01	12.70	366	1.07		12.3	0.014	0.45	1.3	0.220	7.3	2.5	29.9	11.5	53.1	111	22.8	10200	1.198	70	117.0
Zircon87_MiCH16-01	3.40	1350	2.85	0.140	21.2	0.264	4.04	5.6	2.120	29.0	9.0	110.0	41.9	207.0	478	110.0	8900	5.525	283	313.0
Zircon89_MiCH16-01	4.50	384	0.95		4.33	0.000	0.22	0.9	0.318	4.7	1.9	25.2	11.8	60.5	175	45.9	8210	2.203	37	106.0
Zircon90_MiCH16-01	4.60	2360	1.57		12.1	0.202	3.44	6.8	1.500	41.7	14.7	193.0	78.1	369.0	688	146.0	9920	3.600	162	206.0
Zircon91_MiCH16-01	5.70	874	1.19		14.47	0.065	1.46	3.0	0.680	18.4	6.5	73.4	28.4	128.0	258	55.2	10190	1.730	126	181.0
Zircon92_MiCH16-01	4.90	882	2.02	0.027	13.45	0.046	1.10	1.6	0.800	12.2	4.9	61.0	25.6	133.4	344	83.3	8680	4.875	169	307.0
Zircon93_MiCH16-01	5.10	1190	2.20	7.500	57.5	2.300	10.80	6.3	1.830	28.2	9.2	103.0	35.7	162.0	309	64.2	10890	2.200	363	315.0
Zircon94_MiCH16-01	10.70	910	1.64		23.3	0.123	1.62	3.8	1.100	20.3	6.6	76.8	30.1	137.1	264	55.4	8300	28.375	92	77.0
Zircon95_MiCH16-01	4.60	705	1.25		13.18	0.054	1.34	2.6	0.520	14.3	4.8	56.5	22.5	104.0	224	50.2	9280	1.868	119	214.0
Zircon97_MiCH16-01	6.30	1580	2.24	9.600	39.1	3.100	16.00	7.7	1.540	31.3	11.4	133.0	52.9	234.0	475	97.2	8890	3.500	146	179.0
Zircon98_MiCH16-01	7.10	2220	2.29	0.076	24	0.275	5.70	8.9	3.360	46.4	16.4	186.0	73.0	327.0	677	148.0	8030	4.625	244	265.0
Zircon99_MiCH16-01	2.20	2180	3.26		48.6	0.060	1.79	6.5	2.530	46.0	16.2	195.0	73.0	316.0	590	122.0	10260	4.875	496	532.0
Zircon100_MiCH16-01	5.50	1444	3.71	0.361	37.3	0.074	1.96	4.2	1.770	31.7	10.9	123.5	45.6	203.0	391	82.7	11230	3.570	280	392.0
Zircon102_MiCH16-01	1.50	1105	1.59	0.003	28	0.115	2.12	4.4	1.520	26.7	8.4	92.6	32.8	145.0	286	60.1	10130	2.158	183	221.0
Zircon103_MiCH16-01	0.90	1227	1.39	0.680	30.8	0.222	2.86	6.7	2.360	34.4	10.7	110.0	39.6	165.0	317	64.5	12000	1.995	235	254.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
MiCH16-06 (Mi06*) Batolito Aquila, Suite Zihuatanejo																				
Zircon_02_MiCH16-06	11.40	813	1.25		10.57	0.036	0.91	2.6	0.820	13.6	4.5	59.5	24.8	122.0	260	58.6	7840	0.425	23	45.0
Zircon_03_MiCH16-06	3.80	331	0.66		7.2	0.032	0.42	1.1	0.494	6.4	2.0	26.5	10.0	48.0	110	26.9	8690	0.428	19	40.0
Zircon_04_MiCH16-06	1.20	699	0.93		11.7	0.030	0.88	1.9	1.110	13.9	4.5	54.5	21.9	102.8	235	54.0	8440	0.698	39	71.0
Zircon_07_MiCH16-06	8.10	1740	1.42	0.033	21.5	0.341	6.00	11.6	3.230	54.2	16.0	175.0	60.0	239.0	412	82.0	8150	0.813	94	88.0
Zircon_09_MiCH16-06	3.50	557	0.74		7.27	0.105	1.97	2.9	1.190	14.0	4.3	47.8	17.0	79.0	169	38.2	8900	0.345	22	36.0
Zircon_11_MiCH16-06	4.20	304	0.82		7.86	0.013	0.19	0.5	0.426	5.5	1.9	22.0	9.4	45.3	110.9	27.1	11700	0.450	20	45.0
Zircon_14_MiCH16-06	2.90	586	0.60		7.9	0.141	2.61	4.3	1.630	19.0	5.4	55.4	18.9	81.9	151.8	32.8	8520	0.245	17	25.0
Zircon_17_MiCH16-06	2.50	393	0.62		6.81	0.042	0.98	2.3	0.740	11.1	3.2	35.1	12.3	54.9	113.6	25.0	8720	0.213	12	21.0
Zircon_22_MiCH16-06	11.80	1312	1.92	0.004	15	0.086	2.28	4.1	1.400	23.0	7.8	99.3	40.1	200.0	379	81.7	7710	0.580	38	68.0
Zircon_23_MiCH16-06	6.80	1410	1.74		21.1	0.110	1.63	4.4	1.480	27.0	9.8	115.0	45.6	199.0	368	72.9	7910	0.748	84	92.0
Zircon_24_MiCH16-06	6.00	868	0.60		8	0.143	2.90	5.9	1.830	25.5	7.7	80.5	29.0	121.2	223	46.0	8320	0.478	38	48.0
Zircon_25_MiCH16-06	5.40	327	0.69		7.96	0.010	0.44	1.2	0.404	7.3	2.5	27.9	10.7	46.6	94.5	19.9	9200	0.235	12	23.0
Zircon_27_MiCH16-06	4.80	786	0.83		11.62	0.031	1.15	2.6	0.610	16.2	5.6	63.5	25.2	118.1	222	47.8	8030	0.570	37	59.0
Zircon_30_MiCH16-06	1.20	449	0.53		6.53	0.084	1.74	2.9	1.160	13.6	3.9	38.5	14.3	63.7	132.2	29.1	8740	0.213	17	26.0
Zircon_31_MiCH16-06	4.20	318	0.66		6.31	0.013	0.43	1.1	0.411	6.4	2.0	24.0	9.3	46.3	120.8	28.9	10580	0.255	12	27.0
Zircon_35_MiCH16-06	5.00	451	0.68	0.760	8.8	0.230	1.65	2.1	0.650	8.0	2.9	34.1	13.9	65.4	143.9	32.7	7360	0.303	14	28.0
Zircon_36_MiCH16-06	1.10	337	0.65		2.65		0.09	0.2	0.032	1.4	0.8	14.9	9.3	69.7	254	69.6	10310	1.958	54	191.0
Zircon_37_MiCH16-06	3.90	434	0.50		6.51	0.022	0.52	1.5	0.930	9.0	3.0	34.2	13.3	62.0	154	36.1	8880	0.358	13	35.0
Zircon_43_MiCH16-06	6.40	491	1.22	0.005	15.5	0.054	1.01	2.5	0.850	10.8	3.7	42.5	15.5	72.3	151	34.2	10020	0.813	113	87.0
Zircon_44_MiCH16-06	11.30	1114	1.14	0.071	12.6	0.268	4.12	6.4	2.700	33.1	9.6	102.8	36.6	154.0	305	62.2	8720	0.535	76	78.0
Zircon_55_MiCH16-06	5.40	824	1.18		14.05	0.118	1.97	4.1	1.680	21.1	6.3	70.2	25.9	118.4	257	55.6	10210	0.770	46	84.0
Zircon_56_MiCH16-06	3.10	229	0.71		5.47	0.003	0.24	0.5	0.315	4.1	1.4	15.8	6.5	33.3	90.3	22.7	10810	0.363	13	38.0
Zircon_61_MiCH16-06	2.70	504	0.63	0.011	7.84	0.044	0.87	2.4	0.950	12.2	3.8	43.3	15.4	70.3	152	33.3	10290	0.308	21	33.0
Zircon_71_MiCH16-06	5.20	574	0.81		8.94	0.132	1.78	3.7	1.210	14.5	4.4	49.1	18.1	79.3	173	37.1	10130	0.353	21	36.0
Zircon_72_MiCH16-06	4.30	298	0.76	0.040	7.55	0.024	0.49	0.9	0.376	6.6	2.1	23.2	8.8	44.5	98.7	22.5	9950	0.298	10	24.0
Zircon_75_MiCH16-06	7.40	1014	1.04	0.008	11.85	0.177	2.70	6.2	2.090	28.4	8.9	93.4	34.0	144.8	262	53.7	7690	0.373	20	34.0
Zircon_79_MiCH16-06	4.40	493	0.71	0.012	9.81	0.026	0.54	1.8	0.780	11.8	3.8	42.0	15.4	69.2	147.4	32.8	10690	0.370	24	38.0

Zircon_80_MiCH16-06	7.20	376	0.69		6.99	0.018	0.49	1.3	0.559	7.5	2.8	30.9	11.7	56.9	125.6	28.6	7850	0.278	12	25.0
Zircon_81_MiCH16-06	2.10	345	0.78		7	0.030	0.63	1.6	0.640	6.7	2.3	27.3	10.8	50.5	108.1	25.4	11040	0.355	16	35.0
Zircon_86_MiCH16-06	6.50	572	0.89		9.7	0.030	0.68	1.5	0.599	9.2	3.5	41.1	17.5	87.3	196	44.2	8770	0.495	26	47.0
Zircon_88_MiCH16-06	8.60	851	1.51		16.4	0.057	1.42	2.9	0.830	16.8	6.0	68.2	26.9	124.0	245	52.6	8240	0.728	41	65.0
Zircon_89_MiCH16-06	5.10	157	0.52		5.07	0.004	0.17	0.4	0.094	2.9	1.1	11.2	4.7	22.9	55.2	13.3	11320	0.217	7	17.0
Zircon_96_MiCH16-06	2.90	45.5	0.39		0.94	0.014	0.03		0.032	0.4	0.2	2.4	1.4	7.2	26.7	7.8	5750	0.655	5	61.0
Zircon_99_MiCH16-06	2.30	830	1.45		11.2	0.080	1.79	2.8	1.410	15.6	5.4	65.1	27.0	130.0	323	77.0	9380	3.288	95	176.0
Zircon_103_MiCH16-06	7.90	628	0.54	0.006	6.12	0.148	2.01	3.0	1.540	13.3	4.5	49.0	20.2	94.8	232	55.4	7600	0.625	46	64.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
MiCH16-07 (Mi07*) Batolito Aquila																				
Zircon_01_MiCH16-07	2.30	461	0.49		6.8	0.077	1.10	2.9	0.890	12.1	3.6	39.1	14.4	66.2	140.3	32.0	7930	0.273	15	26.0
Zircon_02_MiCH16-07	3.50	986	0.87		9.15	0.069	1.57	3.3	0.675	19.6	6.5	83.5	30.6	145.1	287	60.5	9560	1.025	65	104.0
Zircon_03_MiCH16-07	2.70	551	0.87		9.84	0.035	0.46	1.3	0.545	8.9	3.2	41.4	17.2	83.6	195	44.6	8880	0.415	20	38.0
Zircon_07_MiCH16-07	3.50	985	0.83		10.3	0.085	1.71	5.1	1.030	25.5	8.8	92.9	33.6	145.0	267	55.3	10360	0.573	37	52.0
Zircon_08_MiCH16-07	8.10	921	1.41		14.1	0.030	1.06	2.5	1.220	15.2	5.5	68.6	28.5	139.0	288	68.1	7830	0.705	48	75.0
Zircon_09_MiCH16-07	6.60	837	0.51		8.05	0.087	1.32	3.8	1.050	23.9	7.4	81.1	27.9	118.8	214	43.3	8970	0.308	20	29.0
Zircon_10_MiCH16-07	3.40	408	0.54		6.09	0.014	0.32	1.2	0.480	6.5	2.5	30.6	12.3	60.4	148.9	35.6	9360	0.303	14	33.0
Zircon_11_MiCH16-07	8.10	541	0.74	0.058	7.96	0.078	1.00	2.8	0.550	13.7	4.4	47.9	17.6	78.0	141	30.0	10040	0.355	21	33.0
Zircon_14_MiCH16-07	7.80	618	0.93		10.1	0.075	1.44	2.8	0.870	13.7	4.4	51.0	19.7	93.0	198	44.0	9530	0.373	24	38.0
Zircon_15_MiCH16-07	5.30	761	0.71		8.67	0.167	2.74	5.8	1.380	23.0	7.1	71.1	25.4	105.3	191	38.4	9010	0.380	25	36.0
Zircon_16_MiCH16-07	0.35	723	0.72	0.006	11.25	0.094	2.69	4.7	1.530	19.4	6.3	66.2	23.2	104.2	214	46.2	9870	0.428	30	44.0
Zircon_17_MiCH16-07	5.80	437	0.70		6.58	0.036	0.36	1.0	0.262	8.1	2.8	36.1	14.3	66.8	135.9	29.1	10100	0.228	11	25.0
Zircon_18_MiCH16-07	17.40	859	0.68	0.013	9.86	0.399	6.11	8.1	1.520	30.4	8.4	87.2	28.7	115.1	195	39.2	8220	0.388	30	39.0
Zircon_21_MiCH16-07	6.70	463	0.75		6.95	0.051	0.94	1.7	0.586	11.1	3.6	39.2	15.2	68.5	137	29.0	9620	0.318	16	30.0
Zircon_26_MiCH16-07	6.80	559	1.01	0.170	10.34	0.054	0.95	1.8	0.720	9.4	3.4	41.5	17.2	83.6	193	45.2	8990	0.423	24	45.0
Zircon_27_MiCH16-07	8.90	366	0.67	0.003	5.46	0.030	0.76	1.6	0.519	9.1	3.1	33.2	11.9	50.9	102.9	21.9	9270	0.220	11	22.0
Zircon_30_MiCH16-07	2.60	482	0.87		8.88	0.041	0.56	1.6	0.500	8.2	3.0	37.7	14.8	71.5	169.9	40.4	10520	0.385	18	38.0
Zircon_31_MiCH16-07	2.40	1006	1.75	0.133	29.1	0.091	1.59	4.3	2.050	26.2	8.3	92.7	32.7	143.0	265	55.7	11140	1.195	95	120.0
Zircon_33_MiCH16-07	1.30	507	0.89		8.64	0.002	0.49	1.2	0.502	8.6	2.9	38.5	15.4	76.2	186	43.2	10040	0.388	19	42.0
Zircon_34_MiCH16-07	3.40	488	0.94		9.12	0.009	0.49	1.6	0.540	9.0	3.3	38.5	15.5	73.3	171	40.0	9730	0.388	18	37.0
Zircon_36_MiCH16-07	4.00	352	0.39		6.38	0.026	0.84	1.6	0.610	7.7	2.4	27.7	11.3	49.6	120.3	29.6	12400	0.395	20	40.0
Zircon_39_MiCH16-07	10.10	1950	1.21	0.029	11.7	0.314	4.67	9.2	1.660	44.6	14.9	173.0	67.0	294.0	512	101.9	9000	1.113	105	114.0
Zircon_41_MiCH16-07	1.40	429	0.65		7.28	0.042	0.80	1.5	0.630	8.2	2.9	35.1	13.6	63.0	145	33.9	10150	0.275	13	27.0
Zircon_42_MiCH16-07	4.10	502	0.81		8.32	0.030	0.68	1.7	0.586	10.1	3.1	37.4	15.3	73.6	168	39.6	9110	0.368	17	37.0
Zircon_43_MiCH16-07	2.60	527	0.83		9.2	0.049	1.15	2.2	0.840	12.4	3.9	44.3	16.4	76.5	158	36.3	9850	0.375	24	43.0
Zircon_44_MiCH16-07	2.80	566	0.69	1.200	12.9	0.460	2.48	2.8	0.860	13.6	4.0	45.0	18.1	82.6	188	43.5	9260	0.405	21	40.0
Zircon_49_MiCH16-07	7.00	582	0.81	0.093	10.51	0.077	1.20	2.4	0.930	14.1	4.1	49.8	19.5	86.0	186.9	42.5	10480	0.475	31	40.0
Zircon_50_MiCH16-07	10.00	514	0.87	0.002	9.6	0.023	0.63	1.8	0.334	12.0	3.7	46.6	16.8	74.6	148	31.0	10470	0.393	21	34.0
Zircon_55_MiCH16-07	4.20	365	0.65		7.83	0.034	0.30	1.0	0.303	6.1	2.1	28.1	10.9	54.9	133	30.7	10050	0.313	11	27.0
Zircon_56_MiCH16-07	2.50	616	1.20		11.14	0.022	0.57	1.9	0.620	10.6	3.5	44.8	19.1	90.5	212	48.9	10100	0.445	23	43.0
Zircon_60_MiCH16-07	10.10	1342	0.99	0.140	11.29	0.329	3.52	5.8	2.290	31.9	9.9	116.3	43.7	195.0	368	78.6	8080	0.585	54	64.0
Zircon_61_MiCH16-07	5.70	629	0.89	0.890	13.8	0.320	2.23	2.2	0.790	12.4	4.3	50.0	19.5	92.1	197	45.1	9010	0.445	29	46.0
Zircon_69_MiCH16-07	4.90	665	0.90		10.8	0.034	0.90	2.1	0.780	12.1	4.4	51.4	20.1	94.7	213	48.2	9950	0.520	23	43.0
Zircon_71_MiCH16-07	5.60	191	0.55		6.32	0.014	0.15	0.5	0.273	4.2	1.2	15.8	5.9	28.2	63.4	15.0	10240	0.230	10	23.0
Zircon_74_MiCH16-07	5.80	481	0.73		8.32	0.036	0.35	1.4	0.500	7.9	3.1	36.5	14.2	73.1	183	42.7	10070	0.405	18	38.0
Zircon_75_MiCH16-07	3.40	1010	0.82		9.3	0.123	2.14	4.4	0.830	24.5	7.1	83.0	32.0	144.0	285	61.2	13200	1.413	76	123.0
Zircon_76_MiCH16-07	0.80	692	0.99		11.14	0.069	1.45	3.2	1.130	15.3	5.3	57.8	21.3	98.7	221	49.5	9870	0.415	25	44.0
Zircon_77_MiCH16-07	2.20	227	0.48		3.72	0.022	0.47	1.0	0.520	6.2	1.8	20.1	7.5	33.6	73.9	16.8	7990	0.171	7	14.0
Zircon_78_MiCH16-07	3.70	634	0.65	0.018	10	0.097	2.16	3.1	1.250	16.1	5.1	55.6	19.9	90.0	185	41.0	10020	0.350	26	36.0
Zircon_82_MiCH16-07	4.70	447	0.62	7.000	22.1	1.420	10.90	3.1	0.790	11.0	3.4	37.9	14.2	64.1	138.4	32.0	11030	0.723	25	47.0
Zircon_83_MiCH16-07	5.70	307	0.46		5.19	0.018	0.59	1.2	0.420	5.5	2.1	23.8	9.1	45.1	111.8	25.2	9850	0.215	9	20.0

