# **TABLE OF CONTENTS**

APPENDIX I ANALYTICAL METHODS	2
1.1 LA–ICPMS U–Pb Zircon and Monazite Dating	2
1.2 Whole-rock XRF and solution ICPMS	8
1.3 Electron microprobe Cr-spinel analysis	10
1.4 Pb – isotopes on K – feldspar	
APPENDIX II SAMPLE LIST	
APPENDIX III GEOCHRONOLOGY DATA	
3.1 LA-ICPMS U-Pb Zircon Dating	
3.2 LA-ICPMS U-Th-Pb Monazite Dating APPENDIX IV GEOCHEMICAL DATA	
4.1 Whole Rock Geochemical (XRF and solution ICPMS) Data	
4.1.1. Silurian–Early Devonian Continental Rift Panjiazhai Metabasalt	
4.1.2. Late Devonian–Early Carboniferous CAL Volcanic Passive Margin	
Magmatism	103
4.1.3. Late Permian CAL Continental Rift Magmatism	
4.1.4. Late Carboniferous(?)–Early Permian WAL Continental Rift Mafic	
Magmatism	117
4.1.5. Mid Permian WAL Arc/Backarc Basin Mafic Magmatism	141
4.1.6. Early Triassic WAL Post-collisional Mafic Magmatism	147
4.1.7. Late Permian WAL Syn-or Post-collisional Granites	149
4.1.8. Early Triassic CAL Syn-or Post-collisional Granites	155
4.1.9. Late Carboniferous(?)–Early Permian WAL Continental Rift Rhyolite	157
4.1.10. Mid Permian WAL Arc/Backarc Basin Rhyolite	161
4.1.11. Early Triassic WAL Post-collisional Rhyolite	163
4.1.12. EAL Metamorphic rocks	165
4.1.13. Silurian–Early Devonian Ailaoshan Metasandstones	167
4.1.14. Late Permian–Triassic WAL Sandstones	169
4.2 Peridotitic Cr-spinel Geochemical (Electron Microprobe) Data	172
4.3 Granite K-feldspar Pb-isotope Geochemical (LA-ICPMS) Data	
4.4 Detection Limits	
REFERENCES	177

### 1.1 LA-ICPMS U-Pb Zircon and Monazite Dating

Approximately 100 g of rock was crushed and non magnetic heavy mineral concentrates containing zircons were extracted using a gold pan and a Fe–Nd–B magnet. Selected zircons were then mounted in epoxy resin. After examining their internal textures using cathodoluninescence imaging, the zircons were U–Pb analyzed on an Agilent 7500cs quadrupole ICPMS with a 193 nm Excimer using the Resonetics M50 ablation cell at CODES in the University of Tasmania (Meffre et al., 2008; Meffre et al., 2007). The down–hole fractionation, instrument drift and mass bias correction factors for Pb/U ratios on zircons were determined by primary 91500 standard (Wiedenbeck et al., 1995) and checked using the Temora standard of (Black et al., 2003b), the GJ1 standard (Jackson et al., 2004) and the Mud Tank Zircon (Black and Gulson, 1978). The correction factors for the <sup>207</sup>Pb/<sup>206</sup>Pb ratio was calculated using analyses of NIST610 analyzed throughout the day and calculated using the recommended values by Baker et al. (2004). Isoplot 4.11 was used to calculate weighted averages and plots.

Some of the zircons were analyzed on the same instrument but with an in situ approach designed to provide U–Pb zircon analysis on small rare zircons in ophiolitic gabbros and dolerite (Sack et al., 2011).

Monazite analyses have been performed on the same quadrupole ICPMS and laser as in the zircon analyses. The downhole fractionation, instrument drift and mass bias correction factors for Pb/U ratios on monazites were calculated using the primary– (two analyses, RGL4B (Rubatto et al., 2001)) and secondary standard monazite (one analysis on each of Hores Gneiss (Page et al., 2005) and MB35 (Berry et al., 2008)) analyzed at the beginning of the session and every 12 unknown monazites (or around every 30 minutes) using the same spot size and conditions as used on the samples. The correction factor for the <sup>207</sup>Pb/<sup>206</sup>Pb ratio was calculated using two 32 micron spots of NIST610 as for the zircons.

For both zircon and monazite, each analysis began with a 30 second blank gas measurement followed by a further 30 seconds of analysis time when the laser was switched on. The zircon or monazite was sampled on 32 or 13 micron spots using the laser at 5 Hz and a density of approximately 2 J/cm<sup>2</sup>. A flow of He carrier gas at a rate of 0.6 litres/minute carried particles ablated by the laser out of the chamber to be mixed with Ar gas and carried to the plasma torch. Isotopes measured for zircons were <sup>56</sup>Fe, <sup>90</sup>Zr, <sup>181</sup>Hf, <sup>202</sup>Hg, <sup>204</sup>Pb, <sup>206</sup>Pb206, <sup>207</sup>Pb, <sup>208</sup>Pb, <sup>232</sup>Th, <sup>238</sup>U with each element being measured every 0.16 s with longer counting time on the Pb isotopes compared to the other elements. For the monazite <sup>27</sup>Al, <sup>31</sup>P, <sup>43</sup>Ca, <sup>140</sup>Ce and <sup>172</sup>Yb were analyzed instead of Fe, Zr and Hf. The data reduction used was based on the method proposed by Meffre et al., (2008) and Paton et al., (2010).

### 1.1.2. Standard accuracy

To determine the analytical accuracy of the U-Pb zircon geochronology presented in this thesis, all primary and secondary standards that were analyzed over 12 months (January 2011-December 2011) were compiled. These analyses were undertaken with the same sample chamber and LA-ICP-QMS parameters (i.e., 5 Hz, 35 mm spot size and 30 s ablation time) as used when determining the U-Pb zircon age of the samples from Yunnan. The weighted mean of the <sup>207</sup>Pb corrected <sup>206</sup>Pb/<sup>238</sup>U ages from repeated analyses of our primary reference zircon 91500 (n=848) is 1063.7  $\pm$  0.89 Ma with a MSWD of 0.50. This result closely matches the TIMS age 1062.4  $\pm$  0.4 Ma (Wiedenbeck et al., 1995) with an age offset from recommended value being 0.16% (Fig. 1). The mean on the Temora standard zircons (n=335, 416.06 $\pm$ 0.67 Ma, MSWD=0.85, age offset from recommended value =0.25%) is also close to the TIMS age 416.8 $\pm$ 1.1 Ma (Black et al., 2003a) (Fig. 2), whereas our GJ1 (n=343, 606.06 $\pm$ 0.71 Ma, MSWD=1.14, age offset from recommended value =1.28%) shows a slightly older age than the TIMS age 600.4 $\pm$ 2.0 Ma (Jackson et al., 2004) (Fig. 3).

The mean for the Mudtank zircons (n=249, 714.6 $\pm$ 3.4 Ma, MSWD=0.55, age offset from recommended value =3.04%) shows a significantly younger age than the TIMS age 732 $\pm$ 5 Ma (Black and Gulson, 1978) (Fig. 4). The Mudtank zircons analyzed have low U content (<10 ppm with an average of 4 ppm), as well as very low Hf contents and are unlike any of the zircons analyzed in this thesis. The low U-Pb age of the Mud Tank probably arises from matrix effects where the laser ablates these unusual low U zircons differently to the standards (Jackson et al., 2004). As the Mud Tank zircons are well outside the range of zircon composition analyzed in this study, these matrix effects are unlikely to affect the bulk of the zircons analyzed. The majority of the zircons analyzed in this study tends to have between 50-500 ppm U, with Hf contents between 0.8-1.2 wt% and are similar to the 91500 zircons used as primary standards and the Temora and GJ1 zircons used as secondary standards.

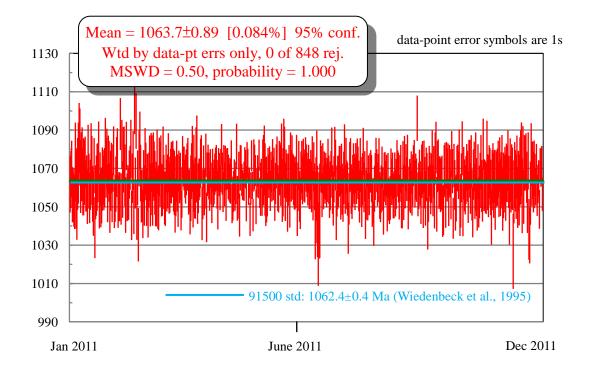


Figure 1. Weighted mean of the  ${}^{207}$ Pb corrected  ${}^{206}$ Pb/ ${}^{238}$ U ages from repeated analyses of the primary reference zircon 91500 (n=848).

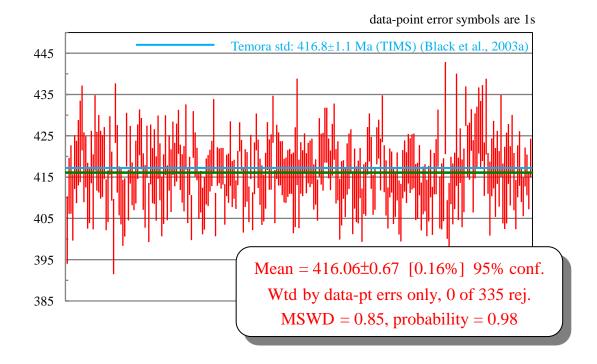


Figure 2. Weighted mean of the  ${}^{207}$ Pb corrected  ${}^{206}$ Pb/ ${}^{238}$ U ages from repeated analyses of the Temora zircons (n=335).

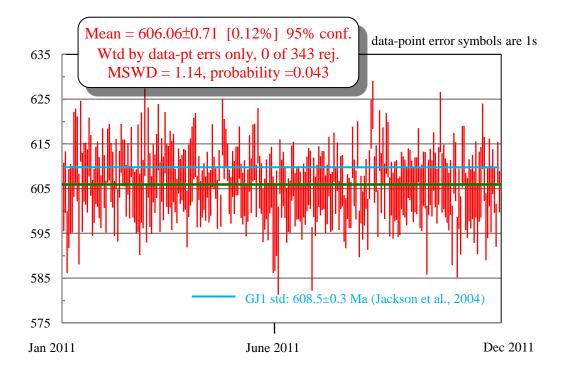


Figure 3. Weighted mean of the  ${}^{207}$ Pb corrected  ${}^{206}$ Pb/ ${}^{238}$ U ages from repeated analyses of the GJ1 zircons (n=343).

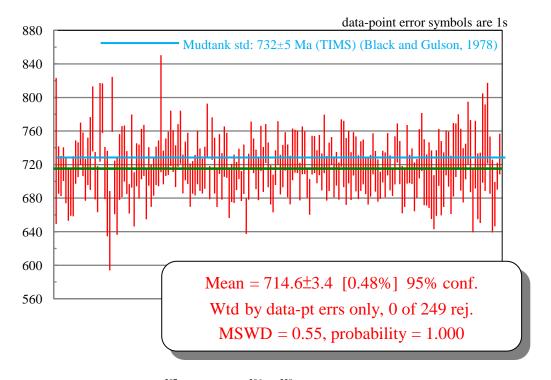


Figure 4. Weighted mean of the  ${}^{207}$ Pb corrected  ${}^{206}$ Pb/ ${}^{238}$ U ages from repeated analyses of the Mudtank zircons (n=249).

### 1.1.3. Statistical criteria for assessing potential provenance

Youngest detrital zircon U–Pb ages are used to determine the maximum deposition ages for sedimentary rocks (e.g., Gehrels, 2011; Gehrels et al., 2006). As to be discussed in Chapter Five, deposition ages of the Ailaoshan sandstones are expected to be within a few million years of the mean age of the youngest zircons, especially because felsic magmatism (e.g., Luchun rhyolites) occurred throughout the region at this time providing a constant supply of juvenile material. Statistically, there are many approaches in using youngest detrital zircons to determine the maximum deposition ages of the sedimentary rocks, with the major two being:

1. Youngest single grain age;

2. Mean age of the youngest two or more grains that overlap in age at  $1\sigma$ ;

Although some detrital zircon researches (e.g., Colorado Plateau) suggest that youngest single detrital zircon in a detrital zircon population is compatible with depositional age in 90% of cases, and in 95% of cases if criteria are relaxed to allow  $\leq$ 5 Ma of discrepancy (Dickinson and Gehrels, 2009), this may not be applied to other cases and the actual compatibility depends also on the proximity of the magmatic source to the deposition sites. Therefore, weighted average instead of youngest single zircon U–Pb age is used because the latter may be spurious and cannot be reproduced (Dickinson and Gehrels, 2009). To be statistically more robust, at least 60 zircons per sample were analyzed in each sample whenever possible (Andersen, 2005).

#### 1.2 Whole–rock XRF and solution ICPMS

Samples were crushed with a jaw crusher and tungsten–carbide ring–mill. XRF analysis using a PANalytical Phillips X–Ray Fluorescence (XRF) spectrometer at CODES, University of Tasmania, was carried out to determine the concentration for major and certain trace elements. For major elements, 1–2g sample was first roasted at 1000°C for 12 hours and reweighed to determine the loss on ignition (LOI). 0.500g of the roasted sample was mixed with 4.500g 12–22 flux (lithium tetraborate–metaborate mix) and 0.0606g LiNO<sub>3</sub>, and then fused at 1,100°C in 5%Au/95%Pt crucibles before analysis (Robinson, 2003). For trace elements, 10g of sample powder was pressed (3.5 tonnes cm<sup>-2</sup>) into a 32mm diameter pellet with PVP–MC (Polyvinylpyrrolidone–Methylcellulose) binder. After that, the sample was measured with a 3kW max. ScMo anode X–Ray tube and a 3kW max. Au anode X–Ray tube (Watson, 1996).

Solution ICPMS analysis was carried out to determine the low–level trace elements and rare earth elements (REE) contents of representative samples. This was performed using the Agillent 7700 Inductively Coupled Plasma Mass Spectrometer (ICPMS) at CODES, University of Tasmania with the method of Robinson et al. (1999) and Yu et al. (2000). Sample powder (100 mg) was dissolved using PicoTrace® high pressure acid (HF/H<sub>2</sub>SO<sub>4</sub>) digestion. After wetting the sample with a few drops of ultra–pure water, 0.1 ml of  $3\mu g g^{-1}$  indium solution, 3 ml HF and 3 ml H<sub>2</sub>SO<sub>4</sub>, the sample was digested for 16 hours at 180°C. After that, the digested mixture was dried by evaporation at 180°C for four days. 1ml of HClO<sub>4</sub> was added to the residue, dried again, and then re–dissolved by heating (60–70°C for ~ 1 hour) the residue with 2 ml HNO<sub>3</sub> and 1 ml HCl. The solution was diluted to 100 ml before analyzed (Yu et al., 2000).

For both XRF and ICPMS analyses, both precision (determined by repeated analysis of the standards and presented as relative standard deviation [%RSD] for the period of analysis) and analytical accuracy (presented as expected value/average measured value) are better than 5%.

#### **1.3 Electron microprobe Cr–spinel analysis**

Cr–spinels were identified from polished thin–sections under reflected light microscopy. The thin–sections were then carbon–coated and analyzed by the Cameca SX100 electron microprobe at the Central Science Laboratory, University of Tasmania. Approximately ten spots were analyzed for each sample according to the method proposed by Kamenetsky et al. (2001), with Chromite–UTAS used as the standard.

#### 1.4 Pb-isotopes on K-feldspar

Unaltered or least altered K-feldspar grains were hand-picked, mounted in epoxy, polished, washed in distilled water and subsequently analyzed on the same ICPMS and laser as used for the zircons. NIST610 was used as the primary standard and GSD1G as a secondary standard. Areas clear of high U- or Th-inclusions and alteration were selected and analyzed using techniques similar to those outlined by (Meffre et al., 2008; Woodhead et al., 2009). Ten spots were analyzed for each sample. The weighted average of 8–10 analyses that formed a coherent group was used.

# APPENDIX II SAMPLE LIST

Location Name	Latitude	Longitude	Description
SM09-108	23.63503	101.9541	Rhyolite
SM09-109	23.66061	101.8484	Rhyolite
SM09-110	23.65899	101.8482	Gneissic granite
SM09-111	23.66073	101.843	Gneissic granite
SM09-112	23.65757	101.8455	Gneiss
SM09–113	23.66096	101.827	Weathered gneiss
SM09–114	23.65901	101.8101	Granite intruding schist
SM09–115	23.66717	101.76	Weathered granite
SM09–116	23.66234	101.7383	Schist
SM09-117	23.67229	101.7351	Schist
SM09-118	23.68213	101.7325	Schist
SM09-119	23.69079	101.7037	Schist
SM09-120	23.69081	101.7037	Weathered granite
SM09-121	23.69765	101.6979	Weathered granite
SM09-122	23.67938	101.6835	Altered sandstone
SM09-123	23.67036	101.6714	Altered sandstone
SM09-124	23.66784	101.6656	Sandstone
SM09-125	23.65077	101.6343	Wehrlite
SM09-126	23.65302	101.6322	Sandstone
SM09-127	23.6533	101.6326	Serpentinite
SM09-128	23.6546	101.6303	Harzburgite
SM09-129	23.65532	101.6324	Mylonitic sandstone
SM09-130	23.65779	101.6239	Sandstone
SM09–131	23.66486	101.6222	Sandstone
SM09-132	23.64239	101.6403	Sandstone
SM09–133	23.63487	101.6464	Sandstone
SM09–134	23.57915	101.6737	Sandstone
SM09–135	23.41781	101.6771	Sandstone
SM09–136	23.29807	101.7145	Volcaniclastic conglomerate
SM09–137	23.2985	101.7113	Dolerite
SM09–138	23.30338	101.706	Black shale
SM09–139	23.3128	101.6929	Dolerite dyke intruding black shale
SM09–140	23.32191	101.6827	Sandstone
SM09–141	23.32242	101.6829	Basalt
SM09-142	23.32326	101.6833	Basalt

Location Name	Latitude	Longitude	Description
SM09–143	23.32308	101.683	Basalt
SM09–144	23.32094	101.681	Volcaniclastic conglomerate
SM09–145	23.32177	101.6796	Andesite
SM09–146	23.32413	101.6769	Dolerite breccia
SM09–147	23.32495	101.674	Andesite-dacite
SM09–148	23.33076	101.666	Black shale and sandstone
SM09–149	23.34173	101.6621	Volcaniclastic conglomerate
SM09-150	23.35015	101.6565	Breccia and black shale interbeds
SM09–151	23.35846	101.6588	Basalt
SM09–152	23.35991	101.6607	Basalt
SM09–153	23.35955	101.6627	Basalt
SM09–154	23.36163	101.6655	Basalt
SM09–155	23.36817	101.6651	Epidote altered basalt
SM09–156	23.374	101.6586	Basalt
SM09–157	23.374	101.6586	Basalt
SM09–158	23.37943	101.6453	Siltstone
SM09–159	23.38338	101.6508	Epidote altered basalt
SM09-160	23.39156	101.6489	Basalt
SM09–161	23.40801	101.6485	Red sandstone
SM09–162	23.41779	101.628	Basalt
SM09–163	23.40919	101.6232	Red siltstone
SM09–164	23.36377	101.5393	Red sandstone
SM09–165	23.36378	101.5393	Rhyolite
SM09–166	23.36378	101.5393	Limestone

Location Name	Latitude	Longitude	Description
K09–01	23.5771	101.949	Schist
K09–02	23.569	101.934	Schist
K09–03	23.5684	101.93	Metasediments
K09–04	23.56	101.92	Granite and metasediment
K09–05	23.5228	101.899	Quartzite
K09–06	23.507	101.902	Sandstone
K09–07	23.4713	101.886	Sandstone
K09–08	23.4322	101.798	Serpentinite
K09–09	23.4569	101.798	Serpentinite
K09–10	23.4822	101.77	Wehrlite
K09–11	23.4587	101.722	Sandstone
K09–12	23.4382	101.717	Sandstone
K09–13	23.6383	101.644	Chromite-enriched sediments
K09–14	23.6504	101.633	Plagiogranite
K09–15	23.7021	101.661	Quartz porphyry
K09–16	23.7407	101.571	Serpentinite and dolerite boulders
K09–17	23.7814	101.572	Sandstone
K09–18	23.79	101.574	Sandstone
K09–19	23.8042	101.563	Andesite breccia
K09–20	23.7981	101.5	Dolerite and gabbro boulders
K09–21	23.8172	101.565	Chert
K09–22	23.8164	101.573	Conglomerate
K09–23	23.8553	101.576	Serpentinite
K09–24	23.8788	101.561	Sandstone
K09–25	23.8873	101.538	Gabbro
K09–26	23.9393	101.493	Dolerite
K09–27	23.9459	101.493	Granite
K09–28	23.9776	101.541	Granite
K09–29	24.0283	101.537	Granite
K09–30	24.0416	101.527	Gneiss
K09–31	24.1009	101.514	Mylonite
K09–32	23.3615	101.664	Basalt
K09–33	23.3625	101.666	Basalt
K09–34	23.3731	101.66	Basalt
K09–35	23.3785	101.651	Andesite
K09–36	23.3826	101.649	Basalt

Location Name	Latitude	Longitude	Description
K09–37	23.393	101.648	Basalt
K09–38	23.395	101.647	Sandstone
K09–39	23.4103	101.667	Gneiss
K09–40	23.2229	102.824	Gneiss
K09–42	23.2105	102.828	Gneiss
K09–43	23.1926	102.822	Gneiss
K09–44	23.1815	102.804	Gneiss
K09–45	23.1824	102.803	Gneiss
K09–46	23.097	102.736	Granodiorite
K09–47	23.0819	102.741	Gneiss
K09–48	23.0484	102.745	Limestone
K09–49	23.0518	102.748	Chert and sandstone
K09–50	22.9829	102.77	Sandstone
K09–51	22.9434	102.796	Sandstone
K09–52	22.9301	102.797	Sandstone
K09–53	22.9271	102.777	Sandstone
K09–54	22.9082	102.737	Limestone
K09–55	22.9068	102.712	Mylonite
K09–56	22.9213	102.687	Sandstone
K09–57	22.9358	102.645	Sandstone
K09–58	22.9573	102.605	Sandstone
K09–59	22.9607	102.561	Phyllite
K09–60	22.9763	102.513	Sandstone
K09–61	22.9975	102.385	Sandstone
K09–62	22.9992	102.372	Sandstone
K09–63	22.9991	102.357	Sandstone
K09–64	23.0049	102.335	Chert
K09–65	23.0065	102.293	Conglomerate
K09–66	23.0085	102.266	Sandstone
K09–67	23.0045	102.255	Phyllite
K09–68	23.0068	102.243	Metasandstone
K09–69	23.0101	102.221	Rhyolitic volcaniclastics
K09–70	23.0336	102.18	Phyllite
K09–71	23.0222	102.081	Volcaniclastics
K09–72	23.0135	102.048	Sandstone
K09–73	23.0082	102.01	Sandstone
K09–74	22.9889	101.978	Sandstone

Location Name	Latitude	Longitude	Description
K09–75	22.966	101.975	Sandstone
K09–76	22.9537	101.954	Sandstone
K09–77	22.9474	101.946	Limestone
K09–78	22.8548	101.976	Schist
K09–79	22.8607	101.979	Basalt
K09–80	22.8652	101.974	Basalt
K09–81	22.9957	102.433	Volcaniclastics
K09–82	22.9898	102.45	Sandstone
K09–83	22.9839	102.462	Rhyolitic volcaniclastics
K09–84	22.9086	102.728	Granite
K09–85	22.9096	102.741	Rhyolite
K09–86	22.9108	102.744	Sandstone
K09–87	22.9195	102.759	Rhyolite
K09–88	23.0797	102.741	Phyllite
K09–89	23.0975	102.741	Schist

Location Name	Latitude	Longitude	Description
K10-01	23.7304	102.86	Limestone
K10-02	23.7367	102.919	Limestone
K10–03	23.0113	103.36	Limestone
K10–04	23.0231	103.332	Limestone
K10–05	23.0126	103.322	Gneiss
K10–06	22.9878	103.316	Amphibolite
K10–07	22.9727	103.292	Amphibolite
K10–08	22.9551	103.289	Amphibolite
K10–09	22.9445	103.278	Gneiss
K10–10	22.919	103.214	Sandstone
K10–11	22.7561	103.196	Basalt
K10–12	22.7506	103.19	Dolerite
K10–13	22.7491	103.181	Chert
K10–14	22.7438	103.176	Basalt
K10–15	22.7423	103.161	Basalt
K10–16	22.759	103.143	Dolerite
K10–17	22.7582	103.142	Basalt
K10–18	22.6811	103.022	Granite
K10–19	22.6873	102.987	Siltstone
K10–20	22.6866	102.983	Sandstone
K10–21	22.7019	102.949	Sandstone
K10–22	22.7138	102.9	Sandstone
K10–23	22.7286	102.86	Sandstone outcrop
K10–24	22.7489	102.763	Sandstone
K10–25	22.7637	102.73	Sandstone
K10–26	22.801	102.635	Sandstone
K10–27	22.8053	102.617	Siltstone
K10–28	22.809	102.58	Sandstone
K10–29	22.8107	102.56	Granite
K10–30	22.8106	102.558	Sandstone and conglomerate
K10–31	22.8148	102.55	Slate
K10–32	22.8148	102.549	Sandstone
K10–33	22.8231	102.535	Conglomerate

Location Name	Latitude	Longitude	Description
K10–34	22.8354	102.513	Black shale
K10–35	22.8478	102.52	Sandstone
K10–36	22.8483	102.522	Granite
K10–37	22.8901	102.526	Sandstone
K10–38	22.8501	102.198	Conglomerate
K10–39	22.7781	102.267	Siltstone
K10–40	22.7677	102.295	Sandstone
K10–41	22.7688	102.294	Marl
K10–42	22.6692	102.254	Marl
K10–43	22.6731	102.212	Basalt
K10–44	22.6507	102.103	Basalt
K10–45	22.6525	102.093	Basalt and basalt breccia
K10–46	22.6596	102.078	Sandstone
K10–47	22.6611	102.077	Dolerite intruding sandstone
K10–48	22.6753	102.069	Basalt and basalt breccia
K10–49	22.6934	102.061	Dolerite intruding sandstone
K10–50	22.7053	102.06	Dolerite
K10–51	22.71	102.061	Dolerite outcrop
K10–52	22.7347	102.051	Dolerite intruding sandstone
K10–53	22.751	102.037	Basalt
K10–54	23.0051	101.964	Limestone
K10–55	23.0169	101.964	Limestone
K10–56	23.0268	101.958	Rhyolitic ignimbrite and sandstone

