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Data Repository

Supplementary File 1. Descriptions of samples and zircon U-Pb, zircon Lu-Hf, and zircon $\delta^{18}\text{O}$ results

Supplementary Table DR1. Zircon U-Pb geochronology data.

Supplementary Table DR2. Zircon Lu-Hf isotopic data.

Supplementary Table DR3. Zircon oxygen isotope SIMS data from the WiscSIMS lab.

Supplementary Table DR4. Compiled Sm-Nd isotopic data and oxygen isotopic data.

Link location: http://www.geosociety.org/datarerepository/2018/2018202_Tables.xls

SUPPLEMENTARY FILE 1

Descriptions of samples and zircon U-Pb, zircon Lu-Hf, and zircon $\delta^{18}\text{O}$ results

Neogene samples

Sample **Bartstow_T** is a hypabyssal andesite to rhyodacite, part of the Pickhandle Fm. located on Elephant Mountain (Dibblee, 1970; 1994; Cox and Wilshire, 1993) near Barstow, California. 21 zircon grains yielded a U-Pb age of 18.2 ± 0.7 Ma. Three older grains with Mesozoic ages (89–142 Ma) are interpreted as inherited age domains. No Proterozoic age domains were measured. The average U/Th ratio of zircon grains used to calculate the age is 3.1 ± 0.7 . The interpreted crystallization age is in agreement with a previous age estimate in Cox and Wilshire (1993). Zircon $\epsilon\text{Hf(t)}$ values range between -8.8 and -1.3 for zircons with crystallization ages, with a weighted mean of $-5.0 \pm 2.8 \epsilon\text{Hf(t)}$, defined by 8 grains. Zircon $\epsilon\text{Hf(t)}$ values for the three zircon grains with inherited ages range from -5.8 to -8.8 .

Sample **Buckeye** is from the Belmont granite in Arizona, as mapped by Richard and Stimac (1994). 13 zircon grains yielded age of 20.0 ± 0.7 Ma, excluding one younger grain with an age of 18 Ma, which we ascribe to minor radiogenic Pb loss. No older age domains were measured. The average U/Th ratio of zircon grains used to calculate the age is 1.4 ± 0.5 . The interpreted crystallization age is in agreement with a whole rock Rb-Sr age reported by Spencer et al. (1995). Zircon $\epsilon\text{Hf(t)}$ values range between -4.8 and -2.8 for zircons with crystallization ages, with a weighted mean of $-3.9 \pm 0.7 \epsilon\text{Hf(t)}$ defined by 6 grains.

Sample **Reefer** is a porphyritic rhyolite, part of the Soledad mountain volcanic complex in California, mapped by Dibblee (1963; 1967b). 11 grains yielded a zircon U-Pb age of 20.3 ± 0.8 Ma, excluding one younger grain (16.6 Ma), which we ascribe to minor radiogenic Pb loss. The age estimate is consistent with previous geochronology (McCusker, 1982). The average U/Th ratio of zircon grains used to calculate the age is 4.1 ± 1.4 . No older age domains were measured. Zircons are elongate, euhedral, have xenocrystic cores with finely oscillatory zoned rims and overgrowths. Only the finely zoned rims were targeted for Lu-Hf and O isotope analyses. Zircon $\epsilon\text{Hf(t)}$ values range between 6.4 and 3.3 for zircons with crystallization ages, with a weighted mean of $4.5 \pm 1.2 \epsilon\text{Hf(t)}$, defined by 8 grains. Zircon $\delta^{18}\text{O}$ values range between 8.25 and 8.51, with a weighted mean of $8.4 \pm 0.2 \text{ ‰}$, defined by 10 grains.

Sample **Snaggletooth** is a dacite from the hangingwall of Chemehuevi detachment fault near the Snaggletooth pinnacle geographic feature in California (John, 1987). 20 grains yielded a zircon U-Pb age of 20.3 ± 0.9 Ma. All zircon grains had U/Th ratios <2 . No older age domains were measured. The zircon U-Pb age estimate is consistent with ages presented in Howard and John (1987). Zircons are elongate, euhedral, broadly oscillatory zoned, have bright CL emissions, and contain abundant inclusions. Xenocrystic cores are not present. Zircon $\epsilon\text{Hf(t)}$ values range between -8.3 and -2.0 for zircons with crystallization ages, with a weighted mean of $-5.8 \pm 2.2 \epsilon\text{Hf(t)}$, defined by 10 grains. Zircon $\delta^{18}\text{O}$ values range between 6.12 and 6.61, with a weighted mean of $6.4 \pm 0.3 \text{ ‰}$, defined by 9 grains

Paleogene samples

Sample **Cochise** is a quartz monzonite from the Cochise Stronghold pluton in the Dragoon Mountains, Arizona. 22 grains yielded a zircon U-Pb age of 26.1 ± 1.8 Ma. No older

age domains were measured. The age estimate is consistent with K-Ar ages presented in Marvin et al. (1978). The average U/Th ratio of zircon grains used to calculate the age is 1.4 ± 1.4 . Zircons are elongate, euhedral, do not have xenocrystic cores, and are very broadly oscillatory zoned with abundant inclusions. Zircon $\epsilon_{\text{Hf}}(t)$ values range between -9.8 and -4.7 for zircons with crystallization ages, with a weighted mean of $-7.1 \pm 1.4 \epsilon_{\text{Hf}}(t)$, defined by 10 grains. Zircon $\delta^{18}\text{O}$ values range between 5.56 and 6.56 , with a weighted mean of $6.2 \pm 0.5 \text{ ‰}$, defined by 10 grains.

Sample **Granite Gap** is a quartz monzonite from the Granite Gap pluton in the Peloncillo Mountains, New Mexico. 22 grains yielded a zircon U-Pb age of 34.2 ± 1.2 Ma, excluding one younger grain (28 Ma), which we ascribe to minor radiogenic Pb loss. One older grain (37 Ma) was measured, which may represent all or part of an older age domain. No older age domains were measured. The average U/Th ratio of zircon grains used to calculate the age is 1.6 ± 0.5 . The zircon U-Pb age estimate is consistent with biotite K-Ar ages reported in Hoggatt et al. (1977). Zircons are elongate, euhedral, prismatic, with xenocrystic to zoned cores and finely oscillatory zoned rims and overgrowths. Inclusions are common. Zircon $\epsilon_{\text{Hf}}(t)$ values range between -12.5 and -6.8 for zircons with crystallization ages, with a weighted mean of $-9.3 \pm 1.8 \epsilon_{\text{Hf}}(t)$, defined by 10 grains. Zircon $\delta^{18}\text{O}$ values range between 4.58 and 5.74 , with a weighted mean of $5.2 \pm 0.8 \text{ ‰}$, defined by 9 grains.

Sample **Hueco** is quartz syenite from Hueco Tanks State Park, Texas. 20 grains yielded a zircon U-Pb age of 34.9 ± 1.2 Ma. No older age domains were measured. All zircon analyses had U/Th ratios ≤ 1 . Zircons are equant, broadly oscillatory zoned, and show little change in CL emission intensity from rim to core. The zircon U-Pb age estimate is consistent with a feldspar K-Ar age presented in Henry et al. (1986). Zircon $\epsilon_{\text{Hf}}(t)$ values range between -6.6 and -1.0 for zircons with crystallization ages, with a weighted mean of $-1.4 \pm 2.2 \epsilon_{\text{Hf}}(t)$, defined by 5 grains. Zircon $\delta^{18}\text{O}$ values range between 4.53 and 5.04 , with a weighted mean of $4.8 \pm 0.3 \text{ ‰}$, defined by 9 grains.

Sample **Tinaja** is a nepheline syenite from Miller Mountain in the Sierra Tinaja Pinta Group of intrusions in Texas. 5 grains yielded a zircon U-Pb age of 35.7 ± 1.1 Ma, excluding three grains with Proterozoic ages (1.1–1.7 Ga). The zircon U-Pb crystallization age estimate is consistent with biotite K-Ar ages presented in Barker et al. (1977). All zircon analyses used to calculate the crystallization age have U/Th ratios < 3 . Zircons are equant, subhedral, do not have obvious pre-magmatic xenocrystic cores, are faintly (and finely) oscillatory zoned to un-zoned. Zircon $\epsilon_{\text{Hf}}(t)$ values range between -3.9 and 5.4 for zircons with crystallization ages, with a weighted mean of $-0.5 \pm 3.8 \epsilon_{\text{Hf}}(t)$, defined by 5 grains. Two Proterozoic (1.1 Ga) zircon grains had $\epsilon_{\text{Hf}}(t)$ values of 13.7 and 6.7. Zircon $\delta^{18}\text{O}$ values range between 5.04 and 5.59 , with a weighted mean of $5.3 \pm 0.4 \text{ ‰}$, defined by 10 grains.

Sample **Cooke** is a granodiorite from the western flank of the Cooke's Peak pluton in the Cookes Range, New Mexico. 7 grains yielded a zircon U-Pb age of 39.4 ± 1.5 Ma, excluding 8 zircon grains with Proterozoic ages (1.5–1.6 Ga) and one older grain (42 Ma), which may be a partially mixed age domain analysis. All zircon analyses used to calculate the crystallization age have U/Th ratios ≤ 1 . The zircon U-Pb age is consistent with previous K-Ar ages (Loring and Loring, 1980; McLemore et al., 2001). Zircons are elongate, prismatic, with large premagmatic, xenocrystic cores and thin mantling overgrowths and rims that are occasionally oscillatory zoned and generally have high CL emissions (bright). Inclusions are common in zircons. Zircon $\epsilon_{\text{Hf}}(t)$ values range between -10.2 and -5.6 for zircons with crystallization ages, with a weighted mean

of $-7.8 \pm 1.9 \text{ } \epsilon\text{Hf(t)}$, defined by 5 grains. Six Proterozoic zircon grains had $\epsilon\text{Hf(t)}$ values that range from 6.1 to 13.2. Zircon $\delta^{18}\text{O}$ values from rims and overgrowths range between 3.47 and 5.59, with a weighted mean of $5.1 \pm 1.2 \text{ } \text{‰}$, defined by 10 grains. Zircon $\delta^{18}\text{O}$ values from zircon cores, which are interpreted to be premagmatic, range from 2.76 to $3.29 \text{ } \text{‰}$.

Sample **UTEP** is a monzodiorite to hypabyssal trachyandesite from the “Campus andesite” from the campus of the University of Texas at El Paso (Barnes et al., 1991). 19 grains yielded a zircon U-Pb age of $46.7 \pm 2.2 \text{ Ma}$, excluding one older grain with an age of 57 Ma, which may include part of an inherited age domain in the analysis. No older age domains were measured. The zircon U-Pb crystallization age in agreement with a previously reported biotite K-Ar age of $48.2 \pm 1.7 \text{ Ma}$ (Hoover et al., 1988). The average U/Th ratio of zircon grains used to calculate the age is 2.4 ± 1.3 . Zircon $\epsilon\text{Hf(t)}$ values range between -6.6 and -1.0 for zircons with crystallization ages, with a weighted mean of $-3.9 \pm 2.1 \text{ } \epsilon\text{Hf(t)}$, defined by 5 grains.

Sample **Tyrone** is a quartz monzonite from the Tyrone mine in New Mexico (DuHamel et al., 1995; McLemore, 2008). Leveille and Stegen (2012) report an emplacement age of 55.5 Ma. Zircon $\epsilon\text{Hf(t)}$ values range between -6.6 and -1.0 for zircons with crystallization ages, with a weighted mean of $-5.5 \pm 1.7 \text{ } \epsilon\text{Hf(t)}$, defined by 10 grains.

Sample **Dragoon** is a quartz monzonite from the Texas Canyon pluton in the Dragoon Mountains, Arizona (Cooper and Silver, 1964). 8 grains yielded a zircon U-Pb age of $55.57 \pm 1.9 \text{ Ma}$, excluding 4 older grains, consisting of two Cretaceous ages (67 and 86 Ma), a Proterozoic age (1.6 Ga), and a Paleozoic age (320 Ma). The average U/Th ratio of zircon grains used to calculate the age is 4.0 ± 2.5 . The zircon U-Pb age is consistent with previous biotite and muscovite K-Ar ages (Marvin et al., 1978). Zircons are elongate, euhedral, with xenocrystic to zoned cores and oscillatory zoned rims and overgrowths. Zircon $\epsilon\text{Hf(t)}$ values range between -19.1 and -9.3 for zircons with crystallization ages, with a weighted mean of $-12.1 \pm 2.5 \text{ } \epsilon\text{Hf(t)}$, defined by 7 grains. Other measured zircon $\epsilon\text{Hf(t)}$ values are -23.0 for the 86 Ma grain, -10.6 for the Paleozoic grain, and 14.6 for the Proterozoic grain. Zircon $\delta^{18}\text{O}$ values from rims range between 5.88 and $8.22 \text{ } \text{‰}$, with a weighted mean of $6.6 \pm 1.6 \text{ } \text{‰}$, defined by 11 grains. Zircon $\delta^{18}\text{O}$ values from cores, which are interpreted to be premagmatic, range from 8.05 to $9.67 \text{ } \text{‰}$, with a weighted mean of $8.8 \pm 1.46 \text{ } \text{‰}$, defined by 4 grains. The age of the premagmatic zircon grains analyzed for $\delta^{18}\text{O}$ is uncertain.

Sample **San Juan** is a quartz monzonite from the San Juan (Dos Pobres) copper porphyry deposit in the Safford district, Arizona (Robinson and Cook, 1966). Leveille and Stegen (2012) report an emplacement age of 57 Ma. Zircon $\epsilon\text{Hf(t)}$ values range between -4.7 and -1.0 for zircons with crystallization ages, with a weighted mean of $-3.9 \pm 1.2 \text{ } \epsilon\text{Hf(t)}$, defined by 8 grains. Zircon $\epsilon\text{Hf(t)}$ values for Proterozoic grains (1.2–1.5 Ga) range from 1.9 to 11.0.

Sample **Chino** is a granodiorite from the Chino/Santa Rita copper porphyry deposit in New Mexico (Audéat and Pettke, 2006). Leveille and Stegen (2012) report an emplacement age of 55.5 Ma. Zircon $\epsilon\text{Hf(t)}$ values range between -6.1 and -1.6 for zircons with crystallization ages, with a weighted mean of $-4.0 \pm 1.1 \text{ } \epsilon\text{Hf(t)}$, defined by 16 grains.

Sample **Ajo** is a granodiorite from Cornelia pluton, near the town of Ajo, Arizona (Hagstrum et al., 1987). Leveille and Stegen (2012) report an emplacement age of 63 Ma, Zircon $\epsilon\text{Hf(t)}$ values range between -9.8 and -7.8 for zircons with crystallization ages, with a weighted mean of $-8.6 \pm 0.8 \text{ } \epsilon\text{Hf(t)}$, defined by 8 grains.

Cretaceous samples

Sample **Lakeshore** is a granodiorite from the Lakeshore copper porphyry deposit in Arizona (Cook, 1988). Leveille and Stegen (2012) report an emplacement age of 66 Ma. Zircon $\epsilon_{\text{Hf}}(t)$ values range between -13.5 and -8.0 for zircons with crystallization ages, with a weighted mean of $-9.9 \pm 1.6 \epsilon_{\text{Hf}}(t)$, defined by 9 grains.

Sample **Granite Mtn** is a granodiorite from the Granite Pass pluton in the Iron Mountains Intrusive Suite, California (Howard, 2002). 15 grains yielded a zircon U-Pb age of 71.5 ± 2.8 Ma, excluding 8 premagmatic ages consisting of 4 Cretaceous grains (105–144 Ma), and 4 Proterozoic grains (1.4–1.6 Ga). The age is consistent with previously reported muscovite K-Ar ages (Miller and Howard, 1985). The average U/Th ratio of zircon grains used to calculate the age is 2.4 ± 1.9 . Zircons are elongate, prismatic, with angular to sub-rounded xenocrystic premagmatic cores and finely oscillatory zoned overgrowths and rims. Zircon $\epsilon_{\text{Hf}}(t)$ values range between -13.7 and -10.8 for zircons with crystallization ages, with a weighted mean of $-12.3 \pm 1.0 \epsilon_{\text{Hf}}(t)$, defined by 9 grains. Zircon $\epsilon_{\text{Hf}}(t)$ values for Proterozoic grains ranges from 4.3 to 9.3. Zircon $\delta^{18}\text{O}$ values range between 6.07 and 6.38 ‰, with a weighted mean of $6.2 \pm 0.2 \text{ ‰}$, defined by 8 grains.

Sample **Hope** is granodiorite from the Granite Wash pluton in the southern Granite Wash Mountains, Arizona. 22 grains yielded a zircon U-Pb age of 72.7 ± 2.3 Ma excluding 3 older Mesozoic grains (78–86 Ma). No older age domains were measured. Previously published biotite K-Ar and hornblende Ar-Ar ages from the pluton range from 66 to 79 Ma (Reynolds et al., 1989). The average U/Th ratio of zircon grains used to calculate the age is 3.2 ± 1.3 . Zircons are elongate, prismatic, and are oscillatory zoned without premagmatic cores. Zircon $\epsilon_{\text{Hf}}(t)$ values range between -14.7 and -8.3 for zircons with crystallization ages, with a weighted mean of $-11.1 \pm 1.8 \epsilon_{\text{Hf}}(t)$, defined by 10 grains. Zircon $\delta^{18}\text{O}$ values range between 5.37 and 5.81 ‰, with a weighted mean of $5.6 \pm 0.2 \text{ ‰}$, defined by 8 grains.

Sample **JDP** is quartz monzonite from the Diamond Joe pluton in the Hualapai Mountains, Arizona. 8 grains yielded a zircon U-Pb age of 72.8 ± 3.2 Ma, excluding three premagmatic Proterozoic ages (1.4–1.7 Ga). The crystallization age is consistent with a previously reported K-Ar age (Gerla, 1988). The average U/Th ratio of zircon grains used to calculate the age is 3.6 ± 1.4 . Zircon $\epsilon_{\text{Hf}}(t)$ values range between -15.1 and -11.2 for zircons with crystallization ages, with a weighted mean of $-13.5 \pm 1.5 \epsilon_{\text{Hf}}(t)$, defined by 5 grains. Zircon $\epsilon_{\text{Hf}}(t)$ values for Proterozoic grains ranges from 1.7 to 5.0.

Sample **Coxcomb** is granodiorite from the Coxcomb Intrusive Suite, part of Cadiz Valley Batholith, California (Howard, 2002). 19 grains yielded a zircon U-Pb age of 76.1 ± 3.4 Ma, excluding 6 older Permian to Cretaceous grains (288–89 Ma). The average U/Th ratio of zircon grains used to calculate the age is 1.8 ± 0.8 . The calculated age is broadly consistent with previously reported zircon U-Pb ages (Calzia et al., 1986; Barth et al., 2004). Zircons are elongate, euhedral, with angular to premagmatic cores and faintly oscillatory zones overgrowths and rims. Inclusions in zircon are common. Zircon $\epsilon_{\text{Hf}}(t)$ values range between -14.0 and -7.5 for zircons with crystallization ages, with a weighted mean of $-11.0 \pm 2.0 \epsilon_{\text{Hf}}(t)$, defined by 8 grains. Zircon $\epsilon_{\text{Hf}}(t)$ values for premagmatic Mesozoic grains ranges from -11.6 to -8.2 . Zircon $\delta^{18}\text{O}$ values range between 5.35 and 7.26 ‰, with a weighted mean of $6.9 \pm 1.1 \text{ ‰}$, defined by 11 grains.

Sample **Yucca** is granodiorite from the previously undated(?) Cactus granite pluton in the hills north of Yucca Valley, California (Dibblee, 1967b). 12 grains yielded a zircon U-Pb age of 76.9 ± 3.1 Ma. Premagmatic zircon grains include 8 Mesozoic grains (234–97 Ma) and two Proterozoic grains (1.6–1.7 Ga). The average U/Th ratio of zircon grains used to calculate the age is 4.2 ± 2.3 . Zircons are elongate, prismatic, and have sub-rounded xenocrystic cores with oscillatory zoned overgrowths and rims. Zircon $\epsilon\text{Hf(t)}$ values range between –12.0 and –5.7 for zircons with crystallization ages, with a weighted mean of $-8.3 \pm 2.1 \epsilon\text{Hf(t)}$, defined by 8 grains. Zircon $\epsilon\text{Hf(t)}$ values for premagmatic Mesozoic grains ranges from –12.5 to –4.8, excluding 1 very negative analysis ($-31.9 \epsilon\text{Hf(t)}$, 173 Ma), which is interpreted to have inadvertently sampled an older age domain based on similarity to other $\epsilon\text{Hf(0)}$ values of Proterozoic grain analyses. Two Proterozoic zircon analyses yielded $\epsilon\text{Hf(t)}$ values of –1.5–1.8. Zircon $\delta^{18}\text{O}$ values range between 6.31 and 7.96 ‰, with a weighted mean of $7.0 \pm 1.2 \text{ ‰}$, defined by 9 grains.

Sample **Joshua** is a mildly deformed monzogranite, perhaps correlative with sheeted Panorama granite, that is related to the (81–75 Ma) Palms granite in Joshua Tree National Park (Paterson et al., 2017). 9 grains yielded a zircon U-Pb age of 77.0 ± 5.2 Ma, excluding 3 premagmatic Mesozoic grains (113–221 Ma) and 5 Proterozoic premagmatic ages (1.6–1.7 Ga). The average U/Th ratio of zircon grains used to calculate the age is 3.7 ± 2.1 . Zircons are elongate, prismatic, and have sub-rounded xenocrystic cores with oscillatory zoned overgrowths and rims. Zircon $\epsilon\text{Hf(t)}$ values range between –23.2 and –9.8 for zircons with crystallization ages, with a weighted mean of $-13.8 \pm 6.3 \epsilon\text{Hf(t)}$, defined by 4 grains. Zircon $\epsilon\text{Hf(t)}$ values for premagmatic Mesozoic grains ranges from –21.3 to –16.9 and $\epsilon\text{Hf(t)}$ values for premagmatic Proterozoic grains ranges from –0.8–9.3. Zircon $\delta^{18}\text{O}$ values from zircon rims range between 5.58 and 7.28 ‰, with a weighted mean of $6.2 \pm 1.2 \text{ ‰}$, defined by 8 grains. A single zircon $\delta^{18}\text{O}$ analysis from an undated zircon core yielded a value of 2.0 ‰.

Sample **Prescott** is quartz monzonite from the Copper Basin porphyry copper deposit, Arizona. 12 grains yielded a zircon U-Pb age of 80.2 ± 6.7 Ma, excluding 1 young grain (41 Ma), which we interpret to be affected by minor Pb loss, and 2 older premagmatic grains (95 Ma and 1.6 Ga). The calculated crystallization age is broadly consistent with previously reported biotite K-Ar ages (73–76 Ma; Christman, 1978). The average U/Th ratio of zircon grains used to calculate the age is 1.6 ± 1.0 . Zircon $\epsilon\text{Hf(t)}$ values range between –10.3 and –8.2 for zircons with crystallization ages, with a weighted mean of $-9.3 \pm 0.9 \epsilon\text{Hf(t)}$, defined by 5 grains. A single analysis of a Proterozoic grain yielded a zircon $\epsilon\text{Hf(t)}$ value of 7.4.

Sample **Rosamond** is quartz monzonite from the Rosamond Hills, California. 18 grains yielded a zircon U-Pb age of 88.4 ± 2.6 Ma, excluding four older Mesozoic grains (97–177 Ma) and three Proterozoic grains (1.4–1.7 Ga). The calculated crystallization age is broadly consistent with a previously reported zircon Pb-alpha age of $95 \text{ Ma} \pm 10$ (Dibblee, 1967a). The average U/Th ratio of zircon grains used to calculate the age is 2.5 ± 0.7 , Zircon $\epsilon\text{Hf(t)}$ values range between –7.6 and –2.2 for zircons with crystallization ages, with a weighted mean of $-4.9 \pm 2.0 \epsilon\text{Hf(t)}$, defined by 9 grains. Zircon $\epsilon\text{Hf(t)}$ values of Proterozoic grains range from 2.5 to 13.1.

Sample **Riverside** is quartz monzodiorite from the West Riverside Mountains, California. 17 grains yielded a zircon U-Pb age of 100.8 ± 3.6 Ma, excluding 1 younger grain (95 Ma), which is interpreted to have been affected by minor Pb loss, two older Cretaceous ages (112–113), and three Proterozoic ages (1.7 Ga). The calculated age is consistent with a previous zircon U-Pb age (99 Ma) reported for the Target granite in the southeastern Turtle Mountains, considered equivalent to the rocks in the West Riverside Mountains (Allen et al., 1995). The

average U/Th ratio of zircon grains used to calculate the age is 2.0 ± 0.5 . Zircons are elongate, euhedral, have sub-rounded pre-magmatic xenocrystic cores, with finely oscillatory zones overgrowths and rims. Zircon $\epsilon\text{Hf(t)}$ values range between -12.2 and -2.1 for zircons with crystallization ages, with a weighted mean of $-6.1 \pm 3.6 \epsilon\text{Hf(t)}$, defined by 9 grains. Zircon $\epsilon\text{Hf(t)}$ values of Proterozoic grains range from 0.1 to 3.9. Zircon $\delta^{18}\text{O}$ values from zircon rims range between 5.07 and 5.78 ‰, with a weighted mean of $5.4 \pm 0.5 \text{ ‰}$, defined by 7 grains.

Sample **Keene** is tonalite from the Bear Valley Suite in the Tehachapi complex in the southern Sierra Nevada. 21 grains yielded a zircon U-Pb age of $102.7 \pm 3.5 \text{ Ma}$, excluding 3 older premagmatic grains (114, 386, and 1409 Ma). The average U/Th ratio of zircon grains used to calculate the age is 3.1 ± 1.4 . The calculated age is consistent with previously reported zircon U-Pb ages from the area (Saleeby et al., 2007). Zircons are elongate, euhedral, with a range of textures including grains with and without premagmatic cores, zoned and unzoned cores and rims, and a range of CL emission responses. Zircon $\epsilon\text{Hf(t)}$ values range between 0.2 and 7.7 for zircons with crystallization ages, with a weighted mean of $5.8 \pm 2.1 \epsilon\text{Hf(t)}$, defined by 10 grains. Zircon $\epsilon\text{Hf(t)}$ values of Proterozoic grains range from -1.1 – 7.6 . Zircon $\delta^{18}\text{O}$ values from zircon rims range between 6.50 and 7.56 ‰, with a weighted mean of $7.0 \pm 0.6 \text{ ‰}$, defined by 9 grains.

Jurassic-Triassic samples

Sample **Strawberry** is an undeformed granodiorite in the Granite Mountains located northwest of Lucerne Lake, California. 22 grains yielded a zircon U-Pb age of $148.8 \pm 4.7 \text{ Ma}$, excluding one young grain (134 Ma) and three older Jurassic grains (156–162 Ma). All zircon grains used to calculate the crystallization age have a U/Th ratio < 2 . To our knowledge, the granodiorite sampled in the Granite Mountains has not been previously dated, but was assigned a Jurassic age by Schermer and Busby (1994) based on regional correlations. Zircons are elongate, euhedral, do not have xenocrystic cores, and are oscillatory zoned with generally light CL emission. Zircon $\epsilon\text{Hf(t)}$ values range between -12.6 and -7.7 for zircons with crystallization ages, with a weighted mean of $-9.6 \pm 1.7 \epsilon\text{Hf(t)}$, defined by 10 grains. Zircon $\delta^{18}\text{O}$ values from zircon rims range between 4.74 and 6.09 ‰, with a weighted mean of $5.3 \pm 0.9 \text{ ‰}$, defined by 8 grains.

Sample **S_Barstow** is quartz monzonite from the eastern end of Stoddard Ridge, southwest of Barstow, California. 22 grains yielded a zircon U-Pb age of $161.2 \pm 4.6 \text{ Ma}$, excluding 2 young grains (118–142 Ma) and one Proterozoic grain (1.2 Ga). All zircon grains used to calculate the crystallization age have a U/Th ratio < 2 . To our knowledge, the quartz monzonite pluton has not been previously dated, but was assigned a Jurassic age by Schermer and Busby (1994) and is similar in age to the nearby Sidewinder and Turtle Mountain tuffs (Schermer et al., 2002; Fohey-Breting et al., 2010). Zircons are elongate, euhedral, with large, angular, dark CL emission cores and thin, light CL emission, finely oscillatory zoned rims. Zircon $\epsilon\text{Hf(t)}$ values range between -10.2 and -2.6 for zircons with crystallization ages, with a weighted mean of $-6.0 \pm 2.3 \epsilon\text{Hf(t)}$, defined by 10 grains. A single analysis of a Proterozoic grain had a zircon $\epsilon\text{Hf(t)}$ value of -0.4 . Zircon $\delta^{18}\text{O}$ values from zircon rims range between 4.76 and 5.65 ‰, with a weighted mean of $5.4 \pm 0.6 \text{ ‰}$, defined by 9 grains.