Zircon_86_MiCH16-07	9.60	866	0.74	0.009	7.66	0.182	2.63	4.4	1.580	18.7	6.1	71.2	27.3	129.0	274	61.0	9010	0.793	55	78.0
Zircon_87_MiCH16-07	4.10	377	0.58	0.022	4.48	0.081	0.43	0.6	0.720	3.2	1.3	21.2	11.0	61.8	185	52.9	8520	2.568	88	237.0
Zircon_90_MiCH16-07	10.90	1015	0.62	0.004	10.36	0.248	3.90	7.1	1.260	30.4	9.6	96.7	34.0	142.6	250	51.1	10210	0.578	42	54.0
Zircon_92_MiCH16-07	4.10	394	0.58	0.034	6.98	0.046	0.94	1.2	0.650	8.4	2.7	31.3	12.1	57.3	131.1	30.7	9640	0.265	14	29.0
Zircon_96_MiCH16-07	3.80	441	0.77		7.76	0.036	0.38	1.2	0.580	7.1	2.8	33.8	13.7	65.9	159	36.5	10410	0.338	15	34.0
Zircon_98_MiCH16-07	11.70	661	0.56		8.18	0.058	1.40	2.7	0.720	16.4	5.7	61.1	22.2	96.3	170	34.5	9830	0.353	22	30.0
Zircon_100_MiCH16-07	3.10	240	0.62		4.63	0.016	0.23	0.6	0.227	3.6	1.5	17.5	6.9	36.4	97.7	25.9	12460	0.733	25	75.0
Zircon_104_MiCH16-07	5.30	898	0.67	0.002	10.31	0.043	1.21	3.0	0.730	19.9	7.0	80.8	30.1	128.2	228	46.0	10200	0.543	43	52.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
MiCH16-09 (Mi09*) Batolito Aquila, Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																				
Zircon_01_MiCH16-09	7.00	1077	0.91		4.72	0.010	0.38	1.6	0.370	12.5	5.7	78.6	35.2	176.0	401	84.1	9210	2.023	54	126.0
Zircon_02_MiCH16-09	6.00	1540	1.76	0.002	13.93	0.177	3.37	6.8	2.200	34.8	11.9	136.7	52.6	240.0	484	101.4	8300	18.350	168	314.0
Zircon_03_MiCH16-09	3.80	532	1.31		10.9	0.039	0.41	0.9	0.610	6.7	3.0	38.2	16.7	83.0	211	50.0	8000	2.750	89	163.0
Zircon_04_MiCH16-09	4.20	793	2.62	0.046	16	0.087	1.06	1.9	0.770	11.1	4.2	56.8	25.0	132.4	368	87.6	8740	5.650	208	339.0
Zircon_05_MiCH16-09	9.40	3150	2.31	0.038	17.19	0.284	4.44	12.0	2.010	72.6	25.5	312.0	118.1	504.0	857	166.0	8250	4.350	151	225.0
Zircon_06_MiCH16-09	1.40	1180	5.60		17.7	0.064	0.91	2.2	0.239	16.5	7.7	95.0	40.7	190.0	386	82.0	9900	80.750	132	316.0
Zircon_07_MiCH16-09	5.60	4330	4.00	0.470	17	0.650	8.80	18.7	4.070	110.0	39.6	463.0	173.0	726.0	1250	236.0	6540	4.125	165	257.0
Zircon_08_MiCH16-09	7.70	1437	4.60	29.000	86	8.800	55.00	16.7	1.630	39.1	12.7	135.6	51.2	226.0	402	76.0	7730	1.255	39	75.0
Zircon_09_MiCH16-09	8.90	1510	6.39		12.65	0.106	2.03	4.7	0.610	28.5	11.8	140.3	55.5	245.0	439	83.0	7400	1.623	38	89.0
Zircon_10_MiCH16-09	2.60	3840	5.68	0.220	18.1	0.231	4.80	12.1	1.260	76.0	30.1	373.0	148.0	637.0	1110	201.0	9100	3.400	76	153.0
Zircon_11_MiCH16-09	12.60	1005	1.21	2.600	8.7	0.970	5.30	4.3	0.340	21.2	7.9	97.0	38.0	173.0	343	71.1	8610	4.225	46	140.0
Zircon_12_MiCH16-09	6.20	2710	1.11		2.33	0.148	3.60	8.4	0.259	54.4	21.4	259.0	101.1	439.0	776	149.0	8470	5.875	126	217.0
Zircon_13_MiCH16-09	1.20	509	1.57		9.09	0.063	0.59	1.0	0.530	6.0	2.7	38.5	16.5	83.1	225	53.5	7960	2.425	75	137.0
Zircon_14_MiCH16-09	3.60	2370	3.78	0.560	15.6	0.650	7.40	11.7	1.110	52.0	19.9	235.0	89.6	383.0	623	116.0	7880	2.070	51	101.0
Zircon_15_MiCH16-09	5.90	776	0.91	0.023	8.35	0.156	1.78	3.5	1.670	14.4	5.2	60.8	26.2	127.5	323	77.4	7010	2.040	62	104.0
Zircon_16_MiCH16-09	5.20	2580	3.45	1.440	17.1	1.110	9.70	13.5	1.150	59.3	21.6	254.0	96.1	414.0	687	127.9	7240	1.930	54	95.0
Zircon_17_MiCH16-09	5.40	1000	1.39		10.51	0.098	1.43	2.9	0.930	17.7	6.8	82.6	33.9	169.6	402	88.1	8140	4.050	125	195.0
Zircon_18_MiCH16-09	3.00	695	1.09		12	0.045	0.50	1.6	0.620	10.5	4.3	54.0	22.1	111.0	261	55.4	8520	0.745	27	67.0
Zircon_19_MiCH16-09	5.90	984	3.46		8.34	0.055	1.22	3.1	0.590	18.3	7.8	91.8	36.7	161.4	292	54.9	5900	0.785	17	43.0
Zircon_20_MiCH16-09	7.90	397	0.77	0.026	8.15	0.066	1.26	1.9	1.020	9.4	2.8	33.4	13.1	64.2	170	40.0	7280	2.125	65	107.0
Zircon_21_MiCH16-09	3.20	1347	4.09		29.8	0.082	1.60	4.5	1.090	24.5	9.7	120.8	48.1	215.0	430	86.8	9290	31.850	88	139.0
Zircon_23_MiCH16-09	6.30	3200	3.60	0.057	4.72	0.420	5.00	11.0	0.820	58.3	24.4	305.0	118.0	507.0	890	169.0	7090	15.475	424	658.0
Zircon_24_MiCH16-09	6.70	825	1.35	0.040	4.97	0.089	1.32	3.3	0.970	18.6	7.2	83.1	31.7	139.0	264	52.8	8390	5.725	37	61.0
Zircon_25_MiCH16-09	0.00	770	1.49		12.1	0.091	1.99	2.8	1.320	13.8	5.1	64.0	26.7	125.0	308	74.5	8250	3.625	98	166.0
Zircon_26_MiCH16-09	0.00	2560	9.00		8.1	0.109	2.07	7.2	0.660	44.8	16.5	225.0	88.9	422.0	839	163.0	9330	23.450	154	509.0
Zircon_27_MiCH16-09	11.00	950	0.77	0.003	9.03	0.068	1.19	3.8	0.970	21.5	7.7	89.8	33.2	149.0	275	57.2	10000	1.638	47	67.0
Zircon_28_MiCH16-09	6.00	851	2.61		22.7	0.036	0.81	2.4	1.040	12.3	4.8	61.5	27.9	142.0	364	87.0	9450	8.825	263	448.0
Zircon_29_MiCH16-09	9.10	2200	4.85	2.400	23.6	1.290	9.70	10.2	0.940	46.7	17.1	204.0	79.5	349.0	607	113.2	7710	1.920	52	95.0
Zircon_30_MiCH16-09	9.30	1820	1.26	0.061	4.53	0.196	2.76	6.4	0.480	37.5	14.8	173.0	66.8	296.0	517	99.5	8410	26.475	169	337.0
Zircon_31_MiCH16-09	1.40	825	1.94		13.8	0.019	0.46	1.6	0.800	11.4	4.6	61.4	27.2	133.0	328	77.0	8440	3.658	129	211.0
Zircon_32_MiCH16-09	16.30	943	1.13	0.034	8.74	0.090	1.72	2.7	1.010	13.8	5.5	71.1	29.6	151.8	347	78.2	7860	2.520	73	137.0
Zircon_33_MiCH16-09	1.30	745	1.63		11	0.035	0.47	1.3	0.690	9.1	3.9	52.2	23.3	122.0	323	78.4	8590	3.625	97	206.0
Zircon_34_MiCH16-09	4.40	1174	2.84	0.081	19.2	0.110	1.22	3.5	0.670	21.2	8.3	102.7	41.1	187.0	379	74.6	10400	15.000	144	219.0
Zircon_35_MiCH16-09	3.30	960	1.26		18.6	0.121	1.64	4.0	1.530	18.8	6.5	82.5	30.4	146.0	318	66.2	9430	0.898	50	98.0
Zircon_36_MiCH16-09	10.20	316	4.15		20.3	0.039	0.76	2.2	0.520	7.3	2.6	29.6	10.5	49.4	100.6	20.6	9020	26.025	38	112.0
Zircon_37_MiCH16-09	7.80	1460	2.75	0.052	26.9	0.109	1.78	5.0	2.090	26.9	10.3	122.0	50.0	232.0	499	109.0	10190	7.250	245	222.0
Zircon_38_MiCH16-09	11.80	339	1.88		14.8	0.020	0.36	1.1	0.350	5.0	2.2	25.8	11.6	55.2	139	31.1	9100	6.700	12	29.0
Zircon_39_MiCH16-09	5.70	1030	2.78		3.29	0.036	0.60	2.0	0.046	15.0	6.5	90.0	36.1	169.0	324	68.2	10360	14.925	137	427.0
Zircon_40_MiCH16-09	1.70	5020	4.65	175.000	280	42.000	225.00	64.0	18.800	181.0	50.8	538.0	188.0	753.0	1190	224.0	7280	5.650	148	247.0
Zircon_42_MiCH16-09	8.10	1640	3.21	0.009	4.95	0.062	0.36	1.7	0.079	13.7	6.9	107.1	50.8	286.0	793	162.0	12060	54.500	62	781.0
Zircon_43_MiCH16-09	10.30	1840	0.60		2.19	0.176	3.25	6.5	0.660	41.6	14.4	165.0	62.0	270.0	481	94.3	8450	3.575	78	187.0

Zircon_44_MiCH16-09	3.00	668	1.65	0.011	14.61	0.052	0.74	1.1	0.690	8.5	3.2	44.0	19.8	101.1	282	68.0	9790	3.650	40	88.0
Zircon_45_MiCH16-09	7.10	679	0.88	0.030	6.24	0.089	1.13	2.4	0.910	10.5	3.8	49.4	21.3	106.6	268	62.8	9600	0.773	24	57.0
Zircon_46_MiCH16-09	4.80	1007	3.76	0.063	4.85	0.208	2.94	5.9	0.770	27.7	9.1	96.7	34.1	140.0	237	47.4	8290	32.350	56	184.0
Zircon_47_MiCH16-09	7.40	1191	1.26	0.015	16	0.132	1.31	3.0	1.090	18.4	6.3	83.8	35.8	181.0	432	101.5	8650	7.175	240	398.0
Zircon_49_MiCH16-09	4.10	3060	3.18	0.038	3.05	0.142	2.16	6.3	0.138	47.3	20.1	260.0	106.0	476.0	910	174.0	10380	20.675	326	1046.0
Zircon_50_MiCH16-09	6.90	778	1.47	0.031	12.13	0.121	1.88	3.1	1.190	16.0	5.8	68.7	25.3	110.6	227	44.7	10270	12.000	105	157.0
Zircon_51_MiCH16-09	8.80	1023	3.66	0.066	3.19	0.058	0.90	2.6	0.119	15.1	6.0	77.0	32.1	155.8	345	72.7	9530	11.325	139	513.0
Zircon_52_MiCH16-09	3.30	3100	3.43	0.104	10.84	0.441	8.40	15.7	2.950	81.3	26.0	298.0	107.0	441.0	759	145.8	7770	6.050	252	362.0
Zircon_53_MiCH16-09	200.00	3100	1.90	89.000	255	41.000	233.00	68.0	6.200	118.0	28.7	304.0	108.6	457.0	724	135.2	7900	2.193	61	123.0
Zircon_54_MiCH16-09	4.20	702	0.59		2.73	0.035	0.39	1.4	0.459	8.9	3.5	46.5	20.5	105.7	283	67.3	10560	3.775	23	78.0
Zircon_55_MiCH16-09	1.80	1990	3.47	4.300	26.7	2.200	14.80	10.9	1.300	47.5	16.1	183.0	66.6	292.0	473	89.7	8340	1.335	38	78.0
Zircon_56_MiCH16-09	6.60	1086	2.34	0.002	12.98	0.296	5.40	8.2	0.244	32.5	9.4	101.0	34.1	141.9	219	38.1	11280	28.500	182	193.0
Zircon_57_MiCH16-09	6.10	728	1.92	17.200	49.4	4.980	22.80	5.2	0.650	13.7	4.2	54.8	22.1	109.8	250	54.5	9380	1.960	51	101.0
Zircon_58_MiCH16-09	9.50	4190	2.86	0.010	11.74	0.432	5.90	16.0	2.030	105.0	33.4	403.0	152.0	625.0	1060	206.0	10170	6.075	331	454.0
Zircon_59_MiCH16-09	1.70	410	0.69		4.88	0.027	0.13	0.9	0.185	5.4	2.0	26.8	11.9	63.1	176	42.5	10840	1.605	30	82.0
Zircon_60_MiCH16-09	9.20	437	1.16		4.46	0.101	1.50	3.4	0.550	17.6	4.8	48.0	14.2	50.1	72	14.1	10420	53.250	72	356.0
Zircon_61_MiCH16-09	0.00	1169	1.66		5.33	0.039	0.68	2.7	0.437	18.6	7.1	94.6	37.4	174.0	345	70.7	9530	1.500	33	100.0
Zircon_62_MiCH16-09	1.70	363	1.77		22.5	0.026	0.18	0.7	0.325	5.2	1.8	24.0	9.6	54.2	134	31.8	10580	36.750	57	114.0
Zircon_63_MiCH16-09	6.30	1240	0.75	0.013	14.7	0.165	2.69	5.7	1.020	31.4	10.1	112.0	39.2	163.0	279	53.4	10420	9.075	132	201.0
Zircon_64_MiCH16-09	4.10	3780	8.44	2.150	30.6	1.250	11.60	16.8	3.350	100.9	32.9	390.0	136.0	569.0	875	162.0	6960	4.080	148	246.0
Zircon_65_MiCH16-09	4.20	691	1.12	1.050	14.4	0.410	2.44	2.3	1.110	12.0	3.7	46.3	20.2	102.0	283	69.1	10220	4.550	127	249.0
Zircon_66_MiCH16-09	6.50	949	1.15	8.700	32.6	3.200	16.00	5.4	1.100	15.6	4.8	62.6	26.0	144.0	376	92.5	10050	2.500	58	131.0
Zircon_68_MiCH16-09	1.60	945	1.79	1.880	14.4	0.850	4.60	2.7	0.346	15.1	5.3	70.1	28.9	136.6	286	60.0	11220	4.300	115	243.0
Zircon_69_MiCH16-09	7.10	1300	3.33		17.5	0.063	0.59	1.5	0.260	12.3	5.8	85.8	37.1	204.0	487	102.9	12650	40.250	88	317.0
Zircon_70_MiCH16-09	1.30	989	3.40		40.6	0.036	0.67	2.1	0.520	12.6	5.0	70.7	30.4	155.7	383	85.2	10560	23.600	114	128.0
Zircon_71_MiCH16-09	4.20	1880	1.76	0.017	44.3	0.390	6.23	10.9	1.500	49.4	15.6	175.0	61.9	272.0	471	93.6	10590	82.750	229	207.0
Zircon_72_MiCH16-09	4.20	1620	3.29	18.200	42	4.900	23.70	7.8	0.236	27.9	10.2	130.0	54.2	251.0	497	100.0	11110	19.200	202	757.0
Zircon_73_MiCH16-09	5.80	590	0.94		7.4	0.072	0.71	1.2	0.693	7.6	2.7	36.2	16.9	89.2	246	62.0	9480	2.295	50	118.0
Zircon_74_MiCH16-09	10.70	903	1.16		15.9	0.061	1.18	2.3	0.940	11.2	4.5	57.5	25.5	138.0	360	89.0	9210	4.000	160	286.0
Zircon_75_MiCH16-09	0.00	1490	2.31	0.077	7.08	0.094	1.71	2.6	0.500	20.5	7.9	111.0	48.0	234.0	482	104.1	13390	9.525	133	763.0
Zircon_76_MiCH16-09	0.64	3980	6.11		20.2	0.213	3.90	11.6	1.910	85.6	30.0	372.0	139.0	610.0	1049	204.0	8760	8.525	389	478.0
Zircon_77_MiCH16-09	4.20	510	0.66		4.56	0.052	0.29	0.8	0.520	6.2	2.4	33.2	14.7	79.0	215	55.8	8800	1.580	28	76.0
Zircon_78_MiCH16-09	7.20	531	0.97		7.82	0.065	0.56	1.4	0.650	8.0	2.9	35.8	15.4	79.2	221	55.8	8310	2.288	65	141.0
Zircon_79_MiCH16-09	3.80	432	0.74		7.05	0.054	0.52	1.3	0.561	6.2	2.5	30.9	13.0	66.9	190	48.2	9560	2.868	75	168.0
Zircon_80_MiCH16-09	3.40	834	1.07	0.012	15.4	0.052	0.41	1.8	0.720	12.7	4.8	61.3	25.6	127.0	281	61.7	10990	0.758	44	104.0
Zircon_81_MiCH16-09	14.30	661	1.08	0.042	10.35	0.127	1.47	2.0	0.840	11.7	4.0	51.8	19.7	98.3	214	47.9	10240	6.250	70	141.0
Zircon_82_MiCH16-09	6.10	404	4.05		9.57	0.052	0.56	2.4	0.231	9.6	3.2	39.4	14.3	61.7	117.4	23.9	9710	20.375	18	118.0
Zircon_83_MiCH16-09	8.00	580	0.52	6.800	20.1	2.000	8.10	3.7	0.680	10.3	3.4	40.8	17.7	90.7	226	54.7	9830	1.725	55	93.0
Zircon_84_MiCH16-09	16.70	2710	1.22	0.017	1.35	0.269	4.05	10.4	0.277	58.8	20.5	244.0	94.5	413.0	739	148.0	10930	5.025	81	181.0
Zircon_85_MiCH16-09	4.80	1952	1.39	0.043	1.43	0.165	1.19	4.1	0.190	31.3	12.8	168.0	67.5	314.0	610	125.0	11260	11.375	80	440.0
Zircon_86_MiCH16-09	12.00	780	0.72	1.900	14.9	0.690	2.90	2.7	0.760	14.8	5.1	69.5	25.4	119.0	261	53.2	10200	2.053	53	87.0
Zircon_87_MiCH16-09	8.20	565	0.92	0.061	7.41	0.091	0.89	1.5	0.680	9.7	4.0	48.3	19.2	89.2	184	38.6	11280	4.075	48	64.0
Zircon_88_MiCH16-09	2.60	903	1.18	0.003	19.5	0.169	2.90	6.5	2.620	29.6	8.3	90.2	30.0	123.3	234	49.6	10830	1.510	82	148.0
Zircon_89_MiCH16-09	4.30	1460	2.67		2.84	0.101	1.89	4.8	0.164	27.5	10.6	130.0	50.3	223.0	407	85.3	8810	11.450	146	389.0
Zircon_90_MiCH16-09	2.40	939	2.05		25.8	0.032	0.64	1.7	0.740	12.6	5.6	71.2	30.3	142.0	306	69.5	10290	1.345	68	115.0
Zircon_91_MiCH16-09	3.90	680	1.37		8.49	0.079	0.53	1.0	0.650	7.8	3.5	46.6	20.9	110.9	288	73.5	9910	3.200	82	201.0
Zircon_92_MiCH16-09	5.90	3110	2.55		1.52	0.078	1.29	4.7	0.185	43.0	19.8	275.0	108.9	513.0	1055	212.0	11600	20.250	115	840.0
Zircon_93_MiCH16-09	1.10	622	1.17		8.6	0.044	0.44	1.5	0.619	8.1	3.2	42.8	19.1	100.8	269	65.3	9560	3.213	74	180.0
Zircon_94_MiCH16-09	9.30	1550	1.52	7.400	33.4	2.270	12.30	8.9	1.560	36.2	11.4	136.0	52.7	235.0	438	92.4	8150	3.700	163	163.0
Zircon_95_MiCH16-09	5.20	2740	3.02	0.006	3.87	0.153	2.46	7.8	0.410	51.9	20.0	250.0	98.0	439.0	790	159.0	8810	13.800	239	561.0
Zircon_96_MiCH16-09	5.30	862	2.07		13.67	0.087	1.43	2.7	1.160	13.5	5.0	64.5	27.0	142.8	345	82.2	9210	4.275	122	253.0
Zircon_98_MiCH16-09	0.00	1210	2.88	4.500	21.2	1.530	5.40	3.1	0.329	16.6	6.4	83.3	38.0	195.0	467	107.2	9860	11.525	217	603.0
Zircon_99_MiCH16-09	8.10	3080	3.61		15.25	0.439	7.77	12.9	1.170	69.9	24.2	288.0	109.0	472.0	755	141.1	9210	2.185	68	112.0
Zircon_100_MiCH16-09	5.20	942	0.69		5.72	0.054	1.07	2.8	0.840	17.1	6.3	78.5	31.4	148.5	310	67.8	9820	1.270	41	64.0

Zircon_101_MiCH16-09	1.20	889	1.39		16.9	0.076	1.40	2.4	1.360	14.6	5.4	69.0	29.5	146.0	359	82.2	9860	10.725	77	77.0
Zircon_102_MiCH16-09	4.30	283	0.41		5.56	0.051	0.35	1.0	0.480	4.6	1.6	20.0	8.5	45.6	127	30.9	9390	1.875	36	91.0
Zircon_103_MiCH16-09	7.30	647	1.03	5.300	20.9	1.360	7.30	2.6	0.740	12.4	4.0	50.3	20.1	100.0	240	55.0	9270	1.633	57	90.0
Zircon_104_MiCH16-09	1.00	464	1.89		9.39	0.035	0.46	0.7	0.351	5.8	2.4	31.9	13.9	76.3	213	54.2	9730	2.585	68	150.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
MICH16-13 (MI13*) Suite Zihuatanejo, Complejo Arteaga																				
Zircon_02_MiCH16-13	1.90	8170	6.06	0.031	55.8		13.30	31.7	3.160	191.0	68.5	841.0	316.0	1390.0	2370	454.0	10720	15.250	608	751.0
Zircon_03_MiCH16-13	33.00	2350	2.27	0.034	9.89		1.72	5.7	0.600	38.9	15.1	191.0	79.3	370.0	716	143.4	12190	2.325	61	122.0
Zircon_04_MiCH16-13	7.40	4710	5.72	4.200	37.9		12.70	14.9	2.240	96.7	34.5	425.0	167.0	749.0	1364	270.0	10010	5.750	261	316.0
Zircon_06_MiCH16-13	4.50	1187	1.83	51.000	130		95.00	23.0	1.150	39.2	9.4	104.2	39.2	185.0	369	77.5	10470	1.180	21	54.0
Zircon_07_MiCH16-13	17.30	1660	2.37	0.347	10.03		1.66	3.8	0.502	24.8	10.1	132.7	55.0	256.0	509	103.4	9580	3.675	472	193.0
Zircon_08_MiCH16-13	5.80	1349	2.19	0.002	9.05		0.90	2.2	0.418	19.0	7.9	104.0	45.7	220.0	449	94.3	10620	2.975	102	178.0
Zircon_09_MiCH16-13	5.00	1160	2.07	2.400	12.1		3.10	2.9	0.262	15.6	6.3	84.5	37.0	182.0	409	88.4	10340	1.803	36	99.0
Zircon_10_MiCH16-13	5.20	2660	1.35	0.002	5.31		2.73	6.6	1.230	48.4	17.9	230.0	91.4	407.0	770	148.0	9460	1.715	49	93.0
Zircon_11_MiCH16-13	3.80	1130	1.87	0.002	7.82		0.79	1.8	0.356	15.3	6.6	86.1	37.1	179.0	385	81.2	11110	5.700	176	311.0
Zircon_12_MiCH16-13	10.80	3790	3.21	12.800	48.8		31.70	17.4	2.120	77.0	28.3	348.0	138.0	625.0	1200	238.0	9460	3.350	117	182.0
Zircon_13_MiCH16-13	2.80	1570	2.30	0.097	8.77		0.92	2.7	0.413	18.2	7.8	109.5	48.9	255.0	603	137.0	10900	5.400	93	244.0
Zircon_14_MiCH16-13	4.90	1226	2.18	8.900	28.6		20.20	6.4	0.434	21.2	7.7	95.5	40.6	195.0	412	88.7	10610	1.388	24	76.0
Zircon_15_MiCH16-13	2.70	1400	1.22	0.070	5.26		1.78	3.5	0.800	22.4	8.8	115.5	47.7	224.0	482	102.7	9780	2.298	50	114.0
Zircon_16_MiCH16-13	5.60	1260	2.79	0.008	19		1.36	2.8	1.030	18.7	7.1	92.1	38.8	192.0	463	107.5	9390	6.050	327	366.0
Zircon_17_MiCH16-13	8.20	8550	13.89	0.097	73.8		13.00	34.6	2.590	213.0	75.9	894.0	334.0	1418.0	2340	439.0	9350	10.850	520	595.0
Zircon_18_MiCH16-13	810	2660	2.11	1.260	14.3		4.70	6.4	0.960	44.1	16.6	215.0	89.1	412.0	812	168.0	9090	3.425	110	196.0
Zircon_21_MiCH16-13	15.50	9130	15.70	0.460	94.5		15.10	36.1	3.290	225.0	79.4	941.0	353.0	1500.0	2500	469.0	8200	10.075	741	612.0
Zircon_22_MiCH16-13	4.60	1890	1.77		7.11		1.52	4.2	0.815	29.5	11.3	147.0	61.2	288.0	594	121.2	8950	4.350	118	251.0
Zircon_23_MiCH16-13	7.20	1770	1.98	21.800	61.3		52.50	17.6	1.600	39.5	12.2	146.0	58.7	274.0	543	115.6	8250	1.430	29	74.0
Zircon_24_MiCH16-13	4.80	1590	1.84	2.340	11.8		6.60	4.9	0.690	24.9	9.6	123.5	51.3	249.0	499	105.0	8800	1.503	28	72.0
Zircon_25_MiCH16-13	4.40	2430	2.19	0.388	13		2.47	5.4	0.620	36.6	14.6	191.0	79.0	376.0	719	148.0	10840	3.825	93	218.0
Zircon_26_MiCH16-13	4.80	1321	2.01	23.500	69		50.00	15.6	1.010	33.3	9.5	111.4	44.6	206.0	412	84.7	9730	1.600	41	93.0
Zircon_27_MiCH16-13	2.50	1630	2.74	22.900	70		46.60	14.2	1.070	35.0	10.9	131.4	53.7	256.0	511	108.9	9910	3.105	88	169.0
Zircon_28_MiCH16-13	10.60	2050	2.48	2.040	11.1		6.30	5.6	0.740	31.0	12.3	162.2	66.3	330.0	671	138.8	8770	1.813	36	94.0
Zircon_29_MiCH16-13	11.30	1100	1.69	0.520	6.37		1.88	2.7	0.417	16.1	6.8	87.4	37.6	173.0	359	74.0	9070	1.033	27	66.0
Zircon_30_MiCH16-13	3.60	2130	4.05	2.890	25.7		7.00	5.2	0.530	30.4	12.5	167.0	70.6	333.0	683	139.0	10630	4.175	116	215.0
Zircon_31_MiCH16-13	7.20	2140	2.25	1.230	9.5		4.14	5.4	0.770	33.4	13.7	177.0	70.7	339.0	664	141.5	9580	1.878	46	96.0
Zircon_32_MiCH16-13	4.30	4140	5.55	1.670	26.8		7.40	12.2	1.750	76.5	29.6	371.0	146.7	660.0	1180	232.0	9390	4.450	166	232.0
Zircon_33_MiCH16-13	3.40	1224	1.94	0.233	7.76		1.44	2.6	0.331	17.5	7.3	95.5	39.9	200.0	397	83.9	10090	1.405	31	78.0
Zircon_34_MiCH16-13	3.20	2720	2.67	0.450	16.6		2.69	6.0	0.574	41.8	16.8	217.0	90.7	426.0	832	169.0	9850	3.150	89	170.0
Zircon_35_MiCH16-13	3.20	2190	1.31	2.000	10		6.30	7.6	1.120	43.3	15.2	191.0	75.3	338.0	621	124.9	7990	1.325	39	75.0
Zircon_36_MiCH16-13	16.50	2930	7.34	0.920	25.1		5.26	8.1	0.940	46.1	17.2	216.0	91.2	446.0	972	210.0	9950	23.000	806	1352.0
Zircon_37_MiCH16-13	10.70	2850	2.23	5.500	19.3		15.40	9.9	1.660	54.2	19.8	241.0	97.4	441.0	809	163.0	8250	2.163	65	110.0
Zircon_38_MiCH16-13	8.50	1620	3.11	0.008	14.4		1.72	5.1	0.940	30.6	11.3	146.0	56.9	257.0	487	97.9	9650	14.200	124	177.0
Zircon_39_MiCH16-13	7.80	2100	2.42	1.370	13.1		4.29	5.3	0.860	32.7	12.8	169.0	69.5	331.0	655	136.4	9780	4.200	125	224.0
Zircon_40_MiCH16-13	4.10	929	1.46	0.047	5.6		0.48	1.5	0.208	11.6	4.4	63.5	28.4	151.0	362	83.3	9650	3.475	59	184.0
Zircon_42_MiCH16-13	5.10	2330	1.66	0.660	9.8		4.19	7.8	0.900	41.7	15.0	186.0	79.3	362.0	671	137.0	9590	1.800	54	103.0
Zircon_43_MiCH16-13	2.80	1810	3.67	0.880	13		2.60	3.1	0.510	23.3	9.4	131.4	57.4	293.0	652	142.0	9900	3.135	73	177.0
Zircon_44_MiCH16-13	4.10	1800	1.60	0.014	4.02		1.75	3.6	0.740	29.3	11.3	149.0	60.7	282.0	546	113.0	8700	1.323	29	70.0
Zircon_45_MiCH16-13	4.60	1422	2.97	1.650	13.2		3.26	3.2	0.440	18.5	7.4	103.1	46.5	233.0	507	108.5	9610	2.510	57	149.0
Zircon_46_MiCH16-13	7.90	1920	1.81	7.400	24.5		17.20	8.5	0.850	36.1	12.7	159.0	64.3	300.0	580	123.8	8620	1.553	33	76.0
Zircon_48_MiCH16-13	2.10	487	0.58		1.33		0.29	1.2	0.570	8.4	3.0	36.8	16.0	76.6	200	55.0	7120	0.680	17	38.0
Zircon_50_MiCH16-13	4.10	1570	2.41	9.900	35		20.70	8.1	0.530	28.3	9.7	122.6	50.5	244.0	494	104.7	10530	2.235	49	115.0
Zircon_51_MiCH16-13	12.60	3370	2.66	3.600	21.9		8.20	10.7	1.550	57.6	21.3	281.0	110.4	511.0	1007	203.0	10430	4.075	120	204.0
Zircon_52_MiCH16-13	4.60	1930	0.83		4.89		1.00	3.2	1.020	27.2	10.9	148.0	64.7	310.0	678	144.0	9160	1.538	36	81.0