Location Name	Latitude	Longitude	Description
K10–57	23.4438	101.607	Limestone
K10–58	23.4444	101.603	Basalt
K10–59	23.4482	101.603	Lava–limestone fault contact
K10–60	23.4655	101.59	Serpentinized wehrlite
K10–61	23.4475	101.6	Gabbro and dolerite
K10–62	23.4436	101.602	Basalt and dolerite
K10–64	23.3623	101.666	Basalt and dolerite
K10–65	23.2664	101.695	Basalt
K10–66	23.269	101.699	Basalt
K10–67	23.2737	101.711	Volcaniclastic sandstone
K10–68	23.2893	101.721	Basalt
K10–69	23.2984	101.715	Basalt and andesite
K10–70	23.5622	101.67	Chert
K10–71	23.9676	101.653	Phyllite
K10–72	23.6959	101.661	Phyllite
K10–73	23.6965	101.658	Basalt
K10–74	23.6957	101.656	Phyllite
K10–75	23.6942	101.656	Phyllite
K10–76	23.7631	101.68	Gneiss
K10–77	23.9616	101.51	Phyllite
K10–78	23.9597	101.447	Schist
K10–79	23.9473	101.404	Ultramafic rock
K10-80	23.9452	101.397	Basalt
K10-81	23.9394	101.385	Sandstone
K10-82	24.2754	101.115	Dolerite
K10-83	24.2754	101.115	Dolerite
K10-84	24.3596	101.042	Dolerite
K10-85	24.3867	100.974	Basalt-limestone faulted contact
K10–86	25.915	100.095	Dolerite
K10-87	26.0359	100.106	Limestone

### APPENDIX III GEOCHRONOLOGY DATA

# 3.1 LA–ICPMS U–Pb Zircon Dating

### Note all analyses are with the 32 micron spot size except were otherwise indicated

(\*) Zircons analyzed with 13 micron spot size by in-situ method

Labels	207 cor	+/-1 ster	U	Th	Pb	Hf	Common	<sup>206</sup> Pb/	+/-1 RSE	<sup>208</sup> Pb/	+/-1	<sup>207</sup> Pb/	+/-1 RSE
	<sup>206</sup> Pb/ <sup>238</sup> U		(ppm)	(ppm)	(ppm)	(ppm)	Pb at age	<sup>238</sup> U		<sup>232</sup> Th	RSE	<sup>206</sup> Pb	
	Age (Ma)						of zircon						
SM09-111-1	27	1	480	88	2	12735	0.837	0.0042	2.9%	0.0020	5.8%	0.0555	6.4%
SM09-111-2	27	1	857	222	3	10837	0.837	0.0042	2.2%	0.0015	5.1%	0.0515	5.3%
SM09-111-3	27	1	490	60	2	12581	0.837	0.0042	2.7%	0.0012	7.9%	0.0499	7.1%
SM09-111-4	27	1	710	123	3	13666	0.837	0.0042	2.5%	0.0014	5.8%	0.0453	6.4%
SM09-111-5	27	1	775	127	3	11868	0.837	0.0043	2.1%	0.0018	6.0%	0.0544	5.4%
SM09-111-6	28	1	1256	472	5	13045	0.837	0.0044	2.0%	0.0016	3.8%	0.0529	4.3%
SM09-111-7	29	1	1463	698	7	13187	0.837	0.0045	1.8%	0.0014	3.3%	0.0493	3.9%
SM09-111-8	29	1	869	354	4	12541	0.838	0.0046	2.2%	0.0015	4.1%	0.0506	4.7%
SM09-111-9	30	1	1347	783	6	12429	0.838	0.0047	1.8%	0.0016	2.8%	0.0555	4.0%
SM09-111-10	30	1	1070	314	5	13327	0.838	0.0047	2.0%	0.0016	4.0%	0.0532	4.6%
SM09-111-11	30	1	1559	823	7	12545	0.838	0.0047	1.8%	0.0015	2.8%	0.0484	3.4%
SM09-111-12	30	1	1026	304	5	14178	0.838	0.0049	2.0%	0.0025	4.0%	0.0758	4.4%

SM09-114-1	26	1	2096	136	7	24650	0.837	0.0040	2.3%	0.0014	8.0%	0.0425	5.5%
SM09-114-2	27	1	2285	109	8	23453	0.837	0.0042	3.0%	0.0025	9.2%	0.0483	6.4%
SM09-114-3	32	1	7095	292	32	34862	0.838	0.0050	1.8%	0.0019	4.6%	0.0508	3.0%
SM09-114-4	34	1	6799	515	33	29178	0.838	0.0053	1.9%	0.0028	6.6%	0.0560	3.8%
SM09-114-5	34	1	5056	835	25	19820	0.838	0.0053	2.1%	0.0019	4.1%	0.0498	4.1%
SM09-114-6	35	1	7978	717	41	38730	0.838	0.0055	2.1%	0.0020	5.2%	0.0532	2.8%
SM09-114-7	35	1	9493	447	45	28905	0.838	0.0055	1.5%	0.0024	4.4%	0.0501	2.1%
SM09-114-8	36	1	9027	490	46	38153	0.838	0.0055	1.5%	0.0024	3.6%	0.0491	1.8%
SM09-114-9	36	0	5449	317	27	32939	0.838	0.0056	1.4%	0.0027	3.9%	0.0508	1.8%
SM09-114-10	36	0	8081	449	44	37406	0.838	0.0057	1.3%	0.0069	3.8%	0.0677	1.7%
SM09-114-11	36	0	8122	618	40	29634	0.838	0.0056	1.2%	0.0022	2.9%	0.0508	1.7%
SM09-114-12	36	0	10223	656	52	43828	0.838	0.0056	1.3%	0.0035	3.7%	0.0545	1.7%
SM09-118-1	159	34	1556	379	152	13750	0.877	0.0975	1.3%	0.0375	3.9%	0.0644	0.9%
SM09-118-2	187	17	3386	79	103	18770	0.851	0.0364	2.0%	0.0194	12.0%	0.0537	3.3%
SM09-118-3	195	21	3037	227	105	17939	0.853	0.0407	1.3%	0.0121	13.0%	0.0559	3.4%
SM09-118-4	209	20	3552	57	102	19001	0.850	0.0347	2.5%	0.0103	25.1%	0.0546	4.6%
SM09-118-5	235	23	3235	32	91	19039	0.850	0.0353	2.5%	0.0138	19.7%	0.0493	1.9%
SM09-118-6	268	21	1525	95	73	14836	0.858	0.0538	1.0%	0.0316	6.0%	0.0580	1.4%
SM09-118-7	284	31	3209	321	213	16632	0.867	0.0736	1.6%	0.0353	4.5%	0.0621	1.2%
SM09-118-8													
51109-110-0	374	30	4000	127	275	20137	0.868	0.0765	1.4%	0.0323	6.6%	0.0622	1.0%
SM09-118-8	374 406	30 12	4000 7115	127 570	275 426	20137 21438	0.868 0.863	0.0765 0.0657	1.4% 3.0%	0.0323 0.0109	6.6% 7.7%	0.0622 0.0634	1.0% 0.7%

SM09-118-10	472	5	930	357	79	12679	0.868	0.0768	1.1%	0.0381	4.2%	0.0653	1.5%
SM09-118-11	496	15	3765	343	283	15900	0.870	0.0807	3.0%	0.0284	5.1%	0.0648	0.7%
SM09-118-12	507	12	1901	159	151	17611	0.870	0.0822	2.4%	0.0549	12.5%	0.0613	3.3%
SM09-118-13	639	45	899	100	108	13349	0.888	0.1213	1.4%	0.0400	5.7%	0.0673	1.5%
SM09-118-14	645	13	1540	890	160	12429	0.881	0.1059	2.1%	0.0401	5.4%	0.0669	2.6%
SM09-118-15	674	10	1148	1100	146	11795	0.879	0.1023	1.1%	0.0372	3.8%	0.0646	1.1%
SM09-118-16	680	8	734	298	86	13843	0.883	0.1113	1.2%	0.0376	6.1%	0.0628	3.0%
SM09-118-17	696	6	2537	96	263	15628	0.885	0.1144	0.9%	0.0296	6.4%	0.0657	0.8%
SM09-118-18	705	5	3006	644	335	13418	0.884	0.1133	0.7%	0.0370	3.8%	0.0661	0.8%
SM09-118-19	716	23	1672	255	151	12930	0.877	0.0963	0.9%	0.0374	4.3%	0.0647	0.9%
SM09-118-20	718	42	2989	137	221	18655	0.868	0.0756	1.7%	0.0353	6.5%	0.0619	1.5%
SM09-118-21	720	8	797	123	91	12856	0.886	0.1184	1.1%	0.0386	4.6%	0.0650	1.2%
SM09-118-22	731	5	1117	188	131	12968	0.887	0.1204	0.8%	0.0346	4.8%	0.0657	1.2%
SM09-118-23	734	7	2008	2967	311	10148	0.888	0.1210	0.9%	0.0386	4.1%	0.0660	1.0%
SM09-118-24	742	42	3552	57	102	19001	0.850	0.0347	2.5%	0.0103	25.1%	0.0546	4.6%
SM09-118-25	746	6	3639	182	432	15893	0.888	0.1230	0.9%	0.0390	4.4%	0.0662	0.7%
SM09-118-26	759	11	4134	170	441	16635	0.889	0.1252	1.5%	0.0376	6.5%	0.0657	1.2%
SM09-118-27	765	8	1031	310	133	13558	0.890	0.1266	1.1%	0.0416	5.7%	0.0680	1.7%
SM09-118-28	769	29	3534	282	409	17285	0.888	0.1228	1.1%	0.0424	6.3%	0.0641	1.4%
SM09-118-29	772	7	824	196	100	13748	0.890	0.1275	0.9%	0.0370	5.0%	0.0664	1.2%
SM09-118-30	776	30	4362	138	410	28083	0.880	0.1030	1.2%	0.0385	6.4%	0.0658	0.6%
SM09-118-31	781	15	1137	216	145	14227	0.891	0.1286	1.2%	0.0386	6.0%	0.0677	1.6%
SM09-118-32	784	11	1517	291	191	13884	0.891	0.1287	1.1%	0.0390	5.5%	0.0655	1.5%

SM09-118-33	790	6	569	123	75	12804	0.891	0.1289	1.2%	0.0429	6.0%	0.0704	2.2%
SM09-118-34	793	19	925	300	126	13046	0.892	0.1312	2.4%	0.0411	7.1%	0.0671	3.5%
SM09-118-35	794	25	1556	379	152	13750	0.877	0.0975	1.3%	0.0375	3.9%	0.0644	0.9%
SM09-118-36	795	6	654	666	104	12063	0.892	0.1315	0.8%	0.0387	3.6%	0.0669	1.3%
SM09-118-37	796	7	1026	232	134	14040	0.892	0.1315	1.0%	0.0396	4.2%	0.0664	1.0%
SM09-118-38	801	7	1301	175	159	14116	0.893	0.1324	0.9%	0.0400	5.1%	0.0665	1.1%
SM09-118-39	801	29	4022	316	249	17146	0.866	0.0722	2.0%	0.0312	10.0%	0.0608	2.6%
SM09-118-40	805	12	4154	219	468	17418	0.888	0.1219	0.8%	0.0369	4.6%	0.0663	0.7%
SM09-118-41	806	7	1154	187	145	13774	0.893	0.1332	0.9%	0.0404	5.0%	0.0662	1.1%
SM09-118-42	812	28	3037	227	105	17939	0.853	0.0407	1.3%	0.0121	13.0%	0.0559	3.4%
SM09-118-43	814	9	465	423	70	11543	0.894	0.1345	1.2%	0.0421	4.3%	0.0650	1.6%
SM09-118-44	815	9	3505	886	483	13408	0.894	0.1350	1.1%	0.0403	3.8%	0.0676	0.8%
SM09-118-45	817	7	485	181	68	12306	0.894	0.1350	1.0%	0.0405	4.7%	0.0663	1.7%
SM09-118-46	817	43	893	73	46	13964	0.860	0.0571	3.7%	0.0381	10.7%	0.0656	4.1%
SM09-118-47	819	7	791	427	111	12896	0.894	0.1355	0.9%	0.0418	5.0%	0.0670	1.0%
SM09-118-48	823	55	577	406	82	10920	0.893	0.1328	0.9%	0.0392	4.1%	0.0664	1.5%
SM09-118-49	827	9	848	974	133	12503	0.895	0.1373	1.1%	0.0364	4.9%	0.0688	1.7%
SM09-118-50	830	21	2570	3204	395	13106	0.889	0.1239	1.0%	0.0385	4.2%	0.0666	1.1%
SM09-118-51	833	15	426	177	64	11270	0.895	0.1378	1.9%	0.0477	5.3%	0.0666	1.8%
SM09-118-52	833	39	3386	79	103	18770	0.851	0.0364	2.0%	0.0194	12.0%	0.0537	3.3%
SM09-118-53	833	20	3235	32	91	19039	0.850	0.0353	2.5%	0.0138	19.7%	0.0493	1.9%
SM09-118-54	834	75	2306	174	221	15379	0.877	0.0961	2.0%	0.0392	7.2%	0.0637	2.9%
SM09-118-55	836	8	1526	2427	272	10946	0.895	0.1382	1.0%	0.0418	4.1%	0.0656	1.1%

SM09-118-56	836	11	363	69	52	12910	0.896	0.1393	1.3%	0.0442	7.4%	0.0711	2.4%
SM09-118-57	844	17	877	146	119	13698	0.895	0.1379	1.2%	0.0414	6.9%	0.0685	1.9%
SM09-118-58	849	37	3087	284	319	16210	0.883	0.1098	1.0%	0.0369	5.5%	0.0672	1.1%
SM09-118-59	852	10	436	337	69	10819	0.897	0.1412	1.2%	0.0427	4.9%	0.0672	1.7%
SM09-118-60	855	13	1058	259	142	13114	0.894	0.1350	1.2%	0.0408	5.5%	0.0667	1.5%
SM09-118-61	862	50	1684	405	189	12998	0.884	0.1123	1.2%	0.0377	6.4%	0.0677	2.1%
SM09-118-62	886	33	3209	321	213	16632	0.867	0.0736	1.6%	0.0353	4.5%	0.0621	1.2%
SM09-118-63	890	45	660	226	66	12537	0.879	0.1014	2.0%	0.0361	7.3%	0.0686	3.5%
SM09-118-64	911	140	1043	156	120	13849	0.885	0.1153	1.5%	0.0378	7.1%	0.0688	2.6%
SM09-118-65	920	15	849	233	134	12319	0.902	0.1527	1.7%	0.0420	4.9%	0.0660	2.0%
SM09-118-66	957	12	584	224	87	12232	0.905	0.1594	1.4%	0.0399	5.3%	0.0674	2.2%
SM09-118-67	982	105	1525	95	73	14836	0.858	0.0538	1.0%	0.0316	6.0%	0.0580	1.4%
SM09-118-68	1115	110	4000	127	275	20137	0.868	0.0765	1.4%	0.0323	6.6%	0.0622	1.0%
SM09-118-69	1506	220	899	100	108	13349	0.888	0.1213	1.4%	0.0400	5.7%	0.0673	1.5%
SM09-119-1	177	25	1081	17	30	14722	0.849	0.0331	4.5%	0.0169	26.1%	0.0519	6.2%
SM09-119-2	223	8	1533	30	45	14624	0.850	0.0353	3.8%	0.0178	25.7%	0.0547	6.5%
SM09-119-3	223	5	1381	18	41	14190	0.850	0.0352	2.3%	0.0128	25.4%	0.0515	4.3%
SM09-119-4	225	3	3953	94	119	14835	0.850	0.0355	1.4%	0.0108	9.8%	0.0497	1.5%
SM09-119-5	230	5	1781	34	55	13987	0.851	0.0365	2.2%	0.0120	15.5%	0.0547	3.0%
SM09-119-6	232	7	1504	26	47	14590	0.851	0.0370	3.0%	0.0149	25.2%	0.0558	4.4%
SM09-119-7	233	25	1187	27	63	14159	0.861	0.0605	1.9%	0.0201	12.1%	0.0584	1.9%
SM09-119-8	618	10	679	181	71	12261	0.879	0.1013	1.7%	0.0411	5.1%	0.0658	1.6%

SM09-119-9	625	5	1197	223	122	13112	0.879	0.1025	0.8%	0.0348	4.3%	0.0656	1.1%
SM09-119-10	727	50	2329	40	71	14912	0.851	0.0366	3.4%	0.0122	21.6%	0.0539	3.7%
SM09-119-11	749	8	742	183	90	12802	0.889	0.1236	1.1%	0.0395	4.9%	0.0669	1.6%
SM09-119-12	765	32	1024	322	115	13128	0.882	0.1081	1.0%	0.0364	4.0%	0.0648	1.3%
SM09-119-13	766	37	3271	24	94	14966	0.850	0.0349	3.5%	0.0139	30.9%	0.0514	2.7%
SM09-119-14	768	18	433	161	62	13093	0.890	0.1270	2.4%	0.0556	8.6%	0.0677	3.4%
SM09-119-15	773	32	1743	148	206	15117	0.888	0.1222	1.0%	0.0413	4.8%	0.0651	0.9%
SM09-119-16	774	26	1076	192	135	13104	0.890	0.1269	1.0%	0.0385	4.5%	0.0644	1.4%
SM09-119-17	783	8	738	302	100	12413	0.891	0.1292	1.0%	0.0418	3.9%	0.0654	1.1%
SM09-119-18	788	145	1227	169	101	12253	0.872	0.0855	1.2%	0.0386	4.1%	0.0634	0.9%
SM09-119-19	790	6	1664	143	203	14915	0.891	0.1284	0.8%	0.0396	4.5%	0.0663	0.8%
SM09-119-20	795	30	691	124	85	13258	0.891	0.1285	0.8%	0.0379	4.4%	0.0659	1.0%
SM09-119-21	795	12	2419	60	73	13396	0.851	0.0363	5.2%	0.0126	16.4%	0.0524	4.9%
SM09-119-22	798	23	1135	151	128	13605	0.886	0.1168	1.1%	0.0390	4.4%	0.0663	1.1%
SM09-119-23	809	20	1055	830	154	12547	0.891	0.1279	0.9%	0.0382	3.7%	0.0662	1.1%
SM09-119-24	812	6	525	142	70	12250	0.894	0.1344	0.8%	0.0410	4.3%	0.0667	1.3%
SM09-119-25	815	6	1504	26	47	14590	0.851	0.0370	3.0%	0.0149	25.2%	0.0558	4.4%
SM09-119-26	815	7	2691	173	345	15069	0.894	0.1348	0.9%	0.0424	4.1%	0.0662	0.6%
SM09-119-27	818	8	397	92	52	12584	0.894	0.1353	1.0%	0.0419	4.6%	0.0666	1.3%
SM09-119-28	818	26	1187	27	63	14159	0.861	0.0605	1.9%	0.0201	12.1%	0.0584	1.9%
SM09-119-29	819	8	535	448	83	11856	0.894	0.1353	1.0%	0.0398	3.7%	0.0660	1.3%
SM09-119-30	819	9	590	235	83	12573	0.894	0.1353	1.1%	0.0416	4.0%	0.0655	1.1%
SM09-119-31	819	9	414	127	57	12328	0.894	0.1356	1.2%	0.0388	4.7%	0.0671	1.7%

SM09-119-32	822	7	527	172	73	11455	0.894	0.1358	0.9%	0.0409	4.2%	0.0659	1.3%
SM09-119-33	828	7	459	150	64	12859	0.895	0.1368	0.9%	0.0432	4.4%	0.0656	1.3%
SM09-119-34	832	28	1081	17	30	14722	0.849	0.0331	4.5%	0.0169	26.1%	0.0519	6.2%
SM09-119-35	836	25	1381	18	41	14190	0.850	0.0352	2.3%	0.0128	25.4%	0.0515	4.3%
SM09-119-36	842	7	1099	288	147	12387	0.894	0.1348	1.0%	0.0415	3.9%	0.0652	1.0%
SM09-119-37	843	42	1624	268	187	13309	0.885	0.1149	1.1%	0.0387	4.8%	0.0661	1.6%
SM09-119-38	851	7	436	112	60	12635	0.896	0.1406	0.9%	0.0437	4.6%	0.0645	1.3%
SM09-124-1	242	4	352	102	14	12416	0.852	0.0385	1.5%	0.0138	6.4%	0.0558	2.8%
SM09-124-2	242	5	260	83	10	11888	0.852	0.0383	2.0%	0.0125	8.9%	0.0513	4.7%
SM09-124-3	244	3	369	105	15	12008	0.852	0.0386	1.3%	0.0127	6.5%	0.0529	2.9%
SM09-124-4	245	3	282	75	11	12071	0.852	0.0388	1.2%	0.0120	6.6%	0.0521	3.2%
SM09-124-5	245	4	549	266	22	11425	0.852	0.0389	1.5%	0.0115	6.3%	0.0538	3.2%
SM09-124-6	246	3	252	86	10	11725	0.852	0.0389	1.3%	0.0119	6.1%	0.0506	3.5%
SM09-124-7	247	4	643	105	24	13320	0.852	0.0391	1.7%	0.0121	8.4%	0.0518	3.4%
SM09-124-8	248	4	322	252	15	10566	0.852	0.0397	1.5%	0.0142	5.4%	0.0625	3.1%
SM09-124-9	249	4	422	360	19	10684	0.852	0.0396	1.6%	0.0128	5.9%	0.0546	3.5%
SM09-124-10	251	16	423	91	123	12012	0.956	0.2678	1.5%	0.0978	7.3%	0.1334	1.8%
SM09-124-11	252	2	1090	233	44	13593	0.852	0.0400	1.0%	0.0125	5.2%	0.0527	2.0%
SM09-124-12	252	3	684	185	27	11030	0.852	0.0399	1.4%	0.0140	6.8%	0.0511	2.7%
SM09-124-13	255	4	765	95	28	13844	0.852	0.0403	1.4%	0.0131	8.3%	0.0509	2.9%
SM09-124-14	257	3	1264	566	51	13668	0.853	0.0406	1.3%	0.0125	5.5%	0.0492	2.3%
SM09-124-15	259	3	2207	750	87	13182	0.853	0.0410	1.2%	0.0127	5.4%	0.0525	2.4%

SM09-124-16	259	5	95	66	4	8706	0.853	0.0409	1.7%	0.0121	7.1%	0.0490	6.2%
SM09-124-17	262	4	890	92	35	12484	0.853	0.0416	1.4%	0.0149	8.4%	0.0537	3.0%
SM09-124-18	262	6	137	74	6	10702	0.853	0.0422	2.3%	0.0148	8.1%	0.0655	6.4%
SM09-124-19	263	5	106	55	5	10394	0.853	0.0418	1.9%	0.0130	7.7%	0.0555	5.8%
SM09-124-20	264	4	397	238	18	10110	0.853	0.0417	1.5%	0.0131	6.6%	0.0506	3.7%
SM09-124-21	264	3	297	139	13	9916	0.853	0.0420	1.3%	0.0131	5.6%	0.0538	2.9%
SM09-124-22	267	4	162	138	8	10461	0.853	0.0424	1.5%	0.0130	5.9%	0.0541	3.9%
SM09-124-23	269	3	2235	781	100	13602	0.853	0.0427	1.2%	0.0133	4.1%	0.0519	1.2%
SM09-124-24	275	3	698	455	34	10007	0.854	0.0437	1.0%	0.0134	4.5%	0.0527	2.1%
SM09-124-25	279	4	221	203	12	10594	0.854	0.0442	1.6%	0.0133	5.1%	0.0531	3.3%
SM09-124-26	280	3	1263	531	59	12159	0.854	0.0444	1.2%	0.0139	4.4%	0.0516	1.6%
SM09-124-27	284	5	318	121	14	10870	0.854	0.0451	1.7%	0.0146	7.3%	0.0517	4.2%
SM09-124-28	286	4	325	244	17	10520	0.855	0.0455	1.2%	0.0141	5.1%	0.0544	3.0%
SM09-124-29	293	5	152	88	8	9589	0.855	0.0474	1.6%	0.0168	6.6%	0.0691	4.0%
SM09-124-30	300	4	448	234	23	12507	0.856	0.0477	1.4%	0.0152	5.0%	0.0522	2.4%
SM09-124-31	330	6	206	101	11	11182	0.858	0.0525	1.9%	0.0152	8.0%	0.0530	4.4%
SM09-124-32	337	5	132	177	9	11610	0.858	0.0537	1.6%	0.0160	5.4%	0.0522	4.0%
SM09-124-33	341	5	111	165	8	9928	0.858	0.0545	1.5%	0.0158	5.3%	0.0564	4.8%
SM09-124-34	342	5	331	163	19	9692	0.859	0.0547	1.6%	0.0172	6.6%	0.0552	3.5%
SM09-124-35	344	6	210	160	13	12222	0.859	0.0550	1.8%	0.0178	6.8%	0.0565	4.7%
SM09-124-36	350	5	170	147	11	11565	0.859	0.0558	1.4%	0.0165	5.4%	0.0534	3.7%
SM09-124-37	372	15	37	13	2	8710	0.860	0.0588	4.1%	0.0181	16.2%	0.0467	12.4%
SM09-124-38	407	5	148	101	11	11733	0.863	0.0654	1.3%	0.0204	5.6%	0.0576	3.5%