Sample **Quartzite** is a quartz monzonite from near the Julian mine on Granite Mountain, west of Quartzsite, Arizona. 23 grains yielded a zircon U-Pb age of $165.0 \pm 4.2 \text{ Ma}$, excluding 2 younger grains (145, 157 Ma), which are interpreted to have been affected by minor Pb loss. No older age domains were measured. The average U/Th ratio of zircon grains used to calculate the

age is 2.3 ± 2.0 . Zircons are equant, euhedral, with few xenocrystic cores and broadly zones to un-zoned rims and overgrowths that tend to have dark CL emissions. Zircon $\epsilon_{\text{Hf}}(t)$ values range between -11.9 and -8.6 for zircons with crystallization ages, with a weighted mean of $-10.4 \pm 1.3 \epsilon_{\text{Hf}}(t)$, defined by 10 grains. Zircon $\delta^{18}\text{O}$ values from zircon rims range between 4.80 and 5.63 ‰ , with a weighted mean of $5.2 \pm 0.5 \text{ ‰}$, defined by 9 grains.

Sample **Finger** is a granodiorite from Lone Mountain in the Harquahala plain, Arizona. 20 grains yielded a zircon U-Pb age of 171.0 ± 5.0 Ma. No older age domains were measured. The average U/Th ratio of zircon grains used to calculate the age is 1.2 ± 0.6 . Zircons are equant, euhedral, very broadly oscillatory zoned to not zoned, and do not contain xenocrystic cores. Zircon $\epsilon_{\text{Hf}}(t)$ values range between -12.4 and -7.2 for zircons with crystallization ages, with a weighted mean of $-9.5 \pm 1.5 \epsilon_{\text{Hf}}(t)$, defined by 10 grains.

Sample **29-Palms** is a quartz monzonite from the Twentynine Palms pluton, California. Barth and Wooden (2006) reported a zircon U-Pb crystallization age of 234 Ma. Zircons are elongate, euhedral, have dark CL emission, and have well-defined premagmatic cores with finely oscillatory zoned rims and overgrowths. Only the finely zoned rims were targeted for O isotope analyses. Zircon $\delta^{18}\text{O}$ values from zircon rims range between 4.87 and 5.44 ‰ , with a weighted mean of $5.2 \pm 0.4 \text{ ‰}$, defined by 10 grains.

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TABLE DR1

Supplementary Table DR1. U-Pb geochronologic analyses.

Analysis	Isotope ratios												Apparent ages (Ma)							
	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U	± (%)	error corr.	206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)	206Pb* 207Pb*	± (Ma)	207Pb* 235U	± (Ma)	Best age (Ma)	± (Ma)
	*analyses highlighted in red were not included in mean age calculations																			
Sample: UTEP																				
DAFOV_CHAPMAN_U_J_P_B-Spot 23	108.051	744.0028	2.298219	37.28613	10.95113	0.02573	15.8894	0.006958	11.51285	0.724562	44.69863	5.128286	25.79516	4.047092	1517.553	366.376	44.69863	5.128286		
DAFOV_CHAPMAN_U_J_P_B-Spot 84	152.2866	939.9296	1.760716	31.15847	9.695977	0.031096	17.48065	0.007027	14.54514	0.832071	45.14191	6.543023	31.09365	5.353043	956.2713	285.1803	45.14191	6.543023		
DAFOV_CHAPMAN_U_J_P_B-Spot 38	424.6799	27279.68	1.336427	20.45576	4.801248	0.047808	5.375506	0.007093	2.417452	0.449716	45.5617	1.097549	47.41903	2.490413	142.3879	112.7568	45.5617	1.097549		
DAFOV_CHAPMAN_U_J_P_B-Spot 72	196.2147	8524.039	2.179588	21.99554	7.742566	0.04448	8.458983	0.007093	3.406916	0.402757	45.5803	1.547405	44.18834	3.657732	30.71194	187.9466	45.5803	1.547405		
DAFOV_CHAPMAN_U_J_P_B-Spot 69	103.6118	2752.369	1.736998	19.73647	9.799782	0.049812	10.12143	0.00713	2.531344	0.250097	45.80158	1.155287	49.35932	4.876424	225.7601	226.9846	45.80158	1.155287		
DAFOV_CHAPMAN_U_J_P_B-Spot 73	296.7338	5457.131	5.289385	22.28383	7.364768	0.044278	7.697084	0.007156	2.237253	0.290662	45.96668	1.024733	43.99199	3.313808	62.38014	179.8321	45.96668	1.024733		
DAFOV_CHAPMAN_U_J_P_B-Spot 4	477.3935	8017.972	3.542547	20.61705	4.139425	0.047931	4.802756	0.0234593	0.507103	46.03743	11.17244	47.53824	2.230572	123.8795	46.03743	45.3743	123.8795			
DAFOV_CHAPMAN_U_J_P_B-Spot 59	245.4356	2498.491	1.483361	21.29355	6.139787	0.046432	7.373751	0.007171	4.083531	0.553793	46.06104	1.874213	46.08485	3.322232	47.34711	146.7923	46.06104	1.874213		
DAFOV_CHAPMAN_U_J_P_B-Spot 33	227.663	1121.308	1.326427	30.82662	6.990035	0.03218	7.606313	0.007195	2.999234	0.394303	46.21441	1.381122	32.16075	2.407917	924.9432	203.9993	46.21441	1.381122		
DAFOV_CHAPMAN_U_J_P_B-Spot 64	111.3459	5658.087	1.9078	19.29688	10.26835	0.05179	10.65732	0.007219	2.852961	0.2677	46.36776	1.318108	51.06673	5.307801	277.5792	235.6697	46.36776	1.318108		
DAFOV_CHAPMAN_U_J_P_B-Spot 3	810.5252	60131.42	0.741514	21.51030	3.407425	0.046372	3.947617	0.007241	1.993272	0.50493	45.51111	0.923756	46.02624	1.776383	20.84131	81.82877	45.51111	0.923756		
DAFOV_CHAPMAN_U_J_P_B-Spot 83	183.3382	4600.677	1.879434	23.7433	7.868977	0.04209	8.479777	0.007248	3.160037	0.372655	46.55471	1.465847	41.86213	3.477643	219.5024	198.1753	45.55471	1.465847		
DAFOV_CHAPMAN_U_J_P_B-Spot 93	1087.954	7232.949	4.194138	22.10876	2.592202	0.045346	2.979184	0.007271	1.468341	0.492867	46.70331	0.838286	45.03028	1.312223	43.17688	63.00936	46.70331	0.838286		
DAFOV_CHAPMAN_U_J_P_B-Spot 75	1044.165	44651.98	5.633817	21.24208	2.97984	0.047204	3.486495	0.007272	1.810028	0.519154	46.71102	0.842427	46.83338	1.59576	53.11003	71.09967	46.71102	0.842427		
DAFOV_CHAPMAN_U_J_P_B-Spot 1	144.2003	2370.434	3.148577	21.46583	8.641088	0.047841	9.531247	0.007249	4.021972	47.84165	1.917056	47.45056	4.418616	27.76052	207.5084	47.84165	1.917056			
DAFOV_CHAPMAN_U_J_P_B-Spot 81	694.2372	17152.46	2.299249	21.89484	3.384967	0.046989	3.758957	0.007467	1.634555	0.348841	47.92175	0.780401	46.62481	1.712978	19.5586	81.89132	47.92175	19.5586		
DAFOV_CHAPMAN_U_J_P_B-Spot 7	491.2329	6862.777	2.151606	21.5595	4.038842	0.048806	6.189738	0.007632	4.690481	0.577883	49.00919	2.290051	48.38547	2.924704	17.56549	97.06194	49.00919	2.290051		
DAFOV_CHAPMAN_U_J_P_B-Spot 37	652.7941	13290.03	1.709496	21.87957	2.351809	0.048319	2.752843	0.007667	1.420243	0.515918	49.23909	0.696651	47.91341	1.288346	17.91128	50.4333	47.91341	0.696651		
DAFOV_CHAPMAN_U_J_P_B-Spot 48	2888.958	2572.579	3.210796	21.45718	0.201867	0.049734	2.748124	0.007205	0.682111	0.497015	49.28683	0.232073	47.82879	29.01499	48.20961	49.10615	49.28683	29.01499		
DAFOV_CHAPMAN_U_J_P_B-Spot 70	76.20503	807.3859	2.353331	28.91571	10.70378	0.042655	11.56051	0.008945	4.367437	0.377789	57.4095	2.496192	42.41275	4.802174	742.0603	300.5784	57.4095	2.496192		
Sample: JDP																				
DAFOV_CHAPMAN_U_J_P_B-Spot 85	1045.854	1083.942	2.395164	22.48568	2.557987	0.066338	3.218391	0.010189	19.53138	0.606863	69.36614	1.347553	65.21855	2.033002	84.42315	62.67198	69.36614	1.347553		
DAFOV_CHAPMAN_U_J_P_B-Spot 103	1216.858	2380.93	3.994577	21.02217	2.794652	0.073832	5.61335	0.011257	4.868225	0.867258	72.16185	3.493412	72.3296	3.918894	77.85555	66.38149	72.16185	3.493412		
DAFOV_CHAPMAN_U_J_P_B-Spot 53	1040.221	176910.4	2.171916	21.14384	3.461621	0.073485	6.340899	0.011269	5.312644	0.837888	72.23741	3.816294	72.00092	4.407422	64.14843	82.44628	72.23741	3.816294		
DAFOV_CHAPMAN_U_J_P_B-Spot 22	382.4831	1582.20	3.196042	20.72023	6.350892	0.0751	9.121968	0.011286	5.648018	0.717829	72.34587	4.710731	73.52787	6.470187	112.1432	150.0048	72.34587	4.710731		
DAFOV_CHAPMAN_U_J_P_B-Spot 51	1160.224	142150.2	2.904557	20.12939	3.498484	0.078642	5.550938	0.011478	4.25604	0.772508	73.57039	3.133808	76.8673	0.478060	180.5936	81.54436	73.57039	3.133808		
DAFOV_CHAPMAN_U_J_P_B-Spot 95	1821.027	42055.69	3.726252	20.88349	2.134214	0.076368	3.030016	0.011567	2.150843	0.0708496	74.13068	1.585417	74.72412	2.182851	93.60047	50.55088	74.13068	1.585417		
DAFOV_CHAPMAN_U_J_P_B-Spot 10	1580.788	4070.15	6.355654	20.47457	2.151697	0.078095	2.899304	0.011597	1.943236	0.0670242	74.327	14.36054	76.35196	2.132497	140.1886	50.53715	74.327	14.36054		
DAFOV_CHAPMAN_U_J_P_B-Spot 108	1441.217	1980.45	6.700129	20.58786	2.22785	0.077797	3.938943	0.011616	3.248378	0.824683	74.45246	2.404585	76.07137	2.886923	127.2612	52.40389	74.45246	2.404585		
DAFOV_CHAPMAN_U_J_P_B-Spot 25	575.8671	23726.3	6.87788	11.31198	1.184479	0.072649	3.694115	0.013974	2.5949071	0.9472011	124.7353	39.68856	130.1357	27.10394	139.1218	22.72776	139.1218	22.72776		
DAFOV_CHAPMAN_U_J_P_B-Spot 49	386.8001	13075.71	2.232472	9.743704	2.130187	0.0730119	1.6	0.000000	2.63206	0.216551	2.326571	0.883886	149.7771	31.09489	157.1561	21.04475	167.2212	22.75968		
DAFOV_CHAPMAN_U_J_P_B-Spot 19	595.9442	69087.01	1.581405	9.736064	0.904343	3.696607	2.392738	0.0261027	2.215256	0.925825	149.094	29.56012	157.0636	19.12473	167.1512	167.1512	167.1512	167.1512		
Sample: Buckeye																				
DAFOV_CHAPMAN_U_J_P_B-Spot 39	161.6789	321.681	0.781386	308.4391	10.95316	0.001227	12.29824	0.002744	5.592405	0.454732	17.66278	0.986422	1.244605	0.152971	0	0	17.66278	0.986422		
DAFOV_CHAPMAN_U_J_P_B-Spot 11	481.9998	1764.649	0.1001784	25.02821	6.845053	0.016492	7.48951	0.009541	3.03941	0.0405822	19.26969	0.584819	16.60949	1.233851	353.8473	177.0281	19.26969	0.584819		
DAFOV_CHAPMAN_U_J_P_B-Spot 101	1016.221	10345.89	2.263928	20.9128	4.405274	0.019994	4.820232	0.003033	1.956578	0.405909	19.52463	0.381437	20.10641	0.959643	90.24895	104.439	19.52463	0.381437		
DAFOV_CHAPMAN_U_J_P_B-Spot 57	805.8882	4973.246	1.739264	22.74555	5.877231	0.018444	6.555685	0.003043	2.904336	0.597293	19.53944	0.56792	18.55675	1.205471	112.6501	144.8542	19.53944	0.56792		
DAFOV_CHAPMAN_U_J_P_B-Spot 102	382.9614	3303.985	1.12831	22.09869	7.367697	0.019192	7.849828	0.0027687	0.708679	0.450626	19.79848	0.535455	19.30238	1.500894	42.06881	19.70404	19.79848	0.535455		
DAFOV_CHAPMAN_U_J_P_B-Spot 47	478.7732	2168.387	1.140334	25.82741	7.469388	0.016448	8.159112	0.003081	3.28317	0.402393	19.80349	0.650688	13.461089	19.997	6.267071	12.64467	0.85591	12.64467		
DAFOV_CHAPMAN_U_J_P_B-Spot 46	509.1743	1004.671	2.28271	14.35123	6.043848	0.012531	6.811169	0.003107	3.140689	0.461109	19.997	0.627071	12.64467	0.85591	123.0791	189.1536	19.997	0.627071		
DAFOV_CHAPMAN_U_J_P_B-Spot 46	641.5562	3158.257	1.347529	23.66382	6.373477	0.018117	6.658088	0.003109	1											

TABLE DR1

Dafov1 17March2016-S. BARSTOW Spot 62	1255	5586	0.7	16.8710	3.1	0.2026	3.7	0.0248	2.1	0.55	157.9	3.2	187.3	6.4	577.2	67.5	157.9	3.2
Dafov1 17March2016-S. BARSTOW Spot 51	621	11013	1.3	18.9441	1.1	0.1809	2.3	0.0248	2.0	0.89	158.2	3.2	168.8	3.6	319.7	24.1	158.2	3.2
Dafov1 17March2016-S. BARSTOW Spot 63	1045	100342	0.5	20.0110	0.8	0.1712	2.0	0.0249	1.8	0.91	158.3	2.8	160.5	2.9	193.7	18.5	158.3	2.8
Dafov1 17March2016-S. BARSTOW Spot 67	1292	358485	0.7	19.9450	0.7	0.1719	1.8	0.0249	1.7	0.91	158.3	2.6	161.0	2.7	201.4	16.9	158.3	2.6
Dafov1 17March2016-S. BARSTOW Spot 66	376	123036	0.9	18.8582	2.9	0.1819	3.3	0.0249	1.7	0.50	158.4	2.6	169.7	5.2	329.9	65.2	158.4	2.6
Dafov1 17March2016-S. BARSTOW Spot 68	240	20254	1.1	20.2147	1.2	0.1702	2.3	0.0250	2.0	0.86	158.9	3.1	159.6	3.4	170.1	27.4	158.9	3.1
Dafov1 17March2016-S. BARSTOW Spot 59	826	45115	0.7	20.4535	0.6	0.1688	2.1	0.0250	2.0	0.96	159.4	3.2	158.4	3.1	142.7	13.6	159.4	3.2
Dafov1 17March2016-S. BARSTOW Spot 49	545	50679	0.6	19.9249	0.8	0.1739	2.1	0.0251	1.9	0.91	160.0	3.0	162.8	3.1	203.7	19.5	160.0	3.0
Dafov1 17March2016-S. BARSTOW Spot 64	1251	27048	0.6	18.6454	1.2	0.1864	2.2	0.0252	1.8	0.83	160.5	2.9	173.6	3.5	355.6	28.1	160.5	2.9
Dafov1 17March2016-S. BARSTOW Spot 69	1899	134526	0.6	20.4534	0.6	0.1708	1.6	0.0253	1.5	0.93	161.3	2.3	160.1	2.3	142.7	13.4	161.3	2.3
Dafov1 17March2016-S. BARSTOW Spot 48	418	41379	0.9	20.3213	1.0	0.1722	2.1	0.0254	1.8	0.88	161.6	2.9	161.3	3.1	157.8	23.0	161.6	2.9
Dafov1 17March2016-S. BARSTOW Spot 53	372	19443	0.9	20.8779	1.2	0.1678	2.1	0.0254	1.8	0.83	161.8	2.8	157.5	3.1	94.2	28.0	161.8	2.8
Dafov1 17March2016-S. BARSTOW Spot 60	76	16569	0.6	20.0174	1.7	0.1755	3.2	0.0255	2.7	0.85	162.2	4.3	164.2	4.8	193.0	38.7	162.2	4.3
Dafov1 17March2016-S. BARSTOW Spot 46	794	71753	0.6	20.1727	0.6	0.1745	1.8	0.0255	1.7	0.94	162.6	2.7	163.4	2.7	174.9	14.0	162.6	2.7
Dafov1 17March2016-S. BARSTOW Spot 57	424	27207	0.9	20.6649	0.9	0.1714	2.2	0.0257	2.0	0.92	163.5	3.3	160.7	3.3	118.4	20.2	163.5	3.3
Dafov1 17March2016-S. BARSTOW Spot 50	530	38318	0.7	20.3657	1.0	0.1744	2.1	0.0258	1.8	0.87	164.0	2.9	163.2	3.1	152.7	23.6	164.0	2.9
Dafov1 17March2016-S. BARSTOW Spot 47	522	15738	0.7	20.6810	0.9	0.1728	2.0	0.0259	1.8	0.89	165.0	3.0	161.9	3.1	116.6	22.2	165.0	3.0
Dafov1 17March2016-S. BARSTOW Spot 65	40	17833	0.6	21.5691	2.7	0.1665	4.6	0.0261	3.8	0.81	165.8	6.2	156.4	6.7	16.5	65.0	165.8	6.2
Dafov1 17March2016-S. BARSTOW Spot 56	326	9058	0.8	19.7870	1.8	0.1821	2.9	0.0261	2.3	0.78	166.3	3.7	169.9	4.6	219.8	42.4	166.3	3.7
Dafov1 17March2016-S. BARSTOW Spot 70	223	8747	1.5	21.0258	1.4	0.1748	2.6	0.0267	2.2	0.85	169.6	3.6	163.5	3.9	77.4	32.2	169.6	3.6
Dafov1 17March2016-S. BARSTOW Spot 55	1128	360677	44.2	12.4754	1.2	2.3837	2.4	0.02157	2.0	0.87	1259.0	23.4	1237.7	16.9	1200.9	23.2	1200.9	23.2
Sample: Snaggletooth																		
Dafov1 17March2016-SNAGGLETOOTH Spot 34	54	296	0.9	-153.0944	69.4	-0.0027	69.5	0.0030	4.4	0.06	19.0	0.8	2.7	1.9	0.0	0.0	19.0	0.8
Dafov1 17March2016-SNAGGLETOOTH Spot 17	48	278	1.2	-113.7720	157.5	-0.0036	157.5	0.0030	3.7	0.02	19.4	0.7	3.7	5.9	0.0	0.0	19.4	0.7
Dafov1 17March2016-SNAGGLETOOTH Spot 23	116	1935	1.1	22.9464	9.7	0.0186	10.0	0.0031	2.6	0.26	19.9	0.5	18.7	1.9	134.3	239.3	19.9	0.5
Dafov1 17March2016-SNAGGLETOOTH Spot 30	117	643	0.9	42.9914	12.6	0.0099	13.0	0.0031	3.1	0.24	20.0	0.6	10.0	1.3	2022.0	477.2	20.0	0.6
Dafov1 17March2016-SNAGGLETOOTH Spot 27	100	748	1.1	43.1877	14.3	0.0099	14.7	0.0031	3.4	0.23	20.0	0.7	10.0	1.5	2039.2	541.5	20.0	0.7
Dafov1 17March2016-SNAGGLETOOTH Spot 26	88	1043	0.9	29.4127	16.1	0.0146	16.5	0.0031	3.7	0.22	20.1	0.7	14.7	2.4	790.1	458.6	20.1	0.7
Dafov1 17March2016-SNAGGLETOOTH Spot 16	53	257	1.0	-67.5636	32.7	-0.0064	33.0	0.0031	4.0	0.12	20.1	0.8	6.5	2.1	0.0	0.0	20.1	0.8
Dafov1 17March2016-SNAGGLETOOTH Spot 32	41	498	1.3	25.9582	18.9	0.166	19.5	0.0031	4.9	0.25	20.1	1.0	16.7	3.2	449.0	500.5	20.1	1.0
Dafov1 17March2016-SNAGGLETOOTH Spot 25	76	494	0.9	26.2896	34.3	0.164	34.4	0.0031	3.2	0.09	20.1	0.6	16.5	5.6	482.6	931.4	20.1	0.6
Dafov1 17March2016-SNAGGLETOOTH Spot 18	71	794	0.9	7.2372	16.1	0.0596	16.5	0.0031	3.4	0.20	20.2	0.7	58.8	9.4	2204.4	281.9	20.2	0.7
Dafov1 17March2016-SNAGGLETOOTH Spot 31	38	452	1.1	29.3436	17.8	0.0148	18.3	0.0031	4.3	0.24	20.3	0.9	14.9	2.7	783.4	506.8	20.3	0.9
Dafov1 17March2016-SNAGGLETOOTH Spot 21	73	820	0.8	26.3158	9.0	0.0165	9.6	0.0031	3.3	0.35	20.3	0.7	16.6	1.6	485.2	238.4	20.3	0.7
Dafov1 17March2016-SNAGGLETOOTH Spot 29	129	2767	0.9	23.9553	4.8	0.0183	5.5	0.0032	2.8	0.50	20.5	0.6	18.4	1.0	241.9	120.3	20.5	0.6
Dafov1 17March2016-SNAGGLETOOTH Spot 20	71	420	1.0	35.3321	11.6	0.0124	12.4	0.0032	4.3	0.35	20.5	0.9	12.6	1.5	1341.5	374.1	20.5	0.9
Dafov1 17March2016-SNAGGLETOOTH Spot 19	133	1483	0.8	21.3959	5.5	0.0206	6.2	0.0032	2.8	0.46	20.6	0.6	20.7	1.3	35.8	132.0	20.6	0.6
Dafov1 17March2016-SNAGGLETOOTH Spot 35	126	1111	0.9	22.7130	5.3	0.0195	6.0	0.0032	2.8	0.47	20.7	0.6	19.6	1.2	109.1	130.2	20.7	0.6
Dafov1 17March2016-SNAGGLETOOTH Spot 24	126	489	1.1	58.0527	17.5	0.0077	17.7	0.0032	2.8	0.16	20.8	0.6	7.8	1.4	0.0	1225.4	20.8	0.6
Dafov1 17March2016-SNAGGLETOOTH Spot 28	104	3032	0.8	23.2702	3.6	0.0192	4.6	0.0032	2.9	0.63	20.9	0.6	19.3	0.9	169.1	89.3	20.9	0.6
Dafov1 17March2016-SNAGGLETOOTH Spot 33	51	804	1.2	19.1143	6.9	0.0234	8.1	0.0032	4.2	0.52	20.9	0.9	23.5	1.9	299.3	156.8	20.9	0.9
Dafov1 17March2016-SNAGGLETOOTH Spot 22	36	1104	1.1	39.1116	10.7	0.0115	11.6	0.0033	4.5	0.39	21.1	0.9	11.7	1.3	1680.2	371.5	21.1	0.9
Sample: Quartzite																		
Dafov1 17March2016-S. QUARTZITE Spot 49	651	7975	2.1	17.5278	3.1	0.1787	4.0	0.0227	2.5	0.63	144.8	3.6	166.9	6.2	493.6	69.2	144.8	3.6
Dafov1 17March2016-S. QUARTZITE Spot 59	863	25089	1.6	19.9104	0.9	0.1703	3.2	0.0246	3.1	0.96	156.6	4.8	157.9	4.8	205.4	21.6	156.6	4.8
Dafov1 17March2016-S. QUARTZITE Spot 57	1041	230818	10.1	19.8732	0.6	0.1754	1.7	0.0253	1.6	0.94	161.0	2.6	164.1	2.6	209.8	14.0	161.0	2.6
Dafov1 17March2016-S. QUARTZITE Spot 47	455	68535	0.9	19.6916	1.2	0.1772	3.1	0.0253	2.8	0.92	161.1	4.5	165.7	4.7	231.0	28.2	161.1	4.5
Dafov1 17March2016-S. QUARTZITE Spot 64	1522	17684	1.6	18.9172	1.1	0.1857	1.9	0.0255	1.4	0.78	162.2	2.3	172.9	2.9	322.9	26.1	162.2	2.3
Dafov1 17March2016-S. QUARTZITE Spot 60	3690	477094	5.2	20.1919	0.6	0.1741	1.5	0.0255	1.3	0.91	162.3	2.2	163.0	2.2	172.7	14.1	162.3	2.2
Dafov1 17March2016-S. QUARTZITE Spot 65	269	16032	1.3	19.9488	1.1	0.1767	2.0	0.0256	1.7	0.84	162.7	2.7	165.2	3.1	200.9	25.2	162.7	2.7
Dafov1 17March2016-S. QUARTZITE Spot 56	2048	355213	4.3	20.0849	0.7	0.1755	3.3	0.0256	3.2	0.98	162.7	5.1	164.2	4.9	185.1	15.2	162.7	5.1
Dafov1 17March2016-S. QUARTZITE Spot 51	383	8033	1.0	17.2718	2.5	0.2047	3.1	0.0256	1.8	0.58	163.2	2.9	189.1	5.3	525.9	55.1	163.2	2.9
Dafov1 17March2016-S. QUARTZITE Spot 50	1831	289013	1.9	19.9678	0.7	0.1771	1.7	0.0256	1.5	0.92	163.3	2.5	165.6	2.6	198.7	15.6	163.3	2.5
Dafov1 17March2016-S. QUARTZITE Spot 70	369	18989	1.3	20.6585	0.9	0.1714	2.0	0.0257	1.8	0.89	163.5	2.8	160.7	2.9	119.2	21.6	163.5	2.8
Dafov1 17March2016-S. QUARTZITE Spot 68	1045	269699	3.8	19.3551	0.9	0.1832	2.0	0.0257	1.8	0.89	163.7	2.9	170.8	3.1	270.6	20.4	163.7	2.9
Dafov1 17March2016-S. QUARTZITE Spot 63	255	12023	0.8	20.7578	1.2	0.1710	2.3	0.0257	1.9	0.85	163.8	3.1	160.2	3.4	107.9	28.4	163.8	3.1
Dafov1 17March2016-S. QUARTZITE Spot 54	716	119517	0.8	20.2761	0.8	0.1751	1.7	0.0257	1.5	0.88	163.9	2.4	163.8	2.5	163.0	18.2	163.9	2.4
Dafov1 17March2016-S. QUARTZITE Spot 69	1120	44651	2.0															