Zircon_53_MiCH16-13	5.70	2160	1.09	0.192	5.39	2.77	6.2	1.100	38.7	14.5	179.0	73.1	332.0	613	123.7	8870	1.395	40	77.0
Zircon_54_MiCH16-13	4.20	4730	5.55	0.033	13.55	7.96	19.6	5.170	120.1	40.6	481.0	173.0	728.0	1206	226.0	6350	2.220	88	132.0
Zircon_56_MiCH16-13	1.20	1181	1.45	2.410	12	6.40	3.6	0.390	18.6	7.0	93.4	39.5	188.0	372	78.0	9730	1.190	25	62.0
Zircon_57_MiCH16-13	6.70	2340	1.75	12.200	42	29.00	12.0	0.990	43.2	14.7	184.0	78.3	367.0	694	145.0	11190	2.450	67	129.0
Zircon_58_MiCH16-13	5.50	1530	1.84	4.900	19.2	10.80	5.6	0.720	26.4	9.6	122.5	50.6	244.0	479	104.7	9300	1.615	40	83.0
Zircon_59_MiCH16-13	4.90	1098	1.12	0.450	6.58	1.01	1.8	0.335	15.4	5.6	76.3	34.0	177.0	428	95.6	10460	2.828	49	146.0
Zircon_60_MiCH16-13	8.40	2520	1.35	0.440	6.81	3.69	7.8	1.210	45.9	17.2	221.0	85.2	384.0	693	142.2	9770	1.475	43	80.0
Zircon_61_MiCH16-13	9.00	1740	2.82	0.026	5.22	0.95	3.2	0.453	22.5	9.3	131.1	55.9	283.0	598	131.7	8830	1.663	28	94.0
Zircon_62_MiCH16-13	7.20	1420	1.91	0.192	9.92	0.71	1.5	0.482	14.9	6.2	90.9	42.2	227.0	585	138.0	10100	6.600	160	372.0
Zircon_63_MiCH16-13	4.70	2490	1.36	0.970	9	4.56	8.0	1.140	45.3	16.8	215.0	84.8	378.0	688	138.0	8620	1.768	52	92.0
Zircon_64_MiCH16-13	12.10	5470	15.30	11.600	85	25.90	22.7	2.390	124.0	43.2	516.0	199.0	854.0	1520	293.0	7010	13.525	783	802.0
Zircon_66_MiCH16-13	13.80	2750	2.06	0.211	10.91	3.86	7.5	1.240	51.3	18.6	235.0	91.4	423.0	777	159.7	8940	5.625	183	321.0
Zircon_67_MiCH16-13	3.70	1780	1.94	5.200	17.5	8.10	5.3	0.730	28.5	11.3	146.0	57.8	278.0	540	114.3	9240	1.648	41	89.0
Zircon_69_MiCH16-13	12.20	3350	2.87	6.800	29.4	19.10	14.1	1.760	72.2	24.2	304.0	115.0	511.0	891	177.0	8480	2.725	108	142.0
Zircon_70_MiCH16-13	65.00	1680	1.95	2.500	13.1	7.00	4.6	0.700	25.6	10.2	134.0	54.9	260.0	520	109.0	8210	1.880	49	95.0
Zircon_71_MiCH16-13	7.20	1554	2.37	0.025	9.84	0.85	3.3	0.368	22.1	9.3	121.4	51.3	248.0	505	105.5	10460	2.933	112	184.0
Zircon_72_MiCH16-13	7.00	2380	2.06	14.300	50.5	30.90	12.9	1.350	51.3	16.2	199.0	78.0	360.0	708	146.0	9510	2.425	88	143.0
Zircon_73_MiCH16-13	10.10	1480	1.45	30.700	82.2	59.70	16.3	1.270	37.5	10.6	126.0	49.1	228.0	464	94.7	9110	1.418	30	68.0
Zircon_74_MiCH16-13	3.10	1380	1.64	2.100	12.3	6.20	3.4	0.490	20.8	8.0	105.6	45.9	221.0	455	96.1	9940	2.710	58	152.0
Zircon_75_MiCH16-13	8.40	1860	1.48	0.880	7.7	4.20	5.8	0.934	29.7	11.9	148.0	61.3	284.0	542	112.6	8600	1.290	36	77.0
Zircon_76_MiCH16-13	3.10	1620	1.80		7.36	1.13	2.8	0.520	20.0	8.0	115.0	49.1	248.0	560	124.3	9250	5.350	141	327.0
Zircon_77_MiCH16-13	9.00	2240	1.93		8.45	2.20	4.7	1.380	36.3	13.9	181.0	74.2	349.0	694	145.1	8050	2.150	78	129.0
Zircon_78_MiCH16-13	2.20	2960	1.60	35.000	93	68.00	23.1	2.280	65.8	20.4	254.0	99.4	464.0	874	182.0	9120	3.300	109	186.0
Zircon_79_MiCH16-13	5.00	946	1.58	0.003	5.36	0.24	1.8	0.221	13.3	5.4	73.8	31.1	148.0	314	65.0	9920	1.030	21	59.0
Zircon_80_MiCH16-13	7.40	1241	1.18		5.27	0.66	2.3	0.571	16.8	6.6	91.0	39.3	203.0	447	101.8	8550	2.028	52	128.0
Zircon_81_MiCH16-13	4.60	1255	1.40		5.9	0.86	2.6	0.405	18.7	7.6	101.7	42.9	202.0	394	83.8	9370	1.348	33	74.0
Zircon_82_MiCH16-13	6.80	2050	1.04	0.520	6.44	3.07	5.4	0.950	37.8	13.9	175.0	70.3	320.0	581	118.9	8680	1.338	40	80.0
Zircon_83_MiCH16-13	0.38	2020	1.49		8	1.88	4.9	0.730	33.4	13.0	164.0	66.0	320.0	642	134.0	9890	5.925	182	367.0
Zircon_84_MiCH16-13	2.10	1113	1.86	0.019	9.48	0.65	1.8	0.233	13.1	5.3	76.9	33.7	180.0	444	101.9	10490	5.950	160	360.0
Zircon_85_MiCH16-13	7.50	1306	1.43	0.074	5.42	1.10	2.7	0.550	19.2	7.7	103.1	42.7	212.0	425	89.5	8250	1.325	35	77.0
Zircon_86_MiCH16-13	4.20	853	1.18		4.6	0.58	1.4	0.240	12.0	5.1	68.6	28.9	135.0	284	60.7	9610	0.913	20	56.0
Zircon_88_MiCH16-13	6.90	3270	8.41	0.170	40.4	2.83	7.6	1.200	55.3	20.5	261.0	107.0	503.0	1048	219.0	8740	19.050	1446	1229.0
Zircon_89_MiCH16-13	3.80	2130	3.25		12.02	1.28	3.6	0.484	27.8	12.0	161.0	70.3	337.0	707	152.9	10500	3.850	103	212.0
Zircon_91_MiCH16-13	6.40	1740	1.25	2.800	13.9	7.40	6.4	0.790	31.9	10.9	145.0	59.7	273.0	514	107.2	9260	1.480	42	87.0
Zircon_92_MiCH16-13	8.30	1580	2.01	25.600	68	54.00	18.5	1.800	38.2	11.6	134.0	50.7	244.0	492	103.9	9610	1.255	25	72.0
Zircon_94_MiCH16-13	6.00	2580	2.99	0.003	6.83	2.22	5.5	0.980	38.1	15.6	202.0	86.0	406.0	817	173.0	9160	2.148	52	117.0
Zircon_95_MiCH16-13	2.09	2840	1.71	3.100	14.2	9.70	9.8	1.440	52.7	19.5	245.0	97.7	447.0	800	162.0	8500	1.953	60	104.0
Zircon_96_MiCH16-13	4.20	15100	20.60	0.086	169	24.70	59.5	1.040	363.0	127.0	1560.0	595.0	2500.0	4110	773.0	9870	23.575	1297	1438.0
Zircon_97_MiCH16-13	7.00	2310	1.41	0.390	6.42	2.78	6.1	0.980	38.8	14.8	194.0	78.6	367.0	702	144.0	9600	1.650	39	83.0
Zircon_98_MiCH16-13	10.10	6740	6.22	2.900	58.5	17.60	25.9	3.270	155.0	53.2	637.0	248.0	1070.0	1900	380.0	9120	10.200	529	557.0
Zircon_99_MiCH16-13	7.10	3040	2.00	0.019	8.14	3.45	9.7	1.480	62.7	21.9	272.0	107.1	473.0	834	168.0	9160	4.925	129	262.0
Zircon_100_MiCH16-13	1.20	1135	1.92	0.012	7.81	0.50	1.5	0.269	13.4	5.6	78.0	36.0	186.0	460	109.1	11110	4.050	77	221.0
Zircon_101_MiCH16-13	6.00	2400	1.34	0.059	3.17	3.47	8.2	1.920	52.4	19.0	222.0	84.8	361.0	594	119.2	8810	0.555	13	33.0
Zircon_103_MiCH16-13	2.90	1520	1.31	0.002	7.02	1.54	3.4	0.694	24.1	8.9	120.2	50.4	245.0	519	112.2	8770	3.053	82	171.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
MiCH16-15 (Mi15*) Suite Zihuatanejo, Suite Cuale-Macias, Complejo Artega																				
Zircon_01_MiCH16-15	9.30	4740	1.83	0.023	15.6		6.03	16.8	2.920	107.0	37.0	451.0	171.0	745.0	1300	252.0	8120	6.125	233	301.0
Zircon_02_MiCH16-15	7.00	1626	3.26		2.36		1.34	4.1	0.255	28.9	10.5	139.9	55.7	257.0	495	103.6	8840	13.575	136	551.0
Zircon_03_MiCH16-15	6.50	1272	0.62		4.53		1.12	3.1	0.900	22.5	8.4	105.0	43.8	198.2	385	78.9	8260	2.210	73	139.0
Zircon_04_MiCH16-15	6.70	451	0.71		2.15		0.16	0.7	0.143	4.6	2.3	33.4	15.0	75.3	193	42.2	9730	1.475	33	69.0
Zircon_05_MiCH16-15	2.40	2710	1.38		13.5		3.47	7.2	1.560	43.2	16.7	212.0	88.4	429.0	906	196.0	9210	7.650	331	436.0

Zircon_06_MiCH16-15	5.30	2140	1.83	0.117	5.9	2.48	5.9	0.990	36.9	13.5	181.0	73.9	334.0	625	129.5	8800	2.643	64	142.0
Zircon_07_MiCH16-15	5.70	1103	1.87		1.81	0.72	3.0	0.148	20.2	7.0	92.3	37.0	169.0	346	71.6	8160	7.575	71	279.0
Zircon_08_MiCH16-15	19.30	739	3.58	0.790	9.8	3.20	3.5	0.337	18.9	6.1	68.2	25.6	110.3	192	37.6	8360	14.925	31	95.0
Zircon_09_MiCH16-15	2.90	1320	1.46		5.93	0.71	2.3	0.420	18.3	7.8	105.9	46.8	217.0	459	96.3	8690	1.605	33	90.0
Zircon_10_MiCH16-15	4.70	1820	2.99		8.47	1.09	3.6	0.528	31.4	12.0	158.0	63.3	285.0	509	106.3	8240	8.150	337	457.0
Zircon_11_MiCH16-15	1.60	1720	2.39	0.005	18.4	1.62	3.9	0.740	27.4	10.7	144.0	58.6	270.0	533	108.0	9690	2.625	125	181.0
Zircon_12_MiCH16-15	4.80	3320	1.42	0.055	13	4.78	10.7	1.780	73.5	25.0	309.0	115.0	508.0	870	166.0	9580	4.475	173	215.0
Zircon_14_MiCH16-15	14.50	2190	5.00		3.86	2.17	5.0	0.434	32.8	12.6	172.8	73.2	341.0	631	128.3	7300	13.975	193	593.0
Zircon_15_MiCH16-15	2.60	614	0.81	0.003	9.77	0.43	1.3	0.750	8.3	3.0	41.4	18.1	95.9	268	68.9	9500	3.750	66	211.0
Zircon_16_MiCH16-15	2.30	543	0.93		4.91	0.41	0.8	0.279	6.6	2.7	37.0	17.2	91.2	243	60.1	10960	1.548	31	83.0
Zircon_17_MiCH16-15	3.80	764	1.80	0.093	12.8	1.00	1.8	0.850	10.9	4.2	53.5	22.9	117.0	307	73.8	8730	3.600	134	238.0
Zircon_18_MiCH16-15	2.50	1940	4.87		3.95	1.39	4.3	0.091	31.1	12.0	161.0	67.2	308.0	590	117.4	9650	21.000	270	870.0
Zircon_19_MiCH16-15	15.10	237	1.34		8.22	0.26	1.1	0.361	5.3	1.9	21.8	8.2	36.0	77.9	16.3	8310	4.175	7	26.0
Zircon_20_MiCH16-15	9.10	663	0.69		4.04	0.37	1.2	0.190	9.9	3.8	50.4	21.9	105.1	232	49.4	9850	0.715	19	38.0
Zircon_21_MiCH16-15	7.50	751	0.48	1.240	12	4.21	4.8	1.610	15.4	4.9	57.4	22.6	110.3	275	63.6	9710	1.313	107	126.0
Zircon_23_MiCH16-15	6.50	589	2.22		19	0.17	1.0	0.660	7.6	3.0	40.6	17.9	91.4	249	60.6	11240	7.500	112	157.0
Zircon_24_MiCH16-15	5.20	824	1.12		5.21	0.45	1.1	0.580	9.4	3.8	55.6	25.2	135.0	362	89.4	10620	1.815	26	84.0
Zircon_25_MiCH16-15	1.40	630	0.76		7.56	0.75	2.1	0.990	9.8	3.4	44.6	18.3	93.0	259	66.6	10150	3.825	45	154.0
Zircon_26_MiCH16-15	2.60	1750	0.67		7.82	1.27	3.9	0.465	28.5	11.4	143.0	58.9	265.0	492	98.1	12150	3.225	92	168.0
Zircon_27_MiCH16-15	4.00	1190	1.94		2.14	2.02	4.1	0.299	25.6	9.1	110.0	40.1	180.0	344	70.5	9620	9.950	105	362.0
Zircon_28_MiCH16-15	10.40	906	2.00		11.29	1.48	3.4	0.194	18.9	6.4	78.9	30.7	134.1	255	49.4	11400	24.500	115	203.0
Zircon_29_MiCH16-15	6.80	4310	1.35	0.029	13.6	5.81	13.7	4.620	87.9	30.0	375.0	150.0	670.0	1310	266.0	9770	6.125	233	307.0
Zircon_30_MiCH16-15	11.10	608	3.04		1.57	0.51	2.2	0.027	15.1	5.8	59.8	19.7	68.7	75.1	10.3	14940	128.000	76	661.0
Zircon_31_MiCH16-15	3.40	1120	0.96		5.97	0.79	2.6	0.322	14.9	6.5	87.8	36.5	173.0	350	73.0	12490	3.250	76	181.0
Zircon_32_MiCH16-15	1.20	1790	3.92	0.720	5.7	3.20	6.0	0.219	33.9	12.5	156.5	61.0	275.0	525	105.3	11070	20.150	278	965.0
Zircon_33_MiCH16-15	2.00	550	0.62		12.13	0.66	1.6	0.441	11.3	3.8	45.8	17.9	80.2	169	36.1	10230	5.375	94	149.0
Zircon_34_MiCH16-15	3.10	578	0.82		5.19	0.37	1.1	0.470	5.9	2.9	38.8	18.0	94.0	254	62.9	11050	1.600	33	78.0
Zircon_35_MiCH16-15	4.00	1339	1.79	0.071	2.74	1.34	3.9	0.182	26.4	9.6	116.7	46.6	205.0	386	79.0	10820	12.625	153	527.0
Zircon_36_MiCH16-15	2.10	422	0.84	0.003	7.16	0.42	1.0	0.370	5.8	2.4	31.2	13.3	69.4	194	46.8	9920	1.925	46	111.0
Zircon_38_MiCH16-15	7.20	895	1.12		1.74	0.65	1.8	0.466	15.5	5.7	75.0	30.8	144.0	285	62.4	10420	1.390	23	70.0
Zircon_39_MiCH16-15	9.00	4580	1.37	0.006	12.26	6.11	15.5	2.400	100.3	35.0	421.0	160.6	688.0	1193	228.0	10540	5.600	236	317.0
Zircon_40_MiCH16-15	11.40	865	1.51	1.970	8	5.20	5.0	0.570	18.9	6.2	73.1	29.0	132.8	314	67.2	14400	130.250	254	736.0
Zircon_41_MiCH16-15	8.10	412	0.75		2.64	0.27	0.8	0.120	5.3	2.1	31.0	13.2	64.6	150	32.7	12390	0.990	20	58.0
Zircon_42_MiCH16-15	2.90	786	0.65		10.26	0.95	1.7	0.790	10.5	3.7	52.8	23.9	127.0	336	81.5	10400	5.700	56	128.0
Zircon_43_MiCH16-15	0.80	1760	2.21	0.084	18.3	10.87	13.5	1.360	54.4	16.3	172.5	60.5	251.0	424	80.2	8870	51.250	156	268.0
Zircon_44_MiCH16-15	3.70	1450	3.92		6.1	2.23	5.4	0.590	28.6	10.1	126.0	46.8	209.0	413	83.4	10250	26.000	438	972.0
Zircon_45_MiCH16-15	14.10	1019	3.03	0.055	2.93	1.30	3.2	0.212	17.8	6.7	83.9	34.9	162.0	327	67.3	8960	11.450	175	481.0
Zircon_46_MiCH16-15	12.00	2080	1.35	0.336	9	3.65	6.7	0.970	41.1	15.1	181.0	71.6	322.0	585	118.0	9660	3.400	111	186.0
Zircon_48_MiCH16-15	3.10	1357	0.68	0.003	6.48	2.49	3.7	0.810	17.2	6.5	89.4	40.3	216.0	590	142.6	12130	6.350	181	354.0
Zircon_49_MiCH16-15	0.00	1450	1.04	0.390	8.82	1.69	3.6	0.570	20.5	8.5	110.6	47.4	233.0	517	116.5	11480	5.375	130	300.0
Zircon_50_MiCH16-15	3.40	1066	0.70		4.96	0.69	2.5	0.512	14.6	5.7	81.1	34.4	170.0	409	91.7	11460	3.338	67	169.0
Zircon_51_MiCH16-15	6.30	1352	0.59		4.02	0.94	3.1	0.570	22.9	8.3	110.1	45.5	213.0	422	84.2	12970	1.950	42	92.0
Zircon_52_MiCH16-15	0.90	1570	5.32		26.8	0.92	2.7	1.620	20.9	8.8	115.6	50.2	254.0	592	136.9	11100	7.525	210	434.0
Zircon_53_MiCH16-15	11.30	1130	0.72	0.048	9.83	1.93	4.4	1.040	23.5	8.1	98.0	37.0	171.0	338	70.3	10760	2.395	71	104.0
Zircon_54_MiCH16-15	5.70	588	1.05		4	0.18	0.7	0.480	7.5	3.1	42.4	19.1	99.4	274	66.4	9340	0.755	13	41.0
Zircon_55_MiCH16-15	2.30	732	0.48		4.57	1.02	2.4	0.710	12.4	4.2	52.0	22.8	115.5	318	76.8	10540	4.175	51	79.0
Zircon_56_MiCH16-15	14.20	1103	1.95	0.013	34.4	3.59	6.2	1.520	26.3	8.8	102.7	37.0	161.0	300	59.1	9410	38.000	120	89.0
Zircon_58_MiCH16-15	1.30	572	0.83		9.6	0.75	1.5	0.840	8.9	2.8	39.2	16.8	91.0	257	66.6	9680	3.850	84	199.0
Zircon_60_MiCH16-15	25.50	2660	1.90	0.110	7.77	3.61	7.7	1.380	50.7	19.5	236.0	92.2	407.0	713	142.0	9050	3.150	122	161.0
Zircon_61_MiCH16-15	7.60	1230	1.02	0.102	17.5	1.78	4.0	1.770	24.1	8.4	99.0	39.0	190.0	417	91.8	8170	1.605	154	187.0
Zircon_62_MiCH16-15	5.80	1430	2.35		13.36	2.35	3.9	1.620	23.7	8.6	107.4	44.7	214.0	465	101.7	8160	19.075	242	288.0
Zircon_63_MiCH16-15	3.50	2170	1.36		7.97	2.36	6.0	1.020	37.7	13.7	175.0	74.3	339.0	671	137.0	10440	3.675	97	188.0
Zircon_64_MiCH16-15	0.60	2790	12.60	6.000	32.7	36.00	28.2	4.490	93.0	27.3	293.0	103.2	419.0	679	122.6	10830	20.475	44	105.0
Zircon_65_MiCH16-15	24.50	494	1.38		3.58	1.23	2.1	0.285	12.4	4.0	47.1	17.6	77.6	144.4	29.5	8940	4.450	10	25.0