SM09-124-39	410	6	391	276	29	10904	0.863	0.0658	1.4%	0.0196	4.5%	0.0562	2.1%
SM09-124-40	414	5	1254	236	78	12606	0.864	0.0663	1.1%	0.0206	6.2%	0.0541	1.9%
SM09-124-41	420	6	569	519	46	11792	0.864	0.0674	1.5%	0.0225	6.0%	0.0561	2.4%
SM09-124-42	425	7	170	80	13	10540	0.864	0.0682	1.6%	0.0207	5.7%	0.0558	3.0%
SM09-124-43	435	6	443	166	30	11369	0.865	0.0697	1.3%	0.0221	6.1%	0.0550	2.7%
SM09-124-44	457	6	210	123	17	10747	0.866	0.0731	1.2%	0.0220	5.2%	0.0518	3.0%
SM09-124-45	459	4	960	466	77	9763	0.867	0.0740	0.9%	0.0230	4.2%	0.0579	1.4%
SM09-124-46	460	7	223	111	17	11309	0.867	0.0743	1.6%	0.0237	6.8%	0.0597	3.4%
SM09-124-47	462	7	275	173	22	11399	0.867	0.0743	1.5%	0.0239	5.9%	0.0557	3.4%
SM09-124-48	465	5	190	163	17	11008	0.867	0.0747	1.2%	0.0222	4.9%	0.0553	2.6%
SM09-124-49	501	7	248	172	24	9910	0.870	0.0814	1.5%	0.0278	4.9%	0.0636	2.3%
SM09-124-50	531	8	265	362	29	10927	0.872	0.0856	1.5%	0.0263	5.2%	0.0553	3.0%
SM09-124-51	533	7	1311	229	116	11656	0.872	0.0867	1.3%	0.0308	4.6%	0.0625	1.1%
SM09-124-52	533	6	714	223	59	12171	0.872	0.0860	1.2%	0.0272	5.7%	0.0553	2.0%
SM09-124-53	553	55	140	165	65	10703	1.001	0.3615	1.5%	0.0701	7.6%	0.1731	2.1%
SM09-124-54	577	5	410	648	52	9733	0.875	0.0936	0.9%	0.0276	3.9%	0.0594	1.8%
SM09-124-55	843	8	482	167	71	11698	0.896	0.1401	1.0%	0.0466	4.2%	0.0694	1.2%
SM09-124-56	866	15	582	866	118	12267	0.898	0.1446	1.7%	0.0459	5.4%	0.0733	3.4%
SM09-124-57	926	41	1011	441	119	12464	0.881	0.1066	1.8%	0.0392	4.5%	0.0679	1.0%
SM09-124-58	959	10	542	285	91	13886	0.905	0.1603	1.0%	0.0492	4.9%	0.0702	1.5%
SM09-124-59	1183	13	494	193	100	12385	0.924	0.2016	1.2%	0.0594	5.2%	0.0805	1.5%
SM09-124-60	1464	22	423	91	123	12012	0.956	0.2678	1.5%	0.0978	7.3%	0.1334	1.8%
SM09-124-61	1690	22	159	101	54	11301	0.972	0.3022	1.3%	0.0917	5.3%	0.1108	1.7%

SM09-124-62	1892	16	324	96	118	11458	0.991	0.3410	0.9%	0.0947	4.5%	0.1156	0.8%
SM09-124-63	1894	17	299	58	108	11740	0.991	0.3418	0.9%	0.0925	4.6%	0.1165	0.9%
SM09-124-64	2155	135	643	105	24	13320	0.852	0.0391	1.7%	0.0121	8.4%	0.0518	3.4%
SM09-124-65	2425	14	213	531	159	10635	1.047	0.4554	0.9%	0.1225	3.7%	0.1574	1.0%
SM09-124-66	2514	55	371	134	113	11459	0.954	0.2647	1.1%	0.0661	5.0%	0.1539	1.1%
SM09-124-67	2662	39	25	31	17	9234	1.075	0.5156	1.3%	0.1365	4.9%	0.1887	1.7%
SM09-124-68	2738	28	140	165	65	10703	1.001	0.3615	1.5%	0.0701	7.6%	0.1731	2.1%
SM09-130-1	419	5	142	129	11	10507	0.864	0.0673	1.2%	0.0210	3.5%	0.0572	2.6%
SM09-130-2	423	6	828	188	53	12704	0.864	0.0680	1.4%	0.0208	3.3%	0.0568	1.1%
SM09-130-3	427	5	199	182	15	11747	0.865	0.0688	1.3%	0.0195	3.5%	0.0598	1.9%
SM09-130-4	428	7	291	309	23	10199	0.864	0.0684	1.7%	0.0200	5.8%	0.0530	4.5%
SM09-130-5	436	5	245	191	20	9795	0.865	0.0701	1.2%	0.0208	4.7%	0.0572	2.5%
SM09-130-6	438	5	356	190	27	9556	0.865	0.0704	1.1%	0.0214	4.8%	0.0578	2.4%
SM09-130-7	438	7	348	99	25	10258	0.865	0.0705	1.7%	0.0252	4.8%	0.0576	3.0%
SM09-130-8	444	6	352	175	26	11021	0.866	0.0713	1.4%	0.0225	3.2%	0.0548	1.7%
SM09-130-9	446	15	373	189	29	12233	0.866	0.0717	3.4%	0.0220	5.0%	0.0575	3.6%
SM09-130-10	447	5	1153	535	88	8475	0.866	0.0717	1.2%	0.0216	4.1%	0.0555	1.2%
SM09-130-11	447	4	754	600	63	9694	0.866	0.0719	0.9%	0.0229	3.9%	0.0561	1.5%
SM09-130-12	448	6	305	243	26	10878	0.866	0.0719	1.4%	0.0222	4.7%	0.0546	2.2%
SM09-130-13	449	6	166	124	14	9973	0.866	0.0722	1.3%	0.0215	5.2%	0.0554	3.1%
SM09-130-14	454	7	164	175	14	8950	0.866	0.0731	1.5%	0.0204	4.7%	0.0569	3.0%
SM09-130-15	456	5	232	151	19	10027	0.867	0.0733	1.1%	0.0215	4.9%	0.0555	2.6%

SM09-130-16	460	6	206	178	18	10301	0.867	0.0739	1.2%	0.0221	4.7%	0.0556	2.9%
SM09-130-17	504	5	316	185	28	11825	0.870	0.0812	1.0%	0.0239	4.6%	0.0565	2.1%
SM09-130-18	567	6	338	616	43	12992	0.875	0.0919	1.0%	0.0265	4.0%	0.0587	1.9%
SM09-130-19	583	8	116	171	15	8634	0.876	0.0949	1.4%	0.0294	4.6%	0.0616	2.9%
SM09-130-20	584	7	268	250	29	10023	0.876	0.0949	1.2%	0.0303	2.9%	0.0597	1.6%
SM09-130-21	623	8	168	125	19	7180	0.879	0.1014	1.3%	0.0317	3.1%	0.0608	2.0%
SM09-130-22	867	16	516	45	67	12979	0.898	0.1440	1.9%	0.0490	4.7%	0.0686	1.8%
SM09-130-23	879	23	176	109	31	7519	0.899	0.1465	2.7%	0.0458	5.8%	0.0706	3.0%
SM09-130-24	904	11	616	72	92	12741	0.901	0.1507	1.2%	0.0431	5.2%	0.0702	1.0%
SM09-130-25	920	12	326	76	48	12621	0.902	0.1537	1.3%	0.0482	3.2%	0.0713	1.2%
SM09-130-26	923	10	769	113	117	13160	0.902	0.1538	1.1%	0.0467	4.5%	0.0696	1.1%
SM09-130-27	927	8	391	378	70	10446	0.903	0.1549	0.9%	0.0435	3.0%	0.0713	1.3%
SM09-130-28	953	20	163	237	32	11204	0.905	0.1589	2.1%	0.0458	2.8%	0.0686	1.7%
SM09-130-29	971	8	647	112	101	13511	0.906	0.1624	0.9%	0.0499	3.0%	0.0709	0.9%
SM09-130-30	985	9	370	395	74	10712	0.907	0.1651	0.9%	0.0474	3.9%	0.0719	1.3%
SM09-130-31	987	12	135	61	23	11231	0.908	0.1654	1.2%	0.0500	3.4%	0.0719	1.6%
SM09-130-32	987	11	872	90	134	13901	0.908	0.1654	1.2%	0.0522	3.2%	0.0716	0.8%
SM09-130-33	991	11	344	278	63	12180	0.908	0.1662	1.2%	0.0500	2.7%	0.0724	1.1%
SM09-130-34	998	11	366	216	64	10824	0.908	0.1671	1.1%	0.0509	2.7%	0.0708	1.1%
SM09-130-35	1000	12	531	129	84	12406	0.909	0.1675	1.2%	0.0478	3.0%	0.0708	0.9%
SM09-130-36	1034	10	198	69	35	9652	0.912	0.1739	1.0%	0.0547	3.5%	0.0735	1.3%
SM09-130-37	1049	20	488	300	97	11447	0.913	0.1766	2.0%	0.0601	3.1%	0.0734	1.4%
SM09-130-38	1063	10	193	165	36	11442	0.914	0.1803	1.0%	0.0302	3.6%	0.0799	1.2%

SM09-130-39	1068	12	456	309	92	12516	0.914	0.1793	1.2%	0.0463	4.7%	0.0708	1.8%
SM09-130-40	1068	10	468	77	81	13056	0.915	0.1805	0.9%	0.0504	3.4%	0.0764	0.9%
SM09-130-41	1082	12	337	183	64	12000	0.916	0.1828	1.2%	0.0556	2.8%	0.0758	1.1%
SM09-130-42	1083	14	95	56	18	7392	0.916	0.1826	1.3%	0.0509	3.3%	0.0742	1.8%
SM09-130-43	1105	14	231	110	45	11265	0.917	0.1867	1.3%	0.0575	2.9%	0.0752	1.2%
SM09-130-44	1105	10	199	140	42	11506	0.918	0.1870	1.0%	0.0531	4.2%	0.0767	1.6%
SM09-130-45	1114	11	1352	462	270	14327	0.918	0.1890	1.0%	0.0597	3.4%	0.0786	1.5%
SM09-130-46	1134	34	679	114	138	13186	0.918	0.1885	2.1%	0.0870	9.4%	0.0792	2.6%
SM09-130-47	1200	32	398	57	74	11268	0.926	0.2047	2.7%	0.0716	4.9%	0.0804	2.0%
SM09-130-48	1207	13	104	116	26	10475	0.926	0.2053	1.1%	0.0601	4.6%	0.0783	1.9%
SM09-130-49	1299	15	630	405	159	10069	0.935	0.2235	1.2%	0.0643	3.7%	0.0850	0.9%
SM09-130-50	1417	12	1765	1027	358	14482	0.923	0.1990	1.1%	0.0371	2.6%	0.0896	0.6%
SM09-130-51	1512	15	142	111	44	9937	0.954	0.2645	1.0%	0.0759	4.3%	0.0949	1.4%
SM09-130-52	1543	11	1692	1253	418	11614	0.934	0.2218	1.0%	0.0654	2.4%	0.0957	0.6%
SM09-130-53	1670	20	367	300	138	10924	0.975	0.3082	1.0%	0.0862	4.1%	0.1051	1.1%
SM09-130-54	1734	34	212	141	75	11229	0.975	0.3090	2.0%	0.0905	3.3%	0.1070	1.3%
SM09-130-55	1857	26	278	321	125	12797	0.988	0.3347	1.4%	0.1014	5.3%	0.1157	1.8%
SM09-130-56	1909	19	200	153	78	9989	0.993	0.3453	1.0%	0.0917	2.7%	0.1186	0.8%
SM09-130-57	1920	11	633	172	205	10259	0.981	0.3196	1.1%	0.0956	2.6%	0.1177	0.6%
SM09-130-58	1981	30	225	218	95	9766	1.000	0.3591	1.5%	0.1026	2.8%	0.1202	0.9%
SM09-130-59	2282	31	38	39	20	9158	1.032	0.4246	1.3%	0.1142	4.8%	0.1443	1.9%
SM09-130-60	2410	30	327	92	112	11421	0.988	0.3348	1.4%	0.1011	2.8%	0.1456	0.7%
SM09-130-61	2438	34	391	96	184	12354	1.048	0.4579	1.3%	0.1279	2.8%	0.1547	0.6%

SM09-130-62	2449	28	136	89	73	9448	1.052	0.4657	1.0%	0.1065	4.6%	0.1662	0.9%
SM09-130-63	2458	25	1020	338	512	10678	1.052	0.4668	1.0%	0.1374	2.5%	0.1651	0.5%
SM09-130-64	2467	145	469	53	96	10222	0.928	0.2095	2.1%	0.0994	3.7%	0.1225	0.9%
SM09-130-65	2486	12	263	116	124	10915	1.035	0.4305	1.0%	0.1224	2.7%	0.1629	0.7%
SM09-133-1	417	4	726	360	55	12509	0.864	0.0671	1.0%	0.0201	4.8%	0.0587	1.8%
SM09-133-2	419	4	417	273	33	11311	0.864	0.0671	1.0%	0.0203	4.7%	0.0552	2.1%
SM09-133-3	456	5	367	352	33	10825	0.867	0.0733	1.0%	0.0221	4.4%	0.0570	2.1%
SM09-133-4	719	6	450	300	62	12114	0.886	0.1182	0.9%	0.0352	4.2%	0.0651	1.3%
SM09-133-5	798	7	452	883	85	11528	0.892	0.1318	0.9%	0.0385	3.7%	0.0658	1.5%
SM09-133-6	834	8	183	55	28	11184	0.895	0.1387	1.0%	0.0497	5.6%	0.0703	1.7%
SM09-133-7	878	8	411	98	64	13645	0.899	0.1456	0.9%	0.0404	5.2%	0.0662	1.3%
SM09-133-8	909	11	394	169	68	9551	0.901	0.1518	1.3%	0.0468	4.5%	0.0712	1.3%
SM09-133-9	913	8	327	120	56	12262	0.902	0.1524	0.9%	0.0475	4.8%	0.0703	1.4%
SM09-133-10	918	11	592	497	111	10994	0.902	0.1531	1.2%	0.0463	3.9%	0.0698	1.0%
SM09-133-11	1643	16	936	322	316	12501	0.966	0.2899	1.0%	0.0776	4.5%	0.0999	0.9%
SM09-133-12	1791	33	396	216	137	11020	0.981	0.3204	1.9%	0.0866	6.3%	0.1098	2.1%
SM09-133-13	2696	26	458	418	316	9774	1.078	0.5212	0.8%	0.1422	3.6%	0.1879	0.6%
SM09-133-14	3080	49	136	21	108	12487	1.119	0.6168	1.5%	0.1637	11.8%	0.2429	2.2%
SM09-134-1	247	5	297	234	13	10369	0.852	0.0392	2.2%	0.0130	7.7%	0.0551	5.6%
SM09-134-2	253	4	1074	680	45	11724	0.852	0.0402	1.8%	0.0129	6.8%	0.0553	2.9%
SM09-134-3	261	6	175	118	8	9963	0.853	0.0422	2.3%	0.0145	8.3%	0.0693	5.4%

SM09-134-4	263	4	694	183	28	12025	0.853	0.0419	1.7%	0.0128	7.9%	0.0564	3.1%
SM09-134-5	305	8	127	61	7	10888	0.856	0.0484	2.7%	0.0161	10.1%	0.0505	7.4%
SM09-134-6	340	5	3240	646	160	14712	0.858	0.0546	1.6%	0.0142	8.0%	0.0586	2.4%
SM09-134-7	349	7	156	161	10	9727	0.859	0.0557	2.2%	0.0178	7.5%	0.0540	5.2%
SM09-134-8	513	75	979	368	268	12941	0.955	0.2675	1.8%	0.0779	5.4%	0.1035	1.0%
SM09-134-9	938	21	634	98	89	13315	0.904	0.1569	2.4%	0.0468	9.9%	0.0724	3.8%
SM09-134-10	1044	21	132	97	25	10114	0.913	0.1771	2.2%	0.0510	8.1%	0.0800	3.7%
SM09-134-11	1249	16	486	278	112	11621	0.931	0.2152	1.4%	0.0618	5.6%	0.0878	1.5%
SM09-134-12	1639	20	262	305	94	8601	0.966	0.2899	1.4%	0.0834	5.5%	0.1021	1.7%
SM09-134-13	1748	23	419	122	136	11643	0.978	0.3139	1.5%	0.0766	6.9%	0.1136	1.6%
SM09-134-14	1754	20	979	368	268	12941	0.955	0.2675	1.8%	0.0779	5.4%	0.1035	1.0%
SM09-134-15	2109	110	202	368	104	10680	0.996	0.3515	2.6%	0.0964	7.1%	0.1209	3.1%
SM09-134-16	2393	27	304	218	157	13154	1.045	0.4519	1.3%	0.1213	5.4%	0.1591	1.2%
SM09-135-1	396	5	347	480	27	9997	0.862	0.0635	1.2%	0.0185	4.9%	0.0576	2.5%
SM09-135-2	422	5	1245	47	77	20733	0.864	0.0677	1.1%	0.0222	9.2%	0.0569	1.7%
SM09-135-3	423	9	115	69	8	12293	0.864	0.0681	2.3%	0.0173	6.9%	0.0588	5.1%
SM09-135-4	426	6	177	133	13	9913	0.865	0.0688	1.5%	0.0210	5.1%	0.0602	3.5%
SM09-135-5	428	8	195	114	14	10843	0.865	0.0690	1.9%	0.0190	6.4%	0.0604	4.4%
SM09-135-6	428	4	805	549	59	10959	0.865	0.0689	1.1%	0.0198	4.0%	0.0575	1.7%
SM09-135-7	430	5	295	347	24	9705	0.865	0.0691	1.3%	0.0211	5.4%	0.0561	3.0%
SM09-135-8	437	5	1094	301	77	13849	0.865	0.0704	1.3%	0.0209	4.3%	0.0589	1.5%
SM09-135-9	437	14	330	217	26	9063	0.865	0.0694	2.1%	0.0214	6.4%	0.0608	4.4%

SM09-135-10	438	6	194	108	15	10488	0.865	0.0705	1.5%	0.0221	5.1%	0.0574	2.5%
SM09-135-11	438	7	333	150	24	11132	0.865	0.0703	1.6%	0.0224	4.6%	0.0548	2.0%
SM09-135-12	439	6	481	254	35	10846	0.865	0.0705	1.4%	0.0203	5.0%	0.0558	2.5%
SM09-135-13	441	5	423	318	32	10459	0.866	0.0709	1.0%	0.0223	5.0%	0.0570	2.2%
SM09-135-14	443	5	346	162	25	10733	0.866	0.0712	1.3%	0.0220	4.9%	0.0561	2.2%
SM09-135-15	444	8	138	109	11	9550	0.866	0.0715	1.9%	0.0222	7.0%	0.0582	4.4%
SM09-135-16	446	6	327	217	25	11060	0.866	0.0716	1.5%	0.0219	4.7%	0.0556	2.5%
SM09-135-17	447	6	150	120	12	10379	0.866	0.0719	1.3%	0.0231	5.9%	0.0569	3.7%
SM09-135-18	448	6	543	412	44	10849	0.866	0.0724	1.3%	0.0236	4.5%	0.0612	2.5%
SM09-135-19	449	6	326	260	26	10212	0.866	0.0724	1.3%	0.0226	4.4%	0.0589	2.3%
SM09-135-20	449	6	202	155	16	10037	0.866	0.0721	1.3%	0.0218	5.0%	0.0546	3.0%
SM09-135-21	452	5	434	258	33	11349	0.866	0.0726	1.0%	0.0224	5.1%	0.0555	2.4%
SM09-135-22	454	8	183	92	14	11422	0.866	0.0729	1.8%	0.0229	7.3%	0.0564	4.0%
SM09-135-23	456	8	79	56	6	9477	0.867	0.0732	1.8%	0.0231	7.6%	0.0542	5.6%
SM09-135-24	457	6	237	131	18	10870	0.867	0.0735	1.4%	0.0222	5.7%	0.0552	3.2%
SM09-135-25	458	8	95	58	7	8784	0.867	0.0733	1.8%	0.0242	6.9%	0.0531	5.0%
SM09-135-26	464	5	784	299	60	11703	0.868	0.0756	1.0%	0.0266	6.8%	0.0672	2.3%
SM09-135-27	464	6	241	127	18	10869	0.867	0.0746	1.3%	0.0228	5.7%	0.0566	2.8%
SM09-135-28	465	6	197	157	16	9817	0.867	0.0744	1.4%	0.0242	5.5%	0.0522	3.2%
SM09-135-29	496	33	306	151	23	11396	0.865	0.0704	1.6%	0.0253	5.1%	0.0697	2.5%
SM09-135-30	512	11	3112	1371	234	10895	0.871	0.0827	2.2%	0.0229	6.5%	0.0576	2.4%
SM09-135-31	559	44	611	261	94	12196	0.897	0.1410	1.6%	0.0423	5.6%	0.0702	2.9%
SM09-135-32	610	10	184	112	19	11209	0.878	0.0995	1.6%	0.0287	6.7%	0.0625	3.6%

SM09-135-33	622	8	570	199	57	12000	0.879	0.1015	1.4%	0.0299	4.6%	0.0624	1.6%
SM09-135-34	652	13	122	40	13	10086	0.881	0.1068	2.1%	0.0325	7.1%	0.0641	4.6%
SM09-135-35	669	7	380	166	41	11218	0.882	0.1093	1.0%	0.0320	5.1%	0.0616	2.1%
SM09-135-36	670	8	273	110	30	10968	0.882	0.1096	1.1%	0.0341	5.7%	0.0622	2.1%
SM09-135-37	689	7	449	107	49	13397	0.884	0.1130	1.0%	0.0376	5.5%	0.0644	1.5%
SM09-135-38	716	7	1398	1094	167	14162	0.887	0.1192	1.1%	0.0192	4.9%	0.0750	1.0%
SM09-135-39	746	9	254	195	34	10533	0.888	0.1232	1.2%	0.0378	5.0%	0.0673	2.0%
SM09-135-40	755	10	214	168	30	10324	0.889	0.1246	1.4%	0.0366	4.4%	0.0666	2.4%
SM09-135-41	767	10	259	133	34	12338	0.890	0.1270	1.4%	0.0359	4.6%	0.0687	1.8%
SM09-135-42	770	10	713	27	83	14042	0.890	0.1269	1.3%	0.0417	8.3%	0.0655	1.5%
SM09-135-43	806	9	219	170	32	10266	0.893	0.1331	1.2%	0.0398	5.1%	0.0661	2.1%
SM09-135-44	820	8	548	148	71	10813	0.894	0.1356	1.0%	0.0349	4.7%	0.0660	1.4%
SM09-135-45	823	75	523	297	119	10924	0.926	0.2043	1.1%	0.0623	3.9%	0.0826	1.1%
SM09-135-46	900	9	425	42	59	13206	0.900	0.1497	1.0%	0.0450	6.4%	0.0686	1.4%
SM09-135-47	911	12	325	121	52	11609	0.901	0.1520	1.5%	0.0460	5.4%	0.0706	2.2%
SM09-135-48	922	10	424	16	59	12146	0.902	0.1537	1.1%	0.0444	6.4%	0.0696	1.3%
SM09-135-49	940	9	902	169	134	12638	0.904	0.1572	1.0%	0.0402	4.8%	0.0717	1.0%
SM09-135-50	940	30	891	68	119	12993	0.907	0.1630	2.6%	0.0471	10.7%	0.0740	1.5%
SM09-135-51	948	11	142	225	29	11021	0.904	0.1583	1.1%	0.0467	4.8%	0.0703	2.1%
SM09-135-52	949	9	596	116	92	12569	0.905	0.1590	1.0%	0.0457	4.4%	0.0726	1.2%
SM09-135-53	953	10	660	103	99	13461	0.905	0.1594	1.0%	0.0446	5.6%	0.0713	1.3%
SM09-135-54	954	10	383	330	69	8683	0.905	0.1594	1.1%	0.0480	3.8%	0.0705	1.5%
SM09-135-55	954	9	1127	321	173	12735	0.905	0.1591	0.9%	0.0448	4.6%	0.0689	1.0%

SM09-135-56	957	11	233	183	41	11966	0.905	0.1606	1.1%	0.0482	4.7%	0.0740	1.6%
SM09-135-57	960	11	414	117	65	12753	0.905	0.1607	1.2%	0.0392	5.5%	0.0715	1.9%
SM09-135-58	971	9	946	583	161	12272	0.906	0.1624	1.0%	0.0485	4.5%	0.0707	1.0%
SM09-135-59	975	10	680	721	128	11688	0.907	0.1632	1.0%	0.0488	4.4%	0.0717	1.2%
SM09-135-60	1000	14	136	176	28	12280	0.909	0.1674	1.5%	0.0506	5.2%	0.0707	3.1%
SM09-135-61	1004	10	567	196	95	12134	0.909	0.1685	1.1%	0.0504	3.8%	0.0728	0.9%
SM09-135-62	1012	55	242	114	32	11181	0.889	0.1239	1.7%	0.0371	6.5%	0.0691	3.8%
SM09-135-63	1015	9	929	365	158	12559	0.910	0.1703	0.9%	0.0511	4.4%	0.0722	1.1%
SM09-135-64	1015	11	341	346	67	11188	0.910	0.1700	1.1%	0.0496	4.5%	0.0702	1.5%
SM09-135-65	1018	10	702	65	111	13958	0.910	0.1709	1.0%	0.0507	5.7%	0.0722	1.1%
SM09-135-66	1024	11	485	77	78	13322	0.911	0.1718	1.1%	0.0531	5.5%	0.0716	1.2%
SM09-135-67	1035	90	611	261	94	12196	0.897	0.1410	1.6%	0.0423	5.6%	0.0702	2.9%
SM09-135-68	1037	11	423	143	71	12323	0.912	0.1741	1.1%	0.0471	5.0%	0.0716	1.4%
SM09-135-69	1044	13	205	110	39	10203	0.913	0.1769	1.3%	0.0559	6.2%	0.0797	2.3%
SM09-135-70	1060	28	2360	723	298	14391	0.892	0.1310	1.1%	0.0301	4.5%	0.0753	0.9%
SM09-135-71	1071	11	641	287	119	11212	0.915	0.1806	1.1%	0.0536	4.7%	0.0742	1.2%
SM09-135-72	1072	10	562	38	92	13232	0.913	0.1762	1.0%	0.0308	9.0%	0.0771	1.0%
SM09-135-73	1079	10	353	213	67	11904	0.915	0.1825	1.0%	0.0502	4.6%	0.0767	1.4%
SM09-135-74	1080	10	484	56	85	12459	0.916	0.1826	1.0%	0.0573	5.0%	0.0768	1.0%
SM09-135-75	1087	13	121	84	24	10282	0.916	0.1844	1.2%	0.0529	5.4%	0.0789	2.1%
SM09-135-76	1116	12	742	104	132	13302	0.919	0.1891	1.1%	0.0596	5.6%	0.0771	1.3%
SM09-135-77	1177	12	400	269	87	12761	0.924	0.2002	1.1%	0.0591	4.9%	0.0784	1.5%
SM09-135-78	1183	11	328	90	65	11910	0.924	0.2011	1.0%	0.0604	5.3%	0.0783	1.4%