TABLE DR1

Dafov2 17March2016-STRAWBERRY Spot 68	156	60709	0.8	20.0948	1.4	0.1603	2.7	0.0234	2.3	0.85	148.8	3.3	150.9	3.8	184.0	33.4	148.8	3.3
Dafov2 17March2016-STRAWBERRY Spot 59	310	12205	0.5	20.6737	1.2	0.1560	2.3	0.0234	1.9	0.85	149.0	2.8	147.2	3.1	117.5	28.2	149.0	2.8
Dafov2 17March2016-STRAWBERRY Spot 69	47	2884	1.1	21.8381	2.9	0.1480	4.7	0.0234	3.7	0.79	149.3	5.5	140.1	6.2	13.3	70.6	149.3	5.5
Dafov2 17March2016-STRAWBERRY Spot 65	94	3720	0.6	21.9915	2.2	0.1471	3.1	0.0235	2.2	0.70	149.5	3.2	139.4	4.0	30.3	53.1	149.5	3.2
Dafov2 17March2016-STRAWBERRY Spot 60	240	44784	0.8	18.0512	1.3	0.1796	2.6	0.0235	2.2	0.86	149.8	3.3	167.7	4.0	428.3	29.5	149.8	3.3
Dafov2 17March2016-STRAWBERRY Spot 46	170	77482	1.0	20.6536	1.2	0.1574	2.6	0.0236	2.4	0.89	150.2	3.5	148.4	3.6	119.7	27.9	150.2	3.5
Dafov2 17March2016-STRAWBERRY Spot 63	39	1352	0.7	23.8955	6.7	0.1362	7.5	0.0236	3.2	0.44	150.4	4.8	129.7	9.1	235.6	169.4	150.4	4.8
Dafov2 17March2016-STRAWBERRY Spot 51	184	10309	1.0	20.4414	1.3	0.1597	2.9	0.0237	2.6	0.89	150.8	3.9	150.4	4.1	144.0	31.0	150.8	3.9
Dafov2 17March2016-STRAWBERRY Spot 61	292	7322	1.6	20.9373	1.4	0.1559	2.5	0.0237	2.2	0.85	150.9	3.2	147.1	3.5	87.5	32.0	150.9	3.2
Dafov2 17March2016-STRAWBERRY Spot 47	46	2436	0.6	19.3326	3.1	0.1689	4.8	0.0237	3.7	0.76	150.9	5.4	158.4	7.0	273.3	71.5	150.9	5.4
Dafov2 17March2016-STRAWBERRY Spot 55	20	482	0.6	49.1940	12.5	0.0669	13.3	0.0239	4.5	0.34	152.0	6.7	65.7	8.4	2564.8	540.1	152.0	6.7
Dafov2 17March2016-STRAWBERRY Spot 62	272	9026	0.7	20.8672	2.0	0.1584	3.2	0.0240	2.5	0.79	152.8	3.8	149.3	4.5	95.4	47.1	152.8	3.8
Dafov2 17March2016-STRAWBERRY Spot 49	21	22079	0.8	19.6983	3.7	0.1712	5.3	0.0245	3.8	0.72	155.8	5.9	160.5	7.9	230.2	85.8	155.8	5.9
Dafov2 17March2016-STRAWBERRY Spot 64	77	7154	0.8	21.2719	2.0	0.1617	3.5	0.0250	2.9	0.82	158.9	4.6	152.2	5.0	49.8	48.2	158.9	4.6
Dafov2 17March2016-STRAWBERRY Spot 58	232	9174	1.1	20.5295	1.8	0.1712	3.0	0.0255	2.4	0.81	162.3	3.9	160.5	4.4	133.9	41.6	162.3	3.9
Sample: Finger																		
Dafov2 17March2016-FINGER Spot 17	182	5280	0.7	20.9126	1.3	0.1737	3.0	0.0263	2.7	0.91	167.6	4.5	162.6	4.5	90.3	29.7	167.6	4.5
Dafov2 17March2016-FINGER Spot 22	262	12690	1.1	20.4116	1.3	0.1780	2.9	0.0264	2.5	0.89	167.7	4.2	166.4	4.4	147.4	30.2	167.7	4.2
Dafov2 17March2016-FINGER Spot 30	115	4432	1.2	20.9627	3.7	0.1748	5.1	0.0266	3.4	0.68	169.0	5.7	163.5	7.6	84.6	88.2	169.0	5.7
Dafov2 17March2016-FINGER Spot 31	147	43373	2.2	19.5180	2.1	0.1879	3.6	0.0266	3.0	0.82	169.2	4.9	174.8	5.8	251.4	47.6	169.2	4.9
Dafov2 17March2016-FINGER Spot 23	157	5465	1.0	21.1038	1.4	0.1739	2.9	0.0266	2.5	0.88	169.3	4.2	162.8	4.3	68.7	32.3	169.3	4.2
Dafov2 17March2016-FINGER Spot 25	100	15456	1.4	19.8519	1.7	0.1849	2.8	0.0266	2.3	0.81	169.3	3.8	172.2	4.4	212.2	38.4	169.3	3.8
Dafov2 17March2016-FINGER Spot 19	369	34313	1.1	20.3121	0.9	0.1812	2.5	0.0267	2.3	0.93	169.8	3.8	169.1	3.8	158.9	20.5	169.8	3.8
Dafov2 17March2016-FINGER Spot 26	74	4801	1.3	21.1550	1.7	0.1741	3.1	0.0267	2.6	0.84	169.9	4.3	163.0	4.6	62.9	40.3	169.9	4.3
Dafov2 17March2016-FINGER Spot 20	175	6519	3.5	21.2402	1.6	0.1737	3.4	0.0268	3.0	0.88	170.2	5.1	162.6	5.2	53.3	38.5	170.2	5.1
Dafov2 17March2016-FINGER Spot 35	180	12865	0.9	20.1378	1.3	0.1832	2.6	0.0268	2.3	0.87	170.2	3.9	170.8	4.1	179.0	29.7	170.2	3.9
Dafov2 17March2016-FINGER Spot 16	123	4994	0.8	21.5796	2.2	0.1713	3.8	0.0268	3.1	0.81	170.6	5.2	160.6	5.7	15.4	53.1	170.6	5.2
Dafov2 17March2016-FINGER Spot 21	142	7580	1.0	20.2404	1.7	0.1832	2.9	0.0269	2.3	0.80	171.0	3.9	170.8	4.5	167.1	40.3	171.0	3.9
Dafov2 17March2016-FINGER Spot 33	215	9433	1.0	20.8127	1.2	0.1781	2.8	0.0269	2.5	0.90	171.1	4.3	166.5	4.3	101.6	28.4	171.1	4.3
Dafov2 17March2016-FINGER Spot 24	131	4608	0.8	21.0332	2.3	0.1771	3.5	0.0270	2.6	0.75	171.9	4.4	165.6	5.3	76.6	54.3	171.9	4.4
Dafov2 17March2016-FINGER Spot 29	92	10313	1.1	20.4894	1.7	0.1821	3.6	0.0271	3.2	0.88	172.1	5.4	169.9	5.7	138.5	40.4	172.1	5.4
Dafov2 17March2016-FINGER Spot 34	88	2314	1.2	23.3582	2.8	0.1597	3.9	0.0271	2.8	0.71	172.1	4.8	150.5	5.5	178.5	68.7	172.1	4.8
Dafov2 17March2016-FINGER Spot 27	206	20549	0.9	20.4788	1.0	0.1832	2.5	0.0272	2.3	0.91	173.1	3.9	170.8	4.0	139.7	24.0	173.1	3.9
Dafov2 17March2016-FINGER Spot 28	105	8071	0.8	20.7621	1.4	0.1821	3.1	0.0274	2.7	0.89	174.4	4.7	169.9	4.8	107.4	33.5	174.4	4.7
Dafov2 17March2016-FINGER Spot 32	184	6997	0.8	20.9909	1.5	0.1813	2.9	0.0276	2.5	0.86	175.5	4.4	169.2	4.6	81.4	35.7	175.5	4.4
Dafov2 17March2016-FINGER Spot 18	256	101940	1.7	20.2213	1.0	0.1888	2.3	0.0277	2.0	0.90	176.1	3.6	175.6	3.7	169.3	23.6	176.1	3.6
Sample: Hope																		
Dafov2 17March2016-HOPE Spot 67	1827	31309	2.4	21.0484	0.8	0.0710	2.3	0.0108	2.2	0.94	69.5	1.5	69.6	1.6	74.9	18.4	69.5	1.5
Dafov2 17March2016-HOPE Spot 60	1101	103533	3.4	20.6619	0.9	0.0731	2.2	0.0110	2.0	0.91	70.2	1.4	71.6	1.5	118.8	21.7	70.2	1.4
Dafov2 17March2016-HOPE Spot 68	1014	25439	1.2	20.1545	0.8	0.0752	2.3	0.0110	2.2	0.94	70.5	1.5	73.6	1.7	177.1	18.4	70.5	1.5
Dafov2 17March2016-HOPE Spot 52	2154	33940	1.9	20.9655	0.8	0.0728	2.4	0.0111	2.2	0.94	71.0	1.6	71.4	1.6	84.3	19.3	71.0	1.6
Dafov2 17March2016-HOPE Spot 69	1391	534176	3.1	20.8401	0.8	0.0737	1.9	0.0111	1.7	0.90	71.4	1.2	72.2	1.3	98.5	19.5	71.4	1.2
Dafov2 17March2016-HOPE Spot 61	2035	27755	1.9	20.9231	0.9	0.0735	2.4	0.0112	2.2	0.92	71.5	1.6	72.0	1.6	89.1	21.9	71.5	1.6
Dafov2 17March2016-HOPE Spot 48	1176	133472	3.0	20.4862	0.9	0.0752	2.0	0.0112	1.8	0.90	71.6	1.3	73.6	1.5	138.7	21.2	71.6	1.3
Dafov2 17March2016-HOPE Spot 50	1622	48550	2.6	21.2417	0.8	0.0728	2.1	0.0112	1.9	0.92	71.9	1.4	71.3	1.4	53.1	19.7	71.9	1.4
Dafov2 17March2016-HOPE Spot 59	1005	234897	2.6	20.2874	1.2	0.0763	2.4	0.0112	2.1	0.87	72.0	1.5	74.7	1.7	161.7	27.8	72.0	1.5
Dafov2 17March2016-HOPE Spot 58	622	8135	4.9	19.8808	1.5	0.0781	2.7	0.0113	2.2	0.83	72.2	1.6	76.4	2.0	208.9	34.5	72.2	1.6
Dafov2 17March2016-HOPE Spot 56	1120	173419	3.6	20.6804	0.9	0.0762	1.7	0.0114	1.4	0.84	73.3	1.0	74.6	1.2	116.7	21.3	73.3	1.0
Dafov2 17March2016-HOPE Spot 47	1047	24484	2.9	18.7301	1.2	0.0844	1.8	0.0115	1.4	0.77	73.5	1.0	82.3	1.5	345.4	26.5	73.5	1.0
Dafov2 17March2016-HOPE Spot 46	151	7408	3.0	21.8233	2.7	0.0726	4.3	0.0115	3.3	0.77	73.7	2.4	71.2	2.9	11.7	66.1	73.7	2.4
Dafov2 17March2016-HOPE Spot 62	515	13077	1.8	20.9549	1.3	0.0757	2.5	0.0115	2.2	0.86	73.7	1.6	74.1	1.8	85.5	30.1	73.7	1.6
Dafov2 17March2016-HOPE Spot 49	962	28633	2.5	20.8896	0.9	0.0760	2.4	0.0115	2.2	0.92	73.8	1.6	74.4	1.7	92.9	21.7	73.8	1.6
Dafov2 17March2016-HOPE Spot 54	251	8583	3.1	21.5635	1.5	0.0736	2.7	0.0115	2.3	0.83	73.8	1.7	72.2	1.9	17.1	36.2	73.8	1.7
Dafov2 17March2016-HOPE Spot 55	265	11198	5.7	21.2446	1.3	0.0749	2.8	0.0115	2.5	0.89	73.9	1.8	73.3	2.0	52.8	30.5	73.9	1.8
Dafov2 17March2016-HOPE Spot 65	636	8232	3.0	21.5301	1.0	0.0741	2.4	0.0116	2.1	0.90	74.2	1.6	72.6	1.6	20.9	24.7	74.2	1.6
Dafov2 17March2016-HOPE Spot 63	593	77113	6.0	20.5439	1.3	0.0778	2.5	0.0116	2.1	0.85	74.3	1.5	76.1	1.8	132.3	30.8	74.3	1.5
Dafov2 17March2016-HOPE Spot 51	348	43508	2.9	20.8283	1.6	0.0770	3.5	0.0116	3.1	0.89	74.5	2.3	75.3	2.5	99.9	37.9	74.5	2.3
Dafov2 17March2016-HOPE Spot 56	261	29266	5.5	20.2600	1.4	0.0794	3.1	0										

TABLE DR1

Dafov3 17Mar2016-Barstow T Spot 61	790	4860	3.0	22.2705	1.9	0.0178	2.7	0.0029	1.9	0.70	18.6	0.4	18.0	0.5	60.9	46.9	18.6	0.4
Dafov3 17Mar2016-Barstow T Spot 57	153	484	2.8	63.2188	81.9	0.0063	81.9	0.0029	2.5	0.03	18.6	0.5	6.4	5.2	0.0	682.6	18.6	0.5
Dafov3 17Mar2016-Barstow T Spot 47	393	1809	3.0	25.1098	10.6	0.0159	10.9	0.0029	2.5	0.23	18.6	0.5	16.0	1.7	362.3	274.1	18.6	0.5
Dafov3 17Mar2016-Barstow T Spot 56	76	716	3.8	31.1436	11.5	0.0129	12.1	0.0029	3.8	0.31	18.8	0.7	13.0	1.6	954.9	338.6	18.8	0.7
Dafov3 17Mar2016-Barstow T Spot 65	143	29207	2.6	22.2117	3.6	0.0182	4.4	0.0029	2.6	0.59	18.9	0.5	18.3	0.8	54.5	87.1	18.9	0.5
Dafov3 17Mar2016-Barstow T Spot 60	169	2991	2.7	22.1372	2.6	0.0184	3.8	0.0030	2.7	0.72	19.0	0.5	18.5	0.7	46.3	63.5	19.0	0.5
Dafov3 17Mar2016-Barstow T Spot 50	206	52619	2.1	20.5349	1.1	0.0094	2.4	0.0039	2.1	0.89	18.0	1.9	90.6	2.1	133.3	25.1	89.0	1.9
Dafov3 17Mar2016-Barstow T Spot 49	158	5087	5.1	21.5441	3.5	0.1024	4.1	0.0160	2.2	0.53	102.3	2.2	99.0	3.9	19.3	83.3	102.3	2.2
Dafov3 17Mar2016-Barstow T Spot 67	137	2292	1.0	16.8117	6.6	0.1838	7.0	0.0224	2.4	0.35	142.9	3.5	171.3	11.0	584.8	142.4	142.9	3.5
Sample: Rosamond																		
Dafov3 17Mar2016-Rosamond Spot 17	221	9206	2.2	20.6630	1.3	0.0889	2.3	0.0133	1.9	0.84	85.3	1.6	86.5	1.9	118.7	29.8	85.3	1.6
Dafov3 17Mar2016-Rosamond Spot 14	352	15303	2.2	21.1420	1.1	0.0876	1.8	0.0134	1.5	0.79	86.0	1.2	85.3	1.5	64.4	26.6	86.0	1.2
Dafov3 17Mar2016-Rosamond Spot 25	213	4234	2.4	22.1833	4.1	0.0838	4.7	0.0135	2.2	0.47	86.4	1.9	81.8	3.7	51.4	100.9	86.4	1.9
Dafov3 17Mar2016-Rosamond Spot 34	306	43000	2.1	21.1032	0.9	0.0882	2.1	0.0135	1.9	0.90	86.4	1.6	85.8	1.7	68.8	21.4	86.4	1.6
Dafov3 17Mar2016-Rosamond Spot 11	299	4437	2.0	20.5834	1.5	0.0910	3.0	0.0136	2.6	0.86	87.0	2.2	88.5	2.5	127.8	36.0	87.0	2.2
Dafov3 17Mar2016-Rosamond Spot 29	287	239819	1.9	20.5653	1.3	0.0912	2.5	0.0136	2.1	0.85	87.1	1.9	88.6	2.2	129.8	31.5	87.1	1.9
Dafov3 17Mar2016-Rosamond Spot 23	230	17584	2.4	20.7205	1.1	0.0906	2.1	0.0136	1.7	0.83	87.2	1.5	88.1	1.7	112.1	27.1	87.2	1.5
Dafov3 17Mar2016-Rosamond Spot 33	373	47869	2.9	20.6644	1.1	0.0909	2.0	0.0136	1.7	0.84	87.2	1.5	88.3	1.7	118.5	25.5	87.2	1.5
Dafov3 17Mar2016-Rosamond Spot 13	381	14167	1.7	21.1832	1.3	0.0891	2.1	0.0137	1.7	0.78	87.7	1.4	86.7	1.8	59.8	31.2	87.7	1.4
Dafov3 17Mar2016-Rosamond Spot 18	742	79709	2.1	20.4368	1.1	0.0926	2.3	0.0137	2.0	0.88	87.9	1.8	89.9	2.0	144.5	25.2	87.9	1.8
Dafov3 17Mar2016-Rosamond Spot 31	845	108503	1.8	20.5654	1.0	0.0928	2.2	0.0138	1.9	0.89	88.6	1.7	90.1	1.9	129.8	23.7	88.6	1.7
Dafov3 17Mar2016-Rosamond Spot 16	559	24424	1.6	19.7775	1.5	0.0976	2.3	0.0140	1.7	0.76	89.6	1.5	94.5	2.1	220.9	34.5	89.6	1.5
Dafov3 17Mar2016-Rosamond Spot 30	730	27927	1.8	20.5859	1.1	0.0939	2.0	0.0140	1.7	0.84	89.7	1.5	91.1	1.8	127.5	25.7	89.7	1.5
Dafov3 17Mar2016-Rosamond Spot 32	153	9109	3.6	20.4529	1.8	0.0951	2.6	0.0141	1.8	0.71	90.3	1.7	92.3	2.3	142.7	42.4	90.3	1.7
Dafov3 17Mar2016-Rosamond Spot 22	511	18795	3.2	20.8165	1.1	0.0939	2.3	0.0142	2.1	0.88	90.7	1.8	91.1	2.0	101.2	26.7	90.7	1.8
Dafov3 17Mar2016-Rosamond Spot 24	193	5087	2.5	21.4579	1.6	0.0911	2.5	0.0142	1.9	0.78	90.8	1.8	88.6	2.1	28.9	37.5	90.8	1.8
Dafov3 17Mar2016-Rosamond Spot 20	647	26472	4.0	20.7995	1.0	0.0942	2.0	0.0142	1.7	0.87	90.9	1.5	91.4	1.7	103.1	23.1	90.9	1.5
Dafov3 17Mar2016-Rosamond Spot 12	429	6984	2.5	19.7755	1.7	0.1002	2.9	0.0144	2.3	0.79	92.0	2.1	97.0	2.6	221.1	40.5	92.0	2.1
Dafov3 17Mar2016-Rosamond Spot 21	1367	5559	3.8	17.6146	1.8	0.1185	2.4	0.0151	1.6	0.67	96.9	1.6	113.7	2.6	482.7	39.8	96.9	1.6
Dafov3 17Mar2016-Rosamond Spot 15	1196	62065	3.2	20.1569	0.9	0.1128	2.6	0.0165	2.4	0.94	105.4	2.5	108.5	2.6	176.8	21.0	105.4	2.5
Dafov3 17Mar2016-Rosamond Spot 26	241	10205	2.3	20.4298	1.2	0.1698	2.3	0.0252	2.0	0.85	160.2	3.1	159.2	3.4	145.3	28.6	160.2	3.1
Dafov3 17Mar2016-Rosamond Spot 19	119	6503	2.5	21.3524	2.5	0.1796	3.2	0.0278	2.0	0.62	176.9	3.5	167.7	5.0	40.8	60.9	176.9	3.5
Dafov3 17Mar2016-Rosamond Spot 35	85	25964	1.6	11.4711	0.8	0.24003	2.6	0.1997	2.5	0.95	1173.7	26.4	1242.7	18.5	1364.4	14.8	1364.4	14.8
Dafov3 17Mar2016-Rosamond Spot 27	551	1576370	0.2	10.5648	1.4	3.3198	3.1	0.2544	2.8	0.89	1461.0	36.3	1485.7	24.3	1521.2	26.5	1521.2	26.5
Dafov3 17Mar2016-Rosamond Spot 28	550	527586	17.4	9.7389	0.9	4.0628	1.6	0.2870	1.3	0.83	1626.4	18.8	1646.9	12.8	1673.1	16.0	1673.1	16.0
Sample: Yucca																		
Dafov3 17Mar2016-Yucca Spot 57	72	866	2.4	30.5777	3.7	0.0521	4.3	0.0116	2.1	0.50	74.0	1.6	51.6	2.2	901.4	108.5	74.0	1.6
Dafov3 17Mar2016-Yucca Spot 52	883	50211	4.7	20.7774	1.2	0.0769	2.4	0.0116	2.1	0.88	74.3	1.6	75.3	1.8	105.6	27.5	74.3	1.6
Dafov3 17Mar2016-Yucca Spot 45	430	14766	3.4	21.0255	1.4	0.0762	2.1	0.0116	1.5	0.72	74.5	1.1	74.6	1.5	77.5	34.3	74.5	1.1
Dafov3 17Mar2016-Yucca Spot 53	2584	12638	9.8	18.0920	1.6	0.0894	2.4	0.0117	1.8	0.76	75.2	1.4	87.0	2.0	423.3	34.8	75.2	1.4
Dafov3 17Mar2016-Yucca Spot 36	367	11777	2.8	20.8117	1.1	0.0783	2.6	0.0118	2.4	0.91	75.7	1.8	76.5	1.9	101.8	26.5	76.5	1.8
Dafov3 17Mar2016-Yucca Spot 46	431	55642	3.5	21.0068	1.2	0.0781	2.6	0.0119	2.3	0.88	76.3	1.7	76.4	1.9	79.6	28.8	76.3	1.7
Dafov3 17Mar2016-Yucca Spot 58	225	3433	2.6	22.5540	2.4	0.0731	4.5	0.0120	3.8	0.84	76.6	2.9	71.6	3.1	91.9	59.5	76.6	2.9
Dafov3 17Mar2016-Yucca Spot 54	1187	18026	4.9	21.3716	1.0	0.0773	2.2	0.0120	2.0	0.89	76.7	1.5	75.6	1.6	38.6	24.6	76.7	1.5
Dafov3 17Mar2016-Yucca Spot 51	312	3214	2.4	22.3540	5.6	0.0755	6.2	0.0122	2.9	0.46	78.5	2.2	73.9	4.5	70.1	135.7	78.5	2.2
Dafov3 17Mar2016-Yucca Spot 42	370	16110	4.8	21.0878	1.7	0.0802	4.4	0.0123	4.1	0.93	78.6	3.2	78.4	3.3	70.5	39.3	78.6	3.2
Dafov3 17Mar2016-Yucca Spot 60	499	33912	7.0	21.3191	1.3	0.0809	2.9	0.0125	2.6	0.90	80.2	2.1	79.0	2.2	44.4	31.0	80.2	2.1
Dafov3 17Mar2016-Yucca Spot 56	251	5114	1.8	19.1821	4.1	0.0919	4.8	0.0128	2.4	0.49	81.9	1.9	89.3	4.1	291.2	94.4	81.9	1.9
Dafov3 17Mar2016-Yucca Spot 48	639	73608	12.7	20.5309	1.0	0.1013	2.3	0.0151	2.0	0.90	96.5	1.9	97.9	2.1	133.7	23.5	96.5	1.9
Dafov3 17Mar2016-Yucca Spot 41	183	5800	1.0	20.8380	2.1	0.1478	4.3	0.0223	3.7	0.87	142.4	5.2	140.0	5.6	98.7	50.5	142.4	5.2
Dafov3 17Mar2016-Yucca Spot 38	219	23122	0.9	20.3296	1.3	0.1534	2.8	0.0226	2.4	0.88	144.2	3.5	144.9	3.7	156.8	30.1	144.2	3.5
Dafov3 17Mar2016-Yucca Spot 47	871	48945	2.6	20.0623	1.0	0.1587	1.8	0.0231	1.5	0.85	147.2	2.2	149.6	2.5	187.7	22.4	147.2	2.2
Dafov3 17Mar2016-Yucca Spot 50	571	505597	53.7	16.7260	1.5	0.2243	4.5	0.0272	4.2	0.94	173.0	7.2	205.5	8.4	595.9	32.9	173.0	7.2
Dafov3 17Mar2016-Yucca Spot 55	543	51332	16.5	19.1975	0.8	0.21670	2.7	0.0301	2.5	0.95	191.2	4.8	198.7	4.8	289.4	19.3	191.2	4.8
Dafov3 17Mar2016-Yucca Spot 59	481	38339	11.5	12.5133	1.9	0.3494	6.2	0.0317	5.9	0.95	201.2	11.7	304.3	16.3	1194.9	37.3	201.2	11.7
Dafov3 17Mar2016-Yucca Spot 55	359	77760	12.2	19.0976	0.8	0.2671	2.5	0.0370	2.4	0.94	234.2	5.5	240.4	5.4	301.3	19.4	234.2	5.5
Dafov3 17Mar2016-Yucca Spot 44	843	386850	18.2	9.8723	0.7	0.38201	2.1	0.02735	2.0	0.98	155.7	27.7	159.7	17.1	1647.9	13.0	1647.9	13.0
Dafov3 17Mar2016-Yucca Spot 43	307	213894	46.7															