Zircon_66_MiCH16-15	14.90	1260	0.68		4.57	1.51	3.6	0.600	20.7	8.4	101.7	41.9	195.0	369	76.1	11130	1.453	42	84.0
Zircon_67_MiCH16-15	5.40	2290	1.11		11.99	2.07	6.4	0.640	39.1	14.5	186.0	75.6	350.0	648	129.9	12850	8.425	348	538.0
Zircon_68_MiCH16-15	15.40	159	1.16	0.005	9.97	1.78	2.5	0.456	8.2	1.9	18.1	5.5	23.6	42.3	8.6	10600	16.725	243	237.0
Zircon_69_MiCH16-15	6.20	1459	0.59	0.029	6.5	3.38	6.4	1.010	30.2	10.2	121.2	48.3	218.0	392	77.7	9910	3.240	133	197.0
Zircon_70_MiCH16-15	0.00	114	0.54		0.34		0.2	0.049	2.6	1.0	11.6	3.8	16.1	28.6	5.7	11790	20.850	3	373.0
Zircon_71_MiCH16-15	15.90	911	0.62	0.007	3.96	0.97	2.6	0.680	15.8	6.0	73.2	30.2	141.0	265	54.2	9290	1.120	34	52.0
Zircon_72_MiCH16-15	5.80	1430	2.41	0.002	2.46	2.31	4.7	0.410	31.0	11.4	130.0	49.0	212.0	405	80.0	7940	11.500	155	501.0
Zircon_73_MiCH16-15	0.44	437	1.35	0.450	11	1.07	1.2	0.354	6.5	2.5	31.5	13.6	66.9	174	40.9	10070	29.275	101	325.0
Zircon_74_MiCH16-15	3.80	1430	2.55	0.021	20.4	1.40	3.8	1.450	23.8	8.4	108.1	45.7	218.0	515	114.8	9830	3.075	115	166.0
Zircon_75_MiCH16-15	5.40	1590	0.57		6.97	1.41	4.6	0.490	31.0	11.2	141.0	54.2	231.0	388	72.5	10060	3.025	100	148.0
Zircon_76_MiCH16-15	4.90	2170	0.82		7.41	2.49	6.0	1.130	40.7	14.8	183.0	75.1	343.0	614	121.0	9640	3.100	76	135.0
Zircon_77_MiCH16-15	5.20	1560	2.06		12.2	0.80	1.8	0.800	18.7	7.5	108.6	48.6	257.0	626	141.6	9330	2.638	74	133.0
Zircon_78_MiCH16-15	8.40	1150	0.71		19.1	3.30	6.6	1.320	34.5	10.1	111.0	39.1	166.0	291	57.4	9940	1.195	92	113.0
Zircon_79_MiCH16-15	8.10	1380	0.72		5.04	1.41	4.2	0.620	26.0	9.5	118.0	47.7	220.0	409	83.2	8620	2.325	55	110.0
Zircon_81_MiCH16-15	10.20	2420	1.05	0.012	9.03	3.55	7.0	1.290	45.8	16.3	206.0	81.6	370.0	648	128.0	8820	3.750	159	215.0
Zircon_82_MiCH16-15	1.60	1430	3.16	3.230	20.8	6.10	3.7	0.367	21.6	8.2	112.5	47.4	234.0	489	102.8	10650	5.625	110	316.0
Zircon_83_MiCH16-15	5.70	658	0.58	0.009	5.29	1.05	2.0	0.850	11.3	4.1	50.8	21.6	107.1	276	64.3	8790	1.603	40	91.0
Zircon_85_MiCH16-15	1.50	497	0.49		3.1	0.47	1.2	0.750	6.6	2.4	32.5	14.6	76.9	217	56.0	7730	1.505	25	93.0
Zircon_86_MiCH16-15	1.90	472	0.83	0.006	3.32	0.19	0.8	0.493	4.0	1.7	26.7	13.5	85.3	317	89.7	8290	7.075	123	406.0
Zircon_87_MiCH16-15	17.50	1210	0.36		5.16	2.42	5.4	1.010	28.0	9.7	109.9	41.3	177.0	295	55.9	9930	1.278	57	72.0
Zircon_88_MiCH16-15	9.30	1870	0.72		4.64	2.71	5.6	1.210	35.4	12.9	161.9	64.1	291.0	528	107.4	7870	2.555	78	134.0
Zircon_89_MiCH16-15	4.00	1660	2.70	0.131	14.9	1.82	4.8	0.770	29.9	11.4	143.1	57.0	263.0	499	97.7	9400	15.650	139	203.0
Zircon_90_MiCH16-15	5.00	608	1.20	0.002	12.5	0.72	1.4	0.646	9.3	3.4	46.1	19.3	100.8	264	64.6	9950	20.350	254	488.0
Zircon_91_MiCH16-15	8.70	1910	0.70		4.78	1.89	4.1	0.850	32.0	11.5	155.0	64.1	303.0	594	121.0	9930	2.330	63	124.0
Zircon_92_MiCH16-15	26.70	753	1.33		0.4	0.47	0.9	0.102	9.7	5.5	69.4	23.4	94.0	189	35.4	13400	90.000	24	660.0
Zircon_93_MiCH16-15	8.00	4380	2.42	0.015	13.2	4.83	9.9	1.170	72.3	27.2	359.0	149.0	679.0	1147	227.0	8800	8.250	495	516.0
Zircon_94_MiCH16-15	0.38	1100	1.79		2.28	1.54	3.7	0.201	22.6	8.1	97.0	37.1	166.0	315	62.9	8240	10.350	169	499.0
Zircon_95_MiCH16-15	15.10	2340	0.93	0.063	8.1	4.20	8.0	1.060	45.8	15.7	199.0	79.2	353.0	644	127.0	9210	2.800	195	232.0
Zircon_96_MiCH16-15	6.10	643	0.61		4.54	0.32	1.2	0.380	9.2	3.8	49.3	21.8	106.4	224	47.4	9490	0.683	26	49.0
Zircon_97_MiCH16-15	0.00	269	0.83		12.2	0.21	0.5	0.137	2.8	1.0	15.9	7.8	45.0	143	39.1	11510	3.900	103	149.0
Zircon_98_MiCH16-15	5.00	2270	0.95		8.33	2.60	6.9	0.680	43.6	16.0	197.0	78.3	338.0	609	117.7	9050	3.500	232	254.0
Zircon_99_MiCH16-15	12.10	1230	1.65		15.4	2.24	3.6	1.500	20.6	7.5	89.9	38.5	195.0	458	104.4	7670	2.900	276	293.0
Zircon_100_MiCH16-15	10.50	493	0.40		2.71	0.13	0.6	0.294	6.8	2.6	34.3	15.5	79.2	197	43.3	9660	0.968	52	70.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
MICH16-18 (MI18*) Batolito Arteaga, Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																				
Zircon_01_MiCH16-18	25.80	121.3	0.22		1.83	1.55	4.9	0.140	15.5	3.0	18.5	3.8	11.5	12.3	2.3	10000	51.250	35	312.0	
Zircon_02_MiCH16-18	4.60	721	2.74		8.21	1.70	2.8	0.410	18.0	6.0	67.5	24.7	104.9	188	38.4	8410	13.400	24	80.0	
Zircon_04_MiCH16-18	7.30	1670	1.75	0.007	7.65	6.50	10.8	0.407	49.8	15.2	168.0	58.3	242.0	392	71.6	8520	54.250	140	264.0	
Zircon_05_MiCH16-18	0.70	981	0.56		3.59	1.40	2.4	0.990	13.6	5.5	71.4	30.3	157.0	442	109.1	8510	8.050	309	519.0	
Zircon_06_MiCH16-18	5.20	1360	0.83		4.87	2.43	5.1	0.730	28.4	10.1	119.0	47.0	210.0	391	78.6	7680	1.920	59	100.0	
Zircon_07_MiCH16-18	13.80	2190	1.06	0.040	12	5.64	9.5	1.330	46.1	15.5	191.0	71.6	332.0	597	118.1	7600	2.190	117	156.0	
Zircon_08_MiCH16-18	1.80	935	0.89		4.4	1.01	2.6	0.462	16.6	6.4	78.9	32.0	146.0	282	60.0	7510	1.448	36	71.0	
Zircon_09_MiCH16-18	6.40	1930	1.12	0.016	0.95	1.19	4.2	0.298	36.1	14.1	176.0	66.2	301.0	573	116.7	9750	6.775	61	352.0	
Zircon_10_MiCH16-18	3.80	610	0.42		6.53	0.83	1.1	0.288	9.8	3.5	49.0	19.3	100.0	241	55.4	8180	3.475	45	84.0	
Zircon_11_MiCH16-18	4.40	865	1.17		6.35	0.57	1.7	1.030	11.6	4.6	64.6	26.8	137.0	344	88.6	8300	3.650	68	189.0	
Zircon_12_MiCH16-18	11.40	2310	1.19	0.012	12.2	5.08	7.4	0.980	48.0	16.7	201.0	79.8	350.0	640	128.1	9400	2.530	137	163.0	
Zircon_13_MiCH16-18	4.70	604	0.50		3.85	0.49	1.5	0.490	8.0	3.0	41.7	18.0	94.6	269	67.5	9530	3.475	25	78.0	
Zircon_14_MiCH16-18	7.90	964	1.98	0.026	10.22	1.95	3.9	0.303	20.7	7.4	89.6	33.0	145.6	265	53.1	8440	10.350	93	111.0	
Zircon_15_MiCH16-18	7.10	697	1.00		3.36	0.26	1.4	0.410	8.5	3.5	50.2	22.3	114.5	273	62.7	7880	0.810	19	45.0	
Zircon_16_MiCH16-18	0.70	1350	3.76	0.016	6.41	3.13	7.5	0.830	38.6	12.3	138.0	48.4	202.0	336	65.3	8500	26.500	83	141.0	
Zircon_17_MiCH16-18	12.20	3590	2.30	0.040	16.9	7.15	13.5	1.260	77.7	25.9	317.0	123.0	535.0	917	183.0	9260	4.500	236	249.0	

Zircon_18_MiCH16-18	18.90	511	1.39	0.002	10.69	2.38	4.4	1.530	18.3	5.1	54.6	17.6	71.5	117	22.5	8390	4.425	12	23.0
Zircon_19_MiCH16-18	10.70	1220	3.12	2.400	41.8	4.50	5.2	1.150	22.9	8.2	99.0	39.8	196.0	428	96.0	9570	16.750	341	417.0
Zircon_20_MiCH16-18	3.20	740	1.00		3.19	0.60	1.6	0.510	10.5	3.7	52.8	23.3	121.9	307	73.2	9130	1.250	23	63.0
Zircon_21_MiCH16-18	13.40	1395	0.72	0.006	9.95	4.00	7.5	1.120	35.6	11.5	128.3	46.3	198.0	330	63.4	9360	1.233	105	154.0
Zircon_22_MiCH16-18	22.60	169	0.39		1.54	0.41	1.4	0.353	5.5	1.7	17.0	5.6	22.1	36.6	7.2	8670	22.800	20	122.0
Zircon_23_MiCH16-18	7.80	395	0.51	0.015	3.39	0.23	0.5	0.223	5.1	2.1	28.0	12.2	63.0	147	32.7	9830	1.585	19	30.0
Zircon_24_MiCH16-18	7.10	753	0.63	0.005	0.129	0.06	0.6	0.032	6.7	3.9	60.0	23.7	119.2	304	63.7	12070	56.250	6	638.0
Zircon_25_MiCH16-18	8.40	1500	2.31		2.46	0.70	1.7	0.155	14.7	6.3	92.8	45.3	251.0	616	147.0	10140	5.625	83	324.0
Zircon_26_MiCH16-18	4.90	3840	4.70	0.820	11.1	4.45	10.0	0.540	72.0	27.2	352.0	135.0	601.0	1040	185.0	9000	13.625	461	752.0
Zircon_27_MiCH16-18	0.70	2170	0.89		1.14	1.80	5.2	0.147	46.6	17.1	205.0	74.5	297.0	459	88.0	10380	81.250	38	393.0
Zircon_28_MiCH16-18	0.00	462	4.67		8.29	0.66	2.6	0.114	11.1	3.7	43.2	16.2	69.3	124.3	24.9	11180	27.000	50	167.0
Zircon_29_MiCH16-18	1.70	1157	3.45		27.6	0.93	2.3	0.440	19.6	6.9	91.6	37.1	179.0	377	81.5	11040	6.450	72	130.0
Zircon_30_MiCH16-18	26.00	2320	3.60	0.230	36.8	13.90	16.3	1.940	70.0	21.4	236.0	81.0	336.0	561	109.0	7730	63.500	939	652.0
Zircon_31_MiCH16-18	11.30	707	1.32		5.14	0.22	1.5	0.101	9.5	4.1	55.1	22.6	107.7	240	49.3	10210	22.325	34	122.0
Zircon_32_MiCH16-18	1.20	1260	0.71	0.002	2.92	0.34	1.5	0.292	13.6	5.7	91.0	39.4	206.0	495	118.0	12500	8.050	24	135.0
Zircon_33_MiCH16-18	5.00	1270	0.61	45.000	126	70.00	21.9	1.270	38.5	9.9	111.0	42.4	195.0	379	78.9	10900	8.800	122	212.0
Zircon_34_MiCH16-18	3.90	556	0.85	0.003	3.37	1.08	1.6	0.810	9.4	3.3	40.3	16.9	81.8	214	53.9	11140	2.155	35	110.0
Zircon_35_MiCH16-18	11.20	1370	1.55	0.009	9.86	1.02	2.5	0.830	15.1	6.4	89.3	41.8	220.0	567	133.0	9970	2.378	48	114.0
Zircon_36_MiCH16-18	5.10	847	5.71	0.010	18.4	2.11	4.1	0.226	20.5	7.1	82.6	30.9	132.0	226	43.6	12790	45.750	124	208.0
Zircon_37_MiCH16-18	7.90	1244	0.81		5.45	1.64	3.9	0.670	22.9	8.2	104.8	42.4	196.0	380	77.8	10180	1.770	53	96.0
Zircon_38_MiCH16-18	6.70	864	0.95		4.09	1.07	2.0	0.720	12.5	4.7	60.3	26.5	136.0	355	85.7	10070	1.355	25	62.0
Zircon_39_MiCH16-18	7.40	871	0.49		10.97	1.04	2.9	0.630	17.6	6.4	78.8	29.7	134.7	264	54.9	10780	2.088	74	113.0
Zircon_40_MiCH16-18	9.80	2820	1.01	0.056	2.28	5.33	11.7	0.550	67.9	23.6	276.0	102.3	439.0	773	148.0	10820	10.750	144	381.0
Zircon_41_MiCH16-18	700.00	1070	3.06	1.060	8.9	2.04	1.8	0.337	15.4	6.2	85.3	36.4	178.0	384	81.8	12700	2.288	41	115.0
Zircon_42_MiCH16-18	11.00	809	0.85		4.77	0.34	1.6	0.319	12.0	4.9	65.2	27.6	133.6	282	59.1	10930	1.530	30	71.0
Zircon_43_MiCH16-18	5.00	1151	1.64		6.52	0.95	3.1	0.530	18.9	7.2	92.5	39.2	192.0	417	90.6	10280	2.305	54	139.0
Zircon_44_MiCH16-18	9.00	1172	0.85	12.000	35	24.00	10.5	1.050	29.5	9.1	104.9	40.0	182.0	350	71.9	9910	1.685	51	97.0
Zircon_45_MiCH16-18	9.90	1550	1.01	21.000	60	37.00	14.3	1.410	40.9	12.1	136.0	52.8	224.0	411	83.5	10660	2.158	76	114.0
Zircon_46_MiCH16-18	13.20	3020	1.70		1.46	3.75	9.5	0.275	61.9	22.0	272.0	105.6	478.0	877	178.0	11280	26.825	83	314.0
Zircon_47_MiCH16-18	6.90	634	1.50		3.02	1.82	7.5	0.331	34.3	9.7	80.4	20.8	65.4	75.4	12.7	12200	170.250	87	853.0
Zircon_48_MiCH16-18	4.80	1250	0.89	0.144	5.07	2.19	4.0	0.710	24.7	8.9	109.0	42.5	194.0	371	75.2	10320	1.603	52	91.0
Zircon_49_MiCH16-18	6.30	2680	3.02	0.002	1.79	1.45	5.6	0.193	43.2	17.6	233.0	91.5	422.0	792	156.0	11590	11.625	88	450.0
Zircon_50_MiCH16-18	11.50	754	1.04	0.009	10.65	0.66	2.3	0.249	13.0	5.2	63.2	24.4	113.5	219	44.7	11920	1.575	82	174.0
Zircon_51_MiCH16-18	19.60	1564	2.44		14	0.92	4.3	0.210	26.0	10.2	134.1	54.1	245.0	446	87.9	13900	102.250	252	606.0
Zircon_52_MiCH16-18	9.20	236	0.96	0.006	4.27	1.02	2.9	0.221	13.4	3.5	30.0	7.1	23.1	27.3	4.6	12110	48.500	107	277.0
Zircon_54_MiCH16-18	3.10	518	0.58		2.46	0.43	1.2	0.519	7.0	2.6	34.5	14.9	83.3	228	58.7	9250	1.530	19	79.0
Zircon_55_MiCH16-18	6.30	1220	1.26	0.009	5.6	0.92	3.0	0.610	18.2	7.3	95.6	39.8	197.0	424	90.5	10080	2.128	47	116.0
Zircon_57_MiCH16-18	8.50	2740	1.35		1.22	2.13	7.5	0.288	48.2	18.5	239.0	96.0	436.0	851	170.0	10930	12.450	80	452.0
Zircon_58_MiCH16-18	7.60	846	1.27	0.004	5.81	0.92	2.1	0.265	13.3	5.5	69.3	28.8	137.0	283	59.6	10210	2.218	72	140.0
Zircon_59_MiCH16-18	9.10	824	1.25	0.510	10.1	1.59	2.3	0.226	13.0	5.2	65.5	27.3	133.3	267	56.1	10840	2.843	72	152.0
Zircon_60_MiCH16-18	0.00	730	0.64	0.006	6.78	1.06	2.1	0.400	14.2	4.5	55.2	23.8	110.0	261	57.2	10480	5.000	65	134.0
Zircon_61_MiCH16-18	3.80	1320	0.77	0.263	7.27	2.27	5.3	0.860	29.6	10.2	123.0	44.7	203.0	369	71.9	10710	1.778	66	92.0
Zircon_62_MiCH16-18	16.30	1860	1.85	0.210	1.68	1.72	6.5	0.495	48.1	18.0	192.0	61.0	226.0	358	64.8	11050	10.125	66	436.0
Zircon_63_MiCH16-18	7.50	1053	1.25		3.73	2.03	5.1	0.350	25.7	9.3	105.0	38.1	155.0	259	51.3	8920	22.225	47	109.0
Zircon_64_MiCH16-18	4.40	1640	0.96		5.72	2.44	5.7	1.000	33.1	11.2	142.0	54.9	249.0	451	95.8	10460	2.305	71	138.0
Zircon_65_MiCH16-18	9.40	4520	3.16	0.019	13.7	5.54	14.7	1.970	101.0	35.0	427.0	159.0	687.0	1138	220.0	8630	7.700	401	429.0
Zircon_66_MiCH16-18	1.50	1460	3.48		24.7	3.11	3.8	1.910	27.7	9.5	117.0	48.2	224.0	481	111.0	8430	7.000	281	420.0
Zircon_67_MiCH16-18	3.30	1410	0.76	0.117	7.77	2.50	5.9	1.070	28.7	10.0	115.7	44.3	205.0	392	78.2	9760	3.500	136	197.0
Zircon_68_MiCH16-18	9.60	919	1.24	0.060	12.4	1.63	3.0	1.030	15.1	5.2	68.4	28.4	140.0	326	73.7	8450	1.213	84	147.0
Zircon_69_MiCH16-18	1.00	591	1.43	0.003	5.11	0.12	0.7	0.184	5.2	2.7	41.7	18.6	103.0	298	69.4	12710	17.650	44	249.0
Zircon_70_MiCH16-18	10.60	1379	1.89	0.008	10.87	0.69	2.6	1.110	16.5	6.8	94.8	42.2	219.0	588	144.8	10470	5.825	170	379.0
Zircon_72_MiCH16-18	7.20	451	1.27	0.003	4.72	1.93	3.2	0.570	15.1	4.4	46.5	15.9	64.5	110.7	21.7	9740	15.750	22	91.0
Zircon_73_MiCH16-18	14.00	3310	0.97	0.440	2.96	6.54	14.4	0.600	76.4	26.4	320.0	118.4	519.0	889	175.0	9370	2.015	142	260.0
Zircon_74_MiCH16-18	8.90	1650	0.83	0.006	6.74	2.32	4.9	1.060	30.5	10.9	143.0	56.0	255.0	506	101.8	10110	2.450	83	127.0