SM09-135-79	1216	14	179	334	50	11339	0.927	0.2068	1.2%	0.0589	4.5%	0.0778	1.7%
SM09-135-80	1334	45	523	297	119	10924	0.926	0.2043	1.1%	0.0623	3.9%	0.0826	1.1%
SM09-135-81	1335	120	1257	806	199	12288	0.897	0.1414	1.5%	0.0254	5.8%	0.1199	2.8%
SM09-135-82	1506	15	425	310	124	11065	0.954	0.2647	1.1%	0.0745	4.0%	0.0990	1.0%
SM09-135-83	1542	14	372	273	115	10482	0.957	0.2710	1.0%	0.0763	4.0%	0.0981	1.1%
SM09-135-84	1567	14	877	147	232	14519	0.960	0.2764	1.0%	0.0360	5.3%	0.1009	0.7%
SM09-135-85	1627	18	185	145	60	10302	0.965	0.2882	1.1%	0.0881	5.0%	0.1034	1.4%
SM09-135-86	1760	21	187	336	82	9999	0.979	0.3152	1.2%	0.0901	4.4%	0.1114	1.5%
SM09-135-87	1845	17	314	39	105	12270	0.987	0.3319	1.1%	0.0967	5.4%	0.1143	1.0%
SM09-135-88	1884	20	295	189	108	11433	0.990	0.3386	1.1%	0.0951	4.5%	0.1132	1.0%
SM09-135-89	1998	21	559	97	223	11257	1.008	0.3761	1.2%	0.1067	4.5%	0.1530	0.7%
SM09-135-90	1998	21	559	97	223	11257	1.008	0.3761	1.2%	0.1067	4.5%	0.1530	0.7%
SM09-135-91	1998	18	288	96	107	12333	1.003	0.3654	1.1%	0.0805	4.9%	0.1276	1.0%
SM09-135-92	2141	23	196	122	84	9969	1.016	0.3914	1.0%	0.1095	4.5%	0.1275	1.1%
SM09-135-93	2232	25	446	238	211	11944	1.030	0.4205	1.1%	0.1108	3.9%	0.1605	0.7%
SM09-135-94	2441	32	139	178	85	9274	1.051	0.4637	1.2%	0.1313	4.7%	0.1651	1.4%
SM09-135-95	2463	10	891	68	119	12993	0.907	0.1630	2.6%	0.0471	10.7%	0.0740	1.5%
SM09-135-96	2522	25	419	368	239	11072	1.059	0.4811	0.9%	0.1327	4.1%	0.1707	0.7%
SM09-135-97	2536	22	400	71	119	12560	0.966	0.2897	1.4%	0.0557	6.6%	0.1147	1.7%
SM09-135-98	2541	31	90	121	55	12042	1.058	0.4789	1.1%	0.1303	4.6%	0.1603	1.3%
SM09-135-99	2652	27	168	57	98	10754	1.079	0.5238	1.2%	0.1110	4.5%	0.2055	0.9%
SM09-161B-1	217	3	393	335	16	8919	0.850	0.0342	1.2%	0.0102	5.0%	0.0510	2.9%

SM09-161B-2	223	3	236	225	10	10169	0.850	0.0355	1.4%	0.0104	5.6%	0.0560	3.6%
SM09-161B-3	224	3	1995	1359	84	13048	0.851	0.0361	1.2%	0.0110	4.2%	0.0694	1.2%
SM09-161B-4	226	4	200	172	9	9223	0.850	0.0356	1.7%	0.0112	5.8%	0.0509	4.6%
SM09-161B-5	231	3	512	441	23	10055	0.851	0.0366	1.4%	0.0113	4.8%	0.0530	2.4%
SM09-161B-6	236	5	90	96	4	8108	0.851	0.0374	2.1%	0.0115	6.3%	0.0528	5.8%
SM09-161B-7	237	7	773	181	30	11527	0.852	0.0394	3.5%	0.0168	12.0%	0.0577	5.7%
SM09-161B-8	238	4	164	112	7	9829	0.851	0.0374	1.6%	0.0116	6.5%	0.0478	4.5%
SM09-161B-9	243	4	283	212	13	10957	0.852	0.0385	1.5%	0.0117	5.4%	0.0529	3.6%
SM09-161B-10	244	2	1214	1396	58	10178	0.852	0.0388	1.0%	0.0109	4.0%	0.0559	1.7%
SM09-161B-11	247	8	445	445	23	10708	0.852	0.0394	3.1%	0.0126	5.7%	0.0587	3.7%
SM09-161B-12	248	3	533	249	23	11660	0.852	0.0395	1.1%	0.0129	5.3%	0.0583	2.3%
SM09-161B-13	248	4	253	253	12	10416	0.852	0.0395	1.6%	0.0108	5.4%	0.0555	3.9%
SM09-161B-14	250	3	352	273	16	10637	0.852	0.0395	1.1%	0.0117	5.2%	0.0497	3.0%
SM09-161B-15	252	5	147	121	7	11079	0.852	0.0400	1.8%	0.0121	5.9%	0.0524	5.0%
SM09-161B-16	253	4	142	98	7	9865	0.852	0.0401	1.7%	0.0124	6.5%	0.0546	4.4%
SM09-161B-17	253	7	218	134	10	9963	0.852	0.0404	2.8%	0.0157	10.4%	0.0599	10.0%
SM09-161B-18	253	3	255	221	12	10285	0.852	0.0400	1.4%	0.0121	5.5%	0.0504	3.3%
SM09-161B-19	254	4	150	101	7	9780	0.852	0.0403	1.5%	0.0124	6.6%	0.0545	4.4%
SM09-161B-20	255	4	241	267	12	10016	0.852	0.0403	1.6%	0.0120	5.3%	0.0528	4.0%
SM09-161B-21	255	4	239	303	12	10689	0.852	0.0402	1.4%	0.0125	5.0%	0.0497	3.3%
SM09-161B-22	255	4	165	81	7	9964	0.853	0.0406	1.6%	0.0126	6.7%	0.0546	4.2%
SM09-161B-23	256	3	788	494	36	12529	0.853	0.0406	1.0%	0.0113	4.8%	0.0531	2.0%
SM09-161B-24	256	4	354	158	16	11605	0.853	0.0407	1.5%	0.0127	5.6%	0.0547	2.8%

SM09-161B-25	257	2	719	333	32	12628	0.853	0.0407	1.0%	0.0121	4.8%	0.0516	2.1%
SM09-161B-26	258	2	1323	321	55	14346	0.853	0.0408	0.9%	0.0127	5.0%	0.0513	1.6%
SM09-161B-27	259	6	58	75	3	9221	0.853	0.0414	2.3%	0.0141	6.8%	0.0582	7.3%
SM09-161B-28	263	3	408	256	19	10303	0.853	0.0417	1.2%	0.0128	5.1%	0.0539	2.5%
SM09-161B-29	272	3	566	484	29	9577	0.854	0.0432	1.0%	0.0131	4.7%	0.0526	2.0%
SM09-161B-30	285	5	131	80	7	10521	0.855	0.0453	1.6%	0.0134	6.6%	0.0521	4.5%
SM09-161B-31	326	5	103	96	6	10413	0.857	0.0518	1.7%	0.0160	6.1%	0.0510	5.0%
SM09-161B-32	363	4	336	342	24	10063	0.860	0.0579	1.2%	0.0183	4.6%	0.0528	2.6%
SM09-161B-33	392	5	1295	561	88	13838	0.862	0.0636	1.2%	0.0115	5.0%	0.0662	1.3%
SM09-161B-34	423	7	259	77	18	9609	0.864	0.0684	1.8%	0.0245	8.7%	0.0620	4.3%
SM09-161B-35	426	5	174	165	14	8002	0.864	0.0684	1.2%	0.0202	5.0%	0.0568	2.8%
SM09-161B-36	438	4	1000	708	80	10183	0.865	0.0704	0.9%	0.0215	4.0%	0.0561	1.2%
SM09-161B-37	444	5	304	133	24	11494	0.866	0.0715	1.1%	0.0216	5.1%	0.0569	2.4%
SM09-161B-38	447	5	182	104	15	9969	0.866	0.0719	1.2%	0.0224	5.6%	0.0573	3.2%
SM09-161B-39	450	4	864	1107	78	10103	0.866	0.0723	1.0%	0.0185	4.0%	0.0569	1.6%
SM09-161B-40	462	21	1121	320	179	13204	0.904	0.1567	2.9%	0.0451	5.3%	0.0888	1.0%
SM09-161B-41	468	6	185	133	16	9983	0.868	0.0756	1.2%	0.0223	5.3%	0.0605	3.0%
SM09-161B-42	477	5	457	460	42	9291	0.868	0.0777	1.1%	0.0187	4.8%	0.0651	2.0%
SM09-161B-43	562	5	653	21	60	13360	0.874	0.0915	1.0%	0.0207	11.3%	0.0619	1.5%
SM09-161B-44	655	6	941	242	103	10373	0.881	0.1067	0.9%	0.0310	4.4%	0.0599	1.1%
SM09-161B-45	676	7	703	833	100	12887	0.883	0.1116	1.0%	0.0301	4.6%	0.0699	1.9%
SM09-161B-46	907	8	374	118	60	12109	0.901	0.1512	0.9%	0.0432	4.7%	0.0699	1.2%
SM09-161B-47	921	9	368	116	61	12951	0.902	0.1538	1.0%	0.0483	4.7%	0.0709	1.3%

SM09-161B-48	928	11	922	77	144	15239	0.903	0.1548	1.2%	0.0451	5.2%	0.0699	0.9%
SM09-161B-49	981	8	455	307	84	12744	0.907	0.1639	0.9%	0.0455	4.2%	0.0696	1.2%
SM09-161B-50	1001	9	379	377	77	12557	0.909	0.1681	1.0%	0.0480	3.8%	0.0729	1.1%
SM09-161B-51	1052	10	272	533	70	10656	0.913	0.1770	0.9%	0.0529	3.8%	0.0734	1.5%
SM09-161B-52	1058	10	336	301	72	11156	0.914	0.1788	1.0%	0.0484	4.3%	0.0767	1.3%
SM09-161B-53	1115	13	145	322	36	10649	0.919	0.1908	1.2%	0.0333	4.7%	0.0857	1.9%
SM09-161B-54	1136	11	220	500	64	10335	0.920	0.1929	1.0%	0.0554	3.7%	0.0786	1.4%
SM09-161B-55	1370	70	288	239	71	12123	0.931	0.2165	1.6%	0.0637	5.5%	0.0833	2.4%
SM09-161B-56	1477	13	928	255	246	11598	0.950	0.2569	0.9%	0.0696	4.0%	0.0905	0.7%
SM09-161B-57	1503	14	205	197	64	11537	0.954	0.2636	1.0%	0.0599	4.2%	0.0972	1.2%
SM09-161B-58	1548	39	134	148	42	9020	0.959	0.2743	2.5%	0.0541	6.9%	0.1053	3.1%
SM09-161B-59	1714	23	116	114	46	10146	0.976	0.3091	1.4%	0.0916	4.3%	0.1176	1.5%
SM09-161B-60	1726	28	1121	320	179	13204	0.904	0.1567	2.9%	0.0451	5.3%	0.0888	1.0%
SM09-161B-61	1883	16	371	56	135	12516	0.990	0.3393	0.8%	0.1040	4.6%	0.1155	0.8%
SM09-161B-62	1935	24	621	178	251	13524	0.997	0.3527	1.3%	0.0869	5.7%	0.1251	1.5%
SM09-161B-63	2656	41	773	181	30	11527	0.852	0.0394	3.5%	0.0168	12.0%	0.0577	5.7%
K09-02-1	33	1	1073	21	5	14350	0.838	0.0052	2.5%	0.0056	22.1%	0.0506	6.8%
К09-02-2	92	2	604	182	9	9640	0.842	0.0145	2.2%	0.0105	8.6%	0.0557	5.8%
К09-02-3	144	5	181	79	4	9631	0.845	0.0228	3.2%	0.0102	11.5%	0.0559	8.7%
K09-02-4	174	2	1222	846	40	9524	0.847	0.0277	1.3%	0.0123	6.7%	0.0629	3.8%
K09-02-5	178	14	225	99	7	12065	0.848	0.0299	2.3%	0.0119	6.3%	0.0532	5.9%
K09-02-6	204	4	122	102	4	9718	0.849	0.0323	1.9%	0.0098	6.3%	0.0550	5.1%

K09-02-7	212	4	121	78	4	10175	0.849	0.0333	1.7%	0.0111	5.6%	0.0475	5.4%
K09-02-8	216	4	152	135	6	8906	0.850	0.0344	1.7%	0.0129	5.2%	0.0573	4.8%
K09-02-9	217	5	218	164	8	10460	0.850	0.0344	2.2%	0.0113	8.5%	0.0525	6.3%
K09-02-10	219	4	126	75	5	9682	0.850	0.0348	1.7%	0.0109	5.9%	0.0563	4.6%
K09-02-11	219	4	119	84	5	7818	0.850	0.0351	1.7%	0.0124	5.6%	0.0619	4.0%
K09-02-12	223	6	171	142	7	9347	0.850	0.0354	2.5%	0.0110	8.7%	0.0544	6.2%
K09-02-13	223	6	94	62	4	8101	0.850	0.0349	2.8%	0.0112	11.2%	0.0439	9.4%
K09-02-14	224	5	224	236	9	8111	0.850	0.0353	2.3%	0.0107	9.0%	0.0509	6.3%
K09-02-15	227	4	77	54	3	8344	0.851	0.0358	1.9%	0.0112	6.6%	0.0504	6.0%
K09-02-16	230	4	92	67	4	8785	0.851	0.0368	1.8%	0.0121	6.1%	0.0609	5.3%
K09-02-17	231	4	102	76	4	8801	0.851	0.0366	1.7%	0.0120	6.0%	0.0535	4.8%
K09-02-18	232	7	115	67	5	9877	0.851	0.0367	2.8%	0.0127	10.6%	0.0505	10.1%
K09-02-19	233	4	104	71	4	7947	0.851	0.0367	1.6%	0.0117	6.1%	0.0489	4.6%
K09-02-20	234	3	783	510	31	13226	0.851	0.0370	1.3%	0.0118	6.6%	0.0512	3.0%
K09-02-21	234	7	94	41	4	11355	0.851	0.0372	3.1%	0.0120	12.7%	0.0538	9.2%
K09-02-22	238	7	87	47	3	7884	0.851	0.0374	3.1%	0.0113	11.4%	0.0485	10.3%
K09-02-23	1512	380	225	99	7	12065	0.848	0.0299	2.3%	0.0119	6.3%	0.0532	5.9%
K09-04-1	75	6	1279	425	17	11441	0.841	0.0123	2.3%	0.0072	7.5%	0.0559	6.4%
K09-04-2	84	31	165	118	28	10691	0.898	0.1442	2.1%	0.0462	7.2%	0.0754	4.9%
K09-04-3	166	14	472	81	10	11307	0.845	0.0230	8.0%	0.0248	10.4%	0.0481	16.5%
K09-04-4	186	4	1279	425	17	11441	0.841	0.0123	2.3%	0.0072	7.5%	0.0559	6.4%
K09-04-5	204	5	357	107	9	9580	0.846	0.0252	3.0%	0.0123	6.6%	0.0571	4.9%

K09-04-6	204	7	551	141	14	11522	0.849	0.0324	3.5%	0.0119	9.4%	0.0540	7.2%
K09-04-7	220	4	876	570	34	11860	0.850	0.0349	1.7%	0.0120	5.1%	0.0545	2.7%
K09-04-8	226	3	407	208	15	10966	0.850	0.0357	1.2%	0.0116	4.6%	0.0511	2.5%
K09-04-9	228	34	1235	91	83	13364	0.869	0.0791	1.8%	0.0570	2.3%	0.0733	1.0%
K09-04-10	238	2	1281	690	45	10658	0.851	0.0377	1.0%	0.0121	1.5%	0.0517	1.4%
K09-04-11	242	17	1006	146	60	11507	0.861	0.0614	1.4%	0.0389	4.7%	0.0754	1.2%
K09-04-12	273	75	1366	105	36	13207	0.849	0.0324	1.9%	0.0112	2.8%	0.0514	1.6%
K09-04-13	315	7	375	216	22	10890	0.857	0.0501	2.4%	0.0190	5.1%	0.0530	3.0%
K09-04-14	330	7	432	117	23	11880	0.857	0.0521	2.1%	0.0132	9.5%	0.0469	4.1%
K09-04-15	407	4	401	42	24	13257	0.863	0.0654	1.0%	0.0252	7.4%	0.0565	2.0%
K09-04-16	443	40	1182	146	233	11738	0.923	0.1996	1.5%	0.1039	3.5%	0.1129	0.7%
K09-04-17	474	40	600	151	40	11445	0.863	0.0647	1.2%	0.0314	5.1%	0.0611	2.1%
K09-04-18	538	10	306	66	25	12913	0.873	0.0887	1.9%	0.0500	1.8%	0.0734	1.4%
K09-04-19	550	12	208	97	21	8816	0.874	0.0905	2.2%	0.0461	7.0%	0.0724	4.5%
K09-04-20	765	8	925	528	131	12809	0.890	0.1264	1.0%	0.0414	4.0%	0.0671	1.4%
K09-04-21	1081	55	165	118	28	10691	0.898	0.1442	2.1%	0.0462	7.2%	0.0754	4.9%
K09-04-22	1117	9	535	223	102	12139	0.915	0.1811	0.9%	0.0553	3.8%	0.0788	1.1%
K09-04-23	1345	85	1235	91	83	13364	0.869	0.0791	1.8%	0.0570	2.3%	0.0733	1.0%
K09-04-24	1756	105	1006	146	60	11507	0.861	0.0614	1.4%	0.0389	4.7%	0.0754	1.2%
K09-04-25	1933	210	472	81	10	11307	0.845	0.0230	8.0%	0.0248	10.4%	0.0481	16.5%
K09-04-26	2078	33	1182	146	233	11738	0.923	0.1996	1.5%	0.1039	3.5%	0.1129	0.7%
K09-04-27	2672	29	223	47	136	12666	1.083	0.5327	1.3%	0.1359	4.8%	0.2143	0.8%

K09-05-1	54	5	809	248	36	12732	0.852	0.0404	2.0%	0.0121	9.9%	0.0544	4.3%
K09-05-2	206	3	627	341	22	11365	0.849	0.0327	1.6%	0.0097	4.9%	0.0539	4.2%
K09-05-3	216	27	462	104	36	13214	0.868	0.0763	1.5%	0.0336	5.4%	0.0663	3.1%
K09-05-4	231	3	691	189	27	13343	0.851	0.0366	1.1%	0.0106	6.1%	0.0540	2.5%
K09-05-5	235	3	2026	1286	87	11221	0.851	0.0371	1.2%	0.0108	4.2%	0.0523	1.4%
K09-05-6	237	2	1425	767	57	9934	0.851	0.0377	0.8%	0.0124	2.9%	0.0552	1.5%
K09-05-7	238	3	969	672	44	11870	0.851	0.0378	1.3%	0.0123	5.2%	0.0571	2.6%
K09-05-8	238	5	481	165	19	13020	0.852	0.0381	1.9%	0.0089	10.6%	0.0622	4.8%
K09-05-9	238	3	630	218	26	12423	0.851	0.0380	1.1%	0.0115	6.0%	0.0572	2.5%
K09-05-10	240	3	964	663	40	11095	0.852	0.0381	1.1%	0.0120	3.0%	0.0544	1.7%
K09-05-11	241	5	812	164	27	12909	0.852	0.0382	2.1%	0.0118	7.4%	0.0510	4.0%
K09-05-12	243	3	1294	1152	54	11926	0.852	0.0385	1.4%	0.0106	4.3%	0.0549	4.9%
K09-05-13	243	3	1077	180	44	14003	0.852	0.0390	1.1%	0.0175	5.6%	0.0609	1.9%
K09-05-14	244	2	450	114	17	12225	0.852	0.0386	1.0%	0.0117	4.1%	0.0505	2.1%
K09-05-15	245	2	754	214	28	12638	0.852	0.0387	0.9%	0.0120	3.5%	0.0505	1.7%
K09-05-16	246	4	284	75	11	12015	0.852	0.0389	1.5%	0.0123	4.3%	0.0524	2.4%
K09-05-17	246	2	1497	284	56	13525	0.852	0.0389	0.8%	0.0122	3.8%	0.0516	1.4%
K09-05-18	247	2	1013	207	41	12991	0.852	0.0392	1.0%	0.0119	5.5%	0.0521	2.0%
K09-05-19	248	2	1294	214	48	13586	0.852	0.0392	0.9%	0.0124	3.4%	0.0512	1.4%
K09-05-20	250	3	2518	470	104	14706	0.852	0.0395	1.2%	0.0116	4.9%	0.0519	1.2%
K09-05-21	250	3	842	282	36	12416	0.852	0.0396	1.3%	0.0127	5.2%	0.0526	2.0%
K09-05-22	250	2	895	324	37	12052	0.852	0.0402	0.9%	0.0157	3.6%	0.0648	1.6%
K09-05-23	252	5	809	248	36	12732	0.852	0.0404	2.0%	0.0121	9.9%	0.0544	4.3%

K09-05-24	255	3	802	210	34	12879	0.852	0.0402	1.0%	0.0122	5.7%	0.0503	2.2%
K09-05-25	255	3	456	261	21	12242	0.853	0.0407	1.2%	0.0137	5.4%	0.0567	2.6%
K09-05-26	390	7	809	248	36	12732	0.852	0.0404	2.0%	0.0121	9.9%	0.0544	4.3%
K09-05-27	459	8	398	328	36	11174	0.867	0.0738	1.8%	0.0227	7.0%	0.0567	5.4%
K09-05-28	527	6	311	47	26	11848	0.872	0.0858	1.2%	0.0323	5.4%	0.0633	2.7%
K09-05-29	667	6	494	134	58	13251	0.883	0.1099	0.9%	0.0332	4.8%	0.0691	1.3%
K09-05-30	1199	14	506	179	115	12963	0.926	0.2048	1.2%	0.0623	4.4%	0.0815	1.0%
K09-06-1	220	8	279	106	10	10230	0.852	0.0382	2.3%	0.0125	7.5%	0.0550	4.7%
K09-06-2	243	3	767	536	33	9928	0.852	0.0385	1.3%	0.0126	4.4%	0.0518	1.9%
K09-06-3	245	3	544	318	22	9870	0.852	0.0387	1.1%	0.0119	4.4%	0.0520	2.2%
K09-06-4	245	4	2167	1531	92	11685	0.852	0.0387	1.8%	0.0120	3.7%	0.0523	1.1%
K09-06-5	247	3	592	203	22	10402	0.852	0.0388	1.7%	0.0121	5.8%	0.0496	2.9%
K09-06-6	248	8	273	95	10	11163	0.852	0.0402	2.8%	0.0133	11.9%	0.0707	16.2%
K09-06-7	249	3	739	436	30	12053	0.852	0.0393	1.0%	0.0121	5.1%	0.0516	2.4%
K09-06-8	250	4	444	41	16	12953	0.852	0.0395	1.7%	0.0127	12.2%	0.0516	4.2%
K09-06-9	250	5	238	98	9	11279	0.852	0.0397	1.9%	0.0125	7.1%	0.0538	6.5%
K09-06-10	250	3	842	387	35	10919	0.852	0.0397	1.4%	0.0125	6.0%	0.0533	2.6%
K09-06-11	250	5	260	130	11	11325	0.852	0.0395	1.9%	0.0125	7.7%	0.0494	4.7%
K09-06-12	253	5	250	83	10	10741	0.852	0.0401	2.0%	0.0125	8.4%	0.0530	4.9%
K09-06-13	262	3	739	228	27	10477	0.853	0.0406	2.5%	0.0129	5.2%	0.0498	3.1%
K09-06-14	262	5	489	248	22	10202	0.853	0.0416	2.0%	0.0126	5.7%	0.0527	4.8%
K09-06-15	267	4	548	186	23	11421	0.853	0.0424	1.6%	0.0142	5.0%	0.0545	2.1%

K09-06-16	269	4	369	126	16	11714	0.853	0.0427	1.5%	0.0143	5.4%	0.0545	2.8%
K09-06-17	269	12	836	394	37	12042	0.853	0.0428	1.4%	0.0143	6.0%	0.0499	2.7%
K09-06-18	271	4	265	82	11	12152	0.852	0.0391	1.4%	0.0130	6.7%	0.0537	3.0%
K09-06-19	275	8	236	67	10	10401	0.854	0.0440	7.4%	0.0204	15.7%	0.0573	5.5%
K09-06-20	293	22	585	109	23	12566	0.853	0.0414	1.2%	0.0136	5.6%	0.0499	2.1%
K09-06-21	416	7	328	189	24	10860	0.864	0.0675	1.7%	0.0219	7.0%	0.0644	3.8%
K09-06-22	440	6	549	48	37	11687	0.865	0.0706	1.4%	0.0321	7.5%	0.0561	2.3%
K09-06-23	442	5	124	99	10	10117	0.866	0.0711	1.2%	0.0215	4.2%	0.0572	3.0%
K09-06-24	444	7	315	179	24	10976	0.866	0.0717	1.5%	0.0231	6.2%	0.0596	2.6%
K09-06-25	448	6	619	102	42	13256	0.866	0.0719	1.4%	0.0234	6.7%	0.0555	2.5%
K09-06-26	508	5	247	245	24	10482	0.870	0.0822	1.0%	0.0247	3.3%	0.0595	2.1%
K09-06-27	615	5	2432	809	221	13193	0.874	0.0912	1.5%	0.0316	4.7%	0.0633	1.1%
K09-06-28	676	130	249	61	26	10897	0.881	0.1072	1.8%	0.0381	7.1%	0.0655	2.8%
K09-06-29	703	50	577	209	79	12607	0.890	0.1267	1.7%	0.0402	4.9%	0.0697	1.7%
K09-06-30	718	26	371	277	42	9046	0.878	0.1005	0.9%	0.0321	3.2%	0.0630	1.6%
K09-06-31	777	15	2017	159	284	12905	0.900	0.1483	2.0%	0.0467	4.1%	0.0698	0.9%
K09-06-32	890	16	862	299	109	12750	0.891	0.1282	1.1%	0.0333	5.2%	0.0662	1.0%
K09-06-33	893	8	434	380	75	9031	0.900	0.1491	1.0%	0.0462	3.5%	0.0715	1.0%
K09-06-34	902	10	1378	113	194	13978	0.901	0.1501	1.1%	0.0452	5.8%	0.0689	1.1%
K09-06-35	916	10	479	22	68	13452	0.902	0.1526	1.2%	0.0492	8.9%	0.0691	1.7%
K09-06-36	924	13	585	622	109	10920	0.902	0.1542	1.5%	0.0462	4.8%	0.0700	1.8%
K09-06-37	929	11	408	160	65	12343	0.903	0.1550	1.2%	0.0470	5.3%	0.0705	1.8%
K09-06-38	943	12	351	190	59	14353	0.904	0.1578	1.3%	0.0513	5.2%	0.0721	1.7%