TABLE DR1

Sample: Cochise																				
Dafov_Mount#4_22Mar-COCHISE	Spot 27	4126	23480	3.5	21.1325	1.1	0.0235	2.1	0.0036	1.8	0.85	23.2	0.4	23.6	0.5	65.4	25.7	23.2	0.4	
Dafov_Mount#4_22Mar-COCHISE	Spot 30	965	3777	1.5	21.9507	1.2	0.0243	3.0	0.0039	2.7	0.92	24.9	0.7	24.3	0.7	25.8	28.8	24.9	0.7	
Dafov_Mount#4_22Mar-COCHISE	Spot 29	218	1249	0.5	26.1837	3.8	0.0207	4.6	0.0039	2.5	0.55	25.3	0.6	20.8	0.9	471.9	101.7	25.3	0.6	
Dafov_Mount#4_22Mar-COCHISE	Spot 31	150	847	0.7	33.0411	7.3	0.0165	7.8	0.0039	2.6	0.33	25.4	0.7	16.6	1.3	1131.9	223.6	25.4	0.7	
Dafov_Mount#4_22Mar-COCHISE	Spot 33	601	10638	1.3	21.5611	1.9	0.0253	2.5	0.0040	1.5	0.63	25.4	0.4	25.4	0.6	17.4	46.1	25.4	0.4	
Dafov_Mount#4_22Mar-COCHISE	Spot 13	1386	7579	0.9	20.7961	1.2	0.0263	2.2	0.0040	1.8	0.83	25.5	0.5	26.3	0.6	103.5	28.3	25.5	0.5	
Dafov_Mount#4_22Mar-COCHISE	Spot 24	861	19159	0.6	20.3266	1.5	0.0269	2.4	0.0040	1.8	0.76	25.5	0.5	26.9	0.6	157.2	35.8	25.5	0.5	
Dafov_Mount#4_22Mar-COCHISE	Spot 26	479	12795	1.1	20.3012	2.3	0.0270	2.9	0.0040	1.8	0.60	25.6	0.5	27.1	0.8	160.1	54.9	25.6	0.5	
Dafov_Mount#4_22Mar-COCHISE	Spot 21	553	5506	1.0	20.6825	3.0	0.0266	3.6	0.0040	1.9	0.53	25.6	0.5	26.6	0.9	116.4	71.5	25.6	0.5	
Dafov_Mount#4_22Mar-COCHISE	Spot 16	426	2208	0.9	16.6003	5.0	0.0331	5.4	0.0040	2.3	0.42	25.6	0.6	33.1	1.8	612.2	107.0	25.6	0.6	
Dafov_Mount#4_22Mar-COCHISE	Spot 35	356	1480	0.8	19.9036	4.2	0.0276	4.8	0.0040	2.4	0.49	25.7	0.6	27.7	1.3	206.2	98.0	25.7	0.6	
Dafov_Mount#4_22Mar-COCHISE	Spot 20	436	3259	1.5	20.8012	2.7	0.0265	3.2	0.0040	1.8	0.55	25.7	0.5	26.5	0.8	102.9	63.9	25.7	0.5	
Dafov_Mount#4_22Mar-COCHISE	Spot 14	816	4838	1.4	22.2552	1.7	0.0247	2.4	0.0040	1.6	0.69	25.7	0.4	24.8	0.6	59.2	42.2	25.7	0.4	
Dafov_Mount#4_22Mar-COCHISE	Spot 17	233	2178	0.6	25.1360	2.5	0.0220	3.5	0.0040	2.4	0.70	25.8	0.6	22.1	0.8	365.0	65.5	25.8	0.6	
Dafov_Mount#4_22Mar-COCHISE	Spot 18	796	13656	0.7	20.0176	1.7	0.0277	2.6	0.0040	2.0	0.78	25.9	0.5	27.8	0.7	193.0	38.6	25.9	0.5	
Dafov_Mount#4_22Mar-COCHISE	Spot 15	1563	7650	1.9	21.4654	2.0	0.0263	2.7	0.0041	1.8	0.68	26.3	0.5	26.3	0.7	28.1	47.6	26.3	0.5	
Dafov_Mount#4_22Mar-COCHISE	Spot 32	879	2928	6.9	22.7685	2.0	0.0249	3.8	0.0041	3.3	0.86	26.5	0.9	25.0	0.9	115.1	48.6	26.5	0.9	
Dafov_Mount#4_22Mar-COCHISE	Spot 28	693	3590	1.0	22.1909	4.8	0.0257	5.2	0.0041	1.8	0.36	26.6	0.5	25.7	1.3	52.2	117.1	26.6	0.5	
Dafov_Mount#4_22Mar-COCHISE	Spot 25	597	2810	0.7	12.8944	7.8	0.0444	9.0	0.0042	4.4	0.49	26.7	1.2	44.1	3.9	1135.4	155.7	26.7	1.2	
Dafov_Mount#4_22Mar-COCHISE	Spot 19	142	8253	1.4	21.8410	3.3	0.0267	4.1	0.0042	2.4	0.59	27.2	0.7	26.7	1.1	13.6	79.1	27.2	0.7	
Dafov_Mount#4_22Mar-COCHISE	Spot 23	94	1105	1.0	6.1687	20.7	0.1037	21.0	0.0046	3.0	0.14	29.8	0.9	100.2	20.0	2477.8	354.1	29.8	0.9	
Dafov_Mount#4_22Mar-COCHISE	Spot 34	216	4773	1.0	21.8512	2.8	0.0307	3.8	0.0049	2.7	0.69	31.3	0.8	30.7	1.2	14.8	67.1	31.3	0.8	
Sample: Dragoon																				
Dafov_Mount#4_22Mar-DRAGOON	Spot 48	1531	304589	5.1	20.6522	0.8	0.0555	1.7	0.0083	1.5	0.89	53.4	0.8	54.9	0.9	119.9	18.1	53.4	0.8	
Dafov_Mount#4_22Mar-DRAGOON	Spot 52	1737	20910	5.5	21.1494	1.0	0.0545	1.9	0.0084	1.6	0.87	53.6	0.9	53.9	1.0	63.5	22.6	53.6	0.9	
Dafov_Mount#4_22Mar-DRAGOON	Spot 50	789	1915340	2.1	20.6268	1.0	0.0571	1.8	0.0085	1.5	0.83	54.8	0.8	56.4	1.0	122.8	23.6	54.8	0.8	
Dafov_Mount#4_22Mar-DRAGOON	Spot 56	809	12357	8.3	21.4066	1.0	0.0553	1.7	0.0086	1.4	0.83	55.1	0.8	54.6	0.9	34.7	23.0	55.1	0.8	
Dafov_Mount#4_22Mar-DRAGOON	Spot 68	294	16815	5.2	20.9349	1.8	0.0571	2.7	0.0087	2.1	0.77	55.6	1.2	56.4	1.5	87.8	41.6	55.6	1.2	
Dafov_Mount#4_22Mar-DRAGOON	Spot 54	114	2440	3.3	22.9797	2.6	0.0533	3.6	0.0089	2.5	0.69	57.0	1.4	52.7	1.8	137.9	64.0	57.0	1.4	
Dafov_Mount#4_22Mar-DRAGOON	Spot 47	128	5801	0.9	20.0578	3.0	0.0612	3.9	0.0089	2.5	0.64	57.2	1.4	60.3	2.3	188.3	69.9	57.2	1.4	
Dafov_Mount#4_22Mar-DRAGOON	Spot 63	193	2111	1.4	24.8597	9.0	0.0497	9.2	0.0090	2.1	0.22	57.5	1.2	49.2	4.4	336.4	232.0	57.5	1.2	
Dafov_Mount#4_22Mar-DRAGOON	Spot 55	377	5951	3.5	18.3239	2.9	0.0784	8.3	0.0104	7.8	0.94	66.8	5.2	76.6	6.1	394.8	64.0	66.8	5.2	
Dafov_Mount#4_22Mar-DRAGOON	Spot 67	310	51552	6.7	15.6768	2.1	0.1180	9.1	0.0134	8.8	0.97	85.9	7.5	113.3	9.7	734.6	44.9	85.9	7.5	
Dafov_Mount#4_22Mar-DRAGOON	Spot 59	379	32099	5.0	11.9286	0.9	0.5874	3.3	0.0508	3.2	0.96	319.5	10.0	469.2	12.5	1288.6	18.3	319.5	10.0	
Dafov_Mount#4_22Mar-DRAGOON	Spot 69	315	65824	2.8	10.1939	0.6	0.29971	2.1	0.2216	2.0	0.95	1290.2	23.0	1406.9	15.7	1588.3	11.7	1588.3	11.7	
Sample: coxcomb																				
Dafov#5_23March2016-COXCOMB	Spot 22	917	5138	1.3	21.1680	1.7	0.0726	2.6	0.0111	1.9	0.74	71.5	1.3	71.2	1.8	61.4	41.4	71.5	1.3	
Dafov#5_23March2016-COXCOMB	Spot 11	621	2693	1.2	21.3160	1.7	0.0731	2.6	0.0113	1.9	0.76	72.4	1.4	71.6	1.8	44.8	40.3	72.4	1.4	
Dafov#5_23March2016-COXCOMB	Spot 20	380	19850	2.0	20.2913	1.7	0.0772	2.7	0.0114	2.0	0.77	72.8	1.5	75.5	1.9	161.3	40.2	72.8	1.5	
Dafov#5_23March2016-COXCOMB	Spot 26	282	2644	1.1	20.7001	2.1	0.0762	3.3	0.0114	2.6	0.78	73.4	1.9	74.6	2.4	114.4	48.9	73.4	1.9	
Dafov#5_23March2016-COXCOMB	Spot 25	263	101984	2.2	19.0924	2.1	0.0837	3.3	0.0116	2.6	0.78	74.3	1.9	81.6	2.6	301.9	47.1	74.3	1.9	
Dafov#5_23March2016-COXCOMB	Spot 32	491	4471	1.5	21.0943	1.6	0.0758	2.8	0.0116	2.3	0.82	74.3	1.7	74.2	2.0	69.8	38.3	74.3	1.7	
Dafov#5_23March2016-COXCOMB	Spot 27	334	74631	3.7	19.1850	1.3	0.0834	2.3	0.0116	1.9	0.83	74.4	1.4	81.3	1.8	290.8	29.3	74.4	1.4	
Dafov#5_23March2016-COXCOMB	Spot 29	909	11680	1.8	20.4643	1.4	0.0793	2.2	0.0118	1.7	0.78	75.5	1.3	77.5	1.6	141.4	32.1	75.5	1.3	
Dafov#5_23March2016-COXCOMB	Spot 35	938	9958	1.3	20.5645	2.5	0.0792	4.0	0.0118	3.2	0.79	75.7	2.4	77.4	3.0	129.9	57.7	77.4	2.4	
Dafov#5_23March2016-COXCOMB	Spot 30	291	3497	0.9	16.8793	3.5	0.0967	4.1	0.0118	2.1	0.51	75.8	1.5	93.7	3.6	576.1	76.0	75.8	1.5	
Dafov#5_23March2016-COXCOMB	Spot 12	489	7711	1.7	19.8737	1.8	0.0825	2.5	0.0119	1.7	0.68	76.2	1.3	80.5	1.9	209.7	42.9	76.2	1.3	
Dafov#5_23March2016-COXCOMB	Spot 24	457	4840	2.1	19.3178	1.6	0.0851	3.2	0.0119	2.8	0.86	76.4	2.1	83.0	2.6	275.1	37.4	76.4	2.1	
Dafov#5_23March2016-COXCOMB	Spot 33	400	6604	2.8	20.4819	2.7	0.0804	3.5	0.0119	2.2	0.64	76.5	1.7	78.5	2.6	139.4	62.4	76.5	1.7	
Dafov#5_23March2016-COXCOMB	Spot 19	268	11734026	0.7	19.5088	2.1	0.0847	2.9	0.0120	2.0	0.69	76.8	1.5	82.6	2.3	252.5	48.2	76.8	1.5	
Dafov#5_23March2016-COXCOMB	Spot 14	461	98052	1.4	17.7979	1.8	0.0940	2.6	0.0121	1.9	0.72	77.8	1.4	91.3	2.2	459.8	39.5	77.8	1.4	
Dafov#5_23March2016-COXCOMB	Spot 31	310	125802	1.6	18.8864	2.0	0.0989	2.7	0.0123	1.8	0.66	78.8	1.4	87.3	2.2	326.6	45.1	78.8	1.4	
Dafov#5_23March2016-COXCOMB	Spot 21	782	102768	1.9	19.9521	1.3	0.0874	2.5	0.0127	2.1	0.85	81.0	1.7	85.1	2.0	200.6	30.3	81.0	1.7	
Dafov#5_23March2016-COXCOMB	Spot 23	230	37050	3.5	20.2015	2.0	0.0864	3.6	0.0127	2.9	0.83	81.1	2.4	84.2	2.9	171.6	46.6	81.1	2.4	
Dafov#5_23March2016-COXCOMB	Spot 16	257	5826	2.9	18.6316	2.2	0.0941	3.0	0.0127	2.1	0.69	81.5	1.7	91.4	2.6	357.3	49.4	81.5	1.7	
Dafov#5_23March2016-COXCOMB	Spot 18	843	11500	1.4	20.7596	1.3	0.0922	2.3	0.0139	1.9	0.83	88.9	1.7	89.6	2.0	107.7</				

TABLE DR1

Chapman TinReef 23May16-Spot 22_reef	12059	102063	1.7	21.5615	0.8	0.0165	2.4	0.0026	2.2	0.94	16.6	0.4	16.6	0.4	17.3	20.1	16.6	0.4
Chapman TinReef 23May16-Spot 21_reef	4516	266459	1.6	21.0077	1.0	0.0192	2.3	0.0029	2.0	0.89	18.9	0.4	19.3	0.4	79.5	24.6	18.9	0.4
Chapman TinReef 23May16-Spot 16_reef	2925	11463	3.9	21.0103	1.5	0.0202	2.7	0.0031	2.3	0.83	19.9	0.5	20.4	0.6	79.2	36.4	19.9	0.5
Chapman TinReef 23May16-Spot 20_reef	2666	69804	3.3	21.5500	1.0	0.0198	2.6	0.0031	2.4	0.92	19.9	0.5	19.9	0.5	18.7	24.8	19.9	0.5
Chapman TinReef 23May16-Spot 11_reef	2255	49946	4.7	21.1491	1.1	0.0202	2.4	0.0031	2.1	0.89	20.0	0.4	20.3	0.5	63.6	26.0	20.0	0.4
Chapman TinReef 23May16-Spot 14_reef	2261	12422	5.1	21.6051	1.1	0.0201	2.1	0.0031	1.7	0.84	20.3	0.3	20.2	0.4	12.5	27.1	20.3	0.3
Chapman TinReef 23May16-Spot 15_reef	1357	12189	4.5	15.8981	4.0	0.0274	4.7	0.0032	2.4	0.52	20.3	0.5	27.4	1.3	704.9	84.8	20.3	0.5
Chapman TinReef 23May16-Spot 19_reef	2550	9452	4.7	21.8157	1.2	0.0201	2.5	0.0032	2.2	0.88	20.5	0.4	20.2	0.5	10.8	28.9	20.5	0.4
Chapman TinReef 23May16-Spot 12_reef	1650	35776	5.8	20.9617	1.3	0.0210	2.3	0.0032	1.8	0.81	20.5	0.4	21.1	0.5	84.7	31.6	20.5	0.4
Chapman TinReef 23May16-Spot 13_reef	1438	12397	3.6	21.6406	2.1	0.0204	3.1	0.0032	2.3	0.73	20.6	0.5	20.5	0.6	8.6	50.5	20.6	0.5
Chapman TinReef 23May16-Spot 17_reef	1953	47357	4.2	21.0525	1.2	0.0212	2.7	0.0032	2.4	0.89	20.8	0.5	21.3	0.6	74.5	28.5	20.8	0.5
Chapman TinReef 23May16-Spot 18_reef	1010	749	5.6	9.5715	10.7	0.0483	11.4	0.0034	4.0	0.35	21.6	0.9	47.9	5.3	1705.1	197.3	21.6	0.9
Sample: Tinaja																		
Chapman TinReef 23May16-Spot 8_tin	415	11778	1.1	19.1580	2.8	0.0391	3.7	0.0054	2.4	0.65	34.9	0.8	39.0	1.4	294.0	63.9	34.9	0.8
Chapman TinReef 23May16-Spot 4_tin	260	5384	1.7	22.8401	3.2	0.0332	3.9	0.0055	2.2	0.57	35.3	0.8	33.1	1.3	122.9	80.1	35.3	0.8
Chapman TinReef 23May16-Spot 6_tin	286	1785	1.6	25.7504	2.1	0.0298	3.8	0.0056	3.2	0.83	35.8	1.1	29.8	1.1	427.9	55.4	35.8	1.1
Chapman TinReef 23May16-Spot 3_tin	292	2097	2.0	25.1877	2.4	0.0307	3.6	0.0056	2.7	0.75	36.0	1.0	30.7	1.1	370.3	61.3	36.0	1.0
Chapman TinReef 23May16-Spot 5_tin	131	4908	2.6	22.5055	3.4	0.0349	4.5	0.0057	2.9	0.64	36.6	1.0	34.8	1.5	86.6	83.8	36.6	1.0
Chapman TinReef 23May16-Spot 7_tin	20	18251	1.6	13.3239	1.5	1.9369	3.6	0.1872	3.2	0.91	1106.0	33.0	1093.9	23.9	1069.9	29.5	1069.9	29.5
Chapman TinReef 23May16-Spot 10_tin	24	26131	1.6	12.8619	0.8	1.9527	4.1	0.1822	4.0	0.98	1078.7	40.1	1099.4	27.7	1140.5	16.5	1140.5	16.5
Chapman TinReef 23May16-Spot 9_tin	574	3098409	2.2	9.5191	0.6	4.2766	2.1	0.2953	2.0	0.96	1667.7	29.7	1688.9	17.3	1715.2	10.2	1715.2	10.2

TABLE DR2

Sample	($^{176}\text{Yb} + ^{176}\text{Lu}$) / ^{176}Hf (%)	Volts Hf	$^{176}\text{Hf}/^{177}\text{Hf}$	$\pm (1\sigma)$	$^{176}\text{Lu}/^{177}\text{Hf}$	$^{176}\text{Yb}/^{177}\text{Hf}$	$^{176}\text{Hf}/^{177}\text{Hf}$ (T)	E-Hf (0)	E-Hf (0) $\pm (1\sigma)$	E-Hf (T)	Age (Ma)
*Analyses in red were not included in mean Ep_Hf(t) calculations											
Sample: UTEP											
DAFOV-UTEP:59	20.2	4.6	0.282620	0.000030	0.001317	0.055549	0.282619	-5.8	1.0	-4.9	46.10
DAFOV-UTEP:33	46.7	3.5	0.282730	0.000038	0.002936	0.124962	0.282728	-1.9	1.4	-1.0	46.20
DAFOV-UTEP:64	17.4	3.8	0.282633	0.000028	0.001242	0.050646	0.282632	-5.4	1.0	-4.4	46.40
DAFOV-UTEP:3	32.2	4.2	0.282570	0.000024	0.001869	0.085494	0.282568	-7.6	0.9	-6.6	46.50
DAFOV-UTEP:83	26.6	3.5	0.282677	0.000033	0.002885	0.111156	0.282674	-3.8	1.2	-2.9	46.60
Sample: JDP											
DAFOV-JDP:103	10.6	5.6	0.282365	0.000024	0.000690	0.024494	0.282364	-14.9	0.8	-13.3	72.00
DAFOV-JDP:53	17.7	5.4	0.282333	0.000024	0.001140	0.050489	0.282332	-16.0	0.8	-14.4	72.00
DAFOV-JDP:22	15.9	4.5	0.282423	0.000029	0.000948	0.040879	0.282422	-12.8	1.0	-11.2	72.00
DAFOV-JDP:51	22.1	4.9	0.282364	0.000029	0.001588	0.071886	0.282362	-14.9	1.0	-13.3	74.00
DAFOV-JDP:95	14.5	6.1	0.282314	0.000021	0.000896	0.039412	0.282313	-16.7	0.7	-15.1	74.00
DAFOV-JDP:25	14.6	4.8	0.281971	0.000028	0.000794	0.032454	0.281950	-28.8	1.0	1.7	1391.00
DAFOV-JDP:49	13.7	4.7	0.281842	0.000031	0.000850	0.036418	0.281815	-33.4	1.1	3.4	1672.00
DAFOV-JDP:19	20.0	4.5	0.281892	0.000028	0.001068	0.046898	0.281858	-31.6	1.0	5.0	1674.00
Sample: Buckeye											
DAFOV-BUCKEYE:45	26.1	5.4	0.282669	0.000026	0.001696	0.070145	0.282669	-4.1	0.9	-3.7	20.00
DAFOV-BUCKEYE:46	49.4	4.2	0.282637	0.000030	0.003000	0.135517	0.282636	-5.2	1.1	-4.8	20.00
DAFOV-BUCKEYE:76	32.9	4.3	0.282694	0.000034	0.002221	0.095990	0.282693	-3.2	1.2	-2.8	20.00
DAFOV-BUCKEYE:6	47.9	3.5	0.282652	0.000032	0.002436	0.112527	0.282652	-4.7	1.1	-4.3	20.00
DAFOV-BUCKEYE:2	38.9	4.5	0.282647	0.000027	0.002151	0.099133	0.282647	-4.9	1.0	-4.4	20.00
DAFOV-BUCKEYE:92	17.3	4.5	0.282669	0.000022	0.001162	0.051315	0.282668	-4.1	0.8	-3.7	21.00
Sample: Prescott											
DAFOV-PRESCOTT:97	10.8	4.1	0.282493	0.000031	0.000807	0.034364	0.282491	-10.3	1.1	-8.7	77.00
DAFOV-PRESCOTT:13	13.0	4.9	0.282455	0.000020	0.000722	0.031146	0.282454	-11.7	0.7	-10.0	79.00
DAFOV-PRESCOTT:24	19.7	3.7	0.282478	0.000019	0.001202	0.053079	0.282476	-10.9	0.7	-9.1	81.00
DAFOV-PRESCOTT:62	9.6	4.0	0.282444	0.000019	0.000588	0.024644	0.282443	-12.0	0.7	-10.3	81.00
DAFOV-PRESCOTT:60	13.3	3.7	0.282503	0.000028	0.000877	0.038169	0.282501	-10.0	1.0	-8.2	82.00
DAFOV-PRESCOTT:26	10.3	4.1	0.281962	0.000026	0.000567	0.023952	0.281944	-29.1	0.9	7.4	1648.00
Sample: Keene											
DAFOV KEANE_SPOT#: 13	31.6	2.2	0.282942	0.000039	0.001623	0.087895	0.282939	5.5	1.4	7.7	101
DAFOV KEANE_SPOT#: 12	28.2	2.4	0.282893	0.000032	0.001422	0.077890	0.282891	3.8	1.1	6.0	102
DAFOV KEANE_SPOT#: 16	41.2	2.1	0.282858	0.000039	0.002611	0.134305	0.282853	2.6	1.4	4.7	102
DAFOV#1 KEANE_SPOT#: 22	22.7	3.1	0.282905	0.000036	0.001236	0.144403	0.282903	4.3	1.3	6.4	102
DAFOV#1 KEANE_SPOT#: 35	57.5	2.2	0.282733	0.000036	0.002939	0.063623	0.282727	-1.8	1.3	0.2	102
DAFOV#1 KEANE_SPOT#: 21	25.7	2.8	0.282934	0.000034	0.001343	0.071297	0.282931	5.3	1.2	7.4	103
DAFOV#1 KEANE_SPOT#: 32	20.6	3.4	0.282925	0.000029	0.001097	0.056269	0.282923	4.9	1.0	7.2	103
DAFOV#1 KEANE_SPOT#: 29	14.6	3.5	0.282893	0.000037	0.000831	0.041586	0.282891	3.8	1.3	6.1	103
DAFOV#1 KEANE_SPOT#: 30	21.7	3.0	0.282907	0.000038	0.001155	0.060322	0.282905	4.3	1.4	6.5	103
DAFOV#1 KEANE_SPOT#: 25	23.6	3.0	0.282888	0.000034	0.001325	0.068606	0.282885	3.6	1.2	5.8	104
DAFOV#1 KEANE_SPOT#: 27	15.3	2.8	0.282516	0.000030	0.000754	0.041673	0.282510	-9.5	1.1	-1.1	386
DAFOV#1 KEANE_SPOT#: 19	21.1	2.7	0.282131	0.000031	0.001037	0.056709	0.282103	-23.1	1.1	7.6	1409
Sample: S-Barstow											
DAFOV#1_S_BARSTOW_SPOT#: 59	58.6	2.9	0.282622	0.000037	0.003202	0.162573	0.282613	-5.8	1.3	-2.6	159
DAFOV#1_S_BARSTOW_SPOT#: 49	36.7	3.0	0.282502	0.000037	0.001954	0.101702	0.282496	-10.0	1.3	-6.7	160
DAFOV#1_S_BARSTOW_SPOT#: 64	171.5	2.5	0.282635	0.000066	0.009143	0.497117	0.282608	-5.3	2.3	-2.7	161
DAFOV#1_S_BARSTOW_SPOT#: 69	128.1	2.5	0.282504	0.000051	0.006783	0.347805	0.282484	-9.9	1.8	-7.1	161
DAFOV#1_S_BARSTOW_SPOT#: 48	60.4	2.8	0.282555	0.000028	0.003327	0.167833	0.282545	-8.1	1.0	-4.9	162
DAFOV#1_S_BARSTOW_SPOT#: 53	69.7	2.6	0.282487	0.000046	0.003798	0.192590	0.282476	-10.5	1.6	-7.3	162
DAFOV#1_S_BARSTOW_SPOT#: 60	47.4	2.5	0.282486	0.000041	0.002319	0.131578	0.282479	-10.6	1.4	-7.2	162
DAFOV#1_S_BARSTOW_SPOT#: 46	85.9	3.2	0.282512	0.000032	0.004620	0.224081	0.282498	-9.6	1.1	-6.5	163
DAFOV#1_S_BARSTOW_SPOT#: 57	65.9	2.7	0.282546	0.000043	0.003622	0.185878	0.282535	-8.5	1.5	-5.2	164
DAFOV#1_S_BARSTOW_SPOT#: 56	32.0	2.7	0.282396	0.000042	0.001598	0.084842	0.282391	-13.8	1.5	-10.2	166
DAFOV#1_S_BARSTOW_SPOT#: 55	26.5	3.1	0.282047	0.000033	0.001511	0.074690	0.282013	-26.1	1.2	-0.4	1201
Sample: Barstow-T											
DAFOV_BARSTOW-T_SPOT#: 64	17.6	2.5	0.282736	0.000034	0.000859	0.046135	0.282736	-1.7	1.2	-1.3	18
DAFOV_BARSTOW-T_SPOT#: 52	27.1	2.3	0.282681	0.000034	0.001454	0.074972	0.282680	-3.7	1.2	-3.3	18
DAFOV_BARSTOW-T_SPOT#: 53	27.1	2.2	0.282672	0.000035	0.001452	0.074682	0.282672	-4.0	1.2	-3.6	18
DAFOV_BARSTOW-T_SPOT#: 55	21.0	2.8	0.282525	0.000033	0.001089	0.058650	0.282524	-9.2	1.2	-8.8	18
DAFOV_BARSTOW-T_SPOT#: 47	39.8	3.4	0.282539	0.000033	0.002016	0.110780	0.282538	-8.7	1.2	-8.3	19
DAFOV_BARSTOW-T_SPOT#: 62	11.3	2.7	0.282649	0.000045	0.000583	0.030899	0.282649	-4.8	1.6	-4.4	19
DAFOV_BARSTOW-T_SPOT#: 61	45.2	4.0	0.282567	0.000024	0.002244	0.124753	0.282566	-7.7	0.9	-7.3	19
DAFOV_BARSTOW-T_SPOT#: 57	23.5	2.7	0.282694	0.000035	0.001198	0.065576	0.282693	-3.2	1.2	-2.8	19
DAFOV_BARSTOW-T_SPOT#: 50	17.2	2.6	0.282620	0.000032	0.000908	0.047892	0.282618	-5.8	1.1	-3.9	89
DAFOV_BARSTOW-T_SPOT#: 49	22.5	2.7	0.282545	0.000029	0.001226	0.062158	0.282543	-8.5	1.0	-6.3	102
DAFOV_BARSTOW-T_SPOT#: 67	32.2	2.0	0.282537	0.000033	0.001979	0.089927	0.282532	-8.8	1.2	-5.8	143
Sample: Snaggletooth											
DAFOV#1_SNAGG_SPOT#: 16	17.0	2.3	0.282715	0.000029	0.000855	0.047360	0.282715	-2.5	1.0	-2.0	20
DAFOV#1_SNAGG_SPOT#: 32	19.0	2.2	0.282693	0.000036	0.000968	0.052506	0.282692	-3.3	1.3	-2.8	20
DAFOV#1_SNAGGLE: 25	17.3	1.7	0.282539	0.000042	0.000907	0.048224	0.282539	-8.7	1.5	-8.3	20
DAFOV#1_SNAGGLE: 18	18.7	2.1	0.282594	0.000036	0.001003	0.052460	0.282593	-6.8	1.3	-6.3	20
DAFOV#1_SNAGGLE: 31	15.3	1.9	0.282577	0.000033	0.000808	0.042287	0.282576	-7.4	1.2	-6.9	20
DAFOV#1_SNAGGLE: 21	39.9	1.8	0.282678	0.000049	0.001824	0.107114	0.282677	-3.8	1.7	-3.4	20
DAFOV#1_SNAGGLE: 29	20.9	2.3	0.282572	0.000047	0.001084	0.058746	0.282572	-7.5	1.7	-7.1	21
DAFOV#1_SNAGGLE: 20	22.3	2.2	0.282580	0.000032	0.001171	0.062069	0.282579	-7.3	1.1	-6.8	21