Zircon_75_MiCH16-18	2.80	1490	6.64	0.014	10.99	3.91	8.1	0.237	43.2	13.6	152.0	54.1	219.0	357	66.6	11010	73.750	129	408.0
Zircon_76_MiCH16-18	9.90	1520	0.79		13.3	1.78	7.2	0.760	34.1	12.0	137.0	50.2	213.0	375	71.7	12010	2.125	184	262.0
Zircon_77_MiCH16-18	1.50	794	1.31		14.7	1.48	3.1	0.830	14.3	4.9	59.0	24.9	122.0	301	71.1	10530	3.975	150	216.0
Zircon_78_MiCH16-18	5.90	1930	0.90	0.009	9.58	4.47	7.9	0.800	38.4	13.3	159.0	63.4	287.0	526	106.4	10200	4.550	142	224.0
Zircon_79_MiCH16-18	5.00	1040	1.35	0.390	6.7	1.13	2.7	0.440	15.9	6.4	83.5	35.3	168.0	344	71.2	12000	1.778	54	109.0
Zircon_80_MiCH16-18	2.70	328	0.95		1.64	0.58	3.0	0.224	20.0	5.5	41.1	10.2	36.0	61.1	12.9	12200	110.750	21	396.0
Zircon_81_MiCH16-18	12.20	446	0.86		2.64	0.36	1.3	0.156	6.5	2.9	38.0	14.9	74.2	161	33.5	8920	0.780	15	41.0
Zircon_82_MiCH16-18	9.30	779	0.76	0.006	4.19	0.81	2.0	0.427	13.8	5.1	63.5	26.6	119.0	252	51.5	9440	1.153	34	63.0
Zircon_83_MiCH16-18	23.80	764	1.20	0.027	17.1	2.29	6.0	1.060	24.2	7.3	77.2	26.9	111.6	181	34.1	11350	5.550	67	63.0
Zircon_84_MiCH16-18	7.90	709	0.75	0.003	3.1	0.57	1.5	0.630	10.9	4.1	52.5	23.2	113.6	274	64.2	9120	0.973	22	48.0
Zircon_85_MiCH16-18	7.70	477	0.46		2.21	0.56	1.4	0.700	8.1	2.7	34.2	14.2	72.5	198	50.5	7820	1.383	23	79.0
Zircon_86_MiCH16-18	2.70	1720	2.14	0.013	10.11	7.18	11.0	0.930	45.7	14.7	165.0	59.4	253.0	442	85.1	8530	72.750	224	370.0
Zircon_87_MiCH16-18	5.10	437	1.55	0.850	12.4	1.70	1.5	0.395	8.0	2.5	34.0	14.3	69.1	163	35.1	8990	12.725	96	220.0
Zircon_88_MiCH16-18	5.90	842	1.50		5.62	0.57	1.3	0.900	11.2	4.2	57.6	24.9	128.1	344	86.1	8970	3.525	54	176.0
Zircon_89_MiCH16-18	7.30	898	0.91	0.300	5.17	1.55	2.1	0.580	16.7	6.0	77.0	30.6	143.0	281	58.3	9490	1.278	33	63.0
Zircon_90_MiCH16-18	4.70	118	0.66		7.57	2.08	4.4	0.640	11.5	2.4	16.2	3.9	11.7	13.5	2.3	11470	28.775	79	180.0
Zircon_91_MiCH16-18	13.00	2760	1.09	0.113	2.27	3.58	11.8	0.470	61.1	23.0	265.0	96.5	411.0	713	136.0	10380	7.850	123	400.0
Zircon_93_MiCH16-18	3.20	1061	0.73	0.006	6.57	0.72	2.6	0.490	18.5	6.3	83.6	34.9	168.0	366	79.0	10540	8.725	90	190.0
Zircon_94_MiCH16-18	14.40	2010	1.25		1.59	3.00	8.3	0.322	45.8	15.2	179.0	68.0	305.0	556	111.2	9100	6.850	97	275.0
Zircon_95_MiCH16-18	6.70	418	0.75	0.245	5.57	3.66	5.0	0.591	18.0	4.5	40.8	13.0	51.2	94.9	19.6	10470	62.750	79	407.0
Zircon_96_MiCH16-18	3.30	733	1.14		15.2	0.82	1.7	0.710	13.1	4.4	57.3	23.5	109.6	257	57.4	9340	0.805	43	72.0
Zircon_97_MiCH16-18	0.70	2590	1.62	0.015	11.8	3.53	8.8	1.070	52.5	18.6	239.0	90.2	410.0	741	144.0	9400	4.575	175	246.0
Zircon_98_MiCH16-18	11.70	1256	0.70		5.53	1.91	3.8	1.690	22.2	7.8	98.4	40.6	197.0	469	108.1	9110	1.938	51	100.0
Zircon_99_MiCH16-18	15.60	3050	1.61	0.023	17.3	5.09	11.4	0.970	65.8	22.1	269.0	101.6	437.0	759	148.0	10300	5.650	264	306.0
Zircon_100_MiCH16-18	7.40	1600	0.73		6.63	1.90	5.0	1.080	33.3	11.6	142.0	54.5	243.0	451	91.7	9720	2.150	60	101.0
Zircon_101_MiCH16-18	2.50	651	1.24		4.37	0.54	1.2	0.660	8.4	3.4	45.4	19.7	104.2	279	68.4	9840	3.425	55	182.0
Zircon_102_MiCH16-18	6.30	1860	2.36	7.800	31.6	13.00	7.2	0.870	33.9	12.2	156.0	64.7	294.0	596	122.8	8840	4.500	131	234.0
Zircon_103_MiCH16-18	18.00	1860	1.16	0.015	1.64	2.78	8.9	0.293	49.8	16.7	185.0	64.3	267.0	441	85.0	9800	7.475	71	229.0
Zircon_104_MiCH16-18	2.50	963	0.99		4.83	1.26	3.4	1.310	18.4	6.2	74.8	30.0	144.0	348	81.3	9020	4.325	83	243.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
MiCH16-20 (Mi20*) Batolito Arteaga, Suite Zihuatanejo, Complejo Arteaga																				
Zircon_01_MiCH16-20	16.00	1434	0.68	0.003	11.23		3.82	7.9	0.990	38.9	12.2	138.0	48.3	200.0	340	63.1	8010	1.313	129	161.0
Zircon_02_MiCH16-20	19.90	1435	0.70	0.055	9.89		6.46	11.2	0.980	42.9	13.0	142.5	47.8	199.0	335	60.4	7160	1.330	136	176.0
Zircon_03_MiCH16-20	9.70	803	0.87		4.83		0.41	1.6	0.650	10.6	4.7	60.7	24.2	125.0	314	71.9	8390	1.190	32	66.0
Zircon_05_MiCH16-20	17.90	1332	0.64		8.33		2.97	6.9	0.680	32.8	11.1	123.4	43.4	185.0	303	56.9	7400	1.168	108	146.0
Zircon_06_MiCH16-20	6.30	1040	0.62	0.008	10.16		2.14	4.6	0.550	22.7	7.8	90.0	34.1	150.0	279	54.8	9010	1.768	115	216.0
Zircon_08_MiCH16-20	19.20	926	0.61		7.75		1.99	4.7	0.485	24.0	7.4	80.8	29.7	132.0	228	43.9	7490	0.913	79	117.0
Zircon_10_MiCH16-20	15.00	1740	1.10	0.004	9.84		4.54	7.8	0.860	38.4	13.3	154.0	57.7	251.0	414	84.8	6870	1.615	163	205.0
Zircon_11_MiCH16-20	5.40	1077	3.15	5.000	25		8.30	3.9	0.580	14.9	5.9	78.7	34.0	180.0	433	99.8	8760	3.505	72	180.0
Zircon_12_MiCH16-20	5.50	1566	0.87		15.72		1.87	5.4	0.384	34.7	12.8	147.4	52.3	228.0	387	74.0	9790	2.828	228	344.0
Zircon_13_MiCH16-20	10.80	766	0.73		7.9		0.38	1.4	0.214	10.8	4.7	60.7	24.3	115.7	227	46.7	9780	1.263	70	142.0
Zircon_15_MiCH16-20	7.00	821	0.85	0.003	4.26		4.81	7.3	1.220	30.8	8.7	86.8	29.0	115.3	180	34.8	8420	12.400	40	62.0
Zircon_16_MiCH16-20	12.10	1420	0.67	0.008	9.32		5.04	9.2	0.860	40.2	13.2	139.0	49.3	199.0	320	60.3	7650	1.123	116	145.0
Zircon_18_MiCH16-20	4.40	579	0.63		6.82		1.37	2.9	1.250	14.3	4.8	51.7	18.6	80.7	171	36.0	7440	0.425	20	39.0
Zircon_19_MiCH16-20	9.40	1241	0.79	0.012	9.1		3.71	6.2	0.641	31.9	10.4	115.1	42.1	178.0	303	57.1	8950	1.023	88	118.0
Zircon_20_MiCH16-20	3.80	1780	1.43		8.6		2.07	5.0	1.070	32.0	11.2	144.0	59.3	277.0	537	110.2	9290	3.900	147	198.0
Zircon_22_MiCH16-20	14.40	1138	0.85		9.52		2.47	4.9	0.650	25.0	8.8	97.7	37.7	160.0	280	57.5	9000	0.980	75	115.0
Zircon_24_MiCH16-20	10.10	1273	1.07	9.900	40		20.00	9.1	0.610	33.2	11.4	119.0	43.6	185.0	318	59.5	10770	2.075	202	333.0
Zircon_25_MiCH16-20	9.90	1343	0.66		9.49		2.58	6.3	0.900	33.4	11.0	125.5	44.8	194.0	328	62.7	8510	1.148	106	137.0
Zircon_26_MiCH16-20	10.90	938	0.75		7.95		0.59	2.4	0.350	15.5	6.1	75.4	30.7	141.0	263	53.1	9120	1.005	60	108.0
Zircon_27_MiCH16-20	7.60	772	0.78		9.04		0.80	2.1	0.185	13.8	5.3	64.4	25.6	115.4	213	42.4	10350	1.673	106	208.0

Zircon_29_MiCH16-20	22.40	837	0.93		9.73	1.27	3.2	0.465	18.1	6.1	72.1	26.5	117.8	224	44.2	8820	0.950	71	113.0
Zircon_31_MiCH16-20	1.00	899	2.42	2.110	16.9	2.61	2.0	0.520	11.7	4.8	65.1	29.0	150.0	341	77.8	9390	4.000	126	208.0
Zircon_32_MiCH16-20	4.40	1790	1.83	2.400	14	5.50	4.5	0.950	26.0	10.2	137.1	60.0	289.0	598	130.0	8620	2.575	63	132.0
Zircon_33_MiCH16-20	11.90	2200	1.67	0.199	15.7	6.12	9.6	2.420	49.2	16.7	195.0	74.7	337.0	620	128.2	7650	3.133	141	148.0
Zircon_34_MiCH16-20	10.70	860	0.56		8.28	2.92	5.7	2.430	23.4	7.0	81.6	28.0	127.0	255	56.4	8980	0.523	35	57.0
Zircon_35_MiCH16-20	14.50	1330	0.90		13.1	4.11	7.4	0.750	36.1	11.3	134.0	46.4	204.0	331	63.5	10000	2.175	166	253.0
Zircon_36_MiCH16-20	15.80	1550	0.99	12.600	45.3	26.20	14.7	1.200	48.9	14.2	151.0	52.4	226.0	372	70.9	10320	1.628	134	178.0
Zircon_37_MiCH16-20	6.40	1270	0.59		12.5	1.18	4.2	0.600	27.6	9.6	114.0	41.7	185.0	317	65.0	10820	7.500	100	140.0
Zircon_39_MiCH16-20	17.70	714	0.78		9.06	0.98	2.1	0.377	13.7	5.0	60.0	24.1	108.4	201	41.2	9520	0.978	62	110.0
Zircon_40_MiCH16-20	5.30	3080	1.02	0.010	2.72	5.02	10.7	0.620	63.2	23.8	284.0	108.0	469.0	753	143.0	9130	6.050	180	303.0
Zircon_41_MiCH16-20	10.90	1530	0.91		11.95	4.35	7.7	2.040	37.8	12.5	141.0	53.3	228.0	415	84.6	9020	0.845	46	78.0
Zircon_43_MiCH16-20	9.90	1100	1.09		9.7	2.51	5.4	1.140	28.5	9.1	105.0	37.2	173.0	304	59.7	9290	1.490	50	75.0
Zircon_44_MiCH16-20	14.10	1140	0.50		9.63	1.26	3.6	0.670	23.3	8.3	104.9	38.6	172.0	292	59.2	10600	1.275	107	157.0
Zircon_45_MiCH16-20	17.70	850	0.83	0.035	8.98	2.13	3.9	0.348	19.4	6.7	78.8	28.7	125.1	223	45.6	10570	1.703	76	197.0
Zircon_46_MiCH16-20	11.50	1507	1.16		12.85	3.61	7.4	1.010	35.1	12.1	134.6	52.4	231.0	413	85.2	9610	3.675	146	210.0
Zircon_47_MiCH16-20	10.10	1440	0.67	0.016	11	5.86	9.9	0.860	44.3	13.5	141.5	51.0	209.0	323	63.2	9450	1.245	109	140.0
Zircon_48_MiCH16-20	5.10	769	1.44	0.003	11.9	0.48	1.6	0.147	11.5	4.5	59.5	24.8	119.8	252	52.9	12670	2.120	97	238.0
Zircon_49_MiCH16-20	8.80	367	0.66	0.008	5.83	0.47	1.4	0.770	7.0	2.7	30.7	12.2	55.8	129	29.9	10260	0.358	12	31.0
Zircon_50_MiCH16-20	15.10	1432	0.79	0.037	11.65	6.84	10.7	1.040	44.0	13.4	142.3	51.0	207.0	352	68.8	9260	1.365	117	151.0
Zircon_51_MiCH16-20	6.30	1050	0.75		9.09	2.73	5.2	0.560	23.8	8.5	93.0	34.9	154.0	283	55.7	11170	1.448	99	169.0
Zircon_52_MiCH16-20	15.60	891	1.07	0.003	8.7	1.16	2.4	0.270	15.0	5.8	72.7	29.4	140.0	271	57.0	12460	1.345	57	154.0
Zircon_53_MiCH16-20	10.00	1620	0.91		13.9	3.48	6.5	0.890	38.4	13.0	146.0	54.6	242.0	426	86.6	11620	2.303	173	267.0
Zircon_54_MiCH16-20	3.70	880	0.79	0.002	8.72	1.52	4.2	0.960	16.5	5.8	71.8	28.6	135.0	295	67.3	10640	1.523	70	148.0
Zircon_55_MiCH16-20	8.20	1900	2.22	14.500	58	45.00	20.6	0.293	65.5	18.2	197.0	70.9	287.0	463	92.9	9340	29.825	63	151.0
Zircon_56_MiCH16-20	14.10	705	1.08		10.03	0.70	2.0	0.193	13.3	5.0	60.2	23.4	107.3	206	43.7	11560	1.200	68	133.0
Zircon_57_MiCH16-20	18.70	759	1.03		9.25	0.90	2.4	0.243	15.4	5.6	65.6	26.0	114.6	212	43.5	11930	1.148	81	130.0
Zircon_58_MiCH16-20	20.40	1080	0.78	0.028	8.9	3.52	6.7	0.760	29.6	9.8	106.0	38.3	156.0	260	49.3	11290	0.490	43	52.0
Zircon_59_MiCH16-20	6.20	1214	0.91	0.117	12.6	4.60	7.3	1.360	34.1	10.1	115.5	42.8	180.0	311	64.3	9470	1.455	63	86.0
Zircon_60_MiCH16-20	15.10	445	0.69	0.049	7.31	0.57	1.2	0.092	7.5	2.8	34.7	14.9	69.3	137	28.8	11340	0.943	41	94.0
Zircon_61_MiCH16-20	7.60	1313	0.71	0.009	13.42	1.23	4.0	0.324	26.2	9.7	114.3	44.7	193.0	343	70.4	11350	2.025	189	258.0
Zircon_62_MiCH16-20	20.90	1571	0.90	0.009	14.2	5.51	9.6	0.920	46.3	14.3	155.4	56.0	224.0	375	72.0	12170	2.015	148	208.0
Zircon_63_MiCH16-20	5.60	1840	0.93	0.013	16.3	5.77	11.0	0.940	51.2	16.2	172.0	62.4	254.0	425	84.2	12340	3.093	262	362.0
Zircon_64_MiCH16-20	9.90	608	0.69		6.02	0.39	1.5	0.156	9.9	3.7	49.1	20.3	92.1	175	36.6	11200	0.735	36	79.0
Zircon_65_MiCH16-20	7.10	1450	0.81		10.49	2.44	6.7	0.850	33.8	11.7	133.0	50.2	220.0	388	80.2	11180	1.645	113	193.0
Zircon_66_MiCH16-20	7.10	1224	0.86		10.14	2.16	4.7	0.491	27.5	9.7	112.4	41.9	175.0	300	59.7	10890	1.183	101	138.0
Zircon_67_MiCH16-20	17.30	589	0.80	0.400	8.53	1.07	2.0	0.313	10.9	4.1	47.7	20.1	89.3	163	34.3	10390	0.833	50	90.0
Zircon_68_MiCH16-20	10.40	288	0.33		3.31	0.67	1.7	0.800	6.5	2.1	24.6	9.5	43.9	102.5	25.6	9600	0.413	16	37.0
Zircon_69_MiCH16-20	21.80	625	1.00		7.78	0.85	1.9	0.110	11.9	4.3	52.7	21.3	96.5	186	40.0	11920	1.010	52	116.0
Zircon_70_MiCH16-20	13.20	1245	0.63	0.014	9.72	3.62	7.1	0.750	31.3	10.2	119.0	42.9	184.0	310	62.7	9840	1.153	103	142.0
Zircon_71_MiCH16-20	12.60	1480	0.87		12.8	1.38	4.6	0.630	31.0	10.9	131.0	49.3	223.0	393	78.4	13030	2.063	154	229.0
Zircon_72_MiCH16-20	5.80	1550	0.69	0.003	11.54	3.42	6.6	0.680	35.6	12.3	143.0	51.5	226.0	397	79.8	11310	2.483	194	291.0
Zircon_73_MiCH16-20	4.30	249	0.49		4.04	0.45	1.1	0.680	5.5	1.8	20.0	8.1	39.0	88.3	23.2	7620	0.318	11	35.0
Zircon_74_MiCH16-20	3.10	996	1.07	0.920	8.1	1.71	2.8	0.650	16.0	6.3	80.9	33.6	166.0	357	80.1	9320	1.978	52	106.0
Zircon_77_MiCH16-20	20.00	1275	0.66		7.62	3.39	5.2	0.720	29.6	10.3	117.4	44.3	194.0	340	67.0	10210	0.953	74	110.0
Zircon_78_MiCH16-20	13.70	1380	0.86		12.3	2.49	6.0	0.570	32.6	11.2	129.0	47.5	197.0	337	65.7	11340	1.718	137	189.0
Zircon_79_MiCH16-20	6.90	1390	1.40	0.008	9.76	3.87	6.9	1.000	33.9	11.0	128.4	48.1	210.0	372	75.6	8520	2.475	110	153.0
Zircon_80_MiCH16-20	6.90	1560	1.04	0.044	13.5	2.24	5.7	0.500	35.3	12.6	147.0	53.1	219.0	383	73.6	12270	2.798	253	353.0
Zircon_81_MiCH16-20	8.00	537	0.85		8.92	0.33	1.2	0.211	8.6	3.4	41.4	17.5	86.2	177	37.7	11800	0.853	55	110.0
Zircon_82_MiCH16-20	15.20	1430	0.61	0.012	10.1	5.42	9.3	0.800	43.2	13.2	146.0	48.5	203.0	325	61.4	10310	1.153	112	141.0
Zircon_83_MiCH16-20	21.20	1550	0.85		13.6	5.48	8.5	0.830	41.5	13.9	150.0	54.1	228.0	381	73.3	11810	1.653	138	178.0
Zircon_86_MiCH16-20	26.70	1401	0.72	0.039	11.52	7.36	10.5	1.190	42.3	12.9	138.0	47.5	193.0	313	59.7	9880	1.258	146	165.0
Zircon_88_MiCH16-20	4.80	1320	0.56	0.004	8.34	3.47	7.6	1.330	34.8	11.0	125.0	45.5	193.0	334	66.2	10130	0.973	82	127.0
Zircon_90_MiCH16-20	8.40	1790	1.44		17.5	2.29	6.3	0.560	38.7	13.6	161.0	59.0	257.0	452	86.0	14900	2.850	181	264.0
Zircon_91_MiCH16-20	13.80	1570	0.58	0.009	10.99	2.15	6.7	0.680	38.1	12.7	146.0	52.2	225.0	377	72.4	11950	1.755	149	216.0

Zircon_93_MiCH16-20	19.60	1051	0.57		6.74	1.98	5.0	0.730	24.1	7.9	95.3	34.7	148.0	262	51.5	8980	0.958	90	132.0
Zircon_94_MiCH16-20	4.30	782	0.52	0.003	7.25	0.50	2.1	0.457	15.2	5.5	65.7	25.5	112.0	213	42.8	10120	4.800	70	112.0
Zircon_95_MiCH16-20	9.70	521	0.74		6.23	0.43	1.6	0.131	8.3	3.5	42.8	16.5	78.5	155	31.3	11110	0.808	39	99.0
Zircon_96_MiCH16-20	14.10	363	0.39		5.43	0.23	0.7	0.095	6.5	2.3	30.8	11.4	54.0	106.4	21.3	10530	0.608	34	85.0
Zircon_97_MiCH16-20	6.10	1453	0.97		17	0.97	3.0	0.226	23.8	9.4	120.3	46.9	216.0	394	76.1	11810	3.018	242	415.0
Zircon_98_MiCH16-20	19.80	1530	0.70	0.053	10.4	6.33	10.5	1.130	43.6	13.8	151.0	50.5	211.0	354	66.5	9320	1.133	114	142.0
Zircon_99_MiCH16-20	8.00	948	0.75		8.29	1.40	3.7	0.830	21.1	7.2	85.6	31.8	142.8	275	54.6	9090	0.953	46	66.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
GUE16-01 (Gr01*) Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																				
Zircon_02_GUE16-01	15.00	1830	1.81	0.060	10.2		4.27	8.7	0.940	44.0	16.0	175.0	67.0	283.0	517	107.0	9960	22.750	158	251.0
Zircon_03_GUE16-01	10.60	1380	3.31	329.000	900		740.00	179.0	8.500	191.0	29.6	194.0	50.6	174.0	255	48.4	7540	26.750	54	124.0
Zircon_04_GUE16-01	5.40	1270	3.57	0.075	30.3		1.31	5.8	1.640	22.2	8.0	95.0	38.3	189.0	443	103.0	8540	0.054	184	352.0
Zircon_05_GUE16-01	6.00	1710	1.24	0.058	3.81		5.83	11.7	0.547	48.3	15.7	171.0	62.5	251.0	426	82.7	7800	38.750	120	216.0
Zircon_06_GUE16-01	2.00	585	0.53	0.134	1.12		1.17	4.6	0.350	12.7	4.6	51.9	19.5	91.0	183	40.5	7660	0.258	12	37.0
Zircon_07_GUE16-01	13.70	2500	1.94	0.103	16.2		5.73	13.6	1.790	54.0	19.0	226.0	86.0	375.0	670	136.0	8400	3.600	140	153.0
Zircon_09_GUE16-01	9.00	1430	0.91	0.067	10		2.01	7.2	1.610	23.6	8.7	112.0	48.0	229.0	552	133.0	6800	1.815	53	88.0
Zircon_10_GUE16-01	17.40	489	2.24	0.016	10.4		0.73	4.0	0.281	9.2	4.1	43.7	16.7	77.4	160	33.5	7930	13.225	29	79.0
Zircon_12_GUE16-01	19.50	465	3.48	0.013	42.3		1.44	5.1	0.650	11.0	3.9	43.2	15.9	71.1	152	32.8	8320	11.300	37	28.0
Zircon_13_GUE16-01	5.70	950	4.42	1.230	17.4		3.22	6.4	0.072	21.8	7.7	86.0	33.0	141.0	262	53.7	8220	84.500	85	305.0
Zircon_15_GUE16-01	2.50	960	1.47	0.026	25.3		1.55	5.6	1.330	18.8	6.9	77.8	31.6	143.0	350	81.0	8370	2.900	216	300.0
Zircon_17_GUE16-01	11.80	3770	3.94	0.033	11.3		5.70	17.1	2.960	81.0	29.0	356.0	137.0	577.0	970	195.0	7900	59.750	72	96.0
Zircon_18_GUE16-01	6.00	1290	1.13	0.009	4.42		1.88	7.5	0.148	30.3	10.6	123.0	45.3	191.0	317	61.7	9520	39.250	127	203.0
Zircon_19_GUE16-01	5.60	1630	1.82	0.290	7.39		6.00	13.2	2.220	45.7	14.4	157.0	58.5	234.0	455	97.0	6980	14.425	325	896.0
Zircon_20_GUE16-01	8.20	755	4.04	2.290	11.3		4.40	4.4	0.029	10.8	5.0	64.0	24.9	120.0	248	52.8	9910	2.130	94	381.0
Zircon_21_GUE16-01	7.50	560	0.88	0.007	3.39		0.23	3.2	0.233	7.3	3.4	41.7	18.2	88.8	231	57.5	8180	1.203	19	59.0
Zircon_25_GUE16-01	16.20	1400	1.81	0.074	13.5		2.23	8.7	0.790	29.0	9.8	120.0	47.7	209.0	428	96.1	9120	61.750	111	263.0
Zircon_27_GUE16-01	4.00	481	2.97	0.009	4.09		0.40	3.1	0.063	6.1	3.1	37.2	16.5	80.4	183	42.7	7990	30.500	30	150.0
Zircon_28_GUE16-01	5.60	1040	2.35	0.065	27.7		1.74	6.6	1.180	20.7	7.8	87.0	33.6	156.0	319	69.8	9300	5.575	283	417.0
Zircon_29_GUE16-01	2.80	868	1.01	0.580	10.7		1.56	4.8	0.650	12.8	4.6	62.0	26.6	140.0	375	93.9	9170	1.933	33	82.0
Zircon_30_GUE16-01	5.40	988	1.65	0.044	22.1		2.01	6.6	2.240	19.5	7.4	79.6	31.7	141.0	335	76.4	7940	2.300	107	193.0
Zircon_31_GUE16-01	21.90	1670	2.10	0.107	6.21		5.77	12.0	0.600	45.1	15.0	163.0	60.0	237.0	391	77.0	9300	85.500	135	270.0
Zircon_32_GUE16-01	5.40	487	2.63	0.032	17.6		0.43	3.7	0.269	7.9	3.2	40.0	15.9	75.3	179	38.4	10080	43.750	62	217.0
Zircon_33_GUE16-01	4.90	457	2.34	0.028	6.39		0.11	3.8	0.260	6.0	2.9	34.9	14.4	71.1	173	39.8	13000	3.500	37	233.0
Zircon_34_GUE16-01	5.40	559	1.27	0.211	11.6		1.55	4.9	1.200	11.5	4.1	44.0	16.7	79.5	196	50.8	9310	5.350	123	453.0
Zircon_35_GUE16-01	10.10	1530	1.06	6.300	21.9		13.00	9.8	0.420	28.8	10.7	131.0	52.5	240.0	477	101.8	8590	32.500	58	217.0
Zircon_39_GUE16-01	3.70	623	0.45	0.039	22.9		1.46	5.2	1.050	13.5	5.0	56.8	21.1	95.5	199	44.4	6000	0.718	20	47.0
Zircon_40_GUE16-01	1.50	427	0.46	0.018	3.71		0.25	2.7	0.420	5.7	2.6	31.0	13.9	69.5	198	51.9	8090	0.508	8	24.0
Zircon_41_GUE16-01	43.00	225	0.97	0.040	6.08		2.09	5.5	0.980	11.1	3.1	28.2	7.7	27.5	41.8	7.9	7990	3.500	10	20.0
Zircon_43_GUE16-01	70.00	2220	8.70	1.680	16.7		3.36	5.6	0.208	30.3	12.6	179.0	73.9	362.0	790	174.0	8000	27.000	456	989.0
Zircon_44_GUE16-01	13.00	1990	0.91	0.041	10.4		3.07	9.0	1.670	37.5	14.0	170.0	69.6	314.0	598	130.0	7790	1.985	70	100.0
Zircon_45_GUE16-01	13.20	1090	1.84	9.200	52		17.70	10.2	1.710	27.9	8.9	98.0	35.6	159.0	322	70.0	8100	6.125	277	463.0
Zircon_47_GUE16-01	86.00	183	7.60	0.041	1.37		0.36	3.0	0.196	4.8	2.1	22.0	7.1	30.4	60.7	11.7	5330	10.300	5	60.0
Zircon_48_GUE16-01	2.40	990	3.78	93.000	242		95.00	22.5	3.540	30.4	6.9	83.0	33.2	152.0	373	95.0	9000	4.200	139	235.0
Zircon_49_GUE16-01	10.50	395	0.44	0.010	7.15		1.13	4.8	0.840	11.4	3.6	36.1	12.8	56.3	111	24.4	9210	0.625	40	56.0
Zircon_51_GUE16-01	3.90	934	1.19	0.039	6.56		1.78	6.4	0.780	20.0	8.0	86.9	32.0	138.5	257	55.2	7310	18.325	45	105.0
Zircon_52_GUE16-01	1.60	3910	2.93	0.035	1.81		0.63	6.3	0.131	35.5	20.8	312.0	135.0	686.0	1610	345.0	12330	69.750	79	891.0
Zircon_53_GUE16-01	24.20	1290	0.82	0.082	15.9		7.20	12.8	2.280	40.4	12.1	125.0	43.0	181.0	313	64.0	9480	2.063	194	216.0
Zircon_55_GUE16-01	4.20	305	0.89	0.032	11.1		0.38	3.0	0.255	6.1	2.4	27.1	10.1	46.2	93.2	20.3	8730	1.008	57	105.0
Zircon_56_GUE16-01	23.30	977	4.33	0.045	16.6		2.16	7.0	0.106	23.2	8.2	91.9	31.1	133.0	232	46.1	12000	16.550	60	143.0
Zircon_57_GUE16-01	1.90	375	1.00	0.003	5.58		0.35	3.1	0.594	6.7	2.6	27.6	10.7	53.3	139	35.5	10240	3.025	49	306.0
Zircon_58_GUE16-01	2.10	890	2.48	0.055	18.5		0.45	4.1	0.870	11.5	4.8	59.0	24.9	137.0	348	89.0	10500	7.175	158	643.0