K09-06-39	955	10	178	181	33	12824	0.905	0.1598	1.0%	0.0471	4.9%	0.0715	1.9%
K09-06-40	956	8	409	298	72	12394	0.905	0.1599	0.8%	0.0449	2.8%	0.0706	1.3%
K09-06-41	960	15	147	66	25	9644	0.905	0.1607	1.6%	0.0554	6.6%	0.0719	2.8%
K09-06-42	973	11	450	290	79	11907	0.906	0.1628	1.2%	0.0485	3.7%	0.0713	1.1%
K09-06-43	980	10	316	286	58	12026	0.907	0.1640	1.1%	0.0485	4.6%	0.0714	1.7%
K09-06-44	985	13	785	229	132	13351	0.908	0.1659	1.3%	0.0531	5.0%	0.0766	1.3%
K09-06-45	1047	8	462	537	100	9883	0.913	0.1769	0.8%	0.0524	2.7%	0.0770	1.1%
K09-06-46	1071	13	118	66	22	8726	0.915	0.1810	1.2%	0.0561	5.4%	0.0760	2.3%
K09-06-47	1120	12	408	290	87	11021	0.919	0.1900	1.1%	0.0575	4.7%	0.0778	1.5%
K09-06-48	1132	16	158	292	43	11939	0.920	0.1913	1.4%	0.0570	4.7%	0.0748	2.3%
K09-06-49	1147	12	856	578	183	12176	0.921	0.1948	1.1%	0.0581	4.5%	0.0781	1.1%
K09-06-50	1196	160	386	70	78	12023	0.927	0.2080	1.3%	0.0613	4.9%	0.0834	1.0%
K09-06-51	1215	14	265	82	11	12152	0.852	0.0391	1.4%	0.0130	6.7%	0.0537	3.0%
K09-06-52	1256	11	670	333	149	11255	0.931	0.2150	0.9%	0.0660	4.3%	0.0821	1.0%
K09-06-53	1402	23	71	51	19	9294	0.943	0.2422	1.6%	0.0674	6.1%	0.0861	3.0%
K09-06-54	1404	160	307	318	104	9456	0.963	0.2835	0.8%	0.0801	2.7%	0.1007	1.0%
K09-06-55	1606	13	585	109	23	12566	0.853	0.0414	1.2%	0.0136	5.6%	0.0499	2.1%
K09-06-56	1639	24	165	127	52	9865	0.966	0.2892	1.5%	0.0849	5.1%	0.0999	1.8%
K09-06-57	1693	45	73	33	26	9026	0.983	0.3248	2.2%	0.0993	5.2%	0.1042	1.6%
K09-06-58	1826	34	328	189	24	10860	0.864	0.0675	1.7%	0.0219	7.0%	0.0644	3.8%
K09-06-59	1904	24	339	126	118	10919	0.991	0.3415	1.3%	0.0961	5.2%	0.1110	1.2%
K09-06-60	2026	32	340	146	178	10542	1.055	0.4724	1.2%	0.1332	5.0%	0.1702	0.9%
K09-06-61	2475	31	767	536	33	9928	0.852	0.0385	1.3%	0.0126	4.4%	0.0518	1.9%

K09-06-62	2520	29	546	158	276	11019	1.056	0.4750	1.1%	0.1292	4.8%	0.1599	0.8%
K09-06-63	2566	26	348	154	192	10243	1.065	0.4941	1.2%	0.1347	3.6%	0.1801	0.6%
K09-06-64	2710	38	251	93	145	10652	1.079	0.5244	1.2%	0.1501	5.1%	0.1895	1.0%
K09-06-65	3438	64	54	12	44	9677	1.147	0.6969	0.9%	0.1945	4.3%	0.2845	0.9%
K09-16A-1	317	9	356	168	23	21185	0.859	0.0560	2.6%	0.0365	8.0%	0.1319	4.6%
K09-16A-2	325	13	365	119	18	27132	0.859	0.0528	3.9%	0.0196	10.8%	0.0689	8.2%
K09-16A-3	326	9	276	175	17	19786	0.859	0.0541	2.8%	0.0218	8.0%	0.0870	5.2%
K09-16A-4	326	6	413	86	21	24505	0.859	0.0532	2.0%	0.0289	7.5%	0.0719	4.5%
K09-16A-5	327	5	400	139	21	23798	0.859	0.0526	1.5%	0.0196	6.5%	0.0610	4.0%
K09-16A-6	330	13	217	102	14	16981	0.859	0.0559	3.9%	0.0288	9.3%	0.1004	6.8%
K09-16A-7	331	17	469	163	32	21269	0.859	0.0593	4.8%	0.0473	11.8%	0.1438	10.1%
K09-16A-8	332	8	396	98	20	24390	0.859	0.0538	2.5%	0.0232	7.9%	0.0673	4.5%
K09-16A-9	334	7	523	254	28	26387	0.859	0.0547	2.2%	0.0183	7.5%	0.0754	5.5%
K09-16A-10	334	5	561	192	30	22466	0.859	0.0542	1.5%	0.0209	5.7%	0.0673	2.9%
K09-16A-11	343	17	401	134	24	30076	0.859	0.0584	4.8%	0.0295	15.3%	0.1053	8.9%
K09-16A-12	351	6	431	152	25	22423	0.859	0.0570	1.8%	0.0237	6.5%	0.0695	3.5%
K09-16A-13	362	14	505	146	29	26571	0.859	0.0595	3.9%	0.0282	13.8%	0.0781	8.7%
K09-16B-1*	313	10	152	282	12	10930	0.858	0.0526	3.1%	0.0182	8.0%	0.0953	6.5%
K09-16B-2*	316	10	460	47	22	8060	0.857	0.0512	3.2%	0.0191	20.1%	0.0665	7.3%
K09-16B-3	333	16	44	54	4	10213	0.861	0.0610	4.3%	0.0277	9.0%	0.1588	8.2%
K09-16B-4	342	20	58	107	5	10601	0.861	0.0614	5.4%	0.0213	9.3%	0.1442	10.7%

K09-16B-5	343	8	178	700	19	12686	0.861	0.0550	2.3%	0.0171	4.5%	0.0578	4.0%
K09-16B-6	344	7	2051	2972	130	24647	0.859	0.0553	2.0%	0.0136	8.3%	0.0616	4.8%
K09-16B-7	344	14	44	39	3	11269	0.860	0.0581	4.1%	0.0227	11.3%	0.0975	9.5%
K09-16B-8	345	14	182	24	9	6467	0.859	0.0558	4.0%	0.0234	23.1%	0.0650	11.0%
K09-16B-9	345	9	77	39	4	10413	0.861	0.0561	2.6%	0.0186	8.0%	0.0686	5.7%
K09-16B-10	348	17	231	280	19	8384	0.861	0.0604	4.7%	0.0270	10.7%	0.1201	7.7%
K09-16B-11*	349	41	59	35	4	8129	0.860	0.0584	11.6%	0.0235	24.0%	0.0921	33.1%
K09-16B-12*	349	21	64	61	4	8504	0.859	0.0553	6.3%	0.0158	21.5%	0.0485	32.2%
K09-16B-13	349	8	207	355	16	14863	0.861	0.0565	2.4%	0.0190	6.4%	0.0653	6.0%
K09-16B-14	360	9	84	138	7	11846	0.861	0.0581	2.4%	0.0196	5.5%	0.0639	4.7%
K09-16B-15	361	9	177	298	13	10046	0.861	0.0584	2.4%	0.0174	5.3%	0.0635	5.1%
K09-16B-16	363	4	199	250	16	11519	0.861	0.0610	1.21%	0.02148	3.8%	0.094283	0.024012
K09-16B-17	366	19	265	316	18	15926	0.861	0.0587	5.4%	0.0196	8.5%	0.0584	10.6%
K09-16B-18	368	9	97	98	7	9995	0.861	0.0588	2.5%	0.0188	6.4%	0.0561	5.7%
K09-16B-19	368	8	2331	1063	135	37054	0.861	0.0589	2.2%	0.0172	4.6%	0.0559	2.7%
K09-16B-20	369	14	45	25	3	11759	0.861	0.0621	3.8%	0.0306	8.5%	0.0951	8.1%
K09-16B-21	373	8	93	85	6	9588	0.861	0.0596	2.1%	0.0186	5.7%	0.0534	4.3%
K09-16B-22	378	7	81	100	6	11337	0.862	0.0616	1.7%	0.0193	4.1%	0.0689	5.1%
K09-16B-23	380	15	42	58	4	12390	0.862	0.0639	3.8%	0.0233	10.4%	0.0944	11.2%
K09-16B-24	386	9	116	56	8	14119	0.863	0.0644	2.30%	0.0280	6.5%	0.0877	5.4%
K09-16B-25	389	5	96	98	7	10701	0.862	0.0633	1.40%	0.0212	4.5%	0.0687	3.8%
K09-16B-26	400	8	57	45	5	11355	0.864	0.0664	2.07%	0.0250	6.1%	0.0840	5.6%
K09-16B-27	402	7	90	92	7	10215	0.863	0.0652	1.64%	0.0215	4.5%	0.0650	3.9%

K09-16B-28	403	5	349	235	26	12589	0.864	0.0662	1.31%	0.0227	4.0%	0.0747	2.2%
K09-16B-29	417	8	72	38	5	12143	0.864	0.0672	1.95%	0.0230	6.0%	0.0605	4.8%
K09-16C-1	313	18	219	418	14	10003	0.857	0.0514	5.8%	0.0133	18.4%	0.0789	26.1%
K09-16C-2	327	16	175	229	12	9391	0.858	0.0531	5.0%	0.0197	15.1%	0.0689	22.5%
K09-16C-3	335	17	425	684	25	7263	0.858	0.0537	5.3%	0.0133	15.3%	0.0580	17.0%
K09-16C-4	347	40	364	588	27	7930	0.860	0.0590	11.2%	0.0221	33.9%	0.1045	47.4%
K09-16C-5	348	19	238	436	17	10075	0.859	0.0564	5.4%	0.0149	15.5%	0.0676	22.9%
K09-16C-6	350	15	186	262	13	10533	0.860	0.0576	4.3%	0.0174	14.4%	0.0778	19.8%
K09-16C-7	352	12	411	885	34	8847	0.860	0.0576	3.3%	0.0171	11.2%	0.0744	9.5%
K09-16C-8	357	17	220	445	17	8326	0.859	0.0564	5.0%	0.0182	13.4%	0.0453	21.7%
K09-16C-9	359	23	153	212	11	10426	0.859	0.0557	6.7%	0.0232	17.5%	0.0321	44.6%
K09-16C-10	360	22	325	605	27	8693	0.861	0.0604	6.1%	0.0213	14.9%	0.0933	19.8%
K09-16C-11	365	25	292	432	20	9356	0.861	0.0595	7.0%	0.0163	19.6%	0.0710	26.3%
K09-16C-12	368	84	199	215	13	7558	0.867	0.0750	18.4%	0.0189	34.6%	0.2304	34.8%
K09-16C-13	383	16	223	391	18	9727	0.862	0.0627	4.2%	0.0192	12.4%	0.0746	22.4%
K09-18-1	213	24	1644	794	273	10229	0.900	0.1483	3.8%	0.0617	8.2%	0.1983	1.4%
K09-18-2	390	5	624	640	44	10543	0.862	0.0629	1.4%	0.0176	4.1%	0.0614	2.8%
K09-18-3	392	10	194	260	15	9561	0.862	0.0630	2.5%	0.0203	6.8%	0.0581	7.3%
K09-18-4	398	5	1156	1055	89	9638	0.863	0.0640	1.3%	0.0181	4.5%	0.0575	2.7%
K09-18-5	402	4	482	727	42	9303	0.863	0.0645	1.1%	0.0198	3.8%	0.0567	1.8%
K09-18-6	412	5	233	216	18	10313	0.864	0.0671	1.3%	0.0194	5.0%	0.0675	2.8%

K09-18-7	414	4	465	370	34	10299	0.864	0.0665	1.0%	0.0210	5.0%	0.0569	2.2%
K09-18-8	424	6	2278	1355	168	11978	0.864	0.0682	1.3%	0.0198	4.3%	0.0583	2.8%
K09-18-9	434	6	296	447	28	9179	0.865	0.0700	1.5%	0.0227	4.5%	0.0606	2.2%
K09-18-10	437	4	759	605	59	10154	0.865	0.0702	0.8%	0.0208	3.0%	0.0573	1.4%
K09-18-11	439	6	446	239	33	11435	0.865	0.0707	1.4%	0.0221	5.8%	0.0576	2.8%
K09-18-12	441	6	334	143	24	11119	0.866	0.0711	1.4%	0.0225	6.7%	0.0591	3.3%
K09-18-13	441	6	1083	362	74	13238	0.866	0.0710	1.3%	0.0220	5.8%	0.0581	2.4%
K09-18-14	443	8	176	139	14	9949	0.866	0.0710	1.7%	0.0220	6.3%	0.0546	4.0%
K09-18-15	444	5	415	323	32	10724	0.866	0.0715	1.2%	0.0222	5.1%	0.0580	2.4%
K09-18-16	444	5	552	327	42	10906	0.866	0.0712	1.1%	0.0217	4.1%	0.0552	1.6%
K09-18-17	444	4	984	411	69	13857	0.866	0.0714	1.0%	0.0227	5.0%	0.0566	1.6%
K09-18-18	450	6	187	158	15	9448	0.866	0.0723	1.4%	0.0229	5.9%	0.0565	3.4%
K09-18-19	451	7	602	572	49	10049	0.866	0.0731	1.5%	0.0239	6.8%	0.0633	4.4%
K09-18-20	456	6	401	229	31	11106	0.867	0.0736	1.4%	0.0232	6.0%	0.0589	2.7%
K09-18-21	596	8	257	109	26	9441	0.877	0.0972	1.4%	0.0269	6.8%	0.0622	3.4%
K09-18-22	688	9	449	134	47	11642	0.884	0.1124	1.3%	0.0342	6.6%	0.0603	2.4%
K09-18-23	711	10	269	217	36	10163	0.886	0.1173	1.4%	0.0323	5.9%	0.0677	3.2%
K09-18-24	717	7	646	176	74	12290	0.886	0.1180	1.0%	0.0385	5.3%	0.0657	1.3%
K09-18-25	735	8	929	86	112	13308	0.888	0.1216	1.2%	0.0319	6.8%	0.0697	1.3%
K09-18-26	771	7	816	254	101	11278	0.891	0.1281	0.9%	0.0359	3.9%	0.0712	1.2%
K09-18-27	791	8	408	248	55	12717	0.892	0.1306	1.0%	0.0385	5.0%	0.0653	1.7%
K09-18-28	803	11	473	182	64	13203	0.893	0.1339	1.5%	0.0398	5.0%	0.0737	1.3%
K09-18-29	807	11	101	70	14	10442	0.893	0.1333	1.4%	0.0406	4.0%	0.0657	2.8%

K09-18-30	815	11	434	257	60	10693	0.894	0.1353	1.4%	0.0381	5.2%	0.0698	1.9%
K09-18-31	831	14	114	65	17	8963	0.895	0.1375	1.7%	0.0418	7.1%	0.0665	3.7%
K09-18-32	834	11	117	66	17	9463	0.895	0.1383	1.4%	0.0443	6.3%	0.0680	3.1%
K09-18-33	851	50	251	153	31	10774	0.883	0.1112	2.1%	0.0340	5.5%	0.0935	2.8%
K09-18-34	905	11	458	385	81	10921	0.901	0.1511	1.3%	0.0482	5.3%	0.0712	2.1%
K09-18-35	921	10	325	261	56	10490	0.903	0.1548	1.1%	0.0429	4.8%	0.0768	1.5%
K09-18-36	921	9	1082	55	152	14187	0.902	0.1535	1.0%	0.0484	7.7%	0.0693	1.3%
K09-18-37	935	11	278	143	45	9942	0.904	0.1572	1.2%	0.0477	5.2%	0.0755	1.7%
K09-18-38	950	11	1310	1308	258	11987	0.905	0.1596	1.2%	0.0492	5.5%	0.0749	1.9%
K09-18-39	962	10	544	442	102	10754	0.906	0.1609	1.1%	0.0492	3.7%	0.0711	1.2%
K09-18-40	963	9	421	320	74	11691	0.906	0.1612	0.9%	0.0487	4.6%	0.0712	1.5%
K09-18-41	975	10	639	374	109	12144	0.907	0.1633	1.1%	0.0484	4.4%	0.0720	1.1%
K09-18-42	990	8	1052	175	164	13460	0.908	0.1658	0.8%	0.0499	5.1%	0.0714	1.0%
K09-18-43	997	12	135	95	24	9706	0.909	0.1679	1.2%	0.0498	5.4%	0.0753	2.1%
K09-18-44	1017	8	681	348	121	11489	0.910	0.1708	0.8%	0.0484	3.0%	0.0729	0.9%
K09-18-45	1019	12	540	267	96	11113	0.910	0.1710	1.2%	0.0519	5.2%	0.0718	1.6%
K09-18-46	1045	15	915	138	160	12946	0.913	0.1765	1.5%	0.0611	6.4%	0.0763	1.7%
K09-18-47	1058	35	1047	296	124	12751	0.887	0.1190	1.3%	0.0217	6.4%	0.0747	1.3%
K09-18-48	1084	12	140	105	30	10665	0.916	0.1839	1.2%	0.0553	4.2%	0.0790	1.7%
K09-18-49	1087	13	241	195	50	11111	0.916	0.1844	1.2%	0.0555	5.2%	0.0791	2.0%
K09-18-50	1121	11	186	115	37	11524	0.919	0.1901	1.0%	0.0568	5.0%	0.0782	1.8%
K09-18-51	1177	12	235	122	50	11507	0.924	0.2014	1.1%	0.0645	4.9%	0.0840	1.5%
K09-18-52	1236	11	1036	934	250	10764	0.929	0.2114	0.9%	0.0657	4.4%	0.0817	0.8%

K09-18-53	1278	12	1178	1204	321	13765	0.934	0.2220	1.0%	0.0672	3.6%	0.0941	0.6%
K09-18-54	1312	13	462	163	105	13307	0.937	0.2278	1.0%	0.0553	4.9%	0.0926	1.1%
K09-18-55	1329	18	35	31	10	9936	0.937	0.2284	1.5%	0.0679	5.3%	0.0837	2.7%
K09-18-56	1348	13	784	455	204	11673	0.939	0.2327	1.0%	0.0694	3.3%	0.0869	1.4%
K09-18-57	1364	19	537	374	135	12396	0.941	0.2370	1.4%	0.0749	5.0%	0.0922	1.5%
K09-18-58	1563	12	504	332	153	10358	0.959	0.2753	0.8%	0.0790	2.8%	0.0994	0.9%
K09-18-59	1703	16	408	382	139	9256	0.973	0.3035	0.9%	0.0805	4.4%	0.1076	1.0%
K09-18-60	1715	48	181	174	57	12051	0.973	0.3039	2.8%	0.0749	9.3%	0.1022	4.3%
K09-18-61	1757	15	292	6	91	13012	0.979	0.3159	0.9%	0.0704	8.2%	0.1145	1.2%
K09-18-62	1775	23	328	86	104	15930	0.980	0.3192	1.3%	0.0803	5.4%	0.1147	1.0%
K09-18-63	1861	17	275	199	105	9235	0.991	0.3400	1.0%	0.0721	6.0%	0.1275	0.8%
K09-18-64	2471	28	163	149	81	9374	1.029	0.4193	1.0%	0.1144	4.5%	0.1584	1.1%
K09-18-65	2589	34	161	116	96	8870	1.069	0.5025	1.2%	0.1408	4.8%	0.1878	1.2%
K09-18-66	2659	36	158	65	90	12795	1.074	0.5135	1.2%	0.1423	5.5%	0.1857	1.1%
K09–18–67	2676	29	173	76	98	12639	1.075	0.5147	0.9%	0.1396	4.9%	0.1827	0.9%
K09–18–68	3089	9	1644	794	273	10229	0.900	0.1483	3.8%	0.0617	8.2%	0.1983	1.4%
K09-18-69	3115	20	192	113	117	9918	1.075	0.5144	0.9%	0.1376	4.7%	0.2401	0.8%
K09-18-70	3239	115	46	15	24	9574	1.045	0.4510	1.8%	0.1271	7.8%	0.2326	1.8%
K09-18-71	3321	12	599	249	414	12176	1.107	0.5878	0.8%	0.1359	2.9%	0.2700	0.5%
K09-21-1	384	180	1264	617	587	10065	1.029	0.4192	1.3%	0.0993	4.8%	0.1781	0.5%
K09-21-2	426	7	259	221	20	10384	0.864	0.0685	1.6%	0.0219	6.3%	0.0586	3.6%
K09-21-3	429	50	1230	99	85	13453	0.870	0.0801	2.2%	0.0256	8.2%	0.0586	1.9%

K09–21–4	431	10	97	80	8	11156	0.865	0.0699	2.3%	0.0233	7.5%	0.0641	6.1%
K09-21-5	432	7	241	45	16	13518	0.865	0.0694	1.5%	0.0230	7.6%	0.0562	2.7%
K09-21-6	439	7	342	256	26	11036	0.865	0.0706	1.6%	0.0208	5.1%	0.0581	2.5%
K09-21-7	439	8	1224	785	89	13233	0.866	0.0710	1.7%	0.0215	5.0%	0.0608	1.7%
K09–21–8	440	7	185	147	14	11227	0.865	0.0708	1.7%	0.0215	5.9%	0.0563	3.0%
K09-21-9	441	4	1314	479	94	13415	0.866	0.0709	0.9%	0.0226	3.2%	0.0564	1.3%
K09-21-10	447	5	272	189	21	10824	0.866	0.0716	1.0%	0.0218	3.5%	0.0538	2.2%
K09-21-11	448	4	469	183	34	12632	0.866	0.0719	0.9%	0.0227	3.8%	0.0556	1.8%
K09-21-12	455	6	772	398	60	11299	0.867	0.0732	1.3%	0.0241	5.2%	0.0575	1.7%
K09-21-13	470	8	239	166	20	10745	0.868	0.0758	1.6%	0.0244	6.4%	0.0582	3.6%
K09-21-14	542	8	163	139	16	10522	0.873	0.0877	1.5%	0.0270	5.8%	0.0579	3.0%
K09-21-15	555	8	173	123	17	10448	0.874	0.0900	1.5%	0.0266	5.8%	0.0590	2.7%
K09-21-16	560	7	5212	836	466	15567	0.875	0.0923	1.3%	0.0326	7.2%	0.0718	1.0%
K09-21-17	629	7	629	230	65	11776	0.879	0.1026	1.2%	0.0309	5.6%	0.0606	1.9%
K09-21-18	696	14	78	30	9	9806	0.885	0.1151	2.0%	0.0428	9.0%	0.0697	4.6%
K09-21-19	735	8	176	139	24	11108	0.887	0.1208	1.1%	0.0359	3.4%	0.0639	2.0%
K09-21-20	784	15	133	35	16	10368	0.891	0.1295	2.0%	0.0444	7.2%	0.0663	2.9%
K09-21-21	794	10	545	361	78	11471	0.892	0.1311	1.3%	0.0381	4.8%	0.0663	1.4%
K09-21-22	849	9	900	680	140	10542	0.897	0.1411	1.1%	0.0406	3.2%	0.0690	1.6%
K09-21-23	868	22	777	25	103	13615	0.901	0.1500	1.5%	0.0522	10.2%	0.0701	2.0%
K09-21-24	913	12	395	272	66	10318	0.901	0.1517	1.4%	0.0453	5.0%	0.0674	1.4%
K09-21-25	919	12	1587	77	231	13668	0.903	0.1545	1.4%	0.0831	5.7%	0.0767	1.0%
K09-21-26	922	22	369	443	68	12048	0.903	0.1551	2.5%	0.0464	6.1%	0.0774	3.0%

K09-21-27	943	13	826	151	127	13010	0.904	0.1575	1.4%	0.0474	5.3%	0.0705	1.1%
K09-21-28	954	15	134	135	25	9452	0.905	0.1601	1.6%	0.0471	5.7%	0.0734	3.2%
K09-21-29	1002	11	434	346	83	10369	0.909	0.1686	1.2%	0.0519	4.9%	0.0743	1.7%
K09-21-30	1003	9	305	200	56	11408	0.909	0.1680	0.9%	0.0512	3.0%	0.0712	1.3%
K09-21-31	1016	9	612	227	104	13023	0.910	0.1701	0.9%	0.0480	3.2%	0.0702	1.0%
K09-21-32	1019	15	330	170	59	11641	0.910	0.1711	1.5%	0.0521	5.3%	0.0726	1.9%
K09-21-33	1020	15	163	63	29	10469	0.910	0.1717	1.5%	0.0502	6.3%	0.0745	2.6%
K09-21-34	1035	13	237	200	47	12563	0.912	0.1743	1.3%	0.0507	5.2%	0.0750	2.0%
K09-21-35	1053	17	134	34	23	10187	0.913	0.1780	1.7%	0.0590	7.4%	0.0772	2.6%
K09-21-36	1068	16	310	115	56	12740	0.914	0.1792	1.5%	0.0525	6.0%	0.0701	2.2%
K09-21-37	1084	14	274	167	55	10249	0.916	0.1831	1.4%	0.0562	5.1%	0.0755	1.7%
K09-21-38	1109	10	619	241	117	11227	0.918	0.1873	0.9%	0.0535	3.0%	0.0743	0.9%
K09-21-39	1133	17	181	209	42	10887	0.920	0.1919	1.6%	0.0553	5.1%	0.0765	1.9%
K09-21-40	1148	11	238	377	63	11680	0.921	0.1950	1.0%	0.0615	2.8%	0.0782	1.5%
K09-21-41	1158	13	532	500	122	12767	0.923	0.1978	1.2%	0.0594	4.7%	0.0827	1.3%
K09-21-42	1252	21	909	405	216	12350	0.931	0.2166	1.7%	0.0569	5.8%	0.0905	1.4%
K09-21-43	1416	18	354	386	107	9349	0.945	0.2459	1.3%	0.0715	4.7%	0.0903	1.1%
K09-21-44	1507	13	233	114	65	9920	0.954	0.2634	0.9%	0.0823	3.2%	0.0936	1.2%
K09-21-45	1564	15	193	253	68	8297	0.958	0.2737	1.0%	0.0816	2.8%	0.0942	1.2%
K09-21-46	1581	19	195	346	78	11550	0.961	0.2780	1.2%	0.0819	4.7%	0.0979	1.7%
K09-21-47	1641	21	462	439	166	10238	0.968	0.2931	1.3%	0.0881	4.8%	0.1107	0.8%
K09-21-48	1723	22	240	129	80	10991	0.974	0.3058	1.3%	0.0877	4.9%	0.1038	1.3%
K09-21-49	1765	20	153	53	52	10050	0.979	0.3156	1.2%	0.0931	5.0%	0.1094	1.6%