TABLE DR2

DAFOV_#1_SNAGGLE: 19	24.9	2.4	0.282549	0.000025	0.001262	0.069101	0.282548	-8.4	0.9	-7.9	21
DAFOV_#1_SNAGGLE: 35	19.6	2.2	0.282581	0.000040	0.001001	0.055342	0.282581	-7.2	1.4	-6.8	21
Sample: Finger											
DAFOV#2_FINGER_SPOT: 23	34.2	2.4	0.282335	0.000041	0.001994	0.102228	0.282328	-15.9	1.4	-12.4	169
DAFOV#2_FINGER_SPOT: 25	13.6	2.7	0.282389	0.000033	0.000759	0.037335	0.282387	-14.0	1.2	-10.3	169
DAFOV#2_FINGER_SPOT: 19	43.0	2.4	0.282420	0.000031	0.002430	0.121097	0.282412	-12.9	1.1	-9.4	170
DAFOV#2_FINGER_SPOT: 26	21.3	2.2	0.282477	0.000041	0.001226	0.059104	0.282473	-10.9	1.4	-7.3	170
DAFOV#2_FINGER_SPOT: 20	14.0	2.7	0.282403	0.000033	0.001223	0.061120	0.282399	-13.5	1.2	-9.9	170
DAFOV#2_FINGER_SPOT: 35	36.0	2.5	0.282402	0.000037	0.001932	0.100124	0.282396	-13.5	1.3	-10.0	170
DAFOV#2_FINGER_SPOT: 16	45.8	2.1	0.282402	0.000033	0.002464	0.127578	0.282394	-13.5	1.2	-10.0	171
DAFOV#2_FINGER_SPOT: 21	25.7	2.4	0.282479	0.000040	0.001373	0.071626	0.282474	-10.8	1.4	-7.2	171
DAFOV#2_FINGER_SPOT: 33	44.3	2.2	0.282400	0.000041	0.002395	0.122791	0.282392	-13.6	1.5	-10.1	171
DAFOV#2_FINGER_SPOT: 24	48.0	1.9	0.282440	0.000038	0.002539	0.132887	0.282432	-12.2	1.3	-8.7	172
Sample: Hope											
DAFOV#2_HOPE_SPOT: 59	22.5	2.6	0.282420	0.000030	0.001377	0.062605	0.282418	-12.9	1.1	-11.4	72
DAFOV#2_HOPE_SPOT: 70	18.6	2.7	0.282324	0.000032	0.001211	0.052241	0.282323	-16.3	1.1	-14.7	72
DAFOV#2_HOPE_SPOT: 58	26.1	2.7	0.282436	0.000034	0.001604	0.072611	0.282434	-12.3	1.2	-10.8	73
DAFOV#2_HOPE_SPOT: 47	30.1	2.8	0.282455	0.000032	0.001789	0.082942	0.282452	-11.7	1.1	-10.1	74
DAFOV#2_HOPE_SPOT: 46	12.5	2.3	0.282401	0.000042	0.000789	0.035684	0.282400	-13.6	1.5	-12.0	74
DAFOV#2_HOPE_SPOT: 62	31.3	2.3	0.282506	0.000046	0.001830	0.085462	0.282503	-9.9	1.6	-8.3	74
DAFOV#2_HOPE_SPOT: 49	38.0	2.4	0.282449	0.000041	0.002112	0.098568	0.282446	-11.9	1.4	-10.3	74
DAFOV#2_HOPE_SPOT: 54	14.0	2.5	0.282462	0.000032	0.000865	0.039103	0.282461	-11.4	1.1	-9.8	74
DAFOV#2_HOPE_SPOT: 55	9.4	2.7	0.282383	0.000036	0.000608	0.025835	0.282382	-14.2	1.3	-12.6	74
DAFOV#2_HOPE_SPOT: 63	13.3	3.5	0.282445	0.000032	0.000936	0.037010	0.282443	-12.0	1.1	-10.4	74
Sample: Riverside											
DAFOV#2_RIVERSIDE_SPOT: 16	22.1	2.8	0.282613	0.000037	0.001411	0.061139	0.282610	-6.1	1.3	-4.0	100
DAFOV#2_RIVERSIDE_SPOT: 27	31.7	2.5	0.282382	0.000041	0.001887	0.088449	0.282378	-14.3	1.5	-12.2	100
DAFOV#2_RIVERSIDE_SPOT: 25	21.7	2.8	0.282388	0.000035	0.001327	0.059995	0.282385	-14.0	1.2	-11.9	100
DAFOV#2_RIVERSIDE_SPOT: 19	32.2	2.5	0.282598	0.000045	0.002002	0.080905	0.282595	-6.6	1.6	-4.5	100
DAFOV#2_RIVERSIDE_SPOT: 21	29.6	2.9	0.282618	0.000027	0.001881	0.081629	0.282614	-5.9	0.9	-3.8	100
DAFOV#2_RIVERSIDE_SPOT: 32	15.6	3.2	0.282546	0.000027	0.001014	0.043290	0.282544	-8.5	1.0	-6.3	101
DAFOV#2_RIVERSIDE_SPOT: 14	32.5	2.9	0.282592	0.000037	0.002025	0.089703	0.282588	-6.8	1.3	-4.7	101
DAFOV#2_RIVERSIDE_SPOT: 13	27.1	2.8	0.282666	0.000030	0.001747	0.074948	0.282663	-4.2	1.0	-2.1	100
DAFOV#2_RIVERSIDE_SPOT: 23	22.0	2.9	0.282567	0.000032	0.001465	0.060698	0.282565	-7.7	1.1	-5.5	102
DAFOV#2_RIVERSIDE_SPOT: 31	32.6	2.5	0.281788	0.000043	0.001765	0.092182	0.281732	-35.3	1.5	0.1	1655
DAFOV#2_RIVERSIDE_SPOT: 22	16.4	2.9	0.281817	0.000036	0.000881	0.045901	0.281789	-34.2	1.3	2.1	1657
DAFOV#2_RIVERSIDE_SPOT: 30	12.4	2.8	0.281857	0.000030	0.000652	0.033512	0.281837	-32.8	1.1	3.9	1663
Sample: Strawberry											
DAFOV#2_STRAWBERRY_SPOT: 59	98.7	1.8	0.282422	0.000069	0.005003	0.274167	0.282408	-12.8	2.4	-10.0	149
DAFOV#2_STRAWBERRY_SPOT: 69	22.3	2.4	0.282465	0.000033	0.001236	0.062254	0.282461	-11.3	1.2	-8.1	149
DAFOV#2_STRAWBERRY_SPOT: 62	31.6	2.5	0.282473	0.000039	0.001735	0.088867	0.282468	-11.0	1.4	-7.8	153
DAFOV#2_STRAWBERRY_SPOT: 68	34.1	2.6	0.282421	0.000035	0.001811	0.094949	0.282416	-12.9	1.2	-9.7	149
DAFOV#2_STRAWBERRY_SPOT: 46	39.6	2.2	0.282374	0.000044	0.002048	0.105258	0.282368	-14.5	1.6	-11.4	150
DAFOV#2_STRAWBERRY_SPOT: 63	29.3	1.8	0.282478	0.000036	0.001597	0.080889	0.282474	-10.9	1.3	-7.7	150
DAFOV#2_STRAWBERRY_SPOT: 51	40.2	2.3	0.282341	0.000044	0.002095	0.110872	0.282335	-15.7	1.6	-12.6	151
DAFOV#2_STRAWBERRY_SPOT: 61	24.3	2.8	0.282464	0.000036	0.001391	0.066772	0.282460	-11.4	1.3	-8.2	151
DAFOV#2_STRAWBERRY_SPOT: 47	73.3	1.7	0.282436	0.000056	0.004017	0.206928	0.282424	-12.3	2.0	-9.4	151
DAFOV#2_STRAWBERRY_SPOT: 55	45.5	1.5	0.282382	0.000051	0.002357	0.126233	0.282375	-14.2	1.8	-11.1	152
Sample: Cochise											
DAFOV#4_COCHISE_SPOT: 33	43.0	2.4	0.282563	0.000036	0.002137	0.119501	0.282562	-7.8	1.3	-7.3	25
DAFOV#4_COCHISE_SPOT: 13	65.6	2.9	0.282561	0.000036	0.003230	0.181635	0.282559	-7.9	1.3	-7.4	26
DAFOV#4_COCHISE_SPOT: 24	51.0	2.0	0.282534	0.000042	0.002490	0.141741	0.282532	-8.9	1.5	-8.4	26
DAFOV#4_COCHISE_SPOT: 18	50.7	2.4	0.282583	0.000046	0.002533	0.140786	0.282582	-7.1	1.6	-6.6	26
DAFOV#4_COCHISE_SPOT: 21	35.2	2.6	0.282560	0.000033	0.001901	0.097778	0.282559	-7.9	1.2	-7.4	26
DAFOV#4_COCHISE_SPOT: 16	45.6	2.3	0.282564	0.000034	0.002243	0.126807	0.282563	-7.8	1.2	-7.3	26
DAFOV#4_COCHISE_SPOT: 35	34.9	2.0	0.282602	0.000042	0.001763	0.098124	0.282601	-6.5	1.5	-5.9	26
DAFOV#4_COCHISE_SPOT: 15	57.1	2.8	0.282591	0.000037	0.002867	0.153871	0.282590	-6.9	1.3	-6.3	26
DAFOV#4_COCHISE_SPOT: 31	45.1	1.9	0.282493	0.000045	0.002314	0.125785	0.282492	-10.3	1.6	-9.8	25
DAFOV#4_COCHISE_SPOT: 17	33.0	2.1	0.282637	0.000047	0.001691	0.093354	0.282636	-5.2	1.7	-4.7	26
Sample: dragoon											
DAFOV#4_DRAGOON_SPOT: 50	58.7	2.3	0.282438	0.000036	0.002792	0.165971	0.282436	-12.3	1.3	-11.1	55
DAFOV#4_DRAGOON_SPOT: 56	38.4	2.9	0.282403	0.000031	0.001823	0.104916	0.282401	-13.5	1.1	-12.4	55
DAFOV#4_DRAGOON_SPOT: 68	48.3	2.9	0.282490	0.000040	0.002603	0.134363	0.282488	-10.4	1.4	-9.3	56
DAFOV#4_DRAGOON_SPOT: 54	12.9	2.4	0.282455	0.000036	0.000662	0.036096	0.282454	-11.7	1.3	-10.4	57
DAFOV#4_DRAGOON_SPOT: 52	66.9	2.7	0.282292	0.000048	0.003628	0.193260	0.282288	-17.4	1.7	-16.4	54
DAFOV#4_DRAGOON_SPOT: 63	35.6	3.0	0.282381	0.000035	0.001618	0.098323	0.282379	-14.3	1.2	-13.1	58
DAFOV#4_DRAGOON_SPOT: 55	28.1	2.5	0.282205	0.000037	0.001398	0.078089	0.282203	-20.5	1.3	-19.1	67
DAFOV#4_DRAGOON_SPOT: 67	26.6	2.3	0.282082	0.000044	0.001210	0.067392	0.282080	-24.9	1.5	-23.0	86
DAFOV#4_DRAGOON_SPOT: 59	23.1	2.9	0.282291	0.000035	0.001220	0.064236	0.282283	-17.5	1.2	-10.6	320
DAFOV#4_DRAGOON_SPOT: 69	26.3	2.4	0.282229	0.000041	0.001491	0.072471	0.282184	-19.7	1.5	14.6	1588
Sample: Granite-Gap											
DAFOV#4_GRANITEGAP_SPOT: 63	26.9	1.2	0.282572	0.000042	0.001277	0.063084	0.282571	-7.5	1.5	-6.8	34
DAFOV#4_GRANITEGAP_SPOT: 46	31.3	2.1	0.282516	0.000037	0.001688	0.086954	0.282515	-9.5	1.3	-8.8	34
DAFOV#4_GRANITEGAP_SPOT: 69	17.3	2.4	0.282483	0.000037	0.000941	0.047978	0.282482	-10.7	1.3	-9.9	34
DAFOV#4_GRANITEGAP_SPOT: 48	21.0	2.6	0.282452	0.000034	0.001185	0.058506	0.282451	-11.8	1.2	-11.1	34
DAFOV#4_GRANITEGAP_SPOT: 54	31.1	2.8	0.282498	0.000037	0.001949	0.086664	0.282497	-10.1	1.3	-9.4	34
DAFOV#4_GRANITEGAP_SPOT: 65	53.5	2.2	0.282411	0.000047	0.002837	0.147043	0.282409	-13.2	1.7	-12.5	34
DAFOV#4_GRANITEGAP_SPOT: 61	22.3	2.6	0.282535	0.000034	0.001309	0.062472	0.282535	-8.8	1.2	-8.1	34
DAFOV#4_GRANITEGAP_SPOT: 57	41.7	3.0	0.282468	0.000037	0.002288	0.107162	0.282467	-11.2	1.3	-10.5	35

TABLE DR2

DAFOV#4_GRANITEGAP_SPOT: 59	33.7	2.4	0.282551	0.000031	0.001861	0.092971	0.282550	-8.3	1.1	-7.5	35
DAFOV#4_GRANITEGAP_SPOT: 52	34.9	2.5	0.282539	0.000044	0.002009	0.097721	0.282537	-8.7	1.5	-8.0	35
Sample: Joshua											
DAFOV#4_JOSHUA_SPOT: 33	85.3	3.3	0.282088	0.000052	0.003990	0.217784	0.282083	-24.6	1.8	-23.2	72
DAFOV#4_JOSHUA_SPOT: 29	9.8	3.1	0.282464	0.000037	0.000622	0.027424	0.282463	-11.4	1.3	-9.8	73
DAFOV#4_JOSHUA_SPOT: 19	7.7	3.0	0.282446	0.000029	0.000459	0.021551	0.282446	-12.0	1.0	-10.4	74
DAFOV#4_JOSHUA_SPOT: 26	17.3	2.6	0.282397	0.000033	0.001016	0.048220	0.282395	-13.7	1.2	-12.0	80
DAFOV#4_JOSHUA_SPOT: 17	12.4	2.8	0.282112	0.000030	0.000673	0.034919	0.282111	-23.8	1.1	-21.3	113
DAFOV#4_JOSHUA_SPOT: 34	24.1	2.4	0.282408	0.000037	0.001316	0.067539	0.282405	-13.3	1.3	-10.8	122
DAFOV#4_JOSHUA_SPOT: 13	34.5	2.9	0.282178	0.000040	0.002116	0.095121	0.282170	-21.5	1.4	-16.9	221
DAFOV#4_JOSHUA_SPOT: 15	19.5	2.6	0.281970	0.000046	0.000994	0.051465	0.281940	-28.8	1.6	6.9	1631
DAFOV#4_JOSHUA_SPOT: 32	9.6	3.0	0.281765	0.000048	0.000552	0.029568	0.281748	-36.1	1.7	0.4	1645
DAFOV#4_JOSHUA_SPOT: 22	28.0	3.1	0.281811	0.000034	0.001578	0.077255	0.281761	-34.5	1.2	0.9	1648
DAFOV#4_JOSHUA_SPOT: 12	34.8	3.0	0.281754	0.000044	0.001783	0.093187	0.281698	-36.4	1.5	-0.8	1670
DAFOV#4_JOSHUA_SPOT: 21	48.3	2.8	0.282041	0.000035	0.002495	0.128209	0.281960	-26.3	1.2	9.3	1703
Sample: Quartzite											
DAFOV_#1_QUARTZITE: 70	26.8	2.6	0.282388	0.000035	0.001503	0.074612	0.282383	-14.0	1.2	-10.6	164
DAFOV_#1_QUARTZITE: 68	18.1	3.9	0.282349	0.000031	0.001232	0.050012	0.282345	-15.4	1.1	-11.9	164
DAFOV_#1_QUARTZITE: 63	54.2	2.0	0.282445	0.000049	0.002910	0.151472	0.282436	-12.0	1.7	-8.7	164
DAFOV_#1_QUARTZITE: 50	38.1	3.3	0.282382	0.000027	0.002242	0.103443	0.282375	-14.3	0.9	-10.9	163
DAFOV_#1_QUARTZITE: 69	20.9	3.5	0.282370	0.000031	0.001283	0.057741	0.282367	-14.7	1.1	-11.2	163
DAFOV_#1_QUARTZITE: 61	42.3	3.1	0.282365	0.000033	0.002461	0.118075	0.282357	-14.9	1.2	-11.5	165
DAFOV_#1_QUARTZITE: 67	25.2	2.3	0.282350	0.000047	0.001323	0.069937	0.282346	-15.4	1.6	-11.9	165
DAFOV_#1_QUARTZITE: 48	23.1	2.2	0.282437	0.000058	0.001474	0.070924	0.282432	-12.3	2.1	-8.8	166
DAFOV_#1_QUARTZITE: 55	29.6	3.2	0.282443	0.000031	0.001806	0.086051	0.282437	-12.1	1.1	-8.6	167
DAFOV_#1_QUARTZITE: 66	9.2	2.6	0.282386	0.000029	0.000547	0.026202	0.282384	-14.1	1.0	-10.5	167
Sample: Cooke											
DAFOV_#5_COOKE: 70	23.3	2.6	0.282472	0.000037	0.001325	0.064861	0.282472	-11.1	1.3	-10.2	39
DAFOV_#5_COOKE: 61	30.3	2.5	0.282504	0.000042	0.001657	0.083954	0.282503	-9.9	1.5	-9.1	39
DAFOV_#5_COOKE: 55	6.5	2.2	0.282602	0.000037	0.000399	0.018195	0.282602	-6.5	1.3	-5.6	40
DAFOV_#5_COOKE: 68	6.8	2.6	0.282583	0.000037	0.000423	0.019063	0.282582	-7.2	1.3	-6.3	40
DAFOV_#5_COOKE: 64	15.4	2.5	0.282544	0.000039	0.000899	0.042514	0.282544	-8.5	1.4	-7.6	40
DAFOV_#5_COOKE: 65	25.6	2.5	0.282102	0.000034	0.001387	0.071474	0.282063	-24.2	1.2	7.5	1468
DAFOV_#5_COOKE: 63	25.5	2.7	0.282053	0.000030	0.001341	0.071603	0.282016	-25.9	1.1	6.1	1481
DAFOV_#5_COOKE: 58	23.4	2.3	0.282061	0.000032	0.001247	0.064511	0.282024	-25.6	1.1	8.1	1555
DAFOV_#5_COOKE: 62	20.6	2.5	0.282086	0.000041	0.001104	0.056636	0.282053	-24.7	1.4	10.1	1598
DAFOV_#5_COOKE: 52	43.9	1.9	0.282190	0.000045	0.002341	0.121685	0.282118	-21.0	1.6	13.2	1633
DAFOV_#5_COOKE: 57	22.6	2.8	0.282019	0.000033	0.001249	0.062735	0.281981	-27.1	1.2	8.5	1637
Sample: Coxcomb											
DAFOV_#5_COXCOMB: 25	9.1	2.5	0.282439	0.000031	0.000817	0.026087	0.282438	-12.2	1.1	-10.6	74
DAFOV_#5_COXCOMB: 27	7.1	3.0	0.282371	0.000027	0.000474	0.019526	0.282371	-14.6	1.0	-13.0	74
DAFOV_#5_COXCOMB: 29	9.2	3.2	0.282526	0.000032	0.000673	0.025947	0.282525	-9.2	1.1	-7.5	76
DAFOV_#5_COXCOMB: 30	17.5	1.6	0.282449	0.000062	0.001280	0.046487	0.282448	-11.9	2.2	-10.2	76
DAFOV_#5_COXCOMB: 12	9.5	2.3	0.282416	0.000038	0.000739	0.026282	0.282415	-13.1	1.4	-11.4	76
DAFOV_#5_COXCOMB: 24	21.9	4.0	0.282407	0.000033	0.001248	0.059452	0.282405	-13.4	1.2	-11.7	76
DAFOV_#5_COXCOMB: 33	39.9	4.4	0.282477	0.000033	0.002112	0.107185	0.282474	-10.9	1.2	-9.3	77
DAFOV_#5_COXCOMB: 19	16.7	3.8	0.282344	0.000025	0.001150	0.044877	0.282342	-15.6	0.9	-14.0	77
DAFOV_#5_COXCOMB: 18	10.9	3.9	0.282496	0.000025	0.000744	0.030423	0.282495	-10.2	0.9	-8.3	89
DAFOV_#5_COXCOMB: 13	10.6	2.9	0.282496	0.000029	0.000630	0.029376	0.282495	-10.2	1.0	-8.2	91
DAFOV_#5_COXCOMB: 34	11.5	2.6	0.282384	0.000040	0.000636	0.032011	0.282383	-14.2	1.4	-11.6	117
DAFOV_#5_COXCOMB: 15	16.7	2.6	0.282369	0.000031	0.001162	0.045631	0.282365	-14.7	1.1	-10.9	179
Sample: Hueco											
DAFOV_#5_HUECO: 22	74.1	1.5	0.282667	0.000047	0.003694	0.206875	0.282664	-4.2	1.7	-3.5	34
DAFOV_#5_HUECO: 17	40.8	1.3	0.282727	0.000053	0.002092	0.113431	0.282726	-2.0	1.9	-1.3	34
DAFOV_#5_HUECO: 23	42.2	1.5	0.282697	0.000047	0.002121	0.117090	0.282696	-3.1	1.7	-2.4	35
DAFOV_#5_HUECO: 31	59.9	1.6	0.282825	0.000051	0.002957	0.166278	0.282823	1.4	1.8	2.1	35
DAFOV_#5_HUECO: 35	52.6	1.6	0.282759	0.000048	0.002658	0.146325	0.282757	-0.9	1.7	-0.2	35
DAFOV_#5_HUECO: 28	67.1	1.9	0.282783	0.000038	0.003312	0.186524	0.282781	-0.1	1.3	0.6	35
DAFOV_#5_HUECO: 26	66.5	1.5	0.282716	0.000062	0.003755	0.188302	0.282714	-2.4	2.2	-1.7	35
DAFOV_#5_HUECO: 32	67.9	1.5	0.282640	0.000050	0.003447	0.188577	0.282638	-5.1	1.8	-4.4	35
Sample: Rosamond											
DAFOV_ROSAMOND_SPOT#: 23	6.4	3.3	0.282585	0.000028	0.000411	0.017726	0.282584	-7.1	1.0	-5.2	87
DAFOV_ROSAMOND_SPOT#: 33	4.9	3.3	0.282516	0.000030	0.000316	0.013572	0.282515	-9.5	1.1	-7.6	87
DAFOV_ROSAMOND_SPOT#: 13	19.4	3.3	0.282540	0.000035	0.001117	0.053453	0.282538	-8.7	1.2	-6.8	88
DAFOV_ROSAMOND_SPOT#: 18	16.1	2.8	0.282661	0.000027	0.000817	0.044690	0.282660	-4.4	1.0	-2.5	88
DAFOV_ROSAMOND_SPOT#: 31	14.8	3.4	0.282535	0.000030	0.000797	0.040910	0.282533	-8.8	1.1	-6.9	89
DAFOV_ROSAMOND_SPOT#: 16	15.7	3.2	0.282574	0.000026	0.000982	0.043921	0.282572	-7.5	0.9	-5.5	90
DAFOV_ROSAMOND_SPOT#: 30	13.8	3.4	0.282669	0.000027	0.000730	0.038315	0.282667	-4.1	1.0	-2.2	90
DAFOV_ROSAMOND_SPOT#: 32	10.1	2.8	0.282619	0.000029	0.000540	0.028059	0.282618	-5.9	1.0	-3.9	90
DAFOV_ROSAMOND_SPOT#: 22	8.6	3.4	0.282633	0.000030	0.000470	0.023769	0.282632	-5.4	1.1	-3.4	91
DAFOV_ROSAMOND_SPOT#: 35	15.2	3.1	0.282110	0.000034	0.000775	0.044114	0.282090	-23.9	1.2	6.1	1364
DAFOV_ROSAMOND_SPOT#: 27	28.7	3.7	0.281953	0.000041	0.002279	0.110772	0.281887	-29.4	1.4	2.5	1521
DAFOV_ROSAMOND_SPOT#: 28	25.5	3.6	0.282141	0.000040	0.001663	0.070179	0.282088	-22.8	1.4	13.1	1673
Sample: Granite-Mtn											
DAFOV_GRANITE_MTN_SPOT#: 25	20.3	3.6	0.282355	0.000025	0.000981	0.055992	0.282354	-15.2	0.9	-13.7	70
DAFOV_GRANITE_MTN_SPOT#: 21	22.9	4.0	0.282437	0.000018	0.001226	0.064021	0.282436	-12.3	0.7	-10.8	71
DAFOV_GRANITE_MTN_SPOT#: 19	16.6	3.6	0.282364	0.000025	0.000965	0.046150	0.282363	-14.9	0.9	-13.3	71
DAFOV_GRANITE_MTN_SPOT#: 14	16.7	3.7	0.282412	0.000027	0.000995	0.046792	0.282411	-13.2	1.0	-11.6	71
DAFOV_GRANITE_MTN_SPOT#: 6	20.2	3.5	0.282400	0.000034	0.001117	0.054130	0.282399	-13.6	1.2	-12.1	72

TABLE DR2

DAFOV_GRANITE MTN_SPOT#:	8	9.6	3.4	0.282382	0.000026	0.000624	0.025821	0.282381	-14.2	0.9	-12.7	72	
DAFOV_GRANITE MTN_SPOT#:	11	11.7	3.9	0.282416	0.000022	0.000655	0.032487	0.282416	-13.0	0.8	-11.5	72	
DAFOV_GRANITE MTN_SPOT#:	23	10.9	3.4	0.282410	0.000028	0.000648	0.030391	0.282409	-13.3	1.0	-11.7	73	
DAFOV_GRANITE MTN_SPOT#:	9	23.7	2.1	0.282376	0.000044	0.001199	0.064819	0.282374	-14.5	1.5	-12.9	74	
DAFOV_GRANITE MTN_SPOT#:	20	11.8	3.6	0.282161	0.000026	0.000634	0.032535	0.282144	-22.1	0.9	9.3	1421	
DAFOV_GRANITE MTN_SPOT#:	1	9.3	3.2	0.282014	0.000034	0.000497	0.024459	0.282000	-27.3	1.2	4.3	1427	
DAFOV_GRANITE MTN_SPOT#:	10	30.9	2.7	0.282003	0.000028	0.001590	0.087311	0.281954	-27.6	1.0	7.1	1617	
DAFOV_GRANITE MTN_SPOT#:	4	28.3	4.0	0.282007	0.000033	0.001482	0.078305	0.281961	-27.5	1.2	7.8	1640	
Sample: Yucca													
DAFOV_YUCCA_SPOT#:	52	35.7	3.5	0.282401	0.000029	0.001644	0.089121	0.282399	-13.6	1.0	-12.0	74	
DAFOV_YUCCA_SPOT#:	53	52.4	3.3	0.282519	0.000032	0.002618	0.146584	0.282516	-9.4	1.1	-7.9	75	
DAFOV_YUCCA_SPOT#:	36	24.7	2.9	0.282529	0.000031	0.001257	0.063828	0.282528	-9.0	1.1	-7.4	76	
DAFOV_YUCCA_SPOT#:	46	17.1	3.1	0.282578	0.000034	0.000918	0.048321	0.282577	-7.3	1.2	-5.7	76	
DAFOV_YUCCA_SPOT#:	58	15.6	2.9	0.282526	0.000032	0.000814	0.043325	0.282525	-9.2	1.1	-7.5	77	
DAFOV_YUCCA_SPOT#:	54	34.2	3.8	0.282547	0.000033	0.001419	0.079688	0.282545	-8.4	1.2	-6.8	77	
DAFOV_YUCCA_SPOT#:	51	23.1	2.5	0.282504	0.000034	0.000985	0.053096	0.282502	-10.0	1.2	-8.3	78	
DAFOV_YUCCA_SPOT#:	42	21.6	3.1	0.282437	0.000025	0.001117	0.060342	0.282436	-12.3	0.9	-10.6	79	
DAFOV_YUCCA_SPOT#:	48	23.3	3.2	0.282491	0.000028	0.001269	0.065599	0.282488	-10.4	1.0	-8.3	97	
DAFOV_YUCCA_SPOT#:	38	17.6	2.6	0.282560	0.000037	0.000989	0.049617	0.282558	-7.9	1.3	-4.8	144	
DAFOV_YUCCA_SPOT#:	37	10.1	3.4	0.281777	0.000026	0.000524	0.028586	0.281775	-35.7	0.9	-31.9	173	
DAFOV_YUCCA_SPOT#:	50	20.1	3.6	0.282437	0.000025	0.001079	0.055022	0.282433	-12.3	0.9	-8.2	191	
DAFOV_YUCCA_SPOT#:	55	20.7	3.1	0.282289	0.000025	0.001172	0.057120	0.282284	-17.5	0.9	-12.5	234	
DAFOV_YUCCA_SPOT#:	44	31.5	3.3	0.281841	0.000032	0.001745	0.085881	0.281786	-33.4	1.1	1.8	1648	
DAFOV_YUCCA_SPOT#:	43	9.9	3.3	0.281868	0.000030	0.000559	0.027055	0.281668	-38.9	1.0	-1.5	1688	
Sample: Ajo													
MIZER_AJO1309:1C		18.3	2.3	0.2824942	0.0000340	0.0016834		0.2824921	-10.3	1.2	-8.9	68	
MIZER_AJO1309:1R		9.5	2.9	0.2824698	0.0000307	0.0007129		0.2824689	-11.1	1.1	-9.7	66	
MIZER_AJO1309:2C		12.1	2.7	0.2825016	0.0000323	0.0008782		0.2825005	-10.0	1.1	-8.5	68	
MIZER_AJO1309:2R		7.1	2.9	0.2825046	0.0000242	0.0005332		0.2825039	-9.9	0.9	-8.4	69	
MIZER_AJO1309:4C		10.4	2.8	0.2824670	0.0000290	0.0010261		0.2824657	-11.2	1.0	-9.8	68	
MIZER_AJO1309:4R		9.0	2.8	0.2825211	0.0000267	0.0006940		0.2825202	-9.3	0.9	-7.9	68	
MIZER_AJO1309:11R		9.0	2.8	0.2825157	0.0000285	0.0006724		0.2825148	-9.5	1.0	-8.1	67	
MIZER_AJO1309:5C		9.5	2.6	0.2825210	0.0000284	0.0008176		0.2825199	-9.3	1.0	-7.8	69	
Sample: Chino													
MIZER_CMD16:15C		17.9	2.8	0.2826146	0.0000310	0.0013211		0.2826131	-6.0	1.1	-4.8	59	
MIZER_CMD16:15R		11.8	2.9	0.2826477	0.0000261	0.0009263		0.2826467	-4.9	0.9	-3.6	59	
MIZER_CMD16:14C		11.3	2.9	0.2826328	0.0000337	0.0009881		0.2826317	-5.4	1.2	-4.1	60	
MIZER_CMD16:14R		9.0	3.1	0.2826447	0.0000347	0.0007664		0.2826439	-5.0	1.2	-3.7	59	
MIZER_CMD16:5C		16.5	2.8	0.2825922	0.0000289	0.0013659		0.2825907	-6.8	1.0	-5.6	60	
MIZER_CMD16:5R		12.3	2.9	0.2826383	0.0000328	0.0009205		0.2826372	-5.2	1.2	-3.8	63	
MIZER_CMD16:3C		17.8	2.9	0.2827041	0.0000258	0.0014166		0.2827025	-2.9	0.9	-1.6	59	
MIZER_CMD16:3R		11.7	2.9	0.2826239	0.0000301	0.0008830		0.2826229	-5.7	1.1	-4.4	59	
MIZER_CMD16:2C		16.7	2.7	0.2826101	0.0000341	0.0013609		0.2826086	-6.2	1.2	-4.9	60	
MIZER_CMD16:2R		11.0	2.6	0.2826619	0.0000305	0.0008380		0.2826610	-4.4	1.1	-3.1	58	
MIZER_CMD16:1C		13.7	2.5	0.2826209	0.0000324	0.0012199		0.2826195	-5.8	1.1	-4.5	59	
MIZER_CMD16:1R		9.1	2.9	0.2826605	0.0000320	0.0006871		0.2826597	-4.4	1.1	-3.1	61	
MIZER_CMD16:10C		16.4	2.9	0.2826393	0.0000279	0.0013326		0.2826378	-5.2	1.0	-3.9	60	
MIZER_CMD16:10R		9.8	2.8	0.2826815	0.0000278	0.0007431		0.2826807	-3.7	1.0	-2.4	58	
MIZER_CMD16:11C		14.3	2.7	0.2826411	0.0000311	0.0011594		0.2826399	-5.1	1.1	-3.8	58	
MIZER_CMD16:11R		8.0	2.9	0.2825779	0.0000255	0.0006293		0.2825772	-7.3	0.9	-6.1	58	
Sample: Lakeshore													
MIZER_PE76:16C		13.2	3.2	0.2824713	0.0000253	0.0009470		0.2824700	-11.1	0.9	-9.6	71	
MIZER_PE76:16R		19.2	3.5	0.2825186	0.0000240	0.0014115		0.2825168	-9.4	0.8	-8.0	69	
MIZER_PE76:14R		14.1	3.4	0.2824520	0.0000322	0.0010507		0.2824506	-11.8	1.1	-10.3	69	
MIZER_PE76:17C		15.0	3.1	0.2824689	0.0000322	0.0011133		0.2824674	-11.2	1.1	-9.7	69	
MIZER_PE76:17R		16.8	3.2	0.2824772	0.0000258	0.0012504		0.2824755	-10.9	0.9	-9.3	72	
MIZER_PE76:2C		13.9	3.1	0.2824575	0.0000295	0.0010772		0.2824561	-11.6	1.0	-10.1	71	
MIZER_PE76:2R		13.5	3.3	0.2824511	0.0000313	0.0010347		0.2824496	-11.8	1.1	-10.2	74	
MIZER_PE76:10C		28.6	3.2	0.2823605	0.0000339	0.0018434		0.2823580	-15.0	1.2	-13.5	72	
MIZER_PE76:10R		20.2	3.2	0.2825122	0.0000318	0.0016532		0.2825100	-9.6	1.1	-8.2	70	
Sample: San Juan													
MIZER_SJEST:16R		8.4	2.7	0.2826464	0.0000294	0.0008689		0.2826454	-4.9	1.0	-3.6	58	
MIZER_SJEST:12R		10.6	3.2	0.2826402	0.0000289	0.0008428		0.2826392	-5.1	1.0	-3.8	59	
MIZER_SJEST:17C		7.2	2.2	0.2826629	0.0000325	0.0005795		0.2826622	-4.3	1.2	-3.0	59	
MIZER_SJEST:2C		9.5	2.5	0.2826558	0.0000291	0.0007381		0.2826550	-4.6	1.0	-3.3	59	
MIZER_SJEST:3C		8.2	3.2	0.2826469	0.0000304	0.0007733		0.2826460	-4.9	1.1	-3.6	59	
MIZER_SJEST:4C		13.1	3.6	0.2826401	0.0000265	0.0011522		0.2826388	-5.1	0.9	-3.9	59	
MIZER_SJEST:1C		9.3	2.4	0.2827194	0.0000368	0.0007524		0.2827185	-2.3	1.3	-1.0	60	
MIZER_SJEST:9R		8.1	3.3	0.2826165	0.0000290	0.0006896		0.2826158	-6.0	1.0	-4.7	60	
MIZER_SJEST:13R		9.5	3.1	0.2823687	0.0000317	0.0006519		0.2823675	-14.7	1.1	-12.4	106	
MIZER_SJEST:9C		14.5	1.8	0.2823419	0.0000377	0.0008661		0.2823219	-15.7	1.3	11.0	1220	
MIZER_SJEST:16C		23.4	3.2	0.2819740	0.0000313	0.0014163		0.2819360	-28.7	1.1	1.9	1418	
MIZER_SJEST:12C		8.5	2.6	0.2821210	0.0000365	0.0005994		0.2821045	-23.5	1.3	8.7	1455	
MIZER_SJEST:19C		17.7	2.8	0.2819499	0.0000347	0.0012408		0.2819137	-29.5	1.2	3.8	1539	
MIZER_SJEST:13C		25.2	2.9	0.2821357	0.0000311	0.0015720		0.2820897	-23.0	1.1	10.3	1546	
Sample: Tyrone													
MIZER_T11QMP:1		12.0	2.7	0.2826038	0.0000319	0.0009610		0.2826029	-6.4	1.1	-5.2	54.9	
MIZER_T11QMP:2		8.3	2.7	0.2825803	0.0000275	0.0007482		0.2825795	-7.2	1.0	-6.0	54.9	
MIZER_T11QMP:3		8.2	2.7	0.2826047	0.0000311	0.0007054		0.2826040	-6.4	1.1	-5.2	54.9	
MIZER_T11QMP:4		18.5	3.3	0.2821211	0.0000270	0.0013748		0.2821197	-23.5	1.0	-22.3	54.9	