Zircon_59_GUE16-01	7.90	1000	0.94	0.012	7.8	0.97	4.9	0.670	13.7	5.9	77.0	32.5	163.0	406	101.0	8900	1.975	32	76.0
Zircon_60_GUE16-01	3.00	920	0.61	0.116	6.98	1.54	5.6	1.130	15.5	6.3	73.0	29.5	141.0	347	84.0	9900	1.138	29	51.0
Zircon_61_GUE16-01	8.80	1320	2.63	0.118	31.8	2.60	8.2	2.650	27.2	9.7	114.0	43.1	208.0	428	96.0	9400	2.900	161	251.0
Zircon_62_GUE16-01	0.00	631	1.66	0.021	11.6	0.52	3.7	0.840	9.0	3.4	41.5	17.1	88.2	241	62.4	10660	6.125	106	543.0
Zircon_63_GUE16-01	0.80	645	1.76	0.023	23.2	0.55	4.1	0.930	12.0	4.2	47.9	19.3	97.0	234	55.3	10430	4.125	141	389.0
Zircon_64_GUE16-01	13.60	1510	1.69	0.129	13.5	3.71	9.1	1.040	33.6	13.6	147.0	49.8	205.0	330	61.0	10950	75.000	77	421.0
Zircon_65_GUE16-01	7.30	580	1.05	0.019	16.6	0.72	4.2	0.566	11.3	4.2	48.1	18.7	90.0	207	48.3	9150	3.975	262	414.0
Zircon_66_GUE16-01	7.80	977	2.77	0.046	10.04	2.35	7.7	0.218	25.3	9.0	95.3	33.7	143.0	255	48.3	10090	42.750	74	209.0
Zircon_67_GUE16-01	20.10	789	0.65	0.056	13	4.06	8.0	0.780	23.5	7.6	74.4	25.7	111.0	202	40.8	10160	1.215	90	110.0
Zircon_68_GUE16-01	1.20	352	0.67	0.037	13.1	0.44	3.3	0.503	5.0	2.0	21.6	9.3	50.1	156	41.0	9440	2.975	85	293.0
Zircon_70_GUE16-01	3.70	671	0.74	0.008	7.55	0.33	4.2	0.690	8.3	3.5	42.0	19.0	109.0	335	93.0	10070	2.148	29	96.0
Zircon_71_GUE16-01	3.20	632	1.65	33.000	86	46.00	13.5	1.260	14.8	4.3	46.0	19.5	98.0	252	62.4	10600	2.575	90	169.0
Zircon_73_GUE16-01	0.80	1970	1.71	6.600	20	10.60	14.3	0.530	48.1	17.4	184.0	67.4	276.0	482	91.0	8700	1.310	89	198.0
Zircon_74_GUE16-01	3.70	2000	14.40	103.000	280	215.00	58.1	0.362	76.7	18.8	181.0	68.6	303.0	574	110.0	14100	6.750	294	1227.0
Zircon_75_GUE16-01	1.70	1470	3.54	0.044	7	2.13	6.9	0.363	32.9	12.2	139.0	50.8	212.0	392	76.1	8480	12.350	443	1526.0
Zircon_76_GUE16-01	14.40	2080	8.70	0.056	34.5	3.27	9.0	3.600	39.1	15.3	175.0	66.9	309.0	638	132.0	7230	3.175	170	238.0
Zircon_77_GUE16-01	6.90	1120	1.23	0.030	18.5	3.21	8.9	2.380	40.8	12.9	117.0	38.3	146.0	245	48.4	11100	6.950	163	548.0
Zircon_78_GUE16-01	11.10	1164	2.15	0.037	5.78	3.16	9.8	0.960	30.7	10.9	117.0	42.4	180.0	324	62.1	8350	13.375	26	55.0
Zircon_80_GUE16-01	11.30	489	1.79	0.029	17.4	0.58	4.0	0.348	8.8	3.6	37.4	15.3	73.4	163	34.2	9090	22.125	89	123.0
Zircon_82_GUE16-01	8.00	345	0.58	0.036	3.91	0.34	3.7	0.241	4.5	2.1	22.2	10.1	54.7	166	40.7	10810	1.235	21	54.0
Zircon_83_GUE16-01	3.10	956	4.53	0.044	12.9	2.47	8.1	0.368	26.9	9.0	93.2	33.1	140.0	242	45.0	10320	45.000	88	240.0
Zircon_85_GUE16-01	10.50	985	0.52	0.025	6.15	0.98	5.3	0.990	17.2	7.1	78.0	31.4	158.0	343	73.4	10510	1.468	24	57.0
Zircon_87_GUE16-01	3.90	415	1.53	0.041	12.3	0.83	4.3	0.356	8.7	3.5	37.3	13.8	62.8	135	25.9	9840	10.925	30	52.0
Zircon_88_GUE16-01	5.40	630	1.17	0.021	6.3	0.40	3.6	0.410	7.6	3.4	39.8	19.4	102.0	301	75.0	11280	4.675	47	206.0
Zircon_89_GUE16-01	16.10	4190	2.27	0.101	17.9	11.00	28.3	2.350	129.0	40.7	427.0	146.0	575.0	853	144.0	8890	1.903	329	284.0
Zircon_91_GUE16-01	10.20	591	0.77	0.019	1.3	0.64	5.0	0.128	12.0	4.5	50.5	20.6	91.2	177	34.6	10100	3.400	35	116.0
Zircon_92_GUE16-01	71.00	830	1.58	0.123	5.75	3.49	8.3	0.980	23.3	7.5	75.5	29.0	122.0	218	43.1	9500	18.575	49	85.0
Zircon_93_GUE16-01	7.80	2140	1.18	0.119	8.7	3.68	10.9	1.680	41.9	16.0	182.0	73.0	323.0	640	130.0	9800	1.535	120	211.0
Zircon_96_GUE16-01	6.30	2880	1.11	0.021	0.88	1.51	6.8	0.099	36.9	18.0	247.0	103.0	443.0	860	175.0	14600	10.225	61	338.0
Zircon_97_GUE16-01	11.70	1620	2.81	0.030	27	1.93	6.7	1.790	27.3	10.6	128.0	51.5	254.0	559	113.9	7960	21.875	232	283.0
Zircon_98_GUE16-01	15.70	1800	1.55	0.035	12.1	6.35	11.0	1.300	46.8	15.5	172.0	62.1	263.0	452	86.0	8000	3.275	159	200.0
Zircon_99_GUE16-01	10.90	1870	0.88	0.061	12.3	6.54	14.0	1.010	49.2	16.7	181.0	63.1	257.0	421	78.2	11000	1.513	210	216.0
Zircon_100_GUE16-01	6.00	368	0.65	0.024	9.4	0.41	3.2	0.266	8.2	3.1	32.5	12.1	54.6	112.8	22.9	9520	0.735	67	100.0
Zircon_101_GUE16-01	20.50	4110	17.70	7.500	34.9	23.50	18.0	0.222	79.0	30.3	355.0	141.0	666.0	1280	265.0	12500	31.000	3151	4594.0
Zircon_102_GUE16-01	9.10	554	0.74	0.023	1.15	1.00	4.4	0.141	9.4	4.2	46.7	18.5	88.9	182	38.1	10270	3.050	32	103.0
Zircon_104_GUE16-01	19.00	392	1.33	0.057	6.6	1.24	4.6	0.498	10.4	4.0	38.0	13.2	56.5	111	21.3	11900	8.225	15	43.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
GUE16-04 (Gr04*) Complejo Arteaga																				
Zircon_01_GUE16-04	14.30	1670	2.15	0.081	13.6	2.82	12.1	2.160	28.3	10.4	125.0	52.0	249.0	590	137.0	9900	1.725	122	198.0	
Zircon_02_GUE16-04	0.00	920	1.50	0.050	5.1	0.83	7.5	0.200	14.3	7.1	72.0	30.0	136.0	250	52.0	8900	0.800	53	95.0	
Zircon_03_GUE16-04	7.40	600	1.22	0.041	5.46	0.55	6.4	0.380	9.8	4.6	48.6	19.4	94.0	209	47.2	7590	0.278	19	42.0	
Zircon_05_GUE16-04	9.00	1710	1.08	0.050	5.8	2.36	9.2	0.810	33.2	12.3	144.0	56.1	247.0	447	90.0	7620	0.920	109	182.0	
Zircon_07_GUE16-04	1.60	519	1.62	4.500	18.3	5.20	6.5	0.410	6.9	3.5	36.4	15.4	80.0	225	53.2	9790	1.563	116	277.0	
Zircon_08_GUE16-04	5.20	950	1.62	0.039	9.2	0.76	6.2	0.700	11.9	5.6	65.0	27.8	150.0	386	90.0	7650	0.953	74	141.0	
Zircon_09_GUE16-04	8.40	980	1.65	0.141	7.96	1.40	7.4	0.860	12.8	5.9	69.5	29.5	150.0	392	93.0	8700	0.923	60	120.0	
Zircon_11_GUE16-04	4.20	1390	2.41	0.215	13.1	2.05	9.6	1.120	25.0	9.5	108.0	43.2	204.0	462	102.0	10600	0.925	81	145.0	
Zircon_12_GUE16-04	18.90	1960	1.39	0.072	9.9	3.09	12.2	0.680	41.1	15.1	164.0	60.6	265.0	466	88.0	10500	1.215	137	175.0	
Zircon_14_GUE16-04	6.70	1050	1.93	1.500	17.1	3.30	6.4	0.940	14.9	6.2	76.0	31.8	163.0	408	94.0	8220	1.105	117	174.0	
Zircon_15_GUE16-04	1.90	1570	2.72	1.800	18.7	4.40	9.3	0.980	23.8	10.0	119.0	48.0	227.0	530	117.0	10800	1.225	103	212.0	
Zircon_16_GUE16-04	4.50	1940	1.73	9.300	33.6	20.20	15.4	0.590	47.7	16.2	178.0	64.6	276.0	481	90.0	8450	3.050	277	555.0	
Zircon_17_GUE16-04	14.00	4170	3.18	0.072	12.6	7.00	16.2	1.150	81.0	29.5	343.0	136.0	580.0	990	190.0	13800	9.050	430	1124.0	

Zircon_18_GUE16-04	1.60	705	1.69	0.019	12	0.55	5.8	0.325	9.3	4.3	49.4	21.3	110.0	293	67.1	13300	1.675	80	186.0
Zircon_19_GUE16-04	12.80	1370	1.56	0.064	8.8	2.58	9.7	1.320	25.0	9.4	108.0	43.6	204.0	452	93.0	8830	0.528	42	82.0
Zircon_21_GUE16-04	6.60	870	1.43	0.023	7.5	0.86	5.3	0.690	9.8	5.0	55.5	25.6	135.0	372	87.0	8800	0.823	54	124.0
Zircon_22_GUE16-04	2.00	1500	1.12	0.053	5.48	3.34	11.5	1.410	30.7	11.2	125.0	47.1	214.0	454	91.0	9900	0.518	34	66.0
Zircon_24_GUE16-04	8.80	2000	1.39	0.061	2.53	4.39	13.4	0.710	49.0	17.5	188.0	68.0	288.0	510	94.0	9500	2.000	105	195.0
Zircon_25_GUE16-04	2.90	980	2.90	0.560	48.2	3.45	10.5	2.060	23.3	7.8	79.0	29.1	131.0	329	70.0	13200	4.200	257	316.0
Zircon_28_GUE16-04	6.50	2280	1.55	0.298	4.55	1.63	6.9	0.520	30.1	14.4	190.0	71.1	296.0	536	95.0	10200	36.250	63	361.0
Zircon_29_GUE16-04	6.30	1020	0.89	0.031	8.04	1.40	6.8	1.050	18.8	7.4	81.2	32.7	152.0	339	67.6	8880	0.565	51	80.0
Zircon_31_GUE16-04	4.70	1340	2.70	7.800	40	17.30	11.0	0.980	19.3	7.7	92.0	39.6	205.0	570	130.0	12600	2.500	133	265.0
Zircon_32_GUE16-04	5.10	1200	2.09	0.023	13.3	1.45	8.6	1.000	16.3	7.4	85.0	36.8	183.0	533	113.0	11200	1.185	75	139.0
Zircon_33_GUE16-04	10.20	720	1.31	0.830	9.6	1.93	5.7	0.500	10.8	4.5	51.5	22.4	115.0	299	64.0	9900	0.568	33	76.0
Zircon_34_GUE16-04	10.00	1090	1.63	0.097	9.7	1.96	7.8	1.070	15.4	6.8	81.5	33.4	166.0	457	101.0	11000	1.123	66	125.0
Zircon_35_GUE16-04	2.50	795	1.90	0.037	13.9	0.74	5.4	1.060	13.5	5.6	62.8	23.3	112.0	279	63.2	10200	2.875	58	306.0
Zircon_36_GUE16-04	1.90	871	1.69	0.037	15.8	1.32	6.2	1.660	17.8	6.4	71.4	25.6	119.0	283	59.1	9340	3.125	118	386.0
Zircon_37_GUE16-04	3.40	703	3.66	0.167	10.1	0.87	5.5	0.420	8.1	4.0	47.5	20.6	112.0	348	77.0	12600	3.675	75	533.0
Zircon_38_GUE16-04	8.00	5820	3.39	0.128	53.8	15.50	32.9	3.090	156.0	52.2	585.0	209.0	840.0	1410	244.0	8330	3.650	575	530.0
Zircon_39_GUE16-04	3.40	1700	1.71	0.078	13.9	4.30	11.1	2.300	34.0	12.0	134.0	52.0	252.0	605	125.0	9440	1.518	191	220.0
Zircon_40_GUE16-04	6.00	1290	2.39	0.082	11.4	0.86	7.3	0.700	12.3	6.2	83.0	37.6	201.0	570	129.0	12000	1.400	62	144.0
Zircon_41_GUE16-04	1.40	1190	0.99	0.980	12.3	4.05	8.7	1.550	21.1	8.2	95.0	37.6	180.0	438	93.0	12800	0.743	47	78.0
Zircon_42_GUE16-04	1.10	1770	3.49	13.800	57	38.00	18.9	0.128	40.0	13.7	160.0	61.0	264.0	482	90.0	11600	4.325	178	454.0
Zircon_43_GUE16-04	2.50	820	1.81	5.500	23	7.30	6.8	0.840	11.1	4.7	54.7	24.1	129.0	355	82.0	10400	1.078	57	124.0
Zircon_44_GUE16-04	2.20	1640	5.31	0.043	13.4	1.87	8.5	0.142	30.1	11.9	146.0	55.9	245.0	445	82.0	11400	4.425	231	492.0
Zircon_45_GUE16-04	4.80	1010	1.70	0.139	10.6	1.04	6.3	0.990	17.3	6.4	74.0	30.7	153.0	382	84.0	9960	1.075	100	127.0
Zircon_47_GUE16-04	7.80	1100	1.28	0.039	3.2	0.83	6.5	0.459	12.9	6.3	72.9	35.8	172.0	422	90.0	9200	1.568	59	208.0
Zircon_48_GUE16-04	8.00	1140	1.94	0.076	10	0.78	6.5	0.710	13.3	6.0	82.0	36.2	190.0	530	125.0	12700	1.165	47	114.0
Zircon_50_GUE16-04	12.90	2300	1.09	0.078	8.7	3.66	11.8	0.770	45.4	17.9	207.0	76.0	313.0	566	107.0	11000	2.025	162	237.0
Zircon_51_GUE16-04	1.20	1060	1.02	0.028	9.9	1.64	7.9	1.140	17.3	6.9	80.0	34.6	161.0	409	97.0	11000	1.800	119	229.0
Zircon_53_GUE16-04	3.60	1290	2.94	0.105	11.1	0.98	5.8	0.166	19.8	8.7	104.0	42.7	200.0	408	83.7	11500	2.700	169	388.0
Zircon_54_GUE16-04	2.60	880	0.92	0.067	7.33	1.18	6.4	0.740	14.2	5.6	64.2	26.1	135.0	347	83.7	11000	1.160	75	154.0
Zircon_56_GUE16-04	9.60	1160	1.96	0.118	10.6	1.07	6.4	0.830	13.5	6.0	82.0	34.8	183.0	475	110.0	11400	1.243	64	137.0
Zircon_57_GUE16-04	49.00	1090	2.25	0.070	13	0.74	6.7	0.170	17.9	7.0	90.0	33.9	158.0	327	64.0	12900	1.350	110	209.0
Zircon_59_GUE16-04	11.80	1180	9.10	3.530	28.7	15.50	10.5	3.630	19.5	7.0	83.0	34.5	183.0	524	125.0	12100	12.875	312	1793.0
Zircon_60_GUE16-04	7.30	1220	1.64	0.064	7.7	2.40	8.0	0.640	25.5	9.3	109.0	41.2	200.0	332	65.5	9600	3.250	184	396.0
Zircon_61_GUE16-04	8.60	1410	0.71	0.075	10.7	2.28	9.9	0.940	33.9	11.7	127.0	46.8	201.0	361	73.0	13000	1.120	80	106.0
Zircon_62_GUE16-04	3.80	1370	2.45	0.046	12.7	1.41	7.4	1.280	19.9	8.5	99.0	42.1	211.0	518	121.0	9200	1.275	97	158.0
Zircon_63_GUE16-04	9.30	1450	1.82	0.029	10.7	1.14	7.0	0.780	21.6	8.8	113.0	49.3	223.0	471	101.5	8790	1.248	77	163.0
Zircon_64_GUE16-04	5.20	819	1.46	0.055	7.68	0.57	5.3	0.630	10.6	4.8	55.8	24.5	130.0	350	84.4	10070	0.893	44	109.0
Zircon_65_GUE16-04	20.00	1240	1.38	4.500	17.7	9.80	10.6	0.520	24.5	9.4	104.0	39.0	183.0	343	71.0	12200	3.025	159	305.0
Zircon_66_GUE16-04	7.90	1810	1.78	0.031	13.8	4.00	12.9	1.720	36.6	13.3	147.0	55.6	262.0	564	124.0	14100	0.853	50	93.0
Zircon_67_GUE16-04	14.70	890	1.63	0.082	7.9	0.89	6.6	0.560	13.8	5.9	71.1	28.6	148.0	322	77.0	11000	0.885	36	94.0
Zircon_68_GUE16-04	5.80	1130	2.91	0.087	23.8	1.52	8.0	0.980	16.7	7.5	84.0	35.0	178.0	425	99.0	12600	3.200	387	330.0
Zircon_69_GUE16-04	12.00	1590	3.20	0.069	14.3	1.18	6.4	0.960	17.6	7.7	104.0	49.4	261.0	670	165.0	10900	1.950	91	201.0
Zircon_72_GUE16-04	7.70	1340	1.76	0.078	12.6	2.67	8.5	1.300	22.5	8.4	100.0	41.3	205.0	508	122.0	13800	2.375	126	246.0
Zircon_73_GUE16-04	6.60	922	1.62	4.200	20.7	7.40	7.0	0.920	13.6	5.4	68.7	28.7	153.0	379	89.9	9370	0.858	54	101.0
Zircon_74_GUE16-04	6.00	1380	1.13	0.111	11	3.14	9.3	1.470	33.7	10.8	120.0	45.2	202.0	383	78.2	10700	0.840	93	129.0
Zircon_79_GUE16-04	4.20	960	1.06	0.105	7.1	1.36	7.7	0.860	15.8	5.7	71.0	29.4	148.0	384	92.0	12900	0.858	45	95.0
Zircon_80_GUE16-04	5.00	1030	1.20	0.066	5.77	0.93	6.5	0.600	16.5	6.9	81.9	32.4	154.0	323	71.9	9760	0.868	40	101.0
Zircon_81_GUE16-04	11.10	1180	1.85	0.076	12.6	1.10	6.1	0.900	14.8	6.9	82.4	36.6	187.0	467	112.0	10750	1.450	132	210.0
Zircon_83_GUE16-04	19.90	6630	2.79	0.112	20.8	11.80	31.1	5.130	161.0	57.5	647.0	240.0	1020.0	1730	349.0	10900	1.593	144	152.0
Zircon_84_GUE16-04	8.90	912	1.51	0.030	7.7	0.80	5.3	0.590	10.2	4.8	61.0	27.8	149.0	397	93.4	9690	1.055	52	131.0
Zircon_85_GUE16-04	11.60	1460	1.80	1.510	18.1	3.80	10.5	1.180	23.9	9.7	115.0	47.5	237.0	530	125.0	10700	1.260	100	151.0
Zircon_86_GUE16-04	5.90	2790	1.12	63.000	146	89.00	32.0	1.360	73.4	23.6	261.0	95.0	412.0	691	136.0	10100	2.150	172	263.0
Zircon_87_GUE16-04	6.30	1760	1.34	0.035	10	2.88	9.3	1.470	34.5	13.2	153.0	59.4	268.0	509	106.0	10250	1.248	85	145.0
Zircon_89_GUE16-04	10.00	790	1.02	0.029	6.2	0.97	6.1	0.580	10.6	4.8	58.0	24.9	128.0	331	82.0	13800	0.950	37	86.0