1801	33	280	126	92	11745	0.981	0.3210	1.9%	0.0957	4.9%	0.1066	1.1%
1806	20	2555	191	535	12854	0.931	0.2161	1.0%	0.0645	5.0%	0.1092	0.7%
2004	38	994	255	292	12949	0.960	0.2772	1.1%	0.0948	6.2%	0.1150	1.0%
2032	30	940	537	378	12553	1.011	0.3820	1.5%	0.0507	5.5%	0.1518	0.7%
2398	25	605	218	226	11957	0.993	0.3450	1.0%	0.1029	4.8%	0.1573	0.9%
2410	27	400	249	208	10308	1.047	0.4554	1.0%	0.1300	4.7%	0.1600	0.9%
2452	16	1267	233	596	11276	1.039	0.4388	1.1%	0.1236	5.0%	0.1575	0.8%
2507	34	610	180	290	11614	1.055	0.4717	1.3%	0.1302	4.6%	0.1578	0.7%
2596	26	362	69	186	10594	1.055	0.4732	1.1%	0.1323	6.0%	0.1707	1.1%
2620	35	467	483	302	9428	1.071	0.5070	1.2%	0.1375	4.4%	0.1862	0.6%
2671	23	1264	617	587	10065	1.029	0.4192	1.3%	0.0993	4.8%	0.1781	0.5%
241	10	1128	3677	90	10209	0.853	0.0417	3.9%	0.0158	8.2%	0.1216	6.3%
244	11	1371	3419	128	10033	0.857	0.0505	3.4%	0.0210	7.7%	0.2400	3.3%
246	8	2745	7609	145	11309	0.852	0.0395	3.1%	0.0100	11.2%	0.0633	7.3%
248	21	1213	3766	134	9977	0.858	0.0526	6.3%	0.0224	9.5%	0.2549	5.6%
255	8	1566	4398	163	8466	0.857	0.0503	2.4%	0.0215	8.8%	0.2106	8.6%
260	20	1097	6117	136	6959	0.855	0.0466	7.0%	0.0162	8.6%	0.1464	11.0%
261	8	1959	3598	120	8077	0.854	0.0435	3.1%	0.0150	10.3%	0.0929	6.8%
267	9	1727	6252	167	8478	0.855	0.0465	3.3%	0.0178	7.1%	0.1234	7.8%
267	6	1433	4536	119	5940	0.854	0.0437	2.3%	0.0159	7.1%	0.0758	5.1%
269	11	1587	6810	157	7326	0.854	0.0445	3.9%	0.0162	6.9%	0.0842	6.8%
273	10	1505	7748	174	6962	0.855	0.0458	3.5%	0.0169	6.4%	0.0945	6.7%
	1806 2004 2032 2398 2410 2452 2507 2596 2620 2671 241 244 246 248 255 260 261 267 267 267 269	1806  20    2004  38    2032  30    2398  25    2410  27    2452  16    2507  34    2596  26    2620  35    2671  23    241  10    244  11    246  8    248  21    255  8    260  20    261  8    267  9    267  6    269  11	1806  20  2555    2004  38  994    2032  30  940    2398  25  605    2410  27  400    2452  16  1267    2507  34  610    2596  26  362    2620  35  467    2671  23  1264	1806  20  2555  191    2004  38  994  255    2032  30  940  537    2398  25  605  218    2410  27  400  249    2452  16  1267  233    2507  34  610  180    2596  26  362  69    2620  35  467  483    2671  23  1264  617	1806  20  2555  191  535    2004  38  994  255  292    2032  30  940  537  378    2398  25  605  218  226    2410  27  400  249  208    2452  16  1267  233  596    2507  34  610  180  290    2596  26  362  69  186    2620  35  467  483  302    2671  23  1264  617  587	1806  20  2555  191  535  12854    2004  38  994  255  292  12949    2032  30  940  537  378  12553    2398  25  605  218  226  11957    2410  27  400  249  208  10308    2452  16  1267  233  596  11276    2507  34  610  180  290  11614    2596  26  362  69  186  10594    2620  35  467  483  302  9428    2671  23  1264  617  587  10065	1806  20  2555  191  535  12854  0.931    2004  38  994  255  292  12949  0.960    2032  30  940  537  378  12553  1.011    2398  25  605  218  226  11957  0.993    2410  27  400  249  208  10308  1.047    2452  16  1267  233  596  11276  1.039    2507  34  610  180  290  11614  1.055    2596  26  362  69  186  10594  1.055    2620  35  467  483  302  9428  1.071    2671  23  1264  617  587  10065  1.029    241  10  1128  3677  90  10209  0.853    244  11  1371  3419  128  10033  0.857    246  8  2745  7609  145  11309  0.852	1806    20    2555    191    535    12854    0.931    0.2161      2004    38    994    255    292    12949    0.960    0.2772      2032    30    940    537    378    12553    1.011    0.3820      2398    25    605    218    226    11957    0.993    0.3450      2410    27    400    249    208    10308    1.047    0.4554      2452    16    1267    233    596    11276    1.039    0.4388      2507    34    610    180    290    11614    1.055    0.4717      2596    26    362    69    186    10594    1.055    0.4732      2620    35    467    483    302    9428    1.071    0.5070      261    123    1264    617    587    10065    1.029    0.4192      7    7    90    10209    0	1806    20    2555    191    535    12854    0.931    0.2161    1.0%      2004    38    994    255    292    12949    0.960    0.2772    1.1%      2032    30    940    537    378    12553    1.011    0.3820    1.5%      2398    25    605    218    226    11957    0.993    0.3450    1.0%      2410    27    400    249    208    10308    1.047    0.4554    1.0%      2452    16    1267    233    596    11276    1.039    0.4388    1.1%      2507    34    610    180    290    11614    1.055    0.4717    1.3%      2596    26    362    69    186    10594    1.055    0.4732    1.1%      2620    35    467    483    302    9428    1.071    0.5070    1.2%      2611    23    1264    617	1806  20  2555  191  535  12854  0.931  0.2161  1.0%  0.0645    2004  38  994  255  292  12949  0.960  0.2772  1.1%  0.0948    2032  30  940  537  378  12553  1.011  0.3820  1.5%  0.0507    2398  25  605  218  226  11957  0.993  0.3450  1.0%  0.1029    2410  27  400  249  208  10308  1.047  0.4554  1.0%  0.1300    2452  16  1267  233  596  11276  1.039  0.4388  1.1%  0.1236    2596  26  362  69  186  10594  1.055  0.4717  1.3%  0.1302    2620  35  467  483  302  9428  1.071  0.5070  1.2%  0.1375    2671  23  1264  617  587  10065  1.029  0.4192  1.3%  0.0210    244  11  <	1806    20    2555    191    535    12854    0.931    0.2161    1.0%    0.0645    5.0%      2004    38    994    255    292    12949    0.960    0.2772    1.1%    0.0948    6.2%      2032    30    940    537    378    12553    1.011    0.3820    1.5%    0.0507    5.5%      2398    25    605    218    226    11957    0.993    0.3450    1.0%    0.1029    4.8%      2410    27    400    249    208    10308    1.047    0.4554    1.0%    0.1300    4.7%      2452    16    1267    233    596    11276    1.039    0.4388    1.1%    0.1323    6.0%      2596    26    362    69    186    10594    1.055    0.4732    1.1%    0.1323    6.0%      2620    35    467    483    302    9428    1.071    0.5070    1.2%	No.    20    2555    191    535    12854    0.931    0.2161    1.0%    0.0645    5.0%    0.1092      2004    38    994    255    292    12949    0.960    0.2772    1.1%    0.0948    6.2%    0.1150      2032    30    940    537    378    12553    1.011    0.3820    1.5%    0.0507    5.5%    0.1518      2398    25    605    218    226    11957    0.993    0.3450    1.0%    0.1029    4.8%    0.1573      2410    27    400    249    208    10308    1.047    0.4554    1.0%    0.1300    4.7%    0.1600      2452    16    1267    233    596    11276    1.039    0.4388    1.1%    0.1236    5.0%    0.1777      2507    34    610    180    290    11614    1.055    0.4717    1.3%    0.1322    6.0%    0.1707      2620 </th

K09-22A-12	280	8	1502	7011	164	7131	0.855	0.0458	2.7%	0.0169	6.4%	0.0768	4.8%
K09-22A-13	280	6	1357	5246	142	8051	0.855	0.0455	2.1%	0.0187	6.0%	0.0714	4.7%
K09-22A-14	283	8	2273	7929	174	11078	0.855	0.0455	2.9%	0.0136	11.8%	0.0631	14.4%
K09-22A-15	285	15	1599	3257	122	8921	0.856	0.0487	4.9%	0.0176	9.3%	0.1104	11.0%
K09-22A-16	285	10	2149	8633	215	8546	0.855	0.0466	3.5%	0.0167	9.9%	0.0750	8.8%
K09-22A-17	292	7	1775	6159	160	7712	0.855	0.0467	2.3%	0.0166	6.3%	0.0586	4.0%
K09-22A-18	308	13	1478	2749	115	6707	0.857	0.0515	4.2%	0.0211	8.9%	0.0916	7.7%
K09-22A-19	358	35	2418	5464	213	12489	0.862	0.0620	9.3%	0.0244	18.4%	0.1186	28.8%
K09-24-1	428	4	510	229	36	11537	0.865	0.0690	1.0%	0.0225	4.7%	0.0599	1.7%
K09-24-2	430	5	378	175	27	10843	0.865	0.0693	1.2%	0.0216	4.8%	0.0580	1.9%
K09-24-3	437	7	362	160	26	11706	0.865	0.0706	1.6%	0.0231	6.2%	0.0603	3.1%
K09-24-4	441	5	230	79	16	12630	0.866	0.0711	1.1%	0.0237	5.1%	0.0597	2.2%
K09-24-5	447	8	180	112	14	10360	0.866	0.0722	1.7%	0.0223	6.9%	0.0597	4.4%
K09-24-6	452	8	233	158	18	10849	0.866	0.0727	1.7%	0.0225	5.6%	0.0568	2.9%
K09-24-7	453	5	388	77	27	12971	0.866	0.0728	1.1%	0.0228	6.4%	0.0560	2.1%
K09-24-8	458	9	296	134	22	11786	0.867	0.0735	1.9%	0.0234	5.8%	0.0551	3.0%
K09-24-9	485	7	598	1617	68	9302	0.869	0.0784	1.5%	0.0202	5.4%	0.0593	2.9%
K09-24-10	497	6	788	2025	107	10109	0.870	0.0802	1.3%	0.0257	3.9%	0.0588	2.3%
K09-24-11	515	14	1181	18	107	12940	0.876	0.0949	1.5%	0.0586	11.2%	0.0642	1.9%
K09-24-12	537	7	320	358	33	8848	0.872	0.0868	1.3%	0.0265	5.0%	0.0574	2.3%
K09-24-13	551	7	368	598	44	10331	0.874	0.0893	1.4%	0.0274	4.0%	0.0589	1.8%
K09-24-14	615	6	527	305	56	12093	0.878	0.1000	1.0%	0.0309	3.8%	0.0597	1.5%

K09-24-15	690	28	614	134	167	12596	0.950	0.2562	1.9%	0.1298	8.5%	0.1644	1.4%
K09-24-16	713	7	762	261	88	12889	0.886	0.1172	0.9%	0.0369	4.8%	0.0647	1.3%
K09-24-17	753	7	476	712	79	10528	0.889	0.1244	1.0%	0.0396	3.4%	0.0673	1.2%
K09-24-18	775	10	119	126	17	9580	0.889	0.1237	1.4%	0.0377	5.2%	0.0663	3.1%
K09-24-19	786	11	549	223	67	12147	0.891	0.1296	1.4%	0.0382	6.1%	0.0654	3.1%
K09-24-20	786	9	541	370	78	11794	0.891	0.1295	1.1%	0.0410	4.8%	0.0636	1.7%
K09-24-21	791	12	422	55	50	12895	0.892	0.1305	1.6%	0.0370	6.3%	0.0657	1.6%
K09-24-22	813	10	751	251	97	12307	0.894	0.1357	1.2%	0.0382	5.5%	0.0737	1.7%
K09-24-23	814	10	323	127	45	12409	0.894	0.1350	1.3%	0.0417	4.5%	0.0689	1.3%
K09-24-24	845	32	79	123	47	10367	1.020	0.3998	1.6%	0.1189	3.9%	0.1714	1.4%
K09-24-25	854	85	413	155	122	12458	0.962	0.2815	1.3%	0.1055	3.7%	0.1320	1.0%
K09-24-26	859	15	264	162	43	12690	0.897	0.1419	1.9%	0.0393	5.0%	0.0640	2.6%
K09–24–27	887	10	166	138	27	10998	0.899	0.1474	1.2%	0.0441	5.1%	0.0684	2.3%
K09-24-28	910	18	78	132	16	11857	0.901	0.1516	2.1%	0.0460	5.2%	0.0691	3.3%
K09-24-29	911	55	1696	176	198	13193	0.886	0.1176	1.4%	0.0278	9.3%	0.0671	2.6%
K09-24-30	919	11	849	69	129	12624	0.903	0.1556	1.3%	0.0908	7.0%	0.0824	1.8%
K09-24-31	922	10	724	163	110	12894	0.903	0.1545	1.1%	0.0408	5.9%	0.0733	1.6%
K09-24-32	927	8	544	70	80	12464	0.903	0.1556	0.9%	0.0601	6.0%	0.0750	1.3%
K09-24-33	950	9	240	274	47	11667	0.905	0.1589	1.0%	0.0473	3.8%	0.0711	1.4%
K09-24-34	977	10	162	94	28	11964	0.907	0.1632	1.1%	0.0492	4.1%	0.0693	1.6%
K09-24-35	988	10	147	138	28	9014	0.908	0.1662	1.0%	0.0518	3.8%	0.0750	1.7%
K09-24-36	1012	13	768	195	127	12378	0.910	0.1703	1.3%	0.0533	5.3%	0.0746	1.4%
K09-24-37	1015	12	179	74	33	9814	0.910	0.1700	1.2%	0.0508	4.7%	0.0705	2.2%

K09-24-38	1025	60	503	179	245	10237	1.034	0.4290	1.6%	0.1322	5.6%	0.1478	1.3%
K09-24-39	1043	120	344	340	174	10546	1.016	0.3912	1.3%	0.1132	4.8%	0.1604	1.1%
K09-24-40	1054	12	150	152	32	9638	0.913	0.1777	1.2%	0.0544	3.9%	0.0744	2.1%
K09-24-41	1055	10	595	1418	168	10509	0.913	0.1779	0.9%	0.0527	3.3%	0.0753	1.2%
K09-24-42	1072	10	676	179	122	13138	0.915	0.1824	1.0%	0.0616	3.6%	0.0820	0.8%
K09-24-43	1084	15	243	255	54	8895	0.916	0.1831	1.4%	0.0539	5.1%	0.0752	2.2%
K09-24-44	1090	18	185	103	36	8842	0.916	0.1846	1.7%	0.0574	5.3%	0.0771	2.0%
K09-24-45	1097	13	161	102	32	12556	0.916	0.1845	1.2%	0.0510	4.1%	0.0713	2.0%
K09-24-46	1118	26	1586	202	196	14410	0.895	0.1373	3.3%	0.0393	9.8%	0.0752	3.2%
K09-24-47	1147	12	166	205	41	10897	0.921	0.1940	1.2%	0.0532	4.2%	0.0746	1.9%
K09-24-48	1248	18	565	266	122	11787	0.930	0.2129	1.5%	0.0601	4.8%	0.0790	1.2%
K09-24-49	1405	21	321	429	96	9573	0.944	0.2435	1.5%	0.0701	4.3%	0.0888	1.4%
K09-24-50	1490	15	216	90	59	11770	0.953	0.2618	1.0%	0.0863	5.2%	0.0987	1.2%
K09-24-51	1546	200	1181	18	107	12940	0.876	0.0949	1.5%	0.0586	11.2%	0.0642	1.9%
K09-24-52	1642	16	201	117	64	9995	0.967	0.2918	1.1%	0.0836	4.0%	0.1059	1.0%
K09-24-53	1697	19	290	144	93	9251	0.971	0.3003	1.2%	0.0876	5.1%	0.1017	1.4%
K09-24-54	1715	16	262	270	97	10810	0.974	0.3068	1.1%	0.0849	3.6%	0.1107	0.9%
K09-24-55	1725	21	412	14	124	12821	0.974	0.3061	1.2%	0.0942	8.9%	0.1034	1.5%
K09-24-56	1737	19	281	167	96	9857	0.976	0.3092	1.1%	0.0901	4.9%	0.1064	1.3%
K09-24-57	1868	18	657	199	254	13390	1.000	0.3585	1.0%	0.1059	6.6%	0.1694	0.9%
K09-24-58	1905	125	276	148	96	10024	0.973	0.3031	1.5%	0.0974	5.4%	0.1125	1.5%
K09-24-59	2190	27	158	11	60	11163	1.019	0.3982	1.5%	0.0895	10.3%	0.1230	1.4%
K09-24-60	2230	19	539	239	236	8361	1.010	0.3804	1.4%	0.1076	4.1%	0.1389	0.9%

K09-24-61	2341	22	503	179	245	10237	1.034	0.4290	1.6%	0.1322	5.6%	0.1478	1.3%
K09-24-62	2408	13	329	318	150	10962	1.010	0.3808	0.9%	0.1080	4.2%	0.1556	0.8%
K09-24-63	2433	29	911	301	403	10286	1.025	0.4112	1.1%	0.1195	4.5%	0.1570	0.8%
K09-24-64	2433	50	413	155	122	12458	0.962	0.2815	1.3%	0.1055	3.7%	0.1320	1.0%
K09-24-65	2446	22	593	450	324	10475	1.051	0.4638	1.1%	0.1278	3.7%	0.1638	0.5%
K09-24-66	2455	15	428	100	202	12598	1.041	0.4426	1.1%	0.1283	5.1%	0.1634	0.9%
K09-24-67	2496	29	317	263	180	11063	1.055	0.4725	1.1%	0.1303	4.5%	0.1632	0.9%
K09-24-68	2589	50	344	340	174	10546	1.016	0.3912	1.3%	0.1132	4.8%	0.1604	1.1%
K09-24-69	2631	61	230	101	129	10333	1.064	0.4914	1.2%	0.1381	5.2%	0.1780	1.1%
K09-24-70	2685	24	79	123	47	10367	1.020	0.3998	1.6%	0.1189	3.9%	0.1714	1.4%
K09-24-71	2843	33	614	134	167	12596	0.950	0.2562	1.9%	0.1298	8.5%	0.1644	1.4%
K09-27-1	183	5	1039	140	18	13193	0.843	0.0184	1.7%	0.0147	6.3%	0.0595	3.6%
K09-27-2	198	3	976	185	31	14876	0.849	0.0312	1.3%	0.0138	5.3%	0.0525	3.0%
K09-27-3	208	2	547	111	18	12313	0.849	0.0330	1.1%	0.0150	5.6%	0.0564	2.3%
K09–27–4	214	3	2012	149	61	15763	0.850	0.0337	1.2%	0.0116	8.9%	0.0511	2.4%
K09-27-5	220	2	1767	229	57	14643	0.850	0.0349	0.9%	0.0106	5.7%	0.0540	1.3%
K09-27-6	227	2	1256	278	45	15701	0.851	0.0363	1.0%	0.0124	4.7%	0.0606	1.9%
K09-27-7	232	2	2105	160	70	14859	0.850	0.0356	0.8%	0.0126	5.6%	0.0519	1.4%
K09-27-8	239	6	724	273	29	12218	0.851	0.0379	2.4%	0.0109	7.9%	0.0516	5.5%
K09–27–9	241	3	543	106	20	11829	0.852	0.0381	1.1%	0.0118	5.4%	0.0515	2.2%
K09-27-10	241	2	1347	438	48	11812	0.852	0.0381	0.9%	0.0119	4.4%	0.0505	1.7%
K09-27-11	244	2	788	121	29	12856	0.852	0.0386	0.9%	0.0128	5.8%	0.0511	2.0%

K09-27-12	245	3	349	64	13	12490	0.852	0.0388	1.2%	0.0120	6.9%	0.0514	2.6%
K09-27-13	246	2	1395	180	50	12958	0.852	0.0389	0.8%	0.0121	5.0%	0.0511	1.3%
K09-27-14	248	2	762	138	28	12083	0.852	0.0392	0.9%	0.0128	5.5%	0.0511	2.1%
K09-27-15	253	3	543	79	20	12980	0.852	0.0400	1.1%	0.0140	5.7%	0.0502	2.0%
K09-27-16	255	3	562	154	22	11917	0.852	0.0402	1.1%	0.0129	5.0%	0.0499	2.5%
K09-27-17	256	3	687	80	24	13188	0.852	0.0398	2.0%	0.0118	9.0%	0.0527	4.3%
K09-27-18	259	3	503	79	19	13015	0.853	0.0409	1.1%	0.0122	6.6%	0.0482	2.4%
K09-27-19	262	3	330	59	13	12423	0.853	0.0415	1.3%	0.0133	6.5%	0.0521	2.5%
K09-27-20	267	3	2012	149	61	15763	0.850	0.0337	1.2%	0.0116	8.9%	0.0511	2.4%
K09-27-21	267	3	927	102	35	13066	0.853	0.0423	1.1%	0.0129	5.4%	0.0520	1.8%
K09-27-22	314	3	625	138	31	12163	0.857	0.0500	0.9%	0.0232	4.3%	0.0536	1.7%
K09-27-23	553	8	511	49	42	13608	0.872	0.0856	2.3%	0.0176	16.0%	0.0569	5.0%
K09-27-24	802	8	222	88	31	10348	0.893	0.1342	1.0%	0.0525	4.0%	0.0762	1.6%
K09-27-25	2000	90	687	80	24	13188	0.852	0.0398	2.0%	0.0118	9.0%	0.0527	4.3%
K09-29A-1	30	3	5249	234	59	21873	0.841	0.0118	2.2%	0.0178	9.8%	0.1208	2.8%
K09-29A-2	32	1	403	150	2	10398	0.838	0.0050	2.9%	0.0014	11.7%	0.0423	9.0%
K09-29A-3	32	1	518	37	2	11342	0.838	0.0051	3.4%	0.0017	28.2%	0.0595	10.3%
K09-29A-4	33	1	565	270	3	10082	0.838	0.0051	2.4%	0.0015	8.5%	0.0506	7.5%
K09-29A-5	33	0	15845	1361	76	23397	0.838	0.0051	1.4%	0.0021	6.1%	0.0506	1.5%
K09-29A-6	33	0	10873	490	50	22040	0.838	0.0051	1.4%	0.0023	11.9%	0.0476	2.2%
K09-29A-7	34	0	11078	902	52	21179	0.838	0.0052	0.9%	0.0018	7.0%	0.0467	1.9%
K09-29A-8	120	3	5461	312	25	18928	0.838	0.0053	3.3%	0.0021	21.7%	0.0482	7.7%

K09-29A-9	34	1	5461	312	25	18928	0.838	0.0053	3.3%	0.0021	21.7%	0.0482	7.7%
K09-29A-10	37	2	1876	737	10	12242	0.838	0.0058	4.5%	0.0016	14.5%	0.0554	12.7%
K09-29A-11	38	1	7387	564	39	19227	0.838	0.0060	1.3%	0.0023	7.0%	0.0491	3.2%
K09-29A-12	193	3	1457	157	42	13890	0.848	0.0305	1.4%	0.0120	8.8%	0.0530	2.7%
K09-29A-13	240	3	1307	1081	59	12178	0.851	0.0380	1.3%	0.0126	4.7%	0.0511	2.6%
K09-29A-14	246	3	796	225	30	11992	0.852	0.0388	1.3%	0.0124	7.6%	0.0505	3.1%
K09-29A-15	246	2	4258	214	148	15854	0.852	0.0389	0.9%	0.0117	7.4%	0.0508	1.4%
K09-29A-16	481	70	1515	134	62	14067	0.853	0.0405	1.7%	0.0169	9.9%	0.0604	3.4%
K09–29A–17	249	7	512	54	18	13533	0.851	0.0368	2.3%	0.0104	11.6%	0.0529	4.2%
K09-29A-18	735	9	584	311	75	11433	0.888	0.1216	1.2%	0.0389	6.1%	0.0692	1.6%
K09-29A-19	1383	125	1202	401	22	12578	0.843	0.0167	3.6%	0.0141	10.5%	0.0807	8.2%
K09–29A–20	1576	15	525	282	158	12663	0.962	0.2802	0.9%	0.0813	5.6%	0.1074	1.1%
K09–29A–21	2537	41	5249	234	59	21873	0.841	0.0118	2.2%	0.0178	9.8%	0.1208	2.8%
K09-29A-22	33	6	5269	385	28	17420	0.838	0.0062	2.2%	0.0023	8.2%	0.0483	2.5%
K09-29B-1	29	3	574007	263091	6692	32415	0.838	0.0068	5.1%	0.0119	10.7%	0.3435	6.1%
K09-29B-2	29	1	610796	182956	7344	35078	0.838	0.0068	3.1%	0.0184	7.5%	0.3200	4.0%
K09-29B-3	33	1	2097	3013	15	10920	0.838	0.0053	2.0%	0.0019	6.3%	0.0542	6.0%
K09-29B-4	35	1	421	168	2	10752	0.838	0.0055	2.3%	0.0018	10.2%	0.0529	7.1%
K09-29B-5	35	1	619	184	3	11001	0.838	0.0055	2.2%	0.0018	9.6%	0.0518	6.2%
K09-29B-6	35	1	780	243	5	11295	0.838	0.0059	2.7%	0.0039	8.8%	0.0995	5.4%
K09-29B-7	35	1	752	319	4	10716	0.838	0.0056	1.8%	0.0023	7.9%	0.0582	5.5%
K09-29B-8	36	1	1065	1085	7	9389	0.838	0.0056	1.7%	0.0019	5.7%	0.0532	4.7%