TABLE DR2

MIZER_T11QMP:5	8.2	2.6	0.2826219	0.0000330	0.0009165	0.2826210	-5.8	1.2	-4.6	54.9	
MIZER_T11QMP:6	8.5	2.6	0.2826635	0.0000296	0.0007323	0.2826628	-4.3	1.0	-3.1	54.9	
MIZER_T11QMP:7	11.0	2.7	0.2825130	0.0000257	0.0007618	0.2825122	-9.6	0.9	-8.4	54.9	
MIZER_T11QMP:8	8.8	2.9	0.2825656	0.0000347	0.0007867	0.2825648	-7.8	1.2	-6.6	54.9	
MIZER_T11QMP:9	11.1	2.6	0.2825569	0.0000328	0.0008826	0.2825560	-8.1	1.2	-6.9	54.9	
MIZER_T11QMP:10	7.9	2.6	0.2826536	0.0000345	0.0011052	0.2826524	-4.6	1.2	-3.5	54.9	
Sample: Tinaja											
JBC_TIN_3	44.5	1.3	0.282917	0.000050	0.002349	0.119955	0.282916	4.7	1.8	5.4	36
JBC_TIN_4	47.7	1.3	0.282756	0.000058	0.002496	0.128169	0.282754	-1.0	2.0	-0.3	35
JBC_TIN_5	31.8	1.3	0.282758	0.000063	0.001841	0.091355	0.282757	-1.0	2.2	-0.2	37
JBC_TIN_6	56.5	1.3	0.282654	0.000054	0.002963	0.153151	0.282652	-4.6	1.9	-3.9	36
JBC_TIN_8	27.1	1.3	0.282659	0.000048	0.001486	0.075908	0.282658	-4.5	1.7	-3.7	35
JBC_TIN_7	22.0	1.5	0.282520	0.000048	0.001252	0.059727	0.282495	-9.4	1.7	13.7	1070
JBC_TIN_10	24.9	1.4	0.282283	0.000045	0.001433	0.067767	0.282252	-17.8	1.6	6.7	1141
Sample: Reefer											
JBC_REEF_20	30.5	2.2	0.282905	0.000032	0.001885	0.086517	0.282905	4.3	1.1	4.7	20
JBC_REEF_11	22.4	2.3	0.282954	0.000038	0.001299	0.059915	0.282954	6.0	1.4	6.4	20
JBC_REEF_12	20.9	2.2	0.282885	0.000038	0.001277	0.057457	0.282885	3.5	1.3	4.0	21
JBC_REEF_15	22.8	2.1	0.282886	0.000043	0.001469	0.065420	0.282885	3.6	1.5	4.0	20
JBC_REEF_13	32.6	2.2	0.282872	0.000044	0.001889	0.087294	0.282872	3.1	1.6	3.5	21
JBC_REEF_14	23.6	2.5	0.282866	0.000031	0.001474	0.066946	0.282866	2.9	1.1	3.3	20
JBC_REEF_17	22.1	2.1	0.282948	0.000041	0.001272	0.057855	0.282947	5.8	1.5	6.2	21
JBC_REEF_19	27.9	2.2	0.282875	0.000046	0.001704	0.077925	0.282874	3.2	1.6	3.6	21

TABLE DR3

Supplementary Table DR3. Zircon oxygen isotope SIMS data from the WISCSIMS lab

File	Sample ID	$\delta^{18}\text{O}$ % VSMOW	2SD (ext.)	Mass Bias (%)	$\delta^{18}\text{O}$ % measured	2SE (int.)	^{16}O (Gcps)	IP (nA)	Yield (Gcps/nA)	$^{16}\text{OH}/^{16}\text{O}$	NOTES/SUMMARY
20170124@114.asc	OX_1 KIM-5-A1				3.041	0.223	2.399	1.549	1.548	7.75E-04	
20170124@115.asc	OX_1 KIM-5-A2				3.123	0.205	2.373	1.533	1.548	7.94E-04	
20170124@116.asc	OX_1 KIM-5-B1				3.013	0.249	2.358	1.525	1.547	8.25E-04	
20170124@117.asc	OX_1 KIM-5-C1				2.823	0.163	2.346	1.516	1.548	7.83E-04	
average and 2SD		5.09		-2.08	3.00	0.25					
20170124@118.asc	OX_1 Reefer-01	8.45	0.20		6.370	0.236	2.339	1.509	1.550	7.77E-04 SAMPLE: Reefer	
20170124@119.asc	OX_1 Reefer-02	8.51	0.20		6.424	0.214	2.317	1.504	1.541	8.31E-04 8.4 ± 0.2 (2 SD), n=10	
20170124@120.asc	OX_1 Reefer-03	8.51	0.20		6.431	0.242	2.284	1.484	1.539	8.18E-04	
20170124@121.asc	OX_1 Reefer-04	8.36	0.20		6.277	0.232	2.274	1.471	1.546	8.81E-04	
20170124@122.asc	OX_1 Reefer-05	8.34	0.20		6.253	0.198	2.310	1.482	1.559	8.13E-04	
20170124@123.asc	OX_1 Reefer-06	8.25	0.20		6.168	0.155	2.258	1.468	1.538	8.19E-04	
20170124@124.asc	OX_1 Reefer-07	8.33	0.20		6.245	0.201	2.224	1.443	1.541	8.73E-04	
20170124@125.asc	OX_1 Reefer-08	8.26	0.20		6.176	0.218	2.213	1.438	1.539	8.33E-04	
20170124@126.asc	OX_1 Reefer-09	8.51	0.20		6.430	0.262	2.217	1.438	1.542	7.84E-04	
20170124@127.asc	OX_1 Reefer-10	8.42	0.20		6.334	0.196	2.203	1.432	1.539	8.18E-04	
20170124@128.asc	OX_1 KIM-5-C2				3.126	0.170	2.211	1.428	1.548	8.12E-04	
20170124@129.asc	OX_1 KIM-5-C3				2.941	0.232	2.189	1.423	1.538	8.20E-04	
20170124@130.asc	OX_1 KIM-5-B2				2.985	0.295	2.323	1.511	1.537	7.88E-04	
20170124@131.asc	OX_1 KIM-5-B3				3.054	0.226	2.325	1.508	1.542	8.05E-04	
average and 2SD		5.09		-2.07	3.03	0.16					
bracket average and 2SD		5.09		-2.07	3.01	0.20					
20170124@132.asc	OX_1 29palms-01	5.01	0.18		2.934	0.236	2.318	1.501	1.544	8.81E-04 SAMPLE: 29 Palms	
20170124@133.asc	OX_1 29palms-02	5.01	0.18		2.926	0.227	2.312	1.494	1.548	8.78E-04 5.2 ± 0.4 (2 SD), n=10	
20170124@134.asc	OX_1 29palms-03	5.24	0.18		3.158	0.201	2.306	1.492	1.545	8.80E-04	
20170124@135.asc	OX_1 29palms-04	5.22	0.18		3.141	0.223	2.320	1.490	1.557	9.00E-04	
20170124@136.asc	OX_1 29palms-05	4.87	0.18		2.791	0.261	2.290	1.484	1.543	9.34E-04	
20170124@137.asc	OX_1 29palms-06	5.39	0.18		3.313	0.251	2.279	1.482	1.538	8.86E-04	
20170124@138.asc	OX_1 29palms-07	5.11	0.18		3.029	0.215	2.351	1.494	1.573	8.99E-04	
20170124@139.asc	OX_1 29palms-08	5.44	0.18		3.361	0.219	2.270	1.480	1.534	8.24E-04	
20170124@140.asc	OX_1 29palms-09	5.02	0.18		2.945	0.279	2.238	1.457	1.537	8.44E-04	
20170124@141.asc	OX_1 29palms-10	5.09	0.18		3.008	0.242	2.218	1.442	1.538	9.19E-04	
20170124@142.asc	OX_1 KIM-5-A3				2.996	0.247	2.335	1.503	1.553	8.06E-04	
20170124@143.asc	OX_1 KIM-5-A4				3.084	0.227	2.371	1.520	1.560	8.08E-04	
20170124@144.asc	OX_1 KIM-5-B4				3.052	0.201	2.351	1.521	1.546	7.97E-04	
20170124@145.asc	OX_1 KIM-5-C4				2.848	0.210	2.330	1.513	1.540	7.90E-04	
average and 2SD		5.09		-2.07	3.00	0.21					
bracket average and 2SD		5.09		-2.07	3.01	0.18					
20170124@146.asc	OX_1 strawberry-01	4.74	0.15		2.643	0.214	2.394	1.530	1.565	8.93E-04 SAMPLE: Strawberry	
20170124@147.asc	OX_1 strawberry-02	5.49	0.15		3.391	0.273	2.331	1.519	1.534	8.78E-04 5.3 ± 0.9 (2 SD), n=8	
20170124@148.asc	OX_1 strawberry-03	5.65	0.15		3.555	0.207	2.277	1.478	1.540	8.76E-04	
20170124@149.asc	OX_1 strawberry-04	4.90	0.15		2.806	0.192	2.242	1.455	1.541	9.48E-04	
20170124@150.asc	OX_1 strawberry-05	6.09	0.15		3.991	0.239	2.222	1.443	1.540	8.10E-04	
20170124@151.asc	OX_1 strawberry-06	5.41	0.15		3.311	0.280	2.205	1.432	1.540	9.25E-04	
20170124@152.asc	OX_1 strawberry-07	4.96	0.15		2.867	0.184	2.215	1.431	1.548	9.19E-04	
20170124@153.asc	OX_1 strawberry-08	5.36	0.15		3.261	0.258	2.181	1.423	1.533	9.11E-04	
20170124@154.asc	OX_1 Tinaja-01	5.59	0.15		3.493	0.225	2.144	1.405	1.526	9.00E-04 SAMPLE: Tinaja	
20170124@155.asc	OX_1 Tinaja-02	5.49	0.15		3.397	0.186	2.176	1.411	1.542	1.02E-03 5.3 ± 0.4 (2 SD), n=10	
20170124@156.asc	OX_1 KIM-5-C5				2.995	0.169	2.234	1.448	1.542	8.01E-04	
20170124@157.asc	OX_1 KIM-5-A5				3.035	0.220	2.253	1.461	1.542	8.33E-04	
20170124@158.asc	OX_1 KIM-5-B5				2.930	0.253	2.394	1.560	1.535	7.67E-04	
20170124@159.asc	OX_1 KIM-5-C6				3.011	0.217	2.375	1.548	1.534	7.82E-04	
average and 2SD		5.09		-2.09	2.99	0.09					
bracket average and 2SD		5.09		-2.09	2.99	0.15					
20170124@160.asc	OX_1 Tinaja-03	5.22	0.15		3.076	0.254	2.380	1.546	1.540	8.36E-04	
20170124@161.asc	OX_1 Tinaja-04	5.04	0.15		2.901	0.220	2.381	1.547	1.539	8.63E-04	
20170124@162.asc	OX_1 Tinaja-05	5.21	0.15		3.073	0.194	2.378	1.546	1.538	8.39E-04	
20170124@163.asc	OX_1 Tinaja-06	5.42	0.15		3.282	0.229	2.358	1.542	1.529	8.34E-04	
20170124@164.asc	OX_1 Tinaja-07	5.37	0.15		3.232	0.205	2.386	1.540	1.549	8.28E-04	
20170124@165.asc	OX_1 Tinaja-08	5.20	0.15		3.056	0.162	2.359	1.547	1.525	8.78E-04	
20170124@166.asc	OX_1 Tinaja-09	5.12	0.15		2.982	0.264	2.358	1.533	1.538	8.90E-04	
20170124@167.asc	OX_1 Tinaja-10	5.12	0.15		2.980	0.224	2.335	1.514	1.542	8.66E-04	
20170124@168.asc	OX_1 Qtzite-01	5.38	0.15		3.236	0.199	2.327	1.506	1.545	8.93E-04 SAMPLE: Quartzite	
20170124@169.asc	OX_1 Qtzite-02	4.89	0.15		2.749	0.229	2.329	1.497	1.556	1.20E-03 5.2 ± 0.5 (2 SD), n=9	
20170124@170.asc	OX_1 Qtzite-03	5.42	0.15		3.274	0.289	2.366	1.507	1.569	2.08E-03	
20170124@171.asc	OX_1 Qtzite-04	4.80	0.15		2.660	0.201	2.302	1.495	1.540	1.25E-03	
20170124@172.asc	OX_1 Qtzite-05	5.63	0.15		3.488	0.187	2.232	1.456	1.533	8.40E-04	
20170124@173.asc	OX_1 Qtzite-06	5.44	0.15		3.296	0.191	2.225	1.443	1.541	9.69E-04	
20170124@174.asc	OX_1 Qtzite-07	5.21	0.15		3.069	0.225	2.220	1.437	1.545	9.77E-04	
20170124@175.asc	OX_1 KIM-5-C7				2.793	0.217	2.339	1.513	1.546	7.70E-04	
20170124@176.asc	OX_1 KIM-5-B6				2.955	0.235	2.342	1.520	1.541	7.64E-04	
20170124@177.asc	OX_1 KIM-5-A6, NMReset				2.958	0.232	2.319	1.501	1.545	7.85E-04	
20170124@178.asc	OX_1 KIM-5-A7				2.910	0.212	2.312	1.496	1.545	7.85E-04	
average and 2SD		5.09		-2.13	2.90	0.15					
bracket average and 2SD		5.09		-2.13	2.95	0.15					
20170124@179.asc	OX_1 Qtzite-08	5.10	0.20		2.922	0.184	2.395	1.511	1.585	1.19E-03	
20170124@180.asc	OX_1 Qtzite-09	5.09	0.20		2.918	0.193	2.323	1.507	1.542	1.29E-03	
20170124@181.asc	OX_1 Keane-01	6.50	0.20		4.318	0.246	2.289	1.477	1.549	2.01E-03 SAMPLE: Keane	
20170124@182.asc	OX_1 Keane-02	7.56	0.20		5.381	0.256	2.240	1.464	1.531	1.24E-03 7.0 ± 0.6 (2 SD), n=9	
20170124@183.asc	OX_1 Keane-03	7.22	0.20		5.043	0.188	2.250	1.458	1.543	7.67E-04	
20170124@184.asc	OX_1 Keane-04	7.05	0.20		4.872	0.225	2.229	1.453	1.534	9.40E-04	
20170124@185.asc	OX_1 Keane-05	7.04	0.20		4.862	0.229	2.226	1.458	1.527	1.08E-03	
20170124@186.asc	OX_1 Keane-06	6.93	0.20		4.747	0.266	2.221	1.445	1.537	1.03E-03	
20170124@187.asc	OX_1 Keane-07	7.12	0.20		4.939	0.259	2.180	1.422	1.533	7.75E-04	
20170124@188.asc	OX_1 Keane-08	6.62	0.20		4.439	0.184	2.260	1.442	1.568	7.56E-04	
20170124@189.asc	OX_1 Keane-09	13.64	0.20		11.449	0.57					

TABLE DR3

20170124@194.asc	OX_1 KIM-5-C8 average and 2SD bracket average and 2SD		2.763 2.93 0.27	0.239 2.91 0.20	2.438 1.584	1.539	7.37E-04
20170124@195.asc	OX_1 Cooke-01	5.05	0.31	2.972 3.087 3.47	0.193 0.214 0.216	2.477 1.609 1.581	1.539 7.74E-04 SAMPLE: Cooke (rim)
20170124@196.asc	OX_1 Cooke-02	5.17	0.31	3.087 3.47	0.214 0.31	2.427 1.581	1.535 7.43E-04 5.1 ± 1.2 (2 SD), n=10
20170124@197.asc	OX_1 Cooke-03	3.47	0.31	1.394 5.48	0.216 0.31	2.426 1.568 1.602	1.547 7.41E-04
20170124@198.asc	OX_1 Cooke-04	5.48	0.31	3.395 5.26	0.265 0.31	2.457 1.597	1.534 7.56E-04 Cooke (core)
20170124@199.asc	OX_1 Cooke-05	5.26	0.31	3.174 2.76	0.226 0.247	2.433 2.363	1.523 7.56E-04 3.0 ± 0.4 (2 SD), n=2
20170124@200.asc	OX_1 Cooke-06 (core)	2.76	0.31	0.686 4.99	0.247 0.285	1.547 1.523	1.527 8.27E-04
20170124@201.asc	OX_1 Cooke-07	4.99	0.31	2.911 5.59	0.285 0.31	2.353 1.523	1.545 8.27E-04
20170124@202.asc	OX_1 Cooke-08	5.59	0.31	3.504 5.58	0.270 0.31	2.338 1.519	1.539 7.40E-04
20170124@203.asc	OX_1 Cooke-09	5.58	0.31	3.500 5.16	0.167 0.202	2.311 1.507 1.516	1.534 7.44E-04
20170124@204.asc	OX_1 Cooke-10	5.16	0.31	3.081 3.29	0.202 0.195	2.335 2.308	1.540 7.74E-04
20170124@205.asc	OX_1 Cooke-11 (core)	3.29	0.31	1.211 5.19	0.195 0.31	1.505 1.485	1.533 7.71E-04
20170124@206.asc	OX_1 Cooke-12	11.49	0.31	9.394	0.501	2.110	1.485
20170124@207.asc	OX_1 Cooke-13	5.19	0.31	3.103 5.19	0.244 0.31	2.278 1.487	1.532 7.97E-04
20170124@208.asc	OX_1 Hope-01	5.58	0.31	3.499 5.76	0.197 0.250	2.243 1.457	1.539 7.79E-04 SAMPLE: Hope
20170124@209.asc	OX_1 Hope-02	5.76	0.31	3.675 5.76	0.250	2.225 1.450	1.534 7.64E-04 5.6 ± 0.3 (2 SD), n=8
20170124@210.asc	OX_1 KIM-5-B8			3.140 3.219 2.888 3.118	0.279 0.220 0.237	2.218 1.447 1.439 2.330	1.533 7.54E-04
20170124@211.asc	OX_1 KIM-5-B9			3.219 2.888	0.230	2.199 1.514	1.528 7.65E-04
20170124@212.asc	OX_1 KIM-5-C9			3.118 3.09	0.281	2.311 1.500	1.539 7.52E-04
20170124@213.asc	OX_1 KIM-5-A10			3.118 3.09	0.281	2.311 1.500	1.541 7.66E-04
average and 2SD		5.09			-2.07	3.01	0.31
bracket average and 2SD							
20170124@214.asc	OX_1 Hope-03	5.58	0.24	3.622 5.37	0.215 0.24	2.296 1.493	1.538 7.45E-04
20170124@215.asc	OX_1 Hope-04	5.37	0.24	3.416 5.53	0.190 0.24	2.307 1.495	1.543 8.22E-04
20170124@216.asc	OX_1 Hope-05	5.53	0.24	3.578 5.81	0.216 0.24	2.310 1.497	1.543 7.33E-04
20170124@217.asc	OX_1 Hope-06	5.81	0.24	3.853 5.74	0.209 0.24	2.310 1.498	1.542 7.29E-04
20170124@218.asc	OX_1 Hope-07	5.74	0.24	3.782 5.65	0.211 0.24	2.294 1.491	1.538 8.63E-04
20170124@219.asc	OX_1 Hope-08	5.65	0.24	3.697 5.95	0.206 0.24	2.365 1.499	1.578 9.15E-04
20170124@220.asc	OX_1 Joshua-01	5.95	0.24	3.998 5.97	0.223 0.24	2.274 1.481	1.535 8.27E-04 SAMPLE: Joshua (rim)
20170124@221.asc	OX_1 Joshua-02	5.97	0.24	4.018 6.95	0.242 0.24	2.281 1.459	1.564 9.98E-04 6.2 ± 1.2 (2 SD), n=8
20170124@222.asc	OX_1 Joshua-03	6.95	0.24	4.995 6.15	0.239 0.24	2.246 1.451	1.548 7.79E-04
20170124@223.asc	OX_1 Joshua-04	6.15	0.24	4.194 5.58	0.296 0.24	2.327 1.473	1.579 7.34E-04
20170124@224.asc	OX_1 Joshua-05	5.58	0.24	3.629 7.28	0.255 0.24	2.246 1.467	1.531 7.45E-04
20170124@225.asc	OX_1 Joshua-06	7.28	0.24	5.322 6.54	0.287 0.24	2.186 1.430	1.528 9.38E-04
20170124@226.asc	OX_1 Joshua-07	6.54	0.24	4.579 2.00	0.258 0.047	2.171 0.201	1.416
20170124@227.asc	OX_1 Joshua-08 (core)	2.00	0.24	0.047 5.61	0.201 0.24	2.184 0.219	1.412 1.402
20170124@228.asc	OX_1 Joshua-09	5.61	0.24	3.651 5.61	0.219	2.163 1.402	1.542 7.47E-04
20170124@229.asc	OX_1 KIM-5-B10			3.246 3.145 3.065	0.217 0.206 0.225	2.152 1.401 1.396	1.536 7.63E-04
20170124@230.asc	OX_1 KIM-5-B11			3.246 3.145	0.217 0.206	2.152 1.401	1.546 7.59E-04
20170124@231.asc	OX_1 KIM-5-C10			3.065 3.264	0.225 0.228	2.140 1.407	1.521 7.71E-04
20170124@232.asc	OX_1 KIM-5-A11			3.264 3.18	0.228 0.19	2.381 1.540	1.546 7.49E-04
average and 2SD		5.09			-1.94	3.14	0.24
bracket average and 2SD							
20170124@233.asc	OX_1 Hueco-01	4.77	0.20	2.822 4.53	0.292 0.219	2.401 1.557	1.542 8.18E-04 SAMPLE: Hueco
20170124@234.asc	OX_1 Hueco-02	4.53	0.20	2.583 4.80	0.219 0.20	2.495 1.586	1.573 7.54E-04 4.8 ± 0.3 (2 SD), n=9
20170124@235.asc	OX_1 Hueco-03	4.80	0.20	2.859 4.86	0.263 0.20	2.418 1.584	1.526 8.16E-04
20170124@236.asc	OX_1 Hueco-04	4.86	0.20	2.914 4.92	0.199 0.20	2.406 1.562	1.541 7.79E-04
20170124@237.asc	OX_1 Hueco-05	4.92	0.20	2.972 4.70	0.237 0.20	2.389 1.559	1.532 7.54E-04
20170124@238.asc	OX_1 Hueco-06	4.70	0.20	2.758 5.04	0.250 0.241	2.455 1.596	1.538 7.51E-04
20170124@239.asc	OX_1 Hueco-07	5.04	0.20	3.100 4.61	0.241 0.20	2.427 1.595	1.522 7.76E-04
20170124@240.asc	OX_1 Hueco-08	4.61	0.20	2.667 4.80	0.197 0.198	2.390 1.555	1.537 8.25E-04
20170124@241.asc	OX_1 Hueco-09	4.80	0.20	2.852 6.72	0.239 0.221	2.359 1.539	1.533 8.11E-04
20170124@242.asc	OX_1 Yucca-01	6.72	0.20	4.771 7.96	0.221 0.20	2.373 1.537	1.543 8.07E-04 SAMPLE: Yucca
20170124@243.asc	OX_1 Yucca-02	7.96	0.20	6.011 7.35	0.233 0.20	2.371 1.539	1.540 8.27E-04 7.0 ± 1.2 (2 SD), n=9
20170124@244.asc	OX_1 Yucca-03	7.35	0.20	5.403 6.31	0.266 0.20	2.396 1.563	1.533 7.74E-04
20170124@245.asc	OX_1 Yucca-04	6.31	0.20	4.367 6.62	0.233 0.201	2.405 1.572	1.530 6.97E-04
20170124@246.asc	OX_1 Yucca-05	6.62	0.20	4.669 6.42	0.201 0.20	2.353 1.532	1.536 7.57E-04
20170124@247.asc	OX_1 Yucca-06	6.42	0.20	4.469 7.00	0.221	2.297 1.512	1.520 7.10E-04
20170124@248.asc	OX_1 KIM-5-C11			3.011 3.044 3.251	0.246 0.246 0.234	2.430 1.546 1.545	1.572 7.04E-04
20170124@249.asc	OX_1 KIM-5-C12			3.044 3.251	0.246 0.234	2.342 1.500	1.516 7.34E-04
20170124@250.asc	OX_1 KIM-5-B12			3.251 3.139	0.234 0.174	2.288 2.285	1.525 7.76E-04
20170124@251.asc	OX_1 KIM-5-B13			3.139 3.11	0.228 0.22	2.285 1.486	1.537 7.38E-04
average and 2SD		5.09			-1.93	3.15	0.20
bracket average and 2SD							
20170124@252.asc	OX_1 Yucca-07	7.31	0.20	5.283 7.77	0.200 0.214	2.262 1.478	1.531 8.07E-04
20170124@253.asc	OX_1 Yucca-08	7.77	0.20	5.737 4.17	0.214 0.20	2.271 1.466	1.549 8.86E-04
20170124@254.asc	OX_1 Yucca-09	4.17	0.20	2.148	0.359	2.254	1.470
20170124@255.asc	OX_1 Yucca-10	7.10	0.20	5.069 6.34	0.284 0.20	2.389 1.518	1.574 6.74E-04
20170124@256.asc	OX_1 Finger-01	6.42	0.20	4.394 6.33	0.199 0.252	2.237 1.471	1.521 9.99E-04 SAMPLE: Finger
20170124@257.asc	OX_1 Finger-02	6.33	0.20	4.301 5.97	0.252 0.173	2.206 1.430	1.543 7.91E-04 6.2 ± 0.3 (2 SD), n=9
20170124@258.asc	OX_1 Finger-03	5.97	0.20	3.944 6.38	0.215 0.230	2.195 1.423	1.542 7.86E-04
20170124@259.asc	OX_1 Finger-04	6.38	0.20	4.352 6.22	0.230 0.219	2.184 1.418	1.541 8.16E-04
20170124@260.asc	OX_1 Finger-05	6.22	0.20	4.194 6.14	0.219 0.20	2.180 1.410	1.546 8.48E-04
20170124@261.asc	OX_1 Finger-06	6.14	0.20	4.116 6.25	0.256 0.265	2.169 1.406	1.543 8.17E-04
20170124@262.asc	OX_1 Finger-07	6.25	0.20	4.219 6.20	0.265 0.219	2.291 1.435	1.597 8.44E-04
20170124@263.asc	OX_1 Finger-08	6.20	0.20	4.175 6.34	0.219 0.190	2.160 1.419	1.522 7.60E-04
20170124@264.asc	OX_1 Finger-09	6.34	0.20	4.316 7.970	0.190 0.181	2.123 1.382	1.537 8.25E-04 low primary ion beam intensity, but data included
20170124@265.asc	OX_1 KIM-5-A12			2.970 3.105 3.067	0.181 0.187 0.248	2.374 1.525 1.557	1.557 7.29E-04
20170124@266.asc	OX_1 KIM-5-A13			3.105 3.067 2.930	0.187 0.248 0.227	2.409 1.564 1.604	1.547 7.24E-04
20170124@267.asc	OX_1 KIM-5-A14			3.067 2.930	0.248 0.227	2.552 1.604	1.591 6.96E-04
20170124@268.asc	OX_1 KIM-5-A15			2.930 3.02	0.227 0.16	2.449 1.609	1.522 7.36E-04
average and 2SD		5.09			-2.02	3.06	0.20
bracket average and 2SD							
20170124@269.asc	OX_1 Riverside-01	5.29	0.16	3.176 5.22	0.206 0.196	2.410 1.563	1.541 7.31E-04 SAMPLE: Riverside
20170124@270.asc	OX_1 Riverside-02	5.22	0.16	3.106 5.46	0.196 0.173	2.383 1.556	1.532 7.19E-04 5.4 ± 0.5 (2 SD), n=7
20170124@271.asc	OX_1 Riverside-03	5.46	0.16	3.345 5.07	0.213 0.233	2.382 1.556	1.531 7.33E-04
20170124@272.asc	OX_1 Riverside-04	5.07	0.16	2.961 5.70	0.233 0.240	2.392 1.556	1.535 7.27E-04
20170124@273.asc	OX_1 Riverside-05	5.70	0.16	3.588 5.78	0.240 0.16	2.384 1.560	1.527 7.00E-04
20170124@274.asc	OX_1 Riverside-06	5.78	0.16	3.669 5.53	0.239 0.16	2.427 1.566	1.550 7.93E-04
20170124@275.asc	OX_1 Riverside-07	5.53	0.16	3.414 5.19			