Zircon_91_GUE16-04	7.90	672	1.07	0.045	11	0.88	6.6	0.520	13.1	5.0	57.4	22.2	108.0	223	48.5	11400	5.200	58	98.0
Zircon_92_GUE16-04	4.70	1550	1.37	0.330	13.1	2.62	10.3	1.650	26.4	10.6	134.0	53.0	248.0	523	126.0	12900	1.063	62	106.0
Zircon_93_GUE16-04	2.00	1190	0.93	0.300	9.2	2.73	8.6	1.740	22.4	8.1	93.0	36.7	180.0	409	96.0	10500	0.813	60	97.0
Zircon_94_GUE16-04	8.30	1500	2.03	14.700	47.1	20.50	10.6	1.610	22.1	8.6	108.0	46.1	241.0	586	139.0	10200	1.470	95	172.0
Zircon_95_GUE16-04	6.40	3210	4.29	0.428	13.8	3.31	15.2	0.096	68.7	24.2	307.0	117.0	500.0	820	164.0	14200	9.250	380	836.0
Zircon_96_GUE16-04	4.40	1470	1.55	0.053	10.6	1.77	8.5	1.010	23.9	10.2	111.0	46.4	226.0	509	114.0	11600	0.808	53	110.0
Zircon_98_GUE16-04	7.50	1530	1.66	0.076	13	1.84	9.3	1.420	23.6	9.8	113.0	48.1	246.0	575	137.0	12000	1.640	93	169.0
Zircon_99_GUE16-04	5.10	840	1.19	0.034	7	0.75	5.9	0.690	11.2	4.8	56.6	25.1	135.0	352	88.0	10200	0.923	45	110.0
Zircon_100_GUE16-04	5.90	1110	0.97	0.047	8.6	2.11	9.9	1.160	19.7	7.8	86.6	36.2	180.0	439	106.0	11800	0.973	58	108.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
GUE16-06 (Gr06*) Ensamblaje El Camalote, Suite Zihuatanejo, Suite Cuale-Macias, Complejo Arteaga																				
Zircon_01_GUE16-06	22.00	720	0.84	0.072	3	6.70	18.3	0.401	66.0	17.2	114.0	23.7	65.0	76	14.7	10500	7.750	60	186.0	
Zircon_02_GUE16-06	12.90	553	1.98	9.100	47.7	27.50	13.7	0.234	22.3	6.6	62.2	19.8	84.6	145	26.7	8800	19.450	247	208.0	
Zircon_03_GUE16-06	4.70	1290	6.73	0.046	15.8	4.36	11.6	0.550	38.4	13.0	130.0	45.1	188.0	342	69.1	9830	23.500	184	291.0	
Zircon_04_GUE16-06	10.80	4420	3.15	0.150	14.8	7.00	16.9	1.330	89.0	33.8	395.0	157.0	703.0	1120	216.0	8140	4.900	549	579.0	
Zircon_05_GUE16-06	19.80	4180	3.77	2.280	33.1	9.70	18.0	1.720	80.0	29.3	343.0	148.0	650.0	1140	222.0	10200	11.700	1442	1556.0	
Zircon_06_GUE16-06	14.00	3110	2.34	0.212	16.6	9.10	14.5	1.880	74.0	27.0	311.0	115.0	490.0	840	157.0	9200	2.975	284	299.0	
Zircon_07_GUE16-06	680	1680	4.26	24.800	80	38.80	18.4	0.820	45.6	15.4	173.0	60.0	286.0	500	94.0	11200	5.475	362	629.0	
Zircon_08_GUE16-06	3.60	970	2.60	12.000	54	17.70	9.6	1.200	19.5	6.7	82.0	31.9	157.0	393	90.0	11200	1.650	132	176.0	
Zircon_09_GUE16-06	0.00	1120	2.15	0.177	58	2.40	10.0	2.130	34.0	11.2	115.0	40.0	160.0	278	52.0	11800	5.900	865	682.0	
Zircon_10_GUE16-06	3.10	1720	3.01	0.081	22	3.70	11.1	2.140	37.1	13.1	151.0	57.7	281.0	631	141.0	10200	2.450	270	352.0	
Zircon_11_GUE16-06	4.10	790	1.02	0.052	1.06	0.60	5.7	0.272	12.6	5.8	70.0	28.6	136.0	284	62.0	7900	5.700	31	165.0	
Zircon_12_GUE16-06	13.40	1820	0.78	0.067	5.91	4.22	11.4	0.870	44.2	15.8	176.0	68.3	298.0	494	96.0	9700	1.465	123	193.0	
Zircon_13_GUE16-06	8.60	992	1.60	0.055	2.92	1.15	6.7	0.278	20.1	7.8	92.6	36.9	182.0	341	74.8	8120	2.153	71	228.0	
Zircon_14_GUE16-06	7.60	2250	1.29	0.155	11	5.06	13.0	1.270	58.3	20.4	226.0	84.0	364.0	638	124.0	9400	2.200	217	276.0	
Zircon_15_GUE16-06	6.40	981	1.69	0.069	11.3	0.87	6.1	0.780	16.1	6.9	81.3	32.8	168.0	391	87.5	10300	2.223	101	249.0	
Zircon_16_GUE16-06	1.00	1180	1.90	0.173	16.9	0.89	7.7	1.040	16.7	7.2	89.0	38.4	204.0	553	133.0	11900	1.098	70	144.0	
Zircon_17_GUE16-06	9.30	960	2.82	0.229	2.14	1.08	6.9	0.125	19.1	8.4	95.0	34.0	158.0	344	75.0	12200	137.000	74	840.0	
Zircon_18_GUE16-06	3.60	1650	1.47	0.115	12.8	4.06	12.2	1.930	42.7	14.8	164.0	59.5	269.0	528	106.0	8270	5.575	284	608.0	
Zircon_19_GUE16-06	6.00	756	1.09	0.247	6.49	1.33	5.5	0.205	15.7	6.0	69.8	27.5	124.0	241	49.1	8430	1.065	72	144.0	
Zircon_22_GUE16-06	15800	1810	26.10	22.600	68	42.00	19.5	1.220	55.0	16.5	181.0	66.0	293.0	520	104.0	10400	2.675	176	244.0	
Zircon_23_GUE16-06	0.00	1410	2.28	0.080	18	2.03	7.8	1.520	26.1	9.6	119.0	48.5	243.0	599	140.0	11600	1.055	71	141.0	
Zircon_24_GUE16-06	16.20	733	0.95	0.520	6.07	1.46	6.0	0.265	16.2	6.3	71.6	26.8	124.0	232	48.0	10500	1.248	77	158.0	
Zircon_25_GUE16-06	1.50	2100	3.87	0.288	23.5	3.63	11.5	0.520	40.9	16.0	194.0	77.0	348.0	652	132.0	8900	6.975	684	961.0	
Zircon_26_GUE16-06	6.10	1660	0.75	0.048	6.65	2.55	10.8	1.010	41.3	15.1	168.0	63.1	279.0	505	99.0	9300	1.605	124	195.0	
Zircon_27_GUE16-06	17.60	2770	1.24	0.700	7.96	9.90	16.7	2.090	77.9	25.9	292.0	104.0	424.0	656	124.0	8220	1.858	361	365.0	
Zircon_28_GUE16-06	11.40	1060	0.75	0.045	11.5	3.40	10.7	1.630	30.8	10.7	109.0	39.2	174.0	315	62.5	9330	1.838	65	83.0	
Zircon_29_GUE16-06	44.00	3750	2.13	0.085	11.4	7.60	17.4	2.040	92.0	33.1	383.0	143.0	622.0	1080	209.0	9200	3.500	300	363.0	
Zircon_30_GUE16-06	13.10	3690	2.73	0.450	33.4	9.90	18.1	3.170	98.0	33.2	386.0	140.0	610.0	1000	196.0	11900	7.000	498	554.0	
Zircon_31_GUE16-06	10.10	1400	2.09	0.087	3.86	2.46	10.0	0.710	34.6	12.3	143.0	55.7	239.0	425	85.1	7510	2.825	180	302.0	
Zircon_32_GUE16-06	10.80	1010	1.20	0.114	10.8	1.16	5.6	0.432	17.4	7.1	86.0	35.6	172.0	363	77.0	9500	2.950	343	466.0	
Zircon_33_GUE16-06	8.00	730	0.81	19.000	54.3	28.20	11.8	2.040	19.9	6.3	67.0	25.5	126.0	298	69.0	9700	5.750	86	130.0	
Zircon_34_GUE16-06	11.50	1170	0.76	0.056	7.3	1.89	9.7	0.680	28.3	9.9	116.0	44.0	192.0	353	70.0	11500	0.885	61	98.0	
Zircon_35_GUE16-06	15.20	1160	0.83	0.084	6.09	2.12	8.9	0.670	28.9	10.4	115.0	42.8	190.0	343	67.9	9970	0.885	76	112.0	
Zircon_36_GUE16-06	10.80	1340	2.76	0.107	6.03	2.38	8.4	0.590	31.6	11.2	130.0	48.4	217.0	416	82.7	7890	9.975	282	1070.0	
Zircon_37_GUE16-06	22.00	1000	1.38	0.050	5.24	1.48	7.8	0.420	21.0	8.8	97.0	36.8	167.0	326	68.0	11000	0.613	24	60.0	
Zircon_39_GUE16-06	25.00	5480	2.67	0.110	19	10.10	23.0	1.520	135.0	47.6	553.0	207.0	840.0	1430	273.0	10900	7.775	606	795.0	
Zircon_40_GUE16-06	23.00	1230	1.05	0.090	7.4	3.28	8.8	0.570	28.9	11.4	126.0	45.5	195.0	341	66.0	9800	1.168	80	136.0	
Zircon_41_GUE16-06	12.90	880	1.80	0.051	14.7	1.29	7.1	0.385	17.7	7.0	80.0	31.5	146.0	285	58.4	12000	1.500	66	136.0	
Zircon_43_GUE16-06	11.80	2260	1.89	0.069	11.6	3.60	11.5	0.810	53.0	18.7	217.0	80.0	345.0	569	113.0	9400	3.575	461	524.0	
Zircon_45_GUE16-06	19.00	3040	1.86	0.173	19.4	10.10	19.6	0.720	69.0	24.2	279.0	99.0	440.0	700	135.0	10800	6.050	676	771.0	

Zircon_46_GUE16-06	23.00	1070	0.85	0.094	15.5	4.07	9.6	1.710	28.9	9.1	102.0	40.1	177.0	327	68.3	10000	8.175	151	170.0
Zircon_47_GUE16-06	27.40	2030	0.85	0.110	13.6	7.53	17.0	0.960	57.9	17.9	202.0	68.3	290.0	462	86.8	9600	1.840	189	231.0
Zircon_49_GUE16-06	25.00	3990	2.91	4.730	30.3	15.60	24.6	1.190	103.0	35.0	385.0	141.0	589.0	1030	186.0	9900	4.900	626	646.0
Zircon_50_GUE16-06	5.20	1080	2.30	0.070	14	0.89	7.7	0.120	15.0	8.0	95.0	35.9	170.0	351	71.0	13500	4.975	273	519.0
Zircon_51_GUE16-06	9.70	4180	4.38	0.105	20	8.60	19.1	0.950	93.0	32.7	390.0	146.0	630.0	1040	202.0	10400	6.600	694	884.0
Zircon_52_GUE16-06	24.40	1900	0.84	0.091	5.3	3.82	10.4	1.250	39.2	14.2	162.0	63.2	281.0	500	97.0	9730	1.448	145	186.0
Zircon_54_GUE16-06	3.70	440	0.76	0.053	17.6	0.46	5.2	0.531	8.2	3.0	31.3	12.4	62.5	163	40.5	11400	4.425	185	429.0
Zircon_55_GUE16-06	1.80	1680	1.68	10.430	36.9	18.70	11.3	0.600	36.6	12.6	147.0	55.9	248.0	452	89.0	9530	4.525	499	727.0
Zircon_56_GUE16-06	18.40	652	0.81	0.053	4.31	0.66	5.2	0.185	11.5	4.9	54.5	21.3	96.1	185	39.2	9120	0.965	66	136.0
Zircon_57_GUE16-06	9.60	2100	1.44	0.115	10.3	5.11	11.9	0.460	45.4	14.7	181.0	67.9	300.0	516	101.0	9570	3.300	290	389.0
Zircon_58_GUE16-06	5.30	4290	5.47	1.300	50.4	10.70	20.5	0.950	94.0	34.3	396.0	143.0	627.0	1080	205.0	9780	15.925	2343	2492.0
Zircon_59_GUE16-06	21.20	1670	1.57	0.031	14	2.24	10.0	0.680	29.5	11.5	138.0	54.0	247.0	473	97.0	12600	2.150	151	232.0
Zircon_60_GUE16-06	11.90	507	2.44	0.059	30.6	0.98	5.2	0.500	10.5	4.0	42.5	15.2	72.2	158	35.0	10050	59.750	167	327.0
Zircon_61_GUE16-06	14.00	806	0.98	0.332	5.87	1.34	6.4	0.371	14.2	5.9	67.6	25.4	119.0	221	48.1	8680	0.888	62	121.0
Zircon_62_GUE16-06	8.50	1830	1.75	0.030	13	2.28	8.7	0.482	30.6	12.4	148.0	58.8	269.0	520	109.0	9800	3.425	282	456.0
Zircon_64_GUE16-06	23.90	1010	1.17	0.139	8.6	1.38	6.4	0.403	15.6	6.6	81.0	32.5	148.0	296	61.9	11000	1.318	93	159.0
Zircon_65_GUE16-06	13.60	1530	1.65	1.470	17	3.90	9.3	0.349	27.8	11.1	123.0	50.1	218.0	403	81.0	9900	2.850	271	419.0
Zircon_66_GUE16-06	29.00	1810	0.98	0.046	6.6	3.21	11.1	0.810	40.0	13.9	161.0	58.5	251.0	438	85.0	11000	1.875	137	215.0
Zircon_67_GUE16-06	35.00	1370	1.34	0.054	9.2	2.96	9.5	0.780	26.8	10.3	116.0	43.3	193.0	376	75.3	11310	0.275	20	31.0
Zircon_68_GUE16-06	8.70	1240	1.25	0.052	9.7	1.31	7.8	0.850	23.5	10.0	112.0	46.0	191.0	358	72.0	11100	1.013	79	123.0
Zircon_69_GUE16-06	1.00	3940	3.43	0.080	44	6.07	17.3	5.050	70.4	26.2	308.0	121.0	549.0	1150	246.0	10400	1.818	270	292.0
Zircon_70_GUE16-06	2.10	1420	1.75	0.103	17.3	2.19	8.4	1.780	23.9	8.9	107.0	42.9	210.0	518	123.0	12000	0.828	65	130.0
Zircon_71_GUE16-06	24.20	1390	0.71	0.058	6.28	3.40	9.8	1.310	30.7	10.8	123.0	45.3	198.0	358	72.0	10600	0.693	62	86.0
Zircon_72_GUE16-06	11.00	846	1.13	0.089	5	0.89	4.9	0.362	14.4	5.5	65.5	26.5	124.0	264	56.8	7880	0.945	59	136.0
Zircon_75_GUE16-06	28.00	1950	0.65	0.209	9.8	7.30	14.7	1.130	47.8	16.6	175.0	61.0	255.0	394	81.0	10100	1.800	173	210.0
Zircon_77_GUE16-06	2.10	2000	5.97	0.076	19.7	1.20	6.1	0.182	24.1	10.7	143.0	59.8	298.0	658	140.0	11090	10.275	611	1563.0
Zircon_78_GUE16-06	22.00	880	0.92	0.530	6.7	1.50	6.9	0.199	17.4	6.1	67.0	27.1	123.0	251	49.2	12700	1.210	68	147.0
Zircon_79_GUE16-06	14.80	5880	4.56	0.137	32.1	10.20	23.0	1.260	122.0	44.4	525.0	198.0	850.0	1430	275.0	9600	8.675	1224	1176.0
Zircon_80_GUE16-06	13.90	1100	2.03	0.830	13.5	2.14	7.2	0.250	20.6	7.8	93.0	35.3	166.0	284	62.0	12600	3.125	222	309.0
Zircon_81_GUE16-06	4.10	1890	4.06	0.108	19.6	1.54	6.4	0.640	22.7	9.7	132.0	57.6	291.0	671	151.0	10300	3.300	200	431.0
Zircon_82_GUE16-06	19.30	1580	0.86	0.680	8.3	5.28	12.0	0.620	37.1	12.8	140.0	51.4	215.0	358	70.2	10100	1.183	119	174.0
Zircon_83_GUE16-06	20.70	1120	1.82	0.086	10.8	1.51	7.1	0.275	19.4	7.4	87.0	34.6	158.0	310	66.0	12500	4.425	254	504.0
Zircon_84_GUE16-06	11.00	820	1.07	2.200	10.9	4.00	6.4	0.145	12.1	5.6	62.7	24.8	116.0	240	49.5	13600	2.350	128	288.0
Zircon_85_GUE16-06	17.10	759	0.90	0.013	5.73	0.86	5.3	0.332	12.8	5.6	62.2	24.2	116.0	233	48.3	9520	0.810	57	114.0
Zircon_86_GUE16-06	5.10	1800	1.95	15.700	57	29.00	14.6	0.385	38.1	12.9	147.0	57.5	260.0	500	101.0	13600	5.350	366	642.0
Zircon_87_GUE16-06	18.00	960	1.36	0.970	9.3	2.11	7.4	0.252	17.1	6.9	78.0	30.2	143.0	266	53.6	12900	1.550	156	259.0
Zircon_88_GUE16-06	7.70	2530	2.81	0.102	9.9	3.60	13.2	1.060	53.0	20.0	227.0	86.0	377.0	670	135.0	10100	1.950	181	301.0
Zircon_89_GUE16-06	10.40	3570	1.60	0.090	14.1	7.60	17.3	1.120	80.0	27.5	310.0	116.0	512.0	807	157.0	10900	4.475	496	612.0
Zircon_90_GUE16-06	17.70	1750	1.06	0.059	12	5.60	12.9	0.620	41.3	14.2	153.0	56.2	237.0	400	76.9	11500	2.025	266	314.0
Zircon_93_GUE16-06	14.90	1280	1.07	0.380	9.7	2.63	7.9	0.359	23.2	9.2	107.0	41.5	187.0	347	68.9	12400	2.113	201	323.0
Zircon_95_GUE16-06	17.40	602	0.89	0.074	4.31	0.59	4.3	0.149	8.7	4.0	47.5	18.9	89.3	190	39.2	12100	0.733	47	98.0
Zircon_96_GUE16-06	16.00	740	1.26	0.370	6.5	1.07	5.1	0.206	11.3	4.8	67.0	27.6	110.0	226	47.0	12600	1.625	106	244.0
Zircon_97_GUE16-06	2.50	1920	1.94	3.890	23.8	9.40	9.5	0.340	37.7	13.6	172.0	64.0	287.0	540	108.0	11500	5.375	340	666.0
Zircon_98_GUE16-06	8.90	5050	3.58	0.133	27.8	8.03	21.6	1.140	108.0	39.6	455.0	172.0	737.0	1240	242.0	8260	8.125	1442	1416.0
Zircon_99_GUE16-06	9.40	1980	3.71	0.085	37.5	2.68	9.1	0.398	35.0	13.8	165.0	64.0	288.0	543	106.0	12700	5.125	495	708.0
Zircon_100_GUE16-06	35.00	1180	6.18	1.070	21.3	5.30	8.1	0.740	23.2	8.9	96.0	36.2	170.0	364	77.0	12500	17.250	924	1980.0
Zircon_101_GUE16-06	17.70	1250	0.61	1.260	8.1	5.25	9.2	1.100	28.2	10.7	116.0	42.7	184.0	328	66.0	10500	0.693	56	85.0
Zircon_102_GUE16-06	17.10	1520	0.67	0.080	5.46	2.25	11.3	0.570	35.0	13.1	142.0	50.8	217.0	388	74.5	11500	1.285	113	175.0
Zircon_104_GUE16-06	22.70	1790	1.21	0.047	9.9	3.43	11.2	0.520	37.1	13.6	161.0	60.3	265.0	491	98.0	11000	2.800	339	449.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
GUE16-07 (Gr07*) Ensamblaje El Camalote, Suite Cuale-Macias, Complejo Arteaga																				
Zircon_01_GUE16-07	19.90	1870	1.13	0.064	14.7		5.06	11.4	1.580	42.2	14.8	172.0	65.5	284.0	533	103.0	7540	1.873	206	235.0
Zircon_02_GUE16-07	18.10	1600	0.90	0.068	10.3		4.04	9.2	0.770	33.6	12.4	138.0	52.9	230.0	409	81.2	8120	0.960	110	137.0
Zircon_03_GUE16-07	20.00	810	1.61	79.000	240		141.00	36.0	2.000	37.0	8.5	85.0	27.3	121.0	231	46.3	7460	10.275	273	319.0
Zircon_04_GUE16-07	9.60	1110	1.75	9.800	37.7		16.10	9.3	0.580	20.2	7.6	87.0	35.4	173.0	378	82.0	8280	1.190	86	154.0
Zircon_05_GUE16-07	15.70	1380	0.87	0.085	8.38		3.29	9.9	0.830	29.9	10.5	124.0	45.8	203.0	364	73.3	8000	0.793	86	116.0
Zircon_06_GUE16-07	9.20	950	0.90	0.028	6.53		1.33	6.9	0.770	16.5	6.3	74.0	30.7	144.0	323	70.8	8040	0.693	45	105.0
Zircon_07_GUE16-07	11.70	7510	4.17	0.081	22.1		8.30	26.1	4.480	187.0	64.8	764.0	285.0	1220.0	2040	389.0	6500	4.100	851	580.0
Zircon_08_GUE16-07	19.40	721	0.88	0.055	6.93		0.79	5.4	0.292	12.0	5.3	62.3	23.7	109.0	216	45.2	9360	0.560	44	78.0
Zircon_09_GUE16-07	0.00	1550	2.12	0.055	6.7		2.02	7.5	0.530	29.2	11.1	137.0	54.4	245.0	448	92.1	7390	1.820	97	222.0
Zircon_11_GUE16-07	6.70	1080	3.15	0.068	3.16		0.81	7.1	0.078	18.6	8.1	93.0	37.0	172.0	334	70.0	10800	12.750	94	359.0
Zircon_12_GUE16-07	11.40	1710	0.92	1.670	12.5		10.10	14.4	0.730	45.6	14.6	162.0	58.6	246.0	424	82.0	9900	1.775	115	200.0
Zircon_14_GUE16-07	25.00	622	0.96	0.210	1.37		0.97	5.8	0.133	15.0	5.0	58.7	22.1	93.0	154	30.3	9500	2.825	39	98.0
Zircon_15_GUE16-07	3.20	624	0.99	0.056	5.72		0.36	4.2	0.478	9.2	3.9	47.2	20.6	104.0	245	57.2	7970	0.673	36	94.0
Zircon_16_GUE16-07	20.40	1650	0.95	0.109	9.5		4.74	11.3	1.200	43.9	13.5	148.0	55.1	238.0	429	83.3	8210	0.823	110	131.0
Zircon_17_GUE16-07	9.50	1600	2.29	0.069	6.49		1.47	7.5	0.520	28.3	11.1	139.0	55.5	261.0	511	103.7	11150	38.500	76	231.0
Zircon_18_GUE16-07	2.50	1170	0.66	0.055	6.03		1.55	8.6	0.850	24.4	9.2	101.1	39.0	177.0	330	67.5	9020	0.533	55	79.0
Zircon_19_GUE16-07	12.00	2060	0.94	0.090	7.57		4.19	11.3	0.970	46.1	16.2	193.0	68.9	299.0	506	102.0	8290	0.810	85	115.0
Zircon_20_GUE16-07	0.36	501	0.75	1.150	26		1.75	4.4	0.690	8.2	3.6	36.9	14.4	69.7	184	45.2	9650	4.325	205	454.0
Zircon_21_GUE16-07	14.00	1520	2.31	0.046	11.9		1.48	6.8	1.020	22.5	8.3	116.0	49.5	250.0	557	123.0	9500	0.578	35	81.0
Zircon_23_GUE16-07	0.00	713	1.38	0.035	11.7		0.76	4.4	0.490	10.2	4.3	53.2	22.2	114.0	286	76.3	11900	14.975	155	341.0
Zircon_24_GUE16-07	13.20	1630	0.90	0.092	6.59		3.88	12.1	0.560	42.2	14.0	152.0	57.6	235.0	401	78.0	11000	1.650	99	174.0
Zircon_25_GUE16-07	25.00	2000	1.03	0.088	10.7		5.65	12.3	1.340	47.5	15.7	181.0	68.5	295.0	513	103.0	10200	1.025	136	159.0
Zircon_26_GUE16-07	11.80	453	1.56	0.022	6.46		1.02	6.1	0.255	12.1	4.2	45.3	15.9	66.1	125	24.3	11600	12.825	22	68.0
Zircon_28_GUE16-07	31.50	690	0.78	0.051	1.63		1.25	5.5	0.175	14.6	6.0	59.5	22.4	101.0	175	34.1	10100	2.675	44	93.0
Zircon_29_GUE16-07	5.40	2030	0.95	0.093	9.9		7.48	15.2	0.800	54.6	17.5	192.0	71.1	302.0	503	97.3	10760	2.310	153	269.0
Zircon_30_GUE16-07	15.10	1340	0.72	0.051	8.7		4.36	10.6	0.750	32.4	11.0	121.0	45.5	189.0	332	63.2	9900	1.015	137	167.0
Zircon_32_GUE16-07	27.20	1040	0.92	0.062	8.5		2.05	7.4	0.360	20.9	8.1	93.0	35.1	156.0	290	58.2	11500	1.180	84	132.0
Zircon_33_GUE16-07	3.10	870	0.61	0.062	12.4		1.50	6.2	0.750	16.8	6.5	74.2	29.5	134.0	262	54.9	10900	5.900	82	135.0
Zircon_36_GUE16-07	21.50	1590	0.88	0.064	13.9		3.90	11.0	1.430	37.9	12.1	144.0	54.5	239.0	427	86.5	10250	1.780	176	199.0
Zircon_37_GUE16-07	2.20	2110	4.00	71.000	188		133.00	40.5	2.630	72.3	19.8	208.0	73.8	325.0	578	112.0	8900	2.125	152	273.0
Zircon_38_GUE16-07	3.80	557	0.98	0.124	9.01		0.39	3.8	0.206	8.4	3.5	42.6	18.1	88.2	198	43.5	12600	1.873	120	249.0
Zircon_39_GUE16-07	7.40	620	1.12	0.105	8		0.74	5.3	0.440	12.1	4.8	55.3	22.2	103.0	214	45.0	10600	0.930	69	126.0
Zircon_40_GUE16-07	9.90	1740	2.66	0.106	23.9		2.33	8.7	0.880	31.1	11.6	141.0	56.9	271.0	524	108.0	11400	3.375	294	401.0
Zircon_41_GUE16-07	3.40	805	0.72	0.097	18.9		4.42	9.7	2.390	26.2	7.9	77.5	26.5	116.0	230	48.7	9390	1.713	103	161.0
Zircon_43_GUE16-07	13.00	1280	1.80	0.222	10.8		1.89	7.8	1.060	23.8	9.0	106.0	40.7	203.0	407	87.0	9980	0.518	57	88.0
Zircon_44_GUE16-07	14.10	1860	0.74	0.032	8.3		4.56	12.2	1.360	44.1	14.9	164.0	63.0	278.0	496	99.0	11200	1.280	140	193.0
Zircon_45_GUE16-07	10.60	177	0.76	0.060	1.56		2.18	11.1	0.330	31.7	6.2	31.7	6.1	17.8	29.8	5.1	13800	72.250	143	559.0
Zircon_46_GUE16-07	10.00	1790	3.24	0.161	27.5		1.58	7.4	0.500	28.0	11.4	146.0	59.9	283.0	580	122.0	11800	3.450	163	333.0
Zircon_47_GUE16-07	5.90	3180	5.00	0.050	49.9		5.83	15.5	2.130	68.6	24.3	291.0	111.0	498.0	886	176.0	10550	5.550	518	623.0
Zircon_49_GUE16-07	18.50	1200	0.78	0.044	7.78		1.60	6.4	0.520	21.3	8.5	101.0	40.7	182.0	335	69.2	11200	0.813	71	104.0
Zircon_50_GUE16-07	10.90	1380	2.10	0.064	11.9		2.04	7.9	1.200	30.9	11.1	127.0	50.3	221.0	409	79.0	10300	2.825	190	301.0
Zircon_51_GUE16-07	16.80	1510	0.72	0.058	9.2		2.81	8.9	0.630	36.5	12.9	139.0	50.4	216.0	375	72.1	10280	1.468	138	192.0
Zircon_52_GUE16-07	5.40	1520	2.75	0.063	9.7		7.01	17.9	0.740	60.6	18.6	173.0	54.6	206.0	292	52.8	10210	18.950	52	107.0
Zircon_53_GUE16-07	7.30	1170	2.47	0.014	9.8		2.73	9.6	0.960	35.5	11.8	117.0	41.9	183.0	283	54.7	10400	36.000	143	204.0
Zircon_54_GUE16-07	0.00	2880	14.50	2.130	62.2		8.00	13.0	0.252	57.1	22.5	270.0	103.0	448.0	745	143.0	10100	11.825	976	1515.0
Zircon_55_GUE16-07	11.10	499	0.90	0.045	5.93		0.32	4.8	0.245	7.6	3.7	40.9	16.8	79.4	173	34.8	10900	0.558	31	59.0
Zircon_57_GUE16-07	15.50	269	0.29	0.062	2.22		0.91	5.5	0.610	7.3	2.8	23.1	8.5	40.4	92	22.4	13300	78.750	31	323.0
Zircon_58_GUE16-07	18.20	1320	0.92	0.041	2.09		2.95	10.3	0.431	35.9	12.2	132.0	47.7	195.0	325	63.6	11400	3.700	59	121.0
Zircon_60_GUE16-07	5.70	2010	0.83	0.105	3.42		4.06	11.7	2.070	38.5	14.3	172.0	67.8	318.0	683	149.0	8700	0.770	52	109.0
Zircon_61_GUE16-07	9.20	3110	2.41	1.520	38		10.60	19.8	4.600	79.0	26.9	301.0	109.0	470.0	820	167.0	9100	2.775	273	256.0