K09-29B-9	36	1	1196	1283	8	11183	0.838	0.0056	1.9%	0.0018	7.3%	0.0508	4.7%
K09-29B-10	36	1	832	278	5	11263	0.838	0.0056	2.2%	0.0018	9.6%	0.0504	5.9%
K09-29B-11	36	1	616	209	4	10686	0.838	0.0057	2.1%	0.0019	8.8%	0.0523	6.7%
K09-29B-12	37	1	513	168	3	12312	0.838	0.0058	2.4%	0.0030	10.5%	0.0619	6.9%
K09-29B-13	37	1	306	73	2	11383	0.838	0.0058	3.2%	0.0024	13.8%	0.0464	10.0%
K09-29B-14	37	1	964	471	6	10069	0.838	0.0058	2.5%	0.0018	8.3%	0.0440	7.0%
K09-29B-15	38	1	570	926	5	9971	0.838	0.0061	2.3%	0.0021	5.8%	0.0707	7.1%
K09-29B-16	40	2	267	136	2	9056	0.838	0.0064	3.8%	0.0018	12.9%	0.0594	11.3%
K09-29B-17	55	14	315	88	26	12087	0.868	0.0767	3.2%	0.0248	12.2%	0.0576	9.7%
K09-30-1	31	1	569	198	9	11882	0.841	0.0138	4.8%	0.0047	17.0%	0.0633	6.6%
K09-30-2	284	4	194	34	9	11173	0.855	0.0459	1.4%	0.0366	5.8%	0.0672	3.0%
K09-30-3	415	5	279	95	20	10584	0.864	0.0675	1.2%	0.0370	4.2%	0.0674	1.9%
K09-30-4	502	5	305	114	27	10820	0.870	0.0822	1.0%	0.0372	4.3%	0.0695	1.8%
K09-30-5	600	9	337	144	33	12235	0.875	0.0917	1.4%	0.0355	4.7%	0.0646	1.8%
K09-30-6	611	9	232	3	17	12784	0.871	0.0835	2.0%	0.0690	10.9%	0.0694	2.5%
K09-30-7	612	7	142	117	17	9050	0.878	0.1004	1.2%	0.0378	4.2%	0.0672	2.3%
K09-30-8	617	7	271	11	25	12673	0.878	0.0987	1.6%	0.0460	12.2%	0.0654	3.2%
K09-30-9	651	21	116	74	13	10034	0.882	0.1075	3.4%	0.0426	8.3%	0.0704	4.8%
K09-30-10	662	14	226	127	25	9528	0.879	0.1023	1.2%	0.0362	4.4%	0.0665	1.8%
K09-30-11	666	7	727	4	9	12852	0.842	0.0151	4.7%	0.0451	47.3%	0.0596	7.6%
K09-30-12	673	7	161	204	23	9036	0.883	0.1107	1.1%	0.0362	3.8%	0.0671	2.1%
K09-30-13	684	9	141	121	18	10230	0.884	0.1122	1.3%	0.0364	4.2%	0.0650	2.2%

K09-30-14	684	65	596	166	54	11414	0.873	0.0880	0.9%	0.0346	4.3%	0.0657	1.5%
K09-30-15	755	8	284	173	39	9770	0.889	0.1246	1.0%	0.0414	3.8%	0.0663	1.7%
K09-30-16	758	8	115	101	17	8793	0.889	0.1251	1.2%	0.0401	4.4%	0.0659	2.5%
K09-30-17	768	150	281	28	22	12152	0.872	0.0864	1.9%	0.0420	6.1%	0.0660	2.3%
K09-30-18	777	8	536	214	71	11093	0.891	0.1286	1.0%	0.0415	3.8%	0.0687	1.0%
K09-30-19	781	7	633	538	97	9962	0.892	0.1300	1.0%	0.0448	3.5%	0.0731	1.3%
K09-30-20	798	12	70	41	10	12037	0.893	0.1323	1.5%	0.0420	5.4%	0.0692	2.9%
K09-30-21	809	140	351	91	25	11155	0.866	0.0718	1.6%	0.0451	5.6%	0.0692	2.9%
K09-30-22	814	50	182	246	26	8721	0.882	0.1079	1.4%	0.0344	4.6%	0.0701	3.0%
K09-30-23	823	81	606	291	71	12167	0.883	0.1104	1.3%	0.0392	4.2%	0.0665	1.8%
K09-30-24	840	70	267	30	11	12395	0.854	0.0441	4.6%	0.0221	8.8%	0.0690	2.9%
K09-30-25	846	140	569	198	9	11882	0.841	0.0138	4.8%	0.0047	17.0%	0.0633	6.6%
K09-30-26	851	8	213	145	32	10329	0.895	0.1373	0.9%	0.0416	4.0%	0.0677	1.5%
K09-30-27	855	38	54	46	8	9244	0.892	0.1314	1.5%	0.0426	4.8%	0.0712	3.1%
K09-30-28	855	48	269	146	36	9982	0.887	0.1202	1.3%	0.0409	5.3%	0.0682	2.8%
K09-30-29	871	50	147	88	20	9905	0.891	0.1280	1.2%	0.0423	4.5%	0.0692	2.0%
K09-30-30	1891	110	120	25	16	9493	0.890	0.1273	1.2%	0.0932	5.7%	0.1101	2.4%
K09-40-1	29	0	1111	36	4	16193	0.837	0.0044	1.7%	0.0015	19.7%	0.0455	4.7%
K09-40-2	29	1	189	78	8	9957	0.851	0.0370	3.8%	0.0110	15.6%	0.0601	9.2%
K09-40-3	31	1	1152	11	5	15030	0.838	0.0048	3.6%	0.0107	41.0%	0.0443	9.8%
K09-40-4	32	1	527	151	12	13929	0.844	0.0210	3.2%	0.0113	10.1%	0.0526	9.6%
K09-40-5	33	1	951	19	4	18033	0.838	0.0051	1.9%	0.0025	23.5%	0.0495	5.2%

K09-40-6	33	1	1238	17	6	18173	0.838	0.0052	1.8%	0.0056	20.5%	0.0523	4.6%
K09-40-7	35	1	1631	8	8	18350	0.838	0.0054	1.9%	0.0007	154.0%	0.0457	5.0%
K09-40-8	35	1	840	3	4	26041	0.838	0.0056	1.6%	0.0327	15.4%	0.0596	4.2%
K09-40-9	36	1	1611	15	9	25218	0.838	0.0058	1.8%	0.0443	14.4%	0.0748	4.1%
K09-40-10	40	1	189	78	8	9957	0.851	0.0370	3.8%	0.0110	15.6%	0.0601	9.2%
K09-40-11	43	1	579	105	17	12088	0.847	0.0274	4.9%	0.0136	13.6%	0.0483	10.6%
K09-40-12	43	4	319	10	2	15490	0.838	0.0067	8.2%	0.0239	56.4%	0.0448	21.6%
K09-40-13	77	31	38	45	6	8066	0.887	0.1191	2.7%	0.0416	5.8%	0.0812	5.3%
K09-40-14	150	4	1152	11	5	15030	0.838	0.0048	3.6%	0.0107	41.0%	0.0443	9.8%
K09-40-15	151	2	1100	591	30	13528	0.845	0.0237	1.6%	0.0111	5.0%	0.0494	3.2%
K09-40-16	194	5	376	143	12	9491	0.848	0.0307	2.7%	0.0116	8.1%	0.0510	6.0%
K09-40-17	241	3	319	10	2	15490	0.838	0.0067	8.2%	0.0239	56.4%	0.0448	21.6%
K09-40-18	397	95	735	471	29	14561	0.849	0.0330	2.7%	0.0133	8.0%	0.0571	5.5%
K09-40-19	1233	85	38	45	6	8066	0.887	0.1191	2.7%	0.0416	5.8%	0.0812	5.3%
K09-44-1	480	5	679	773	64	10033	0.868	0.0775	1.1%	0.0250	5.8%	0.0587	2.2%
K09-44-2	503	7	155	59	13	9648	0.870	0.0814	1.4%	0.0279	5.2%	0.0601	2.5%
K09-44-3	507	11	97	167	11	9941	0.870	0.0820	2.2%	0.0252	7.1%	0.0589	5.6%
K09-44-4	509	6	555	392	59	11833	0.877	0.0964	1.0%	0.0307	3.6%	0.0602	1.3%
K09-44-5	541	8	345	601	40	10341	0.873	0.0875	1.4%	0.0247	5.9%	0.0578	2.9%
K09-44-6	661	20	45	17	5	8897	0.883	0.1104	3.0%	0.0430	14.2%	0.0800	6.7%
K09-44-7	674	9	329	61	34	11452	0.883	0.1098	1.3%	0.0340	8.7%	0.0585	2.6%
K09-44-8	679	10	158	137	20	6788	0.883	0.1110	1.6%	0.0336	7.2%	0.0621	3.4%

K09-44-9	700	12	116	60	14	8656	0.885	0.1144	1.7%	0.0352	8.1%	0.0606	4.2%
K09-44-10	787	8	158	78	21	9792	0.891	0.1299	1.0%	0.0410	4.4%	0.0655	1.9%
K09-44-11	876	70	1068	144	115	14084	0.884	0.1141	1.2%	0.0374	7.0%	0.0726	1.5%
K09-44-12	902	11	276	134	43	10645	0.901	0.1505	1.3%	0.0453	6.6%	0.0708	2.4%
K09-44-13	919	65	787	233	182	11354	0.936	0.2260	1.0%	0.0726	3.7%	0.1038	0.8%
K09-44-14	929	9	140	188	28	10558	0.903	0.1550	1.0%	0.0484	3.7%	0.0695	1.9%
K09-44-15	934	9	257	146	43	12488	0.903	0.1560	1.0%	0.0489	3.8%	0.0703	1.4%
K09-44-16	958	12	224	150	39	8202	0.905	0.1595	1.3%	0.0488	6.8%	0.0674	2.6%
K09-44-17	973	8	371	195	63	11043	0.906	0.1629	0.9%	0.0489	3.6%	0.0714	1.2%
K09-44-18	975	9	363	494	76	10877	0.907	0.1631	1.0%	0.0513	3.7%	0.0702	1.2%
K09-44-19	994	11	262	242	53	12928	0.909	0.1676	1.1%	0.0490	3.9%	0.0766	2.0%
K09-44-20	997	88	347	436	74	13276	0.911	0.1734	1.1%	0.0519	4.2%	0.0724	1.5%
K09-44-21	1004	12	103	51	18	9292	0.910	0.1700	1.2%	0.0545	4.8%	0.0796	2.1%
K09-44-22	1035	11	511	136	86	12049	0.912	0.1748	1.1%	0.0527	6.5%	0.0767	1.7%
K09-44-23	1503	33	32	32	10	8830	0.954	0.2650	2.3%	0.0806	8.4%	0.1015	4.0%
K09-44-24	2497	15	526	605	298	10672	1.031	0.4239	1.1%	0.1244	3.6%	0.1645	0.9%
K09-46-1	34	1	783	692	5	12223	0.838	0.0053	3.0%	0.0017	9.7%	0.0511	7.5%
K09-46-2	35	1	1027	939	7	10605	0.838	0.0054	2.4%	0.0019	7.8%	0.0534	6.7%
K09-46-3	35	1	1043	1248	7	10416	0.838	0.0055	3.5%	0.0017	9.5%	0.0531	10.8%
K09-46-4	35	1	2160	4331	18	9687	0.838	0.0055	1.9%	0.0018	6.3%	0.0505	4.9%
K09-46-5	36	1	1073	364	6	13660	0.838	0.0056	2.5%	0.0018	14.1%	0.0489	8.8%
K09-46-6	36	1	589	93	3	11556	0.838	0.0056	3.1%	0.0027	16.5%	0.0558	11.9%

K09-46-7	36	1	1125	698	7	13743	0.838	0.0057	2.4%	0.0017	9.2%	0.0524	5.7%
K09-46-8	37	1	2042	2518	14	12164	0.838	0.0059	2.0%	0.0019	11.3%	0.0506	5.4%
K09-46-9	38	1	1680	2090	12	11677	0.838	0.0059	1.7%	0.0020	6.8%	0.0468	5.0%
K09-46-10	38	2	3045	7088	34	7162	0.838	0.0064	3.9%	0.0024	10.2%	0.0934	5.7%
K09-46-11	40	3	347	336	2	9025	0.838	0.0064	7.3%	0.0018	16.1%	0.0630	18.0%
K09-53-1	232	4	443	145	16	12291	0.851	0.0366	1.6%	0.0113	8.8%	0.0505	4.1%
K09-53-2	238	3	1022	175	36	13687	0.851	0.0377	1.2%	0.0121	7.6%	0.0530	2.9%
K09-53-3	241	3	524	165	20	12417	0.852	0.0381	1.4%	0.0121	7.8%	0.0522	3.7%
K09-53-4	241	3	298	85	11	11466	0.852	0.0382	1.3%	0.0130	5.7%	0.0522	3.2%
K09-53-5	241	2	807	542	34	10719	0.852	0.0384	1.0%	0.0126	3.9%	0.0564	1.7%
K09-53-6	241	3	359	136	14	11939	0.852	0.0384	1.2%	0.0123	5.1%	0.0554	2.7%
K09-53-7	242	5	346	83	13	12647	0.852	0.0383	1.9%	0.0127	8.4%	0.0536	4.5%
K09-53-8	242	4	477	99	17	13137	0.852	0.0385	1.6%	0.0124	8.0%	0.0557	3.9%
K09-53-9	243	4	464	123	17	12043	0.852	0.0386	1.6%	0.0125	7.6%	0.0556	4.0%
K09-53-10	243	11	263	66	10	12232	0.853	0.0411	1.6%	0.0142	6.1%	0.0555	3.4%
K09-53-11	243	7	408	53	69	13105	0.907	0.1642	2.5%	0.0501	13.6%	0.0789	4.4%
K09-53-12	244	3	439	147	17	11449	0.852	0.0386	1.2%	0.0118	5.0%	0.0515	2.3%
K09-53-13	244	5	1646	1722	73	11145	0.852	0.0388	2.2%	0.0118	4.6%	0.0548	1.8%
K09-53-14	244	4	507	156	19	12349	0.852	0.0386	1.6%	0.0121	7.2%	0.0511	3.6%
K09-53-15	245	2	1142	265	42	12821	0.852	0.0387	0.9%	0.0122	4.6%	0.0503	1.7%
K09-53-16	245	3	245	53	9	12495	0.852	0.0388	1.3%	0.0136	6.6%	0.0510	3.3%
K09-53-17	246	3	337	97	13	11949	0.852	0.0388	1.2%	0.0122	5.4%	0.0496	2.7%

K09-53-18	246	4	379	73	14	12699	0.852	0.0390	1.7%	0.0125	9.2%	0.0527	4.4%
K09-53-19	246	3	536	305	22	11753	0.852	0.0390	1.1%	0.0126	4.1%	0.0517	2.2%
K09-53-20	246	4	543	132	20	12330	0.852	0.0391	1.5%	0.0129	7.2%	0.0545	3.9%
K09-53-21	247	3	433	262	19	10124	0.852	0.0393	1.2%	0.0131	4.3%	0.0558	2.3%
K09-53-22	247	3	364	90	14	12636	0.852	0.0390	1.3%	0.0126	5.5%	0.0512	2.7%
K09-53-23	248	4	416	114	16	12571	0.852	0.0393	1.5%	0.0135	8.3%	0.0534	4.1%
K09-53-24	249	4	470	136	18	12917	0.852	0.0394	1.5%	0.0128	7.6%	0.0523	3.7%
K09-53-25	249	4	436	117	17	12465	0.852	0.0395	1.5%	0.0123	7.7%	0.0523	3.7%
K09-53-26	250	6	562	88	20	13347	0.851	0.0380	1.4%	0.0121	8.3%	0.0548	3.2%
K09-53-27	250	4	474	140	18	12337	0.852	0.0396	1.5%	0.0135	7.8%	0.0521	3.8%
K09-53-28	250	3	490	163	19	12762	0.852	0.0396	1.2%	0.0127	4.5%	0.0526	2.4%
K09-53-29	250	4	522	293	22	10684	0.852	0.0396	1.5%	0.0139	6.4%	0.0528	3.7%
K09-53-30	250	3	704	473	31	10962	0.852	0.0397	1.1%	0.0131	4.2%	0.0538	2.1%
K09-53-31	250	3	456	205	19	11531	0.852	0.0398	1.2%	0.0130	4.5%	0.0546	2.4%
K09-53-32	251	5	369	97	14	12268	0.852	0.0397	2.0%	0.0129	7.5%	0.0513	3.2%
K09-53-33	253	5	1277	224	47	13040	0.852	0.0401	2.1%	0.0120	6.0%	0.0520	1.6%
K09-53-34	253	6	156	69	6	11769	0.852	0.0403	2.4%	0.0120	8.1%	0.0560	5.2%
K09-53-35	253	5	271	99	11	11662	0.852	0.0400	2.1%	0.0127	7.1%	0.0500	3.9%
K09-53-36	254	9	732	400	81	13090	0.876	0.0951	5.2%	0.0328	7.9%	0.0745	2.3%
K09-53-37	254	9	438	120	22	12173	0.857	0.0503	2.5%	0.0219	7.6%	0.0777	2.8%
K09-53-38	257	6	642	287	25	11665	0.853	0.0406	2.4%	0.0124	5.9%	0.0506	2.4%
K09-53-39	258	5	1811	260	67	13512	0.853	0.0409	2.0%	0.0121	5.7%	0.0513	1.7%
K09-53-40	258	6	420	155	17	11757	0.853	0.0409	2.2%	0.0126	6.5%	0.0521	3.1%

259	5	351	91	14	12666	0.853	0.0409	1.9%	0.0125	8.5%	0.0489	4.6%
262	4	572	174	23	12395	0.853	0.0415	1.6%	0.0124	6.8%	0.0533	3.4%
263	6	677	123	27	12396	0.853	0.0421	2.3%	0.0141	7.3%	0.0588	2.5%
267	38	475	77	26	11714	0.862	0.0638	2.6%	0.0154	10.8%	0.0619	3.0%
319	45	455	113	56	11964	0.887	0.1209	1.3%	0.0490	4.0%	0.1040	1.1%
356	31	671	47	54	14837	0.871	0.0825	1.9%	0.0339	13.5%	0.0671	3.8%
375	15	301	191	22	10212	0.863	0.0659	1.2%	0.0229	4.0%	0.0649	2.1%
603	6	229	216	26	12094	0.878	0.0985	1.0%	0.0312	3.9%	0.0636	2.3%
972	24	408	53	69	13105	0.907	0.1642	2.5%	0.0501	13.6%	0.0789	4.4%
973	10	712	314	121	13073	0.907	0.1635	1.0%	0.0513	3.6%	0.0744	0.9%
1056	115	486	136	54	11628	0.883	0.1104	1.3%	0.0408	4.1%	0.0713	1.3%
1129	180	720	196	79	12660	0.879	0.1021	1.5%	0.0526	5.4%	0.0822	2.1%
1144	90	475	77	26	11714	0.862	0.0638	2.6%	0.0154	10.8%	0.0619	3.0%
1339	28	540	304	64	11721	0.882	0.1083	1.6%	0.0385	4.7%	0.0862	1.4%
1560	215	671	47	54	14837	0.871	0.0825	1.9%	0.0339	13.5%	0.0671	3.8%
1703	310	263	66	10	12232	0.853	0.0411	1.6%	0.0142	6.1%	0.0555	3.4%
2098	90	455	113	56	11964	0.887	0.1209	1.3%	0.0490	4.0%	0.1040	1.1%
2509	445	301	191	22	10212	0.863	0.0659	1.2%	0.0229	4.0%	0.0649	2.1%
2635	140	438	120	22	12173	0.857	0.0503	2.5%	0.0219	7.6%	0.0777	2.8%
2635	140	732	400	81	13090	0.876	0.0951	5.2%	0.0328	7.9%	0.0745	2.3%
250	3	667	113	142	12789	0.930	0.2136	0.9%	0.0666	4.0%	0.0879	1.0%
251	3	635	249	47	11115	0.866	0.0723	0.9%	0.0227	3.6%	0.0562	1.5%
	262 263 267 319 356 375 603 972 973 1056 1129 1144 1339 1560 1703 2098 2509 2635 2635	26242636267383194535631375156036972249731010561151129180114490133928156021517033102098902509445263514026351402503	262  4  572    263  6  677    267  38  475    319  45  455    356  31  671    375  15  301    603  6  229    972  24  408    973  10  712    1056  115  486    1129  180  720    1144  90  475    1339  28  540    1560  215  671    1703  310  263    2098  90  455    2509  445  301    2635  140  438    2635  140  732	262  4  572  174    263  6  677  123    267  38  475  77    319  45  455  113    356  31  671  47    375  15  301  191    603  6  229  216    972  24  408  53    973  10  712  314    1056  115  486  136    1129  180  720  196    1144  90  475  77    1339  28  540  304    1560  215  671  47    1703  310  263  66    2098  90  455  113    2509  445  301  191    2635  140  438  120    2635  140  732  400	262  4  572  174  23    263  6  677  123  27    267  38  475  77  26    319  45  455  113  56    356  31  671  47  54    375  15  301  191  22    603  6  229  216  26    972  24  408  53  69    973  10  712  314  121    1056  115  486  136  54    1129  180  720  196  79    1144  90  475  77  26    1339  28  540  304  64    1560  215  671  47  54    1703  310  263  66  10    2098  90  455  113  56    2509  445  301  191  22    2635  140  438  120  22	262  4  572  174  23  12395    263  6  677  123  27  12396    267  38  475  77  26  11714    319  45  455  113  56  11964    356  31  671  47  54  14837    375  15  301  191  22  10212    603  6  229  216  26  12094    972  24  408  53  69  13105    973  10  712  314  121  13073    1056  115  486  136  54  11628    1129  180  720  196  79  12660    1144  90  475  77  26  11714    1339  28  540  304  64  11721    1560  215  671  47  54  14837    1703  310  263  66  10  12232    2098 <t< th=""><th>262  4  572  174  23  12395  0.853    263  6  677  123  27  12396  0.853    267  38  475  77  26  11714  0.862    319  45  455  113  56  11964  0.887    356  31  671  47  54  14837  0.871    375  15  301  191  22  10212  0.863    603  6  229  216  26  12094  0.878    972  24  408  53  69  13105  0.907    973  10  712  314  121  13073  0.907    1056  115  486  136  54  11628  0.883    1129  180  720  196  79  12660  0.879    1144  90  475  77  26  11714  0.862    1339  28  540  304  64  11721  0.883    2098</th><th>262  4  572  174  23  12395  0.853  0.0415    263  6  677  123  27  12396  0.853  0.0421    267  38  475  77  26  11714  0.862  0.0638    319  45  455  113  56  11964  0.887  0.1209    356  31  671  47  54  14837  0.871  0.0825    375  15  301  191  22  10212  0.863  0.0659    603  6  229  216  26  12094  0.878  0.0985    972  24  408  53  69  13105  0.907  0.1642    973  10  712  314  121  13073  0.907  0.1635    1056  115  486  136  54  11628  0.883  0.1104    1129  180  720  196  79  12660  0.879  0.1021    1144  90  475  77  26</th></t<> <th>262  4  572  174  23  12395  0.853  0.0415  1.6%    263  6  677  123  27  12396  0.853  0.0421  2.3%    267  38  475  77  26  11714  0.862  0.0638  2.6%    319  45  455  113  56  11964  0.887  0.1209  1.3%    356  31  671  47  54  14837  0.871  0.0825  1.9%    375  15  301  191  22  10212  0.863  0.0659  1.2%    603  6  229  216  26  12094  0.878  0.0985  1.0%    972  24  408  53  69  13105  0.907  0.1642  2.5%    973  10  712  314  121  13073  0.907  0.1635  1.0%    1129  180  720  196  79  12660  0.879  0.1021  1.5%    1133  28  540  3</th> <th>262  4  572  174  23  12395  0.853  0.0415  1.6%  0.0124    263  6  677  123  27  12396  0.853  0.0421  2.3%  0.0141    267  38  475  77  26  11714  0.862  0.638  2.6%  0.0154    319  45  455  113  56  11964  0.887  0.1209  1.3%  0.0490    356  31  671  47  54  14837  0.871  0.0825  1.9%  0.0229    603  6  229  216  26  12094  0.878  0.0985  1.0%  0.0511    972  24  408  53  69  13105  0.907  0.1642  2.5%  0.0501    973  10  712  314  121  13073  0.907  0.1635  1.0%  0.0526    1144  90  475  77  26  11714  0.862  0.638  2.6%  0.0154    1339  28  540  304</th> <th>262  4  572  174  23  12395  0.853  0.0415  1.6%  0.0124  6.8%    263  6  677  123  27  12396  0.853  0.0415  1.6%  0.0124  6.8%    267  38  475  77  26  11714  0.862  0.0638  2.6%  0.0154  10.8%    319  45  455  113  56  11964  0.887  0.1209  1.3%  0.0490  4.0%    356  31  671  47  54  14837  0.871  0.0825  1.9%  0.0339  13.5%    375  15  301  191  22  10212  0.863  0.0659  1.2%  0.0229  4.0%    603  6  229  216  26  1294  0.878  0.0985  1.0%  0.0312  3.9%    972  24  408  53  69  13105  0.907  0.1635  1.0%  0.0513  3.6%    1703  10  712  314  121  13073</th> <th>262  4  572  174  23  12395  0.853  0.0415  1.6%  0.0124  6.8%  0.0533    263  6  677  123  27  12396  0.853  0.0415  1.6%  0.0124  6.8%  0.0538    267  38  475  77  26  11714  0.862  0.0638  2.6%  0.0154  10.8%  0.0619    319  45  455  113  56  11964  0.887  0.1209  1.3%  0.0400  4.0%  0.1040    356  31  671  47  54  14837  0.871  0.0825  1.9%  0.0339  13.5%  0.0671    375  15  301  191  22  10212  0.863  0.0659  12%  0.0229  4.0%  0.0649    603  6  229  216  26  12094  0.878  0.0985  1.0%  0.0312  3.9%  0.0636    971  10  712  314  121  13073  0.907  0.1642  2.5%  0.0513  <th< th=""></th<></th>	262  4  572  174  23  12395  0.853    263  6  677  123  27  12396  0.853    267  38  475  77  26  11714  0.862    319  45  455  113  56  11964  0.887    356  31  671  47  54  14837  0.871    375  15  301  191  22  10212  0.863    603  6  229  216  26  12094  0.878    972  24  408  53  69  13105  0.907    973  10  712  314  121  13073  0.907    1056  115  486  136  54  11628  0.883    1129  180  720  196  79  12660  0.879    1144  90  475  77  26  11714  0.862    1339  28  540  304  64  11721  0.883    2098	262  4  572  174  23  12395  0.853  0.0415    263  6  677  123  27  12396  0.853  0.0421    267  38  475  77  26  11714  0.862  0.0638    319  45  455  113  56  11964  0.887  0.1209    356  31  671  47  54  14837  0.871  0.0825    375  15  301  191  22  10212  0.863  0.0659    603  6  229  216  26  12094  0.878  0.0985    972  24  408  53  69  13105  0.907  0.1642    973  10  712  314  121  13073  0.907  0.1635    1056  115  486  136  54  11628  0.883  0.1104    1129  180  720  196  79  12660  0.879  0.1021    1144  90  475  77  26	262  4  572  174  23  12395  0.853  0.0415  1.6%    263  6  677  123  27  12396  0.853  0.0421  2.3%    267  38  475  77  26  11714  0.862  0.0638  2.6%    319  45  455  113  56  11964  0.887  0.1209  1.3%    356  31  671  47  54  14837  0.871  0.0825  1.9%    375  15  301  191  22  10212  0.863  0.0659  1.2%    603  6  229  216  26  12094  0.878  0.0985  1.0%    972  24  408  53  69  13105  0.907  0.1642  2.5%    973  10  712  314  121  13073  0.907  0.1635  1.0%    1129  180  720  196  79  12660  0.879  0.1021  1.5%    1133  28  540  3	262  4  572  174  23  12395  0.853  0.0415  1.6%  0.0124    263  6  677  123  27  12396  0.853  0.0421  2.3%  0.0141    267  38  475  77  26  11714  0.862  0.638  2.6%  0.0154    319  45  455  113  56  11964  0.887  0.1209  1.3%  0.0490    356  31  671  47  54  14837  0.871  0.0825  1.9%  0.0229    603  6  229  216  26  12094  0.878  0.0985  1.0%  0.0511    972  24  408  53  69  13105  0.907  0.1642  2.5%  0.0501    973  10  712  314  121  13073  0.907  0.1635  1.0%  0.0526    1144  90  475  77  26  11714  0.862  0.638  2.6%  0.0154    1339  28  540  304	262  4  572  174  23  12395  0.853  0.0415  1.6%  0.0124  6.8%    263  6  677  123  27  12396  0.853  0.0415  1.6%  0.0124  6.8%    267  38  475  77  26  11714  0.862  0.0638  2.6%  0.0154  10.8%    319  45  455  113  56  11964  0.887  0.1209  1.3%  0.0490  4.0%    356  31  671  47  54  14837  0.871  0.0825  1.9%  0.0339  13.5%    375  15  301  191  22  10212  0.863  0.0659  1.2%  0.0229  4.0%    603  6  229  216  26  1294  0.878  0.0985  1.0%  0.0312  3.9%    972  24  408  53  69  13105  0.907  0.1635  1.0%  0.0513  3.6%    1703  10  712  314  121  13073	262  4  572  174  23  12395  0.853  0.0415  1.6%  0.0124  6.8%  0.0533    263  6  677  123  27  12396  0.853  0.0415  1.6%  0.0124  6.8%  0.0538    267  38  475  77  26  11714  0.862  0.0638  2.6%  0.0154  10.8%  0.0619    319  45  455  113  56  11964  0.887  0.1209  1.3%  0.0400  4.0%  0.1040    356  31  671  47  54  14837  0.871  0.0825  1.9%  0.0339  13.5%  0.0671    375  15  301  191  22  10212  0.863  0.0659  12%  0.0229  4.0%  0.0649    603  6  229  216  26  12094  0.878  0.0985  1.0%  0.0312  3.9%  0.0636    971  10  712  314  121  13073  0.907  0.1642  2.5%  0.0513 <th< th=""></th<>