TABLE DR3

20170124@276.asc	OX_1 Snaggle-01	6.37	0.16	4.258	0.284	2.442	1.595	1.531	7.07E-04	SAMPLE: Snaggletooth	
20170124@277.asc	OX_1 Snaggle-02	6.48	0.16	4.362	0.230	2.432	1.596	1.524	7.13E-04	6.4 ± 0.3 (2 SD), n=9	
20170124@278.asc	OX_1 Snaggle-03	6.61	0.16	4.492	0.237	2.372	1.545	1.535	7.27E-04		
20170124@279.asc	OX_1 Snaggle-04	6.36	0.16	4.246	0.191	2.349	1.532	1.533	7.00E-04		
20170124@280.asc	OX_1 Snaggle-05	6.55	0.16	4.437	0.166	2.459	1.557	1.580	6.98E-04		
20170124@281.asc	OX_1 Snaggle-06	6.47	0.16	4.353	0.254	2.346	1.548	1.516	6.51E-04		
20170124@282.asc	OX_1 KIM-5-C13			2.981	0.236	2.320	1.513	1.533	7.17E-04		
20170124@283.asc	OX_1 KIM-5-C14			3.016	0.215	2.312	1.510	1.531	7.26E-04		
20170124@284.asc	OX_1 KIM-5-C15			2.896	0.212	2.320	1.536	1.510	7.27E-04		
20170124@285.asc	OX_1 KIM-5-C16			2.866	0.235	2.414	1.546	1.561	7.12E-04		
average and 2SD		2.94	0.14								
bracket average and 2SD		5.09	-2.10	2.98	0.16						
average and 2SD				0.22							
1/24 bracket average and 2SD				3.02	0.23						
20170125@286.asc	OX_1 KIM-5-C-test MasCalib#3 D2=790			2.072	0.268	2.372	1.634	4.549	6.40E-04	primary beam tuning	
20170125@287.asc	OX_1 KIM-5-C-test			3.065	0.262	2.370	1.534	4.548	6.54E-04	primary beam tuning	
20170125@288.asc	OX_1 KIM-5-C-test			2.948	0.229	2.362	1.630	4.544	6.58E-04	primary beam tuning	
20170125@289.asc	OX_1 KIM-5-C-test D2=790			3.299	0.228	2.466	1.595	4.546	6.48E-04	primary beam tuning	
20170125@290.asc	OX_1 KIM-5-C-test			3.211	0.245	2.453	1.591	4.542	6.31E-04	primary beam tuning	
20170125@291.asc	OX_1 KIM-5-C-test			3.193	0.258	2.443	1.587	4.540	6.44E-04	primary beam tuning	
20170125@292.asc	OX_1 KIM-5-C-test D2=785			3.222	0.196	2.382	1.542	1.545	6.31E-04		
20170125@293.asc	OX_1 KIM-5-C-test			3.111	0.219	2.369	1.534	1.544	6.80E-04		
20170125@294.asc	OX_1 KIM-5-C-test			3.141	0.226	2.361	1.529	1.544	6.58E-04		
20170125@295.asc	OX_1 KIM-5-C-test			3.084	0.221	2.348	1.523	1.542	6.66E-04		
average and 2SD		3.14	0.12								
20170125@296.asc	OX_1 Snaggle-07	6.58	0.14	-1.89	4.687	0.241	2.332	1.510	1.544	6.58E-04	
20170125@297.asc	OX_1 Snaggle-08	6.34	0.14	-1.89	4.444	0.206	2.329	1.503	1.549	6.67E-04	
20170125@298.asc	OX_1 Snaggle-09	6.12	0.14	-1.89	4.218	0.211	2.315	1.493	1.550	6.75E-04	
20170125@299.asc	OX_1 Coxcomb-01	6.96	0.14	-1.89	5.059	0.179	2.285	1.482	1.542	6.47E-04	SAMPLE: Coxcomb
20170125@300.asc	OX_1 Coxcomb-02	7.23	0.14	-1.89	5.333	0.279	2.264	1.474	1.536	6.62E-04	6.9 ± 1.1 (2 SD), n=11
20170125@301.asc	OX_1 Coxcomb-03	7.01	0.14	-1.89	5.111	0.225	2.270	1.462	1.553	7.01E-04	
20170125@302.asc	OX_1 Coxcomb-04	7.14	0.14	-1.89	5.239	0.194	2.250	1.452	1.550	7.06E-04	
20170125@303.asc	OX_1 Coxcomb-05	6.96	0.14	-1.89	5.061	0.214	2.232	1.441	1.549	6.54E-04	
20170125@304.asc	OX_1 Coxcomb-06	5.35	0.14	-1.89	3.459	0.179	2.213	1.431	1.546	7.27E-04	
20170125@305.asc	OX_1 Coxcomb-07	6.96	0.14	-1.89	5.062	0.199	2.208	1.426	1.548	6.60E-04	
20170125@306.asc	OX_1 Coxcomb-08	7.26	0.14	-1.89	5.364	0.207	2.190	1.414	1.548	7.03E-04	
20170125@307.asc	OX_1 GraniteMtn-01	6.27	0.14	-1.89	4.368	0.183	2.170	1.405	1.545	6.66E-04	SAMPLE: Granite Mtn
6.2 ± 0.2 (2 SD), n=8											
20170125@308.asc	OX_1 KIM-5-B14			3.230	0.255	2.384	1.530	1.558	6.08E-04		
20170125@309.asc	OX_1 KIM-5-B15			3.274	0.265	2.407	1.559	1.544	5.99E-04		
20170125@310.asc	OX_1 KIM-5-B16			3.255	0.256	2.420	1.568	1.543	6.02E-04		
20170125@311.asc	OX_1 KIM-5-B17			3.242	0.181	2.403	1.569	1.531	6.03E-04		
average and 2SD				3.25	0.04						
bracket average and 2SD		5.09	-1.89	3.19	0.14						
20170125@312.asc	OX_1 GraniteMtn-02	6.07	0.09	-1.85	4.211	0.249	2.407	1.563	1.540	6.24E-04	
20170125@313.asc	OX_1 GraniteMtn-03	6.23	0.09	-1.85	4.366	0.238	2.398	1.560	1.537	6.34E-04	
20170125@314.asc	OX_1 GraniteMtn-04	6.18	0.09	-1.85	4.315	0.167	2.391	1.560	1.532	5.94E-04	
20170125@315.asc	OX_1 GraniteMtn-05	6.38	0.09	-1.85	4.517	0.236	2.386	1.556	1.534	6.47E-04	
20170125@316.asc	OX_1 GraniteMtn-06	6.16	0.09	-1.85	4.300	0.175	2.366	1.545	1.531	6.47E-04	
20170125@317.asc	OX_1 GraniteMtn-07	6.08	0.09	-1.85	4.214	0.203	2.378	1.541	1.543	6.90E-04	
20170125@318.asc	OX_1 GraniteMtn-08	6.20	0.09	-1.85	4.342	0.165	2.371	1.535	1.544	7.06E-04	
20170125@319.asc	OX_1 Coxcomb-09	7.13	0.09	-1.85	5.264	0.215	2.363	1.530	1.545	6.65E-04	
20170125@320.asc	OX_1 Coxcomb-10	6.99	0.09	-1.85	5.126	0.266	2.333	1.492	1.563	7.12E-04	
20170125@321.asc	OX_1 Coxcomb-11	7.09	0.09	-1.85	5.223	0.219	2.336	1.509	1.547	6.31E-04	
20170125@322.asc	OX_1 KIM-5-A16			3.167	0.168	2.335	1.508	1.548	1.35E-03		
20170125@323.asc	OX_1 KIM-5-A17			3.245	0.252	2.333	1.509	1.546	6.41E-04		
20170125@324.asc	OX_1 KIM-5-A18			3.156	0.239	2.332	1.507	1.547	6.35E-04		
20170125@325.asc	OX_1 KIM-5-A19			3.276	0.263	2.305	1.503	1.533	6.38E-04		
average and 2SD				3.21	0.12						
bracket average and 2SD		5.09	-1.85	3.23	0.09						
20170125@326.asc	OX_2 KIM-5-A1	warm-up		2.732	0.199	2.260	1.484	4.526	6.05E-04	primary beam condition tuning	
20170125@327.asc	OX_2 KIM-5-A2	warm-up		2.886	0.256	2.257	1.472	4.533	6.09E-04	primary beam condition tuning	
20170125@328.asc	OX_2 KIM-5-B1			3.196	0.242	2.261	1.458	1.551	5.82E-04		
20170125@329.asc	OX_2 KIM-5-C1			3.319	0.203	2.258	1.460	1.546	6.01E-04		
20170125@330.asc	OX_2 KIM-5-D1			3.373	0.23	2.244	1.457	1.540	6.13E-04		
20170125@331.asc	OX_2 KIM-5-D2			3.373	0.226	2.233	1.454	1.536	6.37E-04		
average and 2SD				3.32	0.17						
20170125@332.asc	OX_2 Cochise-01	6.30	0.17	-1.82	4.465	0.194	2.340	1.512	1.547	7.38E-04	SAMPLE: Cochise
20170125@333.asc	OX_2 Cochise-02	6.34	0.17	-1.82	4.504	0.262	2.356	1.523	1.547	6.98E-04	6.2 ± 0.5 (2 SD), n=10
20170125@334.asc	OX_2 Cochise-03	6.17	0.17	-1.82	4.331	0.254	2.347	1.526	1.538	6.44E-04	
20170125@335.asc	OX_2 Cochise-04	6.55	0.17	-1.82	4.716	0.237	2.343	1.523	1.538	6.74E-04	
20170125@336.asc	OX_2 Cochise-05	6.29	0.17	-1.82	4.450	0.223	2.341	1.519	1.541	6.73E-04	
20170125@337.asc	OX_2 Cochise-06	5.56	0.17	-1.82	3.724	0.195	2.340	1.518	1.542	8.16E-04	
20170125@338.asc	OX_2 Cochise-07	6.31	0.17	-1.82	4.473	0.230	2.341	1.517	1.543	6.65E-04	
20170125@339.asc	OX_2 Cochise-08	6.27	0.17	-1.82	4.430	0.234	2.345	1.517	1.546	6.74E-04	
20170125@340.asc	OX_2 Cochise-09	6.01	0.17	-1.82	4.170	0.200	2.337	1.517	1.541	6.33E-04	
20170125@341.asc	OX_2 Cochise-10	6.25	0.17	-1.82	4.416	0.254	2.335	1.516	1.540	6.71E-04	
20170125@342.asc	OX_2 Dragoon-01 (rim)	5.89	0.17	-1.82	4.054	0.234	2.332	1.514	1.540	6.60E-04	SAMPLE: Dragoon
20170125@343.asc	OX_2 Dragoon-02 (rim)	7.77	0.17	-1.82	5.927	0.184	2.333	1.512	1.543	6.01E-04	rim = 6.6 ± 1.6 (2 SD), n=11
core = 8.8 ± 1.4 (2 SD), n=4											
20170125@344.asc	OX_2 KIM-5-B2			3.176	0.260	2.317	1.504	1.541	5.92E-04		
20170125@345.asc	OX_2 KIM-5-B3			3.219	0.246	2.328	1.513	1.539	5.94E-04		
20170125@346.asc	OX_2 KIM-5-B4			3.202	0.220	2.301	1.499	1.536	6.03E-04		
20170125@347.asc	OX_2 KIM-5-B5			3.188	0.235	2.300	1.490	1.544	6.08E-04		
average and 2SD				3.20	0.04						
bracket average and 2SD		5.09	-1.82	3.26	0.17						
20170125@348.asc	OX_2 Dragoon-03 (rim)	6.02	0.05	-1.88	4.125	0.193	2.279	1.496	1.523	6.61E-04	
20170125@349.asc	OX_2 Dragoon-04 (rim)	8.22	0.05	-1.88	6.320	0.230	2.282	1.489	1.533	5.93E-04	
20170125@350.asc	OX_2 Dragoon-05 (rim)	6.07	0.05	-1.88	4.173	0.277	2.267	1.483	1.528	6.62E-04	

TABLE DR3

20170125@351.asc	OX_2 Dragoon-06 (rim)	6.16	0.05	-1.88	4.266	0.208	2.270	1.474	1.541	6.57E-04
20170125@352.asc	OX_2 Dragoon-07 (rim)	6.04	0.05	-1.88	4.143	0.213	2.242	1.468	1.527	6.05E-04
20170125@353.asc	OX_2 Dragoon-08 (rim)	7.06	0.05	-1.88	5.167	0.290	2.248	1.463	1.537	6.92E-04
20170125@354.asc	OX_2 Dragoon-09 (rim)	9.15	0.05	-1.88	7.249	0.251	2.251	1.466	1.537	5.99E-04 not included in rim mean, analysis may include core
20170125@355.asc	OX_2 Dragoon-10 (rim)	6.00	0.05	-1.88	4.105	0.288	2.242	1.459	1.536	7.19E-04
20170125@356.asc	OX_2 Dragoon-11 (rim)	6.49	0.05	-1.88	4.590	0.216	2.249	1.452	1.549	6.09E-04
20170125@357.asc	OX_2 Dragoon-12 (rim)	5.88	0.05	-1.88	3.987	0.186	2.252	1.447	1.556	7.06E-04
20170125@358.asc	OX_2 sBarstow-01	5.65	0.05	-1.88	3.757	0.216	2.220	1.442	1.539	6.96E-04 SAMPLE: S. Barstow
20170125@359.asc	OX_2 sBarstow-02	5.46	0.05	-1.88	3.565	0.280	2.202	1.429	1.540	6.90E-04 5.4 ± 0.6 (2 SD), n=9
20170125@360.asc	OX_2 sBarstow-03	5.60	0.05	-1.88	3.702	0.242	2.206	1.428	1.545	8.25E-04
20170125@361.asc	OX_2 KIM-5-C2				3.231	0.204	2.194	1.425	1.540	6.33E-04
20170125@362.asc	OX_2 KIM-5-C3				3.149	0.182	2.195	1.421	1.544	6.30E-04
20170125@363.asc	OX_2 KIM-5-C4				3.215	0.240	2.195	1.421	1.545	6.42E-04
20170125@364.asc	OX_2 KIM-5-C5				3.191	0.254	2.179	1.416	1.539	6.78E-04
average and 2SD					3.20	0.07				
bracket average and 2SD		5.09		-1.88	3.20	0.05				
20170125@365.asc	OX_2 sBarstow-04	4.76	0.12	-1.87	2.873	0.272	2.556	1.636	1.563	6.82E-04
20170125@366.asc	OX_2 sBarstow-05	5.32	0.12	-1.87	3.433	0.275	2.618	1.694	1.546	6.72E-04
20170125@367.asc	OX_2 sBarstow-06	5.50	0.12	-1.87	3.619	0.225	2.661	1.721	1.546	7.15E-04
20170125@368.asc	OX_2 sBarstow-07	5.04	0.12	-1.87	3.153	0.287	2.669	1.732	1.541	6.68E-04
20170125@369.asc	OX_2 sBarstow-08	5.51	0.12	-1.87	3.627	0.267	2.668	1.734	1.539	7.11E-04
20170125@370.asc	OX_2 sBarstow-09	5.27	0.12	-1.87	3.385	0.214	2.636	1.737	1.517	6.76E-04
20170125@371.asc	OX_2 GraniteGap-01	4.86	0.12	-1.87	2.974	0.233	2.676	1.740	1.538	6.17E-04 SAMPLE: Granite Gap
20170125@372.asc	OX_2 GraniteGap-02	5.48	0.12	-1.87	3.597	0.223	2.679	1.739	1.540	6.17E-04 5.2 ± 0.8 (2 SD), n=9
20170125@373.asc	OX_2 GraniteGap-03	4.58	0.12	-1.87	2.694	0.234	2.626	1.750	1.500	7.46E-04
20170125@374.asc	OX_2 GraniteGap-04	5.33	0.12	-1.87	3.445	0.272	2.546	1.663	1.531	6.85E-04
20170125@375.asc	OX_2 GraniteGap-05	4.74	0.12	-1.87	2.854	0.218	2.547	1.637	1.556	6.57E-04
20170125@376.asc	OX_2 GraniteGap-06	5.23	0.12	-1.87	3.342	0.219	2.528	1.638	1.543	7.48E-04
20170125@377.asc	OX_2 GraniteGap-07c	5.46	0.12	-1.87	3.580	0.253	2.480	1.619	1.532	6.35E-04
20170125@378.asc	OX_2 GraniteGap-08	5.26	0.12	-1.87	3.380	0.240	2.478	1.613	1.537	6.31E-04
20170125@379.asc	OX_2 GraniteGap-09	5.74	0.12	-1.87	3.856	0.237	2.479	1.612	1.538	6.50E-04
20170125@380.asc	OX_2 KIM-5-D3				3.302	0.246	2.469	1.610	1.534	6.02E-04
20170125@381.asc	OX_2 KIM-5-D4				3.146	0.273	2.469	1.607	1.537	5.91E-04
20170125@382.asc	OX_2 KIM-5-D5				3.152	0.283	2.461	1.606	1.532	5.93E-04
20170125@383.asc	OX_2 KIM-5-D6				3.267	0.277	2.477	1.609	1.540	5.94E-04
average and 2SD					3.22	0.16				
bracket average and 2SD		5.09		-1.87	3.21	0.12				
analyses 384-389 unrelated to this project										
20170125@399.asc	OX_2 KIM-5-B6				3.024	0.244	2.370	1.539	1.540	5.93E-04
20170125@400.asc	OX_2 KIM-5-B7				3.010	0.261	2.363	1.528	1.547	5.92E-04
20170125@401.asc	OX_2 KIM-5-B8				3.087	0.222	2.348	1.525	1.539	5.99E-04
20170125@402.asc	OX_2 KIM-5-B9				3.141	0.214	2.354	1.525	1.544	6.05E-04
average and 2SD					3.07	0.12				
bracket average and 2SD		5.09		-1.94	3.14	0.21				
analyses 403-417 unrelated to this project										
20170125@418.asc	OX_2 KIM-5-C6				3.254	0.248	2.239	1.456		
20170125@419.asc	OX_2 KIM-5-C7				3.153	0.197	2.230	1.453		
20170125@420.asc	OX_2 KIM-5-C8				3.074	0.193	2.209	1.445		
20170125@421.asc	OX_2 KIM-5-C9				3.109	0.273	2.199	1.438		
average and 2SD					3.15	0.16				
bracket average and 2SD		5.09		-1.97	3.11	0.16				
analyses 422-430 unrelated to this project										
20170125@431.asc	OX_2 Dragoon-13 (core)	9.05	0.18	-1.90	7.134	0.227	2.175	1.417	1.535	6.01E-04
20170125@432.asc	OX_2 Dragoon-14 (core)	8.62	0.18	-1.90	6.707	0.159	2.288	1.481	1.546	6.31E-04
20170125@433.asc	OX_2 Dragoon-15 (core)	9.67	0.18	-1.90	7.757	0.223	2.281	1.491	1.530	5.90E-04
20170125@434.asc	OX_2 Dragoon-16 (core)	6.36	0.18	-1.90	4.451	0.279	2.300	1.494	1.540	7.43E-04 not included in core mean, metamict core
20170125@435.asc	OX_2 Dragoon-17 (rim)	5.94	0.18	-1.90	4.028	0.212	2.299	1.495	1.538	6.89E-04
20170125@436.asc	OX_2 Dragoon-18 (rim)	7.51	0.18	-1.90	5.602	0.218	2.281	1.492	1.529	6.86E-04
20170125@437.asc	OX_2 Dragoon-19 (core)	8.05	0.18	-1.90	6.141	0.236	2.289	1.485	1.542	6.95E-04
20170125@438.asc	OX_2 KIM-5-D7				3.160	0.232	2.312	1.492	1.549	6.12E-04
20170125@439.asc	OX_2 KIM-5-D8				3.128	0.205	2.300	1.490	1.543	6.09E-04
20170125@440.asc	OX_2 KIM-5-D9				3.333	0.203	2.276	1.481	1.536	6.05E-04
20170125@441.asc	OX_2 KIM-5-D10				3.256	0.249	2.286	1.487	1.538	6.16E-04
average and 2SD					3.22	0.19				
bracket average and 2SD		5.09		-1.90	3.18	0.18				

TABLE DR4

SAMPLE ID	Source	AGE	LAT	LONG	Ep_Nd(t)	coverted Ep_Hft(t)	SiO2
UBA 026	McMillan_etal_2000	27	32.5200	-107.1200	-4.5	-3.2	57.3
UBA 023	McMillan_etal_2000	27	32.5200	-107.1200	-4.3	-2.9	56.7
UBA 032	McMillan_etal_2000	27	32.5200	-107.1200	-3.9	-2.4	56.8
UBA010	McMillan_etal_2000	27	32.4500	-107.2500	-3.4	-1.7	51.9
UBA 034	McMillan_etal_2000	27	32.5200	-107.1200	-2.7	-0.7	54.0
UBA011	McMillan_etal_2000	27	32.4500	-107.2500	-2.7	-0.7	50.8
UBA 029	McMillan_etal_2000	27	32.5200	-107.1200	-1.8	0.5	51.5
UBA 025	McMillan_etal_2000	27	32.5200	-107.1200	0.8	4.0	48.8
RP013	McMillan_etal_2000	38	32.4000	-107.4300	-4.5	-3.2	62.9
RP009	McMillan_etal_2000	38	32.4000	-107.4300	-3.4	-1.7	58.0
PP-022	McMillan_etal_2000	45	32.4700	-106.8000	-3.9	-2.4	61.0
VA015	McMillan_etal_2000	47	32.1117	-106.6619	-4.8	-3.6	70.9
CA014	McMillan_etal_2000	47.1	31.8000	-106.5200	-2.7	-0.7	63.2
QL-85-1	Anthony & Titley, 1988	58	31.8778	-111.1778		-8.6	69.6
TWB-PA	Anthony & Titley, 1988	58	31.8778	-111.1778		-8.4	69.4
RSMR3-2	Anthony & Titley, 1988	63	31.8778	-111.1778		-7.5	68.3
RS-MR-5X (isotopic)	Anthony & Titley, 1988	63	31.8778	-111.1778		-6.3	65.7
RS-MR-5	Anthony & Titley, 1988	63	31.8778	-111.1778		-5.9	65.7
KR-3	Anthony & Titley, 1988	65	31.8778	-111.1778		-6.7	75.6
KD-GR2-5	Anthony & Titley, 1988	67	31.8778	-111.1778		-2.9	57.9
KD-GR2-1	Anthony & Titley, 1988	67	31.8778	-111.1778		-2.8	61.1
D-MR2-2	Anthony & Titley, 1988	68	31.8778	-111.1778		-7.0	59.3
CIM8142	Farmer_etal_1989	1	35.2333	-115.7167	-5.6	-4.7	
Ci-12	Farmer_etal_1995	3	35.3385	-115.6320	5.6	10.6	46.7
BW-6	Bradshaw_etal_1993	5	34.2844	-114.1113	5.5	10.5	48.3
CA_4	Kempton_etal_1991	8	35.0000	-118.0000	6.3	11.5	47.8
BW-3	Bradshaw_etal_1993	10	34.5100	-114.0753	-6.3	-5.7	53.6
BW-4	Bradshaw_etal_1993	10	34.5105	-114.0755	-4.2	-2.7	51.6
1215-1	Miller_etal_2000	18	34.3314	-114.7642	-11.5	-12.6	63.0
P-2C	Miller_etal_2000	18	34.7582	-115.1400	-9.6	-10.1	66.1
EP-1	Miller_etal_2000	18	34.6982	-115.1500	-9.3	-9.7	56.2
TU-B	Miller_etal_2000	18	34.6182	-115.1100	-9.2	-9.5	57.5
A-14	Miller_etal_2000	18	34.3835	-114.7707	-9.0	-9.3	68.2
SV-3	Miller_etal_2000	18	34.5382	-115.3700	-8.3	-8.3	54.3
LP-KB	Miller_etal_2000	18	34.6182	-115.0700	-8.2	-8.2	59.3
LP-UB3	Miller_etal_2000	18	34.6182	-115.0700	-7.4	-7.1	61.1
A-2	Miller_etal_2000	18	34.3785	-114.7620	-7.0	-6.5	53.5
MARB-2	Miller_etal_2000	18	34.6683	-115.6412	-6.9	-6.4	71.9
MARB-522-22	Miller_etal_2000	18	34.6810	-115.6381	-6.7	-6.1	53.0
ST-HA-2	Miller_etal_2000	18	34.5000	-114.8600	-6.6	-6.1	66.0
AG-2	Miller_etal_2000	18	34.7745	-116.2424	-6.1	-5.3	63.2
MARB-522-24	Miller_etal_2000	18	34.6854	-115.6498	-5.9	-5.0	73.6
PLB	Miller_etal_2000	18	34.7882	-115.0700	-5.6	-4.7	53.8
MARB-522-23	Miller_etal_2000	18	34.6801	-115.6390	-5.5	-4.6	52.7
PCST-37	Miller_etal_2000	18	34.5000	-114.8600	-5.4	-4.4	71.0
a-3	Miller_etal_2000	18	35.3025	-116.1702	-5.3	-4.2	53.4
SV-2	Miller_etal_2000	18	34.5382	-115.3700	-5.0	-3.8	48.6
OPAL-4	Miller_etal_2000	18	35.0939	-117.1117	-4.2	-2.7	
BARS-2	Miller_etal_2000	18	34.8768	-116.8900	-4.1	-2.6	70.0
11--90	Miller_etal_2000	18	34.7670	-116.2840	-3.8	-2.3	52.7
LVHL-2	Miller_etal_2000	18	34.6450	-115.9625	-3.8	-2.3	65.8