Zircon_62_GUE16-07	2.80	487	1.09	0.031	6.55	0.56	4.7	0.096	8.3	3.3	38.8	15.2	78.4	177	39.0	13700	3.450	75	365.0
Zircon_63_GUE16-07	10.20	590	0.82	0.037	3.37	0.97	5.7	0.250	9.9	4.9	54.0	20.5	94.0	186	39.7	9700	33.250	26	189.0
Zircon_64_GUE16-07	22.00	2650	3.42	0.056	20	2.47	10.3	2.070	35.7	16.9	203.0	87.0	427.0	870	188.0	10300	1.375	99	173.0
Zircon_65_GUE16-07	11.80	1220	0.74	0.073	10.1	2.89	9.5	0.970	27.8	9.9	111.0	42.5	189.0	349	69.4	10200	1.368	107	141.0
Zircon_66_GUE16-07	16.40	1280	0.89	0.062	9.6	3.11	9.5	0.770	29.5	10.4	109.0	42.4	181.0	349	70.4	9800	0.745	74	105.0
Zircon_67_GUE16-07	6.60	1180	1.12	0.020	12.1	2.49	7.6	1.110	21.9	8.0	98.0	39.7	188.0	416	89.0	9600	10.925	160	241.0
Zircon_68_GUE16-07	6.40	2470	10.40	2.600	48.4	11.50	15.6	1.440	56.2	20.9	227.0	85.0	371.0	660	128.0	13100	230.000	396	383.0
Zircon_69_GUE16-07	42.00	1140	0.79	0.075	7.76	5.59	11.1	0.880	32.2	10.8	112.0	39.2	170.0	283	54.5	9600	1.078	130	157.0
Zircon_70_GUE16-07	4.90	1050	3.80	0.043	10.8	1.31	7.4	0.228	23.2	8.5	95.0	36.6	161.0	287	58.3	13000	39.750	63	144.0
Zircon_71_GUE16-07	9.00	1400	1.84	0.095	16.3	2.43	8.7	1.250	29.0	10.9	124.0	48.0	216.0	402	81.1	8490	3.000	244	352.0
Zircon_75_GUE16-07	14.20	1360	1.25	0.056	8.2	2.39	8.3	0.770	25.4	9.7	114.0	45.3	210.0	415	88.0	12000	1.288	80	147.0
Zircon_76_GUE16-07	12.60	841	1.39	0.054	2.59	1.22	5.6	0.134	15.6	5.8	70.2	28.5	134.0	261	53.4	9900	11.900	23	59.0
Zircon_77_GUE16-07	3.30	346	0.49	0.045	8.9	1.26	5.2	0.820	8.2	2.8	28.0	10.9	53.0	126	29.7	10250	4.050	57	89.0
Zircon_78_GUE16-07	5.40	1800	2.94	0.012	42	2.51	7.2	1.610	27.5	11.1	134.0	57.8	296.0	650	149.0	9350	28.250	759	878.0
Zircon_79_GUE16-07	16.10	1040	1.17	0.049	13.8	1.31	6.8	1.030	21.5	7.8	86.0	34.5	164.0	328	71.3	9600	1.225	93	133.0
Zircon_80_GUE16-07	16.00	1050	0.86	0.052	11.2	2.07	7.9	0.750	22.5	8.6	91.0	35.4	160.0	290	59.0	10200	1.165	105	138.0
Zircon_82_GUE16-07	17.50	780	0.69	2.100	19.9	14.40	24.1	5.780	66.0	14.4	107.0	26.4	90.0	125	22.6	10500	5.525	334	550.0
Zircon_83_GUE16-07	21.60	3560	1.69	0.168	9.6	7.60	16.8	1.430	90.0	29.7	327.0	121.0	512.0	829	161.0	9800	3.550	306	394.0
Zircon_85_GUE16-07	18.00	790	0.77	0.009	7.8	1.34	5.8	0.360	14.8	6.2	67.0	25.4	119.0	248	49.1	11700	0.443	43	73.0
Zircon_86_GUE16-07	5.70	1230	1.16	0.990	11.9	4.18	7.3	0.570	25.3	9.1	112.0	41.6	186.0	347	72.4	11300	1.640	147	235.0
Zircon_87_GUE16-07	6.60	4320	3.13	0.330	35.2	11.90	24.8	3.220	116.0	37.8	411.0	149.0	626.0	1050	202.0	7330	4.525	488	581.0
Zircon_88_GUE16-07	10.40	1630	1.09	0.190	13.3	4.70	11.4	1.790	40.3	13.1	149.0	55.7	246.0	466	88.0	10400	1.485	126	155.0
Zircon_89_GUE16-07	11.00	770	0.75	0.035	7.9	1.14	4.8	0.305	15.1	5.8	66.4	25.4	116.0	227	46.6	11300	0.523	44	73.0
Zircon_90_GUE16-07	6.40	4580	7.95	15.000	122	38.00	30.3	4.330	128.0	41.0	441.0	161.0	694.0	1173	224.0	8200	9.925	1458	1250.0
Zircon_91_GUE16-07	14.00	1900	0.81	0.164	8	7.60	14.4	0.910	48.6	16.3	176.0	63.5	271.0	447	89.0	9900	1.943	125	209.0
Zircon_92_GUE16-07	32.00	539	0.60	0.440	6.6	2.69	5.9	0.470	15.7	5.6	52.3	17.8	72.0	121	23.7	10400	11.775	30	51.0
Zircon_93_GUE16-07	16.00	725	0.92	0.038	11.8	0.64	6.1	0.460	11.9	4.8	59.5	24.1	115.0	235	48.5	11900	1.105	90	171.0
Zircon_94_GUE16-07	17.00	479	1.51	0.086	5	0.61	4.7	0.130	11.4	4.3	43.6	15.5	75.0	140	28.7	12000	15.000	50	111.0
Zircon_95_GUE16-07	4.10	349	0.84	0.008	7.6	0.67	5.6	0.480	8.6	4.2	32.5	11.2	52.0	89	19.3	14700	45.000	96	181.0
Zircon_96_GUE16-07	8.90	940	1.00	0.082	10.5	0.80	6.3	0.810	15.2	6.0	71.0	29.4	146.0	334	77.0	14000	6.900	49	129.0
Zircon_98_GUE16-07	34.00	5920	1.86	0.073	2.38	4.80	15.6	0.400	85.0	33.7	477.0	214.0	1040.0	1950	387.0	13600	4.850	66	133.0
Zircon_99_GUE16-07	18.00	2240	2.67	0.109	15.3	2.12	7.9	1.780	32.5	13.4	171.0	71.1	346.0	717	155.0	9900	0.910	78	131.0
Zircon_100_GUE16-07	8.30	790	0.56	0.034	14.1	2.03	6.9	1.500	17.7	6.1	64.0	25.7	123.0	273	63.0	10420	6.700	124	154.0
Zircon_101_GUE16-07	15.30	1510	0.87	0.054	7.9	3.17	9.6	0.750	35.1	12.7	138.0	51.2	219.0	383	75.6	12400	1.400	77	134.0
Zircon_103_GUE16-07	4.50	1580	1.06	0.090	8	4.30	11.7	0.830	39.3	13.5	149.0	53.7	230.0	400	77.0	13400	1.825	111	181.0

SAMPLE	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Yb	Lu	Hf	Pb	Th	U
BAL17-01 (Bal*) Batolito Jilotián, Suite Zihuatanejo, Complejo Arteaga																				
Zircon_02_BAL17-01		1020	0.84		8.9	0.056	1.62	5.0	0.780	24.4	8.1	90.0	37.5	159.0	309	64.0	9400	1.668	75.9	112.8
Zircon_03_BAL17-01		1400	2.77		18.4	0.029	1.43	3.3	1.150	23.0	8.3	111.0	45.6	217.0	515	112.0	6900	3.575	161	215.0
Zircon_06_BAL17-01		314	0.74		5.08	0.009	0.34	0.7	0.375	4.8	1.9	23.7	9.8	48.8	131	29.9	9080	0.503	30.1	59.9
Zircon_07_BAL17-01		415	0.79	0.073	9	0.021	0.67	1.7	0.570	7.5	2.8	34.1	12.9	66.0	160	36.5	10400	0.960	87	104.0
Zircon_08_BAL17-01		670	0.75		5.8	0.103	1.94	2.9	1.350	13.9	4.5	52.2	20.8	102.0	254	59.4	8520	1.480	43.6	78.6
Zircon_09_BAL17-01		930	0.65		6.8	0.019	0.74	2.1	0.620	13.8	5.1	66.1	30.0	145.0	388	87.0	13100	2.775	69.2	117.0
Zircon_11_BAL17-01		437	0.64	0.018	2.2	0.107	1.37	3.3	0.920	16.6	4.6	43.8	15.0	57.0	100	18.2	10300	12.825	22.7	78.5
Zircon_15_BAL17-01		840	1.20		13.8	0.040	0.87	1.6	0.304	14.5	5.4	70.0	27.5	127.0	255	46.7	9800	1.475	75	85.0
Zircon_16_BAL17-01		980	1.19		8	0.062	2.10	4.8	1.290	23.7	7.4	86.0	32.6	145.0	303	61.0	9700	1.675	70.9	171.5
Zircon_17_BAL17-01		910	0.80		6.5	0.038	1.50	3.5	0.740	19.4	6.4	78.0	29.9	135.0	274	54.3	7800	1.315	55.2	87.8
Zircon_18_BAL17-01		1070	1.37		9.6	0.048	0.70	2.1	0.790	13.4	5.4	75.0	33.1	169.0	422	96.0	9300	2.700	55.2	132.5
Zircon_19_BAL17-01		1070	2.69	0.040	28.2	0.111	2.09	3.8	1.540	21.0	6.8	84.0	33.6	160.0	380	80.9	9090	5.025	248	389.0
Zircon_20_BAL17-01		670	0.99	0.011	3.9	0.047	1.53	2.3	0.470	13.9	4.6	58.0	22.9	105.0	221	44.7	9500	1.300	39.7	107.9
Zircon_22_BAL17-01		730	1.25		5.8	0.020	0.54	0.9	0.436	8.2	3.2	46.7	21.9	120.0	330	77.0	9400	1.900	42.5	122.0

Zircon_24_BAL17-01	466	0.57		7.2	0.086	1.32	2.6	1.140	11.7	3.5	37.3	14.5	68.0	159	34.9	11800	0.828	72	100.0
Zircon_25_BAL17-01	920	0.90		5.7	0.031	0.57	1.9	0.540	15.3	5.8	74.7	30.1	138.0	279	56.1	9400	0.915	29	52.3
Zircon_26_BAL17-01	1100	1.08		7.6	0.006	1.40	3.5	1.010	21.9	7.5	94.0	37.1	161.0	321	65.0	12100	1.525	29.5	49.3
Zircon_27_BAL17-01	980	0.74		6.7	0.053	1.04	3.1	0.660	15.6	5.4	75.0	31.1	151.0	336	72.0	10600	1.250	36.2	67.0
Zircon_30_BAL17-01	409	0.30		3.53	0.002	0.57	1.4	0.530	7.4	2.6	31.9	12.7	62.7	153	33.5	8410	0.890	32.1	61.7
Zircon_32_BAL17-01	730	0.82		5.1	0.020	0.93	1.7	0.590	11.5	4.3	54.6	23.3	117.0	299	68.1	10600	1.433	36.5	67.4
Zircon_33_BAL17-01	1050	0.90		16.2	0.172	2.75	5.9	1.090	28.5	8.9	100.0	35.8	152.0	278	53.1	10300	1.550	198	194.1
Zircon_34_BAL17-01	459	0.67		7.8	0.016	0.49	1.3	0.540	7.7	2.7	34.1	14.1	71.0	182	43.1	12300	1.225	69.4	115.4
Zircon_35_BAL17-01	590	1.16		14.5	0.057	0.70	1.6	0.222	10.6	3.7	43.1	16.5	80.0	192	35.3	13300	2.025	118.3	202.7
Zircon_36_BAL17-01	796	0.87		11.1	0.162	2.84	5.3	1.910	20.8	6.4	68.2	25.6	115.0	258	56.0	10210	1.168	103	123.0
Zircon_37_BAL17-01	920	1.56	0.620	24.4	0.280	2.60	3.6	1.120	17.5	6.1	76.0	28.6	137.0	308	64.4	12000	2.425	138.3	249.0
Zircon_38_BAL17-01	327	1.00		8.9		0.18	0.8	0.163	5.8	2.2	27.0	10.4	49.0	108	21.8	12600	0.858	44.6	90.8
Zircon_39_BAL17-01	800	0.94		6.6	0.002	0.28	0.8	0.320	10.5	3.8	58.0	25.2	123.0	268	55.0	11800	1.338	35	72.5
Zircon_41_BAL17-01	620	1.08		15	0.020	0.54	1.5	0.318	11.7	4.2	50.0	19.1	91.0	189	37.9	13900	1.545	95.3	159.0
Zircon_42_BAL17-01	990	1.39		25.6	0.014	0.67	2.6	0.316	15.2	6.0	77.0	32.2	152.0	367	73.0	15500	5.175	457	710.0
Zircon_44_BAL17-01	620	0.71		10.8	0.033	1.09	3.2	0.560	15.8	5.1	55.5	20.9	88.0	165	31.7	9650	0.983	89	109.0
Zircon_45_BAL17-01	750	0.79	0.056	8.3	0.025	0.59	1.7	0.440	12.5	4.7	60.0	24.0	116.0	242	50.9	10000	1.675	56.7	104.5
Zircon_47_BAL17-01	760	1.06	0.011	15.1	0.131	2.10	3.2	1.290	19.5	5.6	68.4	25.0	115.0	266	57.7	9700	3.225	150	220.0
Zircon_48_BAL17-01	366	0.91		11.5	0.012	0.27	1.3	0.205	7.9	2.7	31.7	12.1	53.8	109	21.2	12500	1.148	66.9	120.0
Zircon_49_BAL17-01	520	0.51		3.99	0.056	0.42	1.2	0.443	7.0	2.7	38.1	15.9	82.0	232	56.8	12200	4.575	125.2	352.0
Zircon_50_BAL17-01	580	0.94		9.7	0.025	0.58	1.3	0.700	9.1	3.1	44.0	17.3	90.0	239	57.0	12300	1.275	48.9	100.0
Zircon_52_BAL17-01	2000	0.98		12.7	0.122	3.00	6.6	1.000	40.9	13.6	173.0	67.0	285.0	580	113.0	10800	2.650	107	138.7
Zircon_55_BAL17-01	1330	0.99		12.7	0.138	2.62	7.6	1.630	37.4	11.6	121.0	43.3	194.0	344	66.1	11100	13.150	147	186.0
Zircon_57_BAL17-01	643	0.41		5.8	0.025	1.08	2.0	0.650	12.1	4.2	50.1	19.9	99.1	253	54.6	10900	1.808	62.8	112.5
Zircon_59_BAL17-01	1400	1.14	4.700	28.4	1.570	10.20	7.9	1.490	37.5	11.8	123.0	45.0	204.0	405	83.0	10700	4.200	336	405.0
Zircon_66_BAL17-01	640	0.77		14.7	0.046	1.03	3.1	0.510	16.0	5.1	56.0	21.0	94.0	187	37.5	12400	1.475	103.3	137.0
Zircon_67_BAL17-01	940	1.87		6.7	0.004	0.28	1.1	0.138	12.4	4.5	69.0	29.9	156.0	362	78.0	11400	0.938	74.9	222.0
Zircon_69_BAL17-01	1090	0.67		7.2	0.054	1.92	3.8	1.200	20.1	6.4	87.0	35.7	164.0	427	94.0	12600	1.675	53.4	87.5
Zircon_70_BAL17-01	667	1.07	5.400	25.8	1.600	7.10	2.9	0.960	11.9	4.5	53.5	21.6	102.0	247	55.7	9300	1.200	109	141.0
Zircon_71_BAL17-01	890	1.23		6.6	0.026	0.89	2.0	0.560	15.1	5.5	73.0	30.1	141.0	286	57.7	11100	1.090	27.9	52.5
Zircon_72_BAL17-01	1130	1.21	1.070	31.6	0.480	4.50	6.1	1.460	29.7	8.8	102.0	37.4	168.0	359	70.7	12700	4.525	511	601.0
Zircon_73_BAL17-01	436	0.84		5.21	0.005	0.30	0.8	0.272	5.3	2.2	29.6	13.2	67.7	201	47.3	14700	2.150	35.9	103.0
Zircon_74_BAL17-01	690	0.71		4.76	0.028	1.25	1.8	0.440	12.1	4.1	55.0	22.8	112.0	253	55.4	9600	1.245	33.8	60.4
Zircon_77_BAL17-01	780	0.70		14.3	0.109	2.80	3.7	1.510	20.0	6.4	74.0	25.3	116.0	262	58.0	10700	1.925	206	240.0
Zircon_80_BAL17-01	1380	2.99		20.5	0.073	1.53	3.6	1.270	21.9	8.6	109.0	44.8	211.0	507	108.0	8500	5.175	269	367.0
Zircon_81_BAL17-01	680	0.88	3.600	24.9	0.810	4.90	3.6	1.280	17.1	4.6	56.3	21.3	104.0	242	53.2	13400	2.525	85.4	137.4
Zircon_84_BAL17-01	513	0.73		3.07		0.16	0.8	0.329	6.0	2.8	39.2	15.6	83.0	233	55.1	10200	0.758	13.42	39.4
Zircon_87_BAL17-01	640	0.83	0.008	11.8	0.155	1.90	3.4	1.200	16.0	5.2	57.0	21.0	96.0	228	48.7	11300	2.125	161.8	210.3
Zircon_88_BAL17-01	541	0.59		8.7	0.078	1.55	2.4	1.000	10.3	4.0	47.9	17.7	88.0	204	46.3	9000	0.920	71.2	93.8
Zircon_93_BAL17-01	567	0.50		5.81	0.009	0.64	1.2	0.600	9.5	3.5	44.1	17.8	88.0	222	50.1	10700	1.925	52.1	105.0
Zircon_94_BAL17-01	1550	1.44		1.98	0.018	0.72	3.0	0.015	23.1	9.7	129.0	52.7	249.0	483	92.0	11500	74.000	101.3	388.0
Zircon_95_BAL17-01	498	0.65		5.5	0.038	0.25	0.5	0.630	6.8	2.5	33.7	15.1	84.0	247	63.0	11400	3.625	35.8	171.0
Zircon_96_BAL17-01	760	1.79		25.4	0.009	0.66	2.1	0.870	12.7	4.9	58.6	23.2	118.0	287	67.0	11200	11.250	434	844.0
Zircon_97_BAL17-01	720	0.58	0.010	9.8	0.086	1.94	4.5	1.060	21.8	6.7	72.2	24.8	103.0	190	35.9	8620	1.153	103.9	108.0
Zircon_99_BAL17-01	680	1.02	0.072	9.5	0.028	0.71	1.7	0.560	12.0	4.6	57.6	22.5	104.0	227	46.4	9400	1.550	69.5	151.8
Zircon_104_BAL17-01	2050	1.52	0.032	19.8	0.421	5.81	9.9	1.820	48.9	16.1	187.0	70.9	310.0	544	107.0	8860	3.625	424	353.0

Las concentraciones de U, Th, elementos traza y REE en zircones fueron calculadas usando el estándar NIST 610, considerando un valor estequiométrico de SiO₂ en el zircón (32.78%) como estándar interno.