TABLE DR4

A-4-2	Miller_etal_2000	18	34.8055	-116.6698	-3.7	-2.1	69.1
22-10A	Miller_etal_2000	18	34.8250	-116.3085	-3.5	-1.8	64.3
ECVF1549	Miller_etal_2000	18	35.4000	-116.9700	-2.7	-0.7	0.0
OM9313	Miller_etal_2000	18	35.1500	-117.2600	-2.3	-0.1	53.5
91fi102	Miller_etal_2000	18	35.3682	-116.6900	-1.9	0.4	65.7
A-3-1	Miller_etal_2000	18	34.3814	-114.7652	-1.9	0.4	44.5
82-25	Miller_etal_2000	18	34.8098	-116.3182	-1.7	0.7	68.3
91fi12p	Miller_etal_2000	18	35.4982	-116.8700	-1.3	1.2	56.0
90fi38	Miller_etal_2000	18	35.3382	-116.8100	-1.2	1.3	63.3
NBPS-6	Miller_etal_2000	18	34.4957	-116.1492	-1.1	1.4	48.9
PK914b	Miller_etal_2000	18	35.5589	-117.1181	-0.5	2.2	50.9
90fi39	Miller_etal_2000	18	35.3382	-116.8000	-0.5	2.3	75.6
90fi28	Miller_etal_2000	18	35.4982	-116.8600	-0.3	2.6	64.0
KRMR-4	Miller_etal_2000	18	34.8994	-117.5116	-0.3	2.6	
91fi9p	Miller_etal_2000	18	35.4977	-116.8674	0.1	3.1	55.1
ECVF1340	Miller_etal_2000	18	35.5500	-116.9900	0.3	3.3	0.0
ECVF1431	Miller_etal_2000	18	35.4700	-117.0300	0.3	3.3	59.8
OPAL-2	Miller_etal_2000	18	35.0939	-117.1117	0.3	3.4	
13-22	Miller_etal_2000	18	34.7724	-116.2432	0.5	3.7	53.1
91fi5	Miller_etal_2000	18	35.3382	-116.7900	0.6	3.7	51.5
ECVF1332	Miller_etal_2000	18	35.4800	-117.0300	0.7	4.0	74.9
12--3	Miller_etal_2000	18	34.7817	-116.2442	0.8	4.1	50.0
ECVF1425	Miller_etal_2000	18	35.5500	-117.0200	1.2	4.6	56.9
ECVF1514	Miller_etal_2000	18	35.4300	-117.2000	1.3	4.7	77.2
pk914c	Miller_etal_2000	18	35.5589	-117.1181	1.6	5.1	52.5
EP9315	Miller_etal_2000	18	35.2616	-117.4854	2.8	6.8	
SADL-1	Miller_etal_2000	18	35.0595	-117.6253	3.6	7.9	49.1
89fi6	Miller_etal_2000	18	35.3052	-116.6809	3.8	8.1	48.2
ALVO-3	Miller_etal_2000	18	35.0640	-116.5454	4.3	8.8	48.7
93fi12	Miller_etal_2000	18	35.3282	-116.7500	4.4	8.9	49.1
SA9311	Miller_etal_2000	18	34.8994	-117.5116	4.8	9.4	
OM9312	Miller_etal_2000	18	35.1400	-117.2600	8.4	14.3	51.3
MO-1	Bradshaw_etal_1993	21	34.6833	-114.3107	-5.7	-4.8	48.5
MO-1	Bradshaw_etal_1993	21	34.6833	-114.3107	-5.7	-4.8	48.5
D31	Lang_1992	72	34.8386	-113.7669	-13.7	-15.7	70.7
D11	Lang_1992	72	34.8242	-113.7378	-12.2	-13.7	61.9
B61	Lang_1992	72	34.5883	-113.2078	-12.1	-13.5	69.9
B51	Lang_1992	73	34.5881	-113.2142	-11.2	-12.3	66.1
B42	Lang_1992	75	34.5683	-113.2303	-10.8	-11.7	65.2
B33	Lang_1992	77	34.5989	-113.1117	-12.3	-13.8	59.1
B3a1	Lang_1992	77	34.5839	-113.2036	-10.2	-10.9	66.6
B22	Lang_1992	78	34.5694	-113.2375	-11.2	-12.2	76.1
B3b1	Lang_1992	78	34.5711	-113.2458	-9.9	-10.5	66.3
DVB-108	Ramo_etal_2002	93	35.3161	-115.5508	-12.8	-14.5	67.9
DVB-113	Ramo_etal_2002	93	35.1639	-115.4436	-11.4	-12.6	73.8
DVB-112	Ramo_etal_2002	93	35.1203	-115.4014	-3.5	-1.8	46.6
DVB-117	Ramo_etal_2002	95	35.6361	-116.2750	-15.9	-18.7	73.9
DVB-114B	Ramo_etal_2002	95	35.6767	-116.6681	-13.0	-14.7	66.8
DVB-114A	Ramo_etal_2002	95	35.6767	-116.6681	-11.3	-12.4	65.0
DVB-131	Ramo_etal_2002	95	35.1939	-116.1431	-6.3	-5.6	77.0
DVB-110	Ramo_etal_2002	97	35.3153	-115.5822	-13.5	-15.4	70.2
DVB-129	Ramo_etal_2002	97	35.1883	-115.5964	-9.8	-10.4	73.1

TABLE DR4

DVB-107	Ramo_etal_2002	97	35.4061	-115.9453	-8.5	-8.6	68.5
DVB-111	Ramo_etal_2002	97	35.1544	-115.3319	-6.6	-6.0	60.5
TC-42	Sams_Saleeby_1988	98	35.2283	-118.4961	-1.9	0.4	58.9
TC-42	Sams_Saleeby_1988	98	35.2283	-118.4961	-1.9	0.4	58.9
2	Sams_Saleeby_1988	99	34.9256	-118.9279	4.0	8.4	
CM-9	Sams_Saleeby_1988	100	35.0408	-118.5683	-3.2	-1.3	62.8
CM-9	Sams_Saleeby_1988	100	35.0408	-118.5683	-3.2	-1.3	62.8
PC-35 PC35-P	Sams_Saleeby_1988	110	34.9194	-118.7961	1.0	4.4	79.4
CM-630 GC-1	Sams_Saleeby_1988	115	35.1250	-118.7228	1.3	4.7	61.9
WR-643 GC-14	Sams_Saleeby_1988	117	35.0244	-118.7067	0.2	3.2	73.8
DVB-109	Ramo_etal_2002	145	35.3406	-115.6767	-13.4	-15.3	76.5
ID929C	Glazner_etal_2008	148	34.6991	-117.0989	-9.7	-10.3	74.1
ID929A	Glazner_etal_2008	148	34.6963	-117.0994	-8.0	-7.9	75.4
ID929B	Glazner_etal_2008	148	34.6996	-117.0989	-7.8	-7.7	69.3
ID9210A	Glazner_etal_2008	148	34.5246	-116.7339	-6.2	-5.5	74.0
ID9210D	Glazner_etal_2008	148	34.5382	-116.7183	-5.5	-4.6	73.3
CRO35.4	Glazner_etal_2008	148	35.1357	-116.2975	-5.2	-4.2	56.4
ID9210B	Glazner_etal_2008	148	34.5288	-116.7236	-4.4	-3.0	67.8
ID9210F	Glazner_etal_2008	148	35.5746	-116.6092	-2.2	-0.1	48.9
DVB-116	Ramo_etal_2002	179	35.5761	-115.3544	-9.0	-9.3	58.5
DVB-132A	Ramo_etal_2002	179	35.5131	-116.2583	-8.1	-8.1	63.6
DVB-132B	Ramo_etal_2002	179	35.5131	-116.2583	-8.0	-7.9	52.3
9-94-41	NAVDAT	15	33.5789	-112.8717	-7.5	-7.2	50.8
5-93-3	NAVDAT	16	34.3628	-112.2175	-2.5	-0.5	45.8
12-94-2	NAVDAT	16	34.4914	-111.6900	-1.8	0.5	47.0
3-93-59	NAVDAT	16	33.9658	-112.0686	-5.5	-4.5	48.1
4-93-5	NAVDAT	16	33.8750	-111.8750	-3.5	-1.9	49.7
11-94-1	NAVDAT	16	33.5936	-112.0861	-6.8	-6.3	51.2
4-93-51A	NAVDAT	16.2	33.8903	-112.2103	0.0	2.9	50.2
CV 12	NAVDAT	16.7	34.1306	-118.7614	6.3	11.5	50.8
CV 195B	NAVDAT	16.7	34.1500	-118.9000	6.1	11.2	55.4
CV 117	NAVDAT	16.7	34.2098	-118.9218	6.3	11.5	55.6
CV 107	NAVDAT	16.7	34.2409	-118.8817	6.4	11.6	57.5
CV 121	NAVDAT	16.7	34.2358	-118.8660	6.5	11.8	57.9
CV 187	NAVDAT	16.7	34.0945	-118.9385	5.7	10.7	59.6
CV 151	NAVDAT	16.7	34.1411	-118.9686	7.4	12.9	62.3
CV 162	NAVDAT	16.7	34.1457	-118.9655	8.3	14.3	62.8
CV 177	NAVDAT	16.7	34.1001	-118.8388	6.0	11.1	64.1
CV 102B	NAVDAT	16.7	34.1598	-119.0270	7.1	12.6	65.9
CV 116	NAVDAT	16.7	34.2141	-118.9281	6.2	11.4	66.7
CB7	NAVDAT	17.5	34.7600	-119.9800	8.3	14.2	46.2
CB3	NAVDAT	17.5	34.7600	-119.9800	9.2	15.4	46.7
CB5	NAVDAT	17.5	34.7600	-119.9800	9.3	15.6	47.2
Lp89-6	NAVDAT	17.55	33.8000	-107.7670	1.8	5.4	46.2
Lp89-5	NAVDAT	17.55	33.8000	-107.7670	0.6	3.7	46.6
Jk89-9	NAVDAT	17.55	33.8125	-108.4750	3.7	8.0	47.7
Jk89-5	NAVDAT	17.55	33.8125	-108.4750	4.1	8.6	48.2
Jk88-4	NAVDAT	17.55	33.8125	-108.4750	-1.3	1.1	50.1
A-3-1	NAVDAT	18	34.3814	-114.7652	-1.9	0.4	44.5
SV-2	NAVDAT	18	34.5382	-115.3700	-5.0	-3.8	48.6
NBPS-6	NAVDAT	18	34.4957	-116.1492	-1.1	1.4	48.9
12--3	NAVDAT	18	34.7817	-116.2442	0.8	4.1	50.0

TABLE DR4

11--90	NAVDAT	18	34.7670	-116.2840	-3.8	-2.3	52.7
MARB-522-23	NAVDAT	18	34.6801	-115.6390	-5.5	-4.6	52.7
MARB-522-22	NAVDAT	18	34.6810	-115.6381	-6.7	-6.1	53.0
13-22	NAVDAT	18	34.7724	-116.2432	0.5	3.7	53.1
A-2	NAVDAT	18	34.3785	-114.7620	-7.0	-6.5	53.5
PLB	NAVDAT	18	34.7882	-115.0700	-5.6	-4.7	53.8
SV-3	NAVDAT	18	34.5382	-115.3700	-8.3	-8.3	54.3
EP-1	NAVDAT	18	34.6982	-115.1500	-9.3	-9.7	56.2
TU-B	NAVDAT	18	34.6182	-115.1100	-9.2	-9.5	57.5
LP-KB	NAVDAT	18	34.6182	-115.0700	-8.2	-8.2	59.3
LP-UB3	NAVDAT	18	34.6182	-115.0700	-7.4	-7.1	61.1
1215-1	NAVDAT	18	34.3314	-114.7642	-11.5	-12.6	63.0
AG-2	NAVDAT	18	34.7745	-116.2424	-6.1	-5.3	63.2
22-10A	NAVDAT	18	34.8250	-116.3085	-3.5	-1.8	64.3
LVHL-2	NAVDAT	18	34.6450	-115.9625	-3.8	-2.3	65.8
ST-HA-2	NAVDAT	18	34.5000	-114.8600	-6.6	-6.1	66.0
P-2C	NAVDAT	18	34.7582	-115.1400	-9.6	-10.1	66.1
A-14	NAVDAT	18	34.3835	-114.7707	-9.0	-9.3	68.2
82-25	NAVDAT	18	34.8098	-116.3182	-1.7	0.7	68.3
A-4-2	NAVDAT	18	34.8055	-116.6698	-3.7	-2.1	69.1
BARS-2	NAVDAT	18	34.8768	-116.8900	-4.1	-2.6	70.0
PCST-37	NAVDAT	18	34.5000	-114.8600	-5.4	-4.4	71.0
MARB-2	NAVDAT	18	34.6683	-115.6412	-6.9	-6.4	71.9
MARB-522-24	NAVDAT	18	34.6854	-115.6498	-5.9	-5.0	73.6
1-92-3	NAVDAT	18.9	34.3497	-112.1925	-12.1	-13.5	59.2
9-94-31	NAVDAT	19.9	33.3528	-112.8522	-10.5	-11.3	61.4
MH-1	NAVDAT	20.5	34.6807	-114.3117	-7.3	-7.0	46.0
MO-5	NAVDAT	20.5	34.6821	-114.3117	-5.4	-4.4	50.9
MO-6	NAVDAT	20.5	34.6820	-114.3118	-7.2	-6.9	53.6
MO-1	NAVDAT	21	34.6833	-114.3107	-5.7	-4.8	48.5
Lr87-1	NAVDAT	21.1	33.0292	-108.1667	-4.4	-3.1	51.7
9-94-16	NAVDAT	21.3	33.7500	-111.8750	-8.1	-8.1	48.8
B188-11	NAVDAT	21.3	33.1833	-108.0292	-3.9	-2.3	50.6
B188-12	NAVDAT	21.3	33.1833	-108.0292	-3.9	-2.3	51.0
H-1	NAVDAT	21.5	34.4248	-114.2504	-2.1	0.1	45.4
Jk88-7	NAVDAT	21.9	33.7625	-108.5333	-6.3	-5.7	54.0
Jk88-6	NAVDAT	21.9	33.7625	-108.5375	-5.5	-4.5	56.0
Lp89-1	NAVDAT	22.2	33.7375	-107.8000	-5.2	-4.1	54.3
Mm89-6	NAVDAT	22.7	34.0208	-108.3500	-6.3	-5.7	55.4
PR3-72	NAVDAT	23	34.7800	-119.0900	3.8	8.1	47.1
PR3-55	NAVDAT	23	34.7800	-119.0900	4.1	8.5	48.0
VQ1	NAVDAT	23	34.4900	-118.2900	1.0	4.3	58.2
NV31	NAVDAT	23	34.7500	-118.5500	1.6	5.2	68.3
NV25	NAVDAT	23	34.7500	-118.5500	1.8	5.4	70.2
Bw88-10	NAVDAT	23.1	33.4042	-108.5750	-5.4	-4.4	52.9
Bw88-8	NAVDAT	23.1	33.4500	-108.6083	-6.5	-5.9	57.0
Bw88-5	NAVDAT	23.1	33.4500	-108.6083	-4.6	-3.3	59.7
Bm88-3	NAVDAT	23.9	33.3792	-108.2292	-8.1	-8.1	60.8
Bs87-5	NAVDAT	25	32.7208	-107.3460	-5.0	-3.8	50.9
Bl88-12	NAVDAT	25	33.1833	-108.0290	-4.0	-2.5	51.0
Bs87-3	NAVDAT	25	32.7208	-107.3460	-6.3	-5.7	51.6
Lr87-1	NAVDAT	25	33.0292	-108.1670	-4.4	-3.0	51.7

TABLE DR4

Jk89-13	NAVDAT	25	33.7500	-108.5250	-4.7	-3.5	53.3
J87-11	NAVDAT	25	32.7208	-107.3460	-4.4	-3.1	53.4
Lp89-1	NAVDAT	25	33.7375	-107.8000	-5.1	-4.0	54.3
Mm89-6	NAVDAT	25	34.0292	-108.3500	-5.7	-4.8	55.4
G-40	NAVDAT	25	33.8200	-108.7800	-7.3	-7.0	57.9
A81-23	NAVDAT	25	33.4800	-108.9300	-7.1	-6.7	59.3
5-92-19	NAVDAT	26.5	33.8750	-111.8750	-2.2	0.0	62.4
UBA 025	NAVDAT	27	32.5200	-107.1200	0.2	3.3	48.8
UBA011	NAVDAT	27	32.4500	-107.2500	-3.1	-1.3	50.8
G-23	NAVDAT	28	33.6300	-109.1200	-7.2	-6.8	74.8
G-48	NAVDAT	28	33.7500	-108.5700	-8.0	-7.9	77.4
G-11	NAVDAT	28	33.2800	-108.7300	-6.6	-6.0	82.0
CERROS	NAVDAT	28.3	34.6700	-108.3500	0.9	4.1	46.7
G-15A	NAVDAT	28.7	33.7800	-108.5300	-6.8	-6.3	71.7
H9-77	NAVDAT	28.9	33.8500	-108.0300	-6.7	-6.1	71.2
G-32	NAVDAT	29	33.6300	-108.9000	-7.0	-6.5	76.2
TTC	NAVDAT	29.7	33.7500	-108.7200	-5.7	-4.9	74.2
G-55	NAVDAT	30.1	33.7500	-108.9700	-7.9	-7.7	62.8
Bs87-3	NAVDAT	30.4	32.7208	-107.8792	-6.1	-5.3	52.0
GM-1	NAVDAT	32	31.5833	-105.5833	3.6	7.9	57.4
DM-5	NAVDAT	32	31.9000	-105.5167	5.3	10.1	59.0
CD-7	NAVDAT	32	31.9000	-105.4000	3.1	7.2	60.8
TtwR17r	NAVDAT	33.7	32.2944	-106.6110	-6.2	-5.4	60.1
G-8	NAVDAT	34	33.4300	-108.8500	-8.6	-8.7	67.2
Tss28	NAVDAT	35.46	32.2961	-106.6082	-4.8	-3.6	68.1
TssR15	NAVDAT	35.46	32.2957	-106.6098	-4.7	-3.5	68.4
TssA6	NAVDAT	35.46	32.2989	-106.5865	-6.8	-6.4	72.7
6191	NAVDAT	35.69	32.3153	-106.4833	-2.0	0.2	47.9
Tmo4-7	NAVDAT	35.69	32.3519	-106.5159	-4.0	-2.5	53.3
5592I	NAVDAT	35.69	32.3139	-106.4806	-4.2	-2.7	55.5
492I	NAVDAT	35.69	32.2583	-106.5278	-1.3	1.2	56.0
1092	NAVDAT	35.69	32.3486	-106.5167	-3.5	-1.8	56.6
4391	NAVDAT	35.69	32.3333	-106.4889	-5.0	-3.8	57.0
4491	NAVDAT	35.69	32.3333	-106.4889	-2.5	-0.5	57.1
5592	NAVDAT	35.69	32.3139	-106.4806	-4.8	-3.6	57.2
592	NAVDAT	35.69	32.3486	-106.5167	-3.5	-1.9	57.5
5692	NAVDAT	35.69	32.3139	-106.4792	-4.9	-3.8	58.3
Tmo6-9	NAVDAT	35.69	32.3517	-106.5192	-2.8	-0.9	59.6
3002	NAVDAT	35.69	32.3333	-106.5083	-3.6	-1.9	59.9
42164	NAVDAT	35.69	32.3447	-106.5167	-2.8	-0.9	60.4
6491	NAVDAT	35.69	32.3162	-106.4887	-3.2	-1.5	60.5
4992	NAVDAT	35.69	32.3139	-106.4861	-4.5	-3.1	61.4
7591	NAVDAT	35.69	32.3139	-106.4847	-4.9	-3.7	61.6
1491	NAVDAT	35.69	32.3417	-106.4875	-4.6	-3.3	61.7
1591	NAVDAT	35.69	32.3417	-106.4889	-2.4	-0.3	62.1
2392	NAVDAT	35.69	32.2875	-106.5278	-3.5	-1.8	62.1
6391	NAVDAT	35.69	32.3181	-106.4917	-4.3	-2.9	62.7
1391	NAVDAT	35.69	32.3583	-106.5056	-3.2	-1.4	62.8
4392	NAVDAT	35.69	32.3083	-106.4917	-2.5	-0.4	62.8
6591	NAVDAT	35.69	32.3139	-106.4986	-2.3	-0.2	62.9
TC2	NAVDAT	35.69	32.3559	-106.5068	-2.2	-0.1	63.1
7291	NAVDAT	35.69	32.3133	-106.4833	-5.3	-4.2	63.2

TABLE DR4

5292	NAVDAT	35.69	32.3153	-106.4833	-4.6	-3.3	63.6
3592	NAVDAT	35.69	32.3458	-106.5000	-2.7	-0.7	64.2
3007	NAVDAT	35.69	32.3250	-106.5000	-2.6	-0.6	64.6
2092	NAVDAT	35.69	32.2792	-106.5222	-2.6	-0.6	65.0
3006	NAVDAT	35.69	32.3353	-106.5000	-2.8	-0.8	65.5
5091	NAVDAT	35.69	32.3347	-106.4889	-3.2	-1.5	65.6
2292	NAVDAT	35.69	32.2792	-106.5222	-2.5	-0.4	66.0
3292	NAVDAT	35.69	32.2958	-106.5167	-2.3	-0.2	66.1
491	NAVDAT	35.69	32.4125	-106.5917	-4.9	-3.8	66.3
1692	NAVDAT	35.69	32.2694	-106.5167	-2.8	-0.9	66.4
2701	NAVDAT	35.69	32.2861	-106.5347	-2.4	-0.4	66.7
5092	NAVDAT	35.69	32.3139	-106.4833	-4.7	-3.4	67.0
2902	NAVDAT	35.69	32.2847	-106.5514	-2.8	-0.9	67.2
4292	NAVDAT	35.69	32.3083	-106.4917	-4.7	-3.5	68.3
1292	NAVDAT	35.69	32.2583	-106.5111	-2.8	-0.9	68.3
2992	NAVDAT	35.69	32.2833	-106.5472	-2.7	-0.7	68.4
1891	NAVDAT	35.69	32.3583	-106.5083	-4.8	-3.5	68.6
492	NAVDAT	35.69	32.2583	-106.5278	-4.0	-2.5	68.7
2891	NAVDAT	35.69	32.3583	-106.5083	-5.0	-3.9	68.9
4591	NAVDAT	35.69	32.3333	-106.4889	-4.3	-2.9	69.0
Tmo3	NAVDAT	35.69	32.3812	-106.5791	-4.4	-3.1	69.1
2791	NAVDAT	35.69	32.3583	-106.5083	-4.6	-3.3	69.2
3892	NAVDAT	35.69	32.2917	-106.5333	-4.7	-3.4	69.3
591	NAVDAT	35.69	32.4125	-106.5917	-4.9	-3.7	69.6
691	NAVDAT	35.69	32.4125	-106.5917	-5.0	-3.9	69.7
SUM	NAVDAT	35.69	32.3454	-106.5636	-4.1	-2.6	70.9
RE1	NAVDAT	35.69	32.3676	-106.5878	-4.0	-2.5	71.1
2906	NAVDAT	35.69	32.2944	-106.5083	-2.7	-0.7	71.4
3591	NAVDAT	35.69	32.4153	-106.5917	-5.1	-3.9	73.1
3491	NAVDAT	35.69	32.4153	-106.5917	-4.9	-3.7	73.1
3691	NAVDAT	35.69	32.4153	-106.5917	-4.9	-3.7	73.3
1691	NAVDAT	35.69	32.3417	-106.4861	-5.0	-3.9	73.3
3791	NAVDAT	35.69	32.2611	-106.5333	-5.1	-4.0	73.5
292	NAVDAT	35.69	32.2611	-106.5403	-5.1	-3.9	74.4
TmoeD1	NAVDAT	35.69	32.3027	-106.5351	-5.9	-5.1	74.5
192	NAVDAT	35.69	32.3411	-106.4917	-5.2	-4.1	76.1
AS-5	NAVDAT	36.8	32.0500	-105.5500	3.7	7.9	55.2
AI-11	NAVDAT	36.8	32.0333	-105.6333	3.4	7.5	58.9
RP009	NAVDAT	38	32.3750	-107.3750	-3.9	-2.3	58.0
Tc88-2	NAVDAT	47.5	33.0667	-108.0040	-4.7	-3.4	52.6
Rp88-8	NAVDAT	47.5	32.7500	-107.9210	-5.9	-5.1	55.5
C43	NAVDAT	52	32.6619	-110.4796	-4.5	-3.1	62.2
SF33	NAVDAT	58	32.9503	-109.6731	-3.2	-1.4	65.8
SF32	NAVDAT	58	32.9519	-109.6725	-3.2	-1.4	67.4
SF34	NAVDAT	58	32.9394	-109.6056	-8.7	-8.8	69.7
CH31	NAVDAT	60	33.0625	-110.7333	-6.6	-6.0	64.8
CH32	NAVDAT	60	33.0653	-110.7264	-6.5	-5.9	66.8
R31	NAVDAT	60	33.1789	-111.0389	-7.9	-7.8	71.8
R32	NAVDAT	60	33.1511	-110.0506	-9.1	-9.5	72.3
C31	NAVDAT	60	32.7486	-110.4806	-4.9	-3.7	73.7
C22	NAVDAT	62	32.7417	-110.4792	-5.2	-4.1	68.6
CK1	NAVDAT	64	34.2075	-112.3369	-10.8	-11.8	66.9

TABLE DR4

R42	NAVDAT	64	33.1806	-111.0583	-9.6	-10.2	68.6
R2a7	NAVDAT	64	33.0694	-111.0820	-9.9	-10.5	75.1
R21	NAVDAT	65	33.0506	-110.0631	-6.0	-5.2	68.9
T43	NAVDAT	66	31.6550	-110.0264	-7.2	-6.8	78.1
SF21	NAVDAT	69	32.9336	-109.6195	-4.5	-3.1	63.2
R1a4	NAVDAT	70	33.1592	-110.9028	-6.1	-5.4	58.9
CH14	NAVDAT	70	33.0653	-110.7264	-6.3	-5.6	61.9
CH11	NAVDAT	70	33.0803	-110.7186	-6.3	-5.6	66.8
R1a2	NAVDAT	70	33.1508	-110.8936	-7.0	-6.6	67.4
R11	NAVDAT	72	33.1333	-110.9992	-9.6	-10.1	58.0
D11	NAVDAT	72	34.8242	-113.7378	-12.2	-13.7	61.9
CB41	NAVDAT	72	34.4928	-112.5844	-9.2	-9.5	65.3
CB31	NAVDAT	72	34.4914	-112.5831	-9.3	-9.7	66.4
B61	NAVDAT	72	34.5883	-113.2078	-12.1	-13.5	69.9
D31	NAVDAT	72	34.8386	-113.7669	-13.7	-15.7	70.7
T32	NAVDAT	72	31.6833	-110.0833	-7.5	-7.3	71.7
B51	NAVDAT	73	34.5881	-113.2142	-11.2	-12.3	66.1
CB11	NAVDAT	74	34.4956	-112.5919	-13.5	-15.4	52.9
CB23	NAVDAT	74	34.4928	-112.5781	-10.3	-11.0	68.2
SF17	NAVDAT	75	32.9556	-109.6208	0.6	3.8	58.6
C13	NAVDAT	75	32.7706	-110.4828	-1.6	0.7	59.7
B42	NAVDAT	75	34.5683	-113.2303	-10.8	-11.7	65.2
C12	NAVDAT	75	32.1044	-110.4778	-2.5	-0.4	79.4
CH1	NAVDAT	76	33.0669	-110.7258	-0.2	2.6	48.6
T11	NAVDAT	76	31.6250	-110.1708	-3.9	-2.3	53.2
T22	NAVDAT	76	31.6194	-110.1667	-6.9	-6.4	64.8
T21	NAVDAT	76	31.7333	-110.1083	-6.5	-5.9	66.6
T2a5	NAVDAT	76	31.6917	-110.0833	-7.2	-6.8	71.5
B33	NAVDAT	77	34.5989	-113.1117	-12.3	-13.8	59.1
B3a1	NAVDAT	77	34.5839	-113.2036	-10.2	-10.9	66.6
B3b1	NAVDAT	78	34.5711	-113.2458	-9.9	-10.5	66.3
B22	NAVDAT	78	34.5694	-113.2375	-11.2	-12.2	76.1
PC-35 PC35-P	NAVDAT	110	34.9194	-118.7961	1.0	4.4	79.4