K09-60-3	257	5	213	158	9	10287	0.853	0.0407	2.1%	0.0134	8.8%	0.0517	5.5%
K09-60-4	257	5	252	386	14	8312	0.853	0.0408	2.0%	0.0129	7.0%	0.0541	4.7%
K09-60-5	257	4	368	214	16	11045	0.853	0.0406	1.7%	0.0121	8.0%	0.0494	4.6%
K09-60-6	258	3	115	71	9	10563	0.868	0.0767	1.2%	0.0236	4.6%	0.0554	3.5%
K09-60-7	259	5	213	235	10	8265	0.853	0.0410	2.1%	0.0129	7.0%	0.0529	5.1%
K09-60-8	261	5	223	106	9	9353	0.853	0.0411	1.8%	0.0132	9.4%	0.0481	5.3%
K09-60-9	263	4	476	481	23	11325	0.853	0.0415	1.6%	0.0132	6.5%	0.0500	3.7%
K09-60-10	263	3	259	186	17	11062	0.861	0.0600	1.1%	0.0193	3.8%	0.0542	2.7%
K09-60-11	263	7	110	88	5	7749	0.853	0.0419	2.8%	0.0122	9.5%	0.0545	7.7%
K09-60-12	271	2	1008	847	50	9305.822527	0.854	0.0430	0.9%	0.0142	3.4%	0.0546	1.6%
K09-60-13	272	3	735	286	31	10851	0.854	0.0430	1.2%	0.0141	7.1%	0.0493	2.9%
K09-60-14	280	3	963	544	45	10728	0.854	0.0444	1.1%	0.0142	6.5%	0.0534	2.6%
K09-60-15	281	4	731	311	33	11132	0.854	0.0446	1.3%	0.0142	6.9%	0.0530	2.7%
K09-60-16	317	3	1151	592	50	11995	0.853	0.0416	1.0%	0.0132	3.3%	0.0520	1.7%
K09-60-17	327	4	723	295	152	12323	0.926	0.2051	0.9%	0.0597	2.9%	0.0846	0.9%
K09-60-18	346	9	84	71	5	10085	0.859	0.0557	2.7%	0.0177	9.7%	0.0622	7.5%
K09-60-19	376	4	844	361	291	11283	0.984	0.3273	0.8%	0.0865	2.7%	0.1132	0.6%
K09-60-20	437	6	277	187	21	9686	0.865	0.0701	1.5%	0.0217	7.0%	0.0565	3.2%
K09-60-21	448	7	254	208	20	10995	0.866	0.0718	1.5%	0.0217	6.8%	0.0530	3.5%
K09-60-22	450	4	1826	1109	486	12095	0.946	0.2486	0.8%	0.0660	2.6%	0.0907	0.6%
K09-60-23	477	6	726	63	189	13137	0.957	0.2712	0.8%	0.0802	3.5%	0.0958	0.8%
K09-60-24	491	6	361	37	26	12443	0.869	0.0794	1.3%	0.0234	10.6%	0.0592	2.8%
K09-60-25	941	10	379	156	61	11110	0.904	0.1570	1.1%	0.0479	6.4%	0.0696	1.9%

K09-60-26	1003	12	310	115	53	10665	0.909	0.1686	1.3%	0.0538	6.5%	0.0738	1.8%
K09-60-27	1196	10	405	280	17	10183	0.852	0.0397	1.1%	0.0120	3.9%	0.0530	2.7%
K09-60-28	1248	12	1050	250	218	13472	0.930	0.2127	1.0%	0.0644	6.0%	0.0787	1.1%
K09-60-29	1400	29	1008	847	50	9306	0.854	0.0430	0.9%	0.0142	3.4%	0.0546	1.6%
K09-60-30	1430	10	1822	222	86	13190	0.857	0.0506	1.0%	0.0195	3.8%	0.0548	1.1%
K09-60-31	1486	13	167	214	62	9907	0.969	0.2965	1.0%	0.0835	3.0%	0.1016	1.2%
K09-60-32	1512	15	575	896	200	10177	0.953	0.2629	1.0%	0.0786	5.4%	0.0895	1.3%
K09-60-33	1547	11	607	92	194	12598	0.984	0.3260	0.8%	0.0901	3.2%	0.1089	0.7%
K09-60-34	1623	21	129	136	45	8606	0.965	0.2866	1.3%	0.0843	6.3%	0.1007	2.2%
K09-60-35	1676	16	213	78	8	11301	0.852	0.0396	1.3%	0.0120	5.3%	0.0509	3.6%
K09-60-36	1822	14	374	160	16	10341	0.853	0.0411	1.1%	0.0141	4.4%	0.0575	2.5%
K09-60-37	1824	14	260	253	16	10211	0.857	0.0521	1.1%	0.0161	3.7%	0.0530	2.6%
K09-60-38	1935	19	346	55	117	12046	0.994	0.3479	1.0%	0.0988	6.8%	0.1132	1.2%
K09-60-39	2013	19	625	183	228	12460	1.002	0.3637	0.9%	0.1007	5.7%	0.1170	0.9%
K09-60-40	2492	43	413	198	223	11493	1.053	0.4684	1.6%	0.1296	7.0%	0.1569	2.2%
K09-60-41	2503	27	521	269	275	11937	1.057	0.4764	1.0%	0.1327	5.7%	0.1684	0.8%
K09-60-42	2754	38	99	66	62	8275	1.085	0.5363	1.2%	0.1466	6.4%	0.1969	1.4%
K09-61-1	410	5	307	260	24	8361	0.863	0.0659	1.3%	0.0203	4.8%	0.0578	3.0%
K09-61-2	428	6	175	212	14	9151	0.864	0.0682	1.5%	0.0200	5.4%	0.0505	4.1%
K09-61-3	442	4	318	230	26	10569	0.866	0.0715	1.3%	0.0247	5.0%	0.0671	2.3%
K09-61-4	451	4	538	511	46	10870	0.866	0.0726	1.0%	0.0233	4.3%	0.0578	1.5%
K09-61-5	494	11	210	114	17	8962	0.867	0.0753	1.4%	0.0259	4.6%	0.0576	2.1%

K09-61-6	548	5	594	454	61	10957	0.874	0.0899	1.0%	0.0295	4.4%	0.0692	1.6%
K09-61-7	616	9	282	149	33	10280	0.880	0.1029	1.5%	0.0407	5.7%	0.0811	2.4%
K09-61-8	787	7	600	269	80	12998	0.892	0.1300	0.9%	0.0416	4.4%	0.0656	1.2%
K09-61-9	824	12	78	62	12	9278	0.895	0.1366	1.5%	0.0411	5.2%	0.0683	2.4%
K09-61-10	834	24	520	112	74	13674	0.899	0.1471	1.0%	0.0422	5.0%	0.0759	1.1%
K09-61-11	861	8	799	305	119	13562	0.898	0.1445	1.0%	0.0470	4.2%	0.0771	1.0%
K09-61-12	866	14	323	203	47	10094	0.898	0.1438	1.7%	0.0450	5.9%	0.0678	2.6%
K09-61-13	914	8	617	314	98	12639	0.902	0.1529	1.0%	0.0484	4.2%	0.0722	0.9%
K09-61-14	915	8	1137	264	167	11359	0.902	0.1526	0.9%	0.0431	4.9%	0.0706	1.0%
K09-61-15	929	10	316	108	49	11631	0.903	0.1551	1.2%	0.0465	5.4%	0.0707	1.6%
K09-61-16	946	10	216	210	39	11996	0.905	0.1590	1.1%	0.0479	5.1%	0.0753	1.9%
K09-61-17	952	11	641	88	98	13968	0.905	0.1592	1.3%	0.0529	4.6%	0.0711	1.1%
K09-61-18	952	8	350	216	60	12601	0.905	0.1599	0.9%	0.0475	4.5%	0.0749	1.2%
K09-61-19	968	40	1229	314	150	12361	0.889	0.1235	1.5%	0.0369	4.1%	0.0709	0.7%
K09-61-20	969	10	455	191	74	12262	0.906	0.1620	1.1%	0.0492	4.8%	0.0707	1.3%
K09-61-21	984	10	430	276	80	10285	0.909	0.1674	1.0%	0.0629	4.8%	0.0840	1.6%
K09-61-22	992	9	793	339	133	8910	0.908	0.1664	0.9%	0.0490	4.6%	0.0723	1.1%
K09-61-23	1005	10	429	76	72	13646	0.910	0.1700	1.1%	0.0651	5.3%	0.0793	1.1%
K09-61-24	1015	8	1208	75	191	13846	0.910	0.1709	0.9%	0.0545	6.3%	0.0751	0.7%
K09-61-25	1016	15	908	294	143	10032	0.910	0.1706	1.5%	0.0441	5.8%	0.0728	1.5%
K09-61-26	1027	19	312	5	47	13284	0.906	0.1624	1.1%	0.0564	9.4%	0.0737	1.2%
K09-61-27	1027	9	1050	124	172	13386	0.912	0.1741	0.9%	0.0315	7.8%	0.0802	0.9%
K09-61-28	1028	12	373	56	62	12449	0.911	0.1724	1.2%	0.0557	7.6%	0.0713	1.7%

K09-61-29	1041	11	174	70	32	10722	0.912	0.1751	1.1%	0.0533	5.7%	0.0732	1.6%
K09-61-30	1046	13	147	122	30	10953	0.913	0.1763	1.3%	0.0541	4.6%	0.0752	1.6%
K09-61-31	1079	9	774	299	139	10620	0.915	0.1806	1.3%	0.0527	4.9%	0.0767	1.1%
K09-61-32	1082	29	449	314	99	10788	0.920	0.1929	1.4%	0.0510	7.3%	0.1088	1.9%
K09-61-33	1082	14	235	177	50	9821	0.915	0.1820	1.2%	0.0530	4.3%	0.0754	1.6%
K09-61-34	1098	10	191	125	38	9352	0.917	0.1854	1.0%	0.0550	4.7%	0.0750	1.4%
K09-61-35	1106	10	350	75	63	12333	0.918	0.1878	1.0%	0.0575	5.7%	0.0789	1.4%
K09-61-36	1135	9	702	34	126	14337	0.920	0.1930	0.9%	0.0958	7.0%	0.0796	0.8%
K09-61-37	1195	18	325	191	69	10266	0.921	0.1942	1.2%	0.0595	3.8%	0.0773	1.2%
K09-61-38	1217	39	793	40	134	13634	0.910	0.1715	0.9%	0.1787	6.1%	0.0891	0.8%
K09-61-39	1272	21	1184	345	262	12380	0.929	0.2108	1.1%	0.0618	5.4%	0.0880	1.0%
K09-61-40	1297	14	306	173	72	12118	0.935	0.2246	1.1%	0.0661	4.8%	0.0908	1.4%
K09-61-41	1398	29	163	171	98	10154	1.053	0.4695	1.2%	0.1290	3.8%	0.1635	0.9%
K09-61-42	1407	13	351	85	87	12815	0.944	0.2437	1.0%	0.0702	4.2%	0.0881	0.9%
K09-61-43	1420	26	306	75	83	13088	0.946	0.2476	1.7%	0.0777	6.1%	0.1065	1.6%
K09-61-44	1458	16	356	151	100	10209	0.953	0.2619	1.1%	0.0973	4.6%	0.1186	1.1%
K09-61-45	1522	15	350	298	110	10396	0.955	0.2673	1.1%	0.0839	4.1%	0.0980	0.9%
K09-61-46	1666	20	157	245	61	9735	0.972	0.3018	1.2%	0.0831	4.6%	0.1222	1.6%
K09-61-47	1692	14	233	164	79	9182	0.972	0.3014	0.9%	0.0872	4.1%	0.1075	0.9%
K09-61-48	1777	17	441	271	154	10839	0.979	0.3171	1.1%	0.0903	3.6%	0.1075	0.7%
K09-61-49	1889	24	127	124	53	9164	0.989	0.3369	1.5%	0.0877	4.0%	0.1062	1.4%
K09-61-50	2296	26	808	766	452	11028	1.037	0.4363	1.3%	0.1171	3.8%	0.1630	0.8%
K09-61-51	2374	14	1085	680	443	10798	1.006	0.3724	1.0%	0.0960	4.4%	0.1529	0.6%

K09-61-52	2461	14	163	171	98	10154	1.053	0.4695	1.2%	0.1290	3.8%	0.1635	0.9%
K09-61-53	2466	11	421	123	101	11440	0.927	0.2072	1.7%	0.1191	4.0%	0.1349	0.9%
K09-61-54	2480	16	632	283	312	12372	1.040	0.4420	1.2%	0.1071	5.3%	0.1632	1.0%
K09-61-55	2482	27	144	87	59	10579	1.005	0.3701	1.1%	0.0993	5.0%	0.1640	1.0%
K09-61-56	2483	21	1088	206	530	12324	1.054	0.4701	1.0%	0.1315	4.4%	0.1629	0.6%
K09-61-57	2495	16	233	144	107	10015	1.012	0.3849	1.2%	0.1087	4.6%	0.1631	0.9%
K09-61-58	2510	30	350	176	158	11093	1.024	0.4089	1.0%	0.1010	4.3%	0.1634	0.6%
K09-61-59	2516	45	335	199	155	10847	1.032	0.4242	1.0%	0.0677	6.3%	0.1685	0.7%
K09-62-1	212	33	324	241	14	7611	0.851	0.0381	1.2%	0.0116	4.0%	0.0513	3.0%
K09-62-2	241	3	178	66	29	12094	0.904	0.1578	0.9%	0.0471	3.8%	0.0693	1.7%
K09-62-3	244	3	1362	978	59	10064	0.852	0.0390	1.3%	0.0120	5.1%	0.0586	2.0%
K09-62-4	247	3	1291	377	50	13507	0.852	0.0391	1.4%	0.0121	5.4%	0.0530	1.9%
K09-62-5	248	4	717	320	29	10876	0.852	0.0392	1.6%	0.0119	5.8%	0.0501	2.2%
K09-62-6	250	3	682	332	28	11535	0.852	0.0396	1.3%	0.0128	6.3%	0.0519	3.1%
K09-62-7	250	4	281	160	12	7782	0.852	0.0395	1.7%	0.0119	6.4%	0.0491	3.9%
K09-62-8	252	4	451	177	18	10952	0.852	0.0401	1.6%	0.0132	7.3%	0.0548	3.6%
K09-62-9	253	3	720	286	29	11518	0.852	0.0400	1.4%	0.0128	6.4%	0.0511	3.3%
K09-62-10	259	4	574	209	24	11386	0.853	0.0410	1.5%	0.0135	6.5%	0.0512	3.4%
K09-62-11	260	3	252	81	10	11823	0.853	0.0412	1.3%	0.0126	5.3%	0.0525	3.5%
K09-62-12	261	3	893	265	36	11034	0.853	0.0414	1.0%	0.0127	4.3%	0.0523	2.1%
K09-62-13	264	3	479	130	19	13680	0.853	0.0418	1.0%	0.0127	4.5%	0.0512	2.2%
K09-62-14	268	5	275	158	12	10749	0.853	0.0427	1.7%	0.0137	7.1%	0.0554	4.6%

K09-62-15	270	4	248	164	11	10151	0.853	0.0428	1.7%	0.0132	6.5%	0.0530	3.4%
K09-62-16	278	3	1169	337	51	12831	0.854	0.0440	0.9%	0.0137	3.7%	0.0512	1.6%
K09-62-17	284	4	1150	200	48	12240	0.854	0.0449	1.4%	0.0145	7.3%	0.0508	2.7%
K09-62-18	328	7	114	41	6	12595	0.857	0.0520	2.3%	0.0177	10.2%	0.0508	6.2%
K09-62-19	334	7	119	79	7	9553	0.858	0.0535	2.2%	0.0172	7.8%	0.0589	6.3%
K09-62-20	334	6	186	226	12	11101	0.858	0.0529	1.8%	0.0157	5.9%	0.0494	4.1%
K09-62-21	343	13	50	34	3	9517	0.859	0.0550	3.8%	0.0185	9.9%	0.0585	10.9%
K09-62-22	343	6	293	126	16	8426	0.859	0.0548	1.7%	0.0177	6.8%	0.0545	3.9%
K09-62-23	344	8	90	45	5	10067	0.859	0.0547	2.2%	0.0157	8.3%	0.0514	6.3%
K09-62-24	354	11	617	149	37	12011	0.860	0.0574	2.9%	0.0126	17.0%	0.0662	8.9%
K09-62-25	360	7	200	115	12	10545	0.860	0.0578	2.1%	0.0185	8.5%	0.0573	4.9%
K09-62-26	376	7	104	50	6	10633	0.861	0.0602	1.8%	0.0193	7.3%	0.0552	4.6%
K09-62-27	416	5	495	279	36	9544	0.864	0.0669	1.3%	0.0216	6.0%	0.0578	2.8%
K09-62-28	418	6	722	249	47	11230	0.864	0.0669	1.4%	0.0210	5.0%	0.0551	1.6%
K09-62-29	424	9	119	59	8	10454	0.864	0.0680	2.2%	0.0225	8.7%	0.0544	5.6%
K09-62-30	426	3	970	407	68	12646	0.864	0.0684	0.8%	0.0214	3.2%	0.0556	1.3%
K09-62-31	434	6	575	178	39	11098	0.865	0.0697	1.4%	0.0221	6.2%	0.0571	2.6%
K09-62-32	439	8	154	77	11	9543	0.865	0.0705	1.9%	0.0231	7.7%	0.0567	5.0%
K09-62-33	443	6	123	171	11	8999	0.866	0.0710	1.3%	0.0220	3.6%	0.0544	3.1%
K09-62-34	449	7	343	229	27	10561	0.866	0.0721	1.6%	0.0211	5.6%	0.0562	2.4%
K09-62-35	464	6	692	574	58	11557	0.867	0.0748	1.4%	0.0217	5.1%	0.0586	1.7%
K09-62-36	464	6	380	283	32	9782	0.867	0.0747	1.4%	0.0238	5.3%	0.0575	2.0%
K09-62-37	465	8	115	86	10	10476	0.867	0.0749	1.8%	0.0232	6.3%	0.0576	4.2%

K09-62-38	468	7	591	362	48	10736	0.867	0.0754	1.4%	0.0230	5.3%	0.0565	1.8%
K09-62-39	476	8	175	118	14	9890	0.868	0.0765	1.6%	0.0235	6.0%	0.0560	3.1%
K09-62-40	488	10	72	36	6	10790	0.869	0.0790	2.0%	0.0244	7.5%	0.0608	4.9%
K09-62-41	488	9	160	81	13	12338	0.869	0.0784	1.8%	0.0222	6.3%	0.0543	3.3%
K09-62-42	497	7	364	326	33	12160	0.869	0.0800	1.3%	0.0234	5.6%	0.0567	3.2%
K09-62-43	508	9	232	127	20	12064	0.871	0.0825	1.8%	0.0246	7.0%	0.0629	3.5%
K09-62-44	546	23	168	169	18	7845	0.875	0.0929	1.1%	0.0282	3.5%	0.0616	2.5%
K09-62-45	571	6	173	64	25	10084	0.898	0.1447	1.0%	0.0434	4.0%	0.0709	1.8%
K09-62-46	605	11	1015	969	106	12230	0.878	0.0987	1.8%	0.0276	5.3%	0.0607	2.1%
K09-62-47	625	6	241	175	27	9112	0.879	0.1020	1.0%	0.0301	3.5%	0.0615	1.9%
K09-62-48	735	11	173	217	26	10256	0.888	0.1217	1.5%	0.0357	5.3%	0.0695	2.1%
K09-62-49	868	8	752	146	97	12163	0.895	0.1388	2.8%	0.0497	5.7%	0.0816	1.5%
K09-62-50	879	9	2120	100	288	12892	0.899	0.1460	1.1%	0.0449	6.2%	0.0682	1.0%
K09-62-51	909	37	791	118	156	12985	0.924	0.1999	1.4%	0.0609	6.2%	0.1071	1.1%
K09-62-52	946	9	296	117	49	12287	0.905	0.1591	4.6%	0.0676	6.4%	0.1001	1.7%
K09-62-53	949	12	447	91	68	12691	0.904	0.1584	1.3%	0.0478	6.2%	0.0701	1.6%
K09-62-54	1014	14	144	72	26	11097	0.910	0.1710	1.4%	0.0548	6.3%	0.0761	2.7%
K09-62-55	1183	15	411	171	88	12688	0.924	0.2010	1.3%	0.0573	5.5%	0.0775	1.5%
K09-62-56	1202	15	803	361	173	10798	0.926	0.2055	1.3%	0.0618	4.7%	0.0822	0.9%
K09-62-57	1246	11	217	71	47	11045	0.930	0.2145	0.9%	0.0672	3.8%	0.0869	1.2%
K09-62-58	1535	12	1124	840	337	10969	0.955	0.2672	0.8%	0.0793	2.6%	0.0902	0.6%
K09-62-59	1769	55	483	47	162	12838	0.993	0.3454	0.8%	0.0959	3.7%	0.1146	0.7%
K09-62-60	1787	37	173	64	25	10084	0.898	0.1447	1.0%	0.0434	4.0%	0.0709	1.8%

K09-62-61	1918	15	178	66	29	12094	0.904	0.1578	0.9%	0.0471	3.8%	0.0693	1.7%
K09-62-62	1938	23	293	89	106	11600	0.995	0.3490	1.2%	0.0980	5.7%	0.1144	1.2%
K09-62-63	2426	24	288	309	148	10271	1.034	0.4297	1.5%	0.1216	4.0%	0.1547	1.7%
K09-62-64	2525	22	243	85	122	11706	1.055	0.4724	1.6%	0.1340	5.3%	0.1678	1.1%
K09-62-65	2565	25	791	118	156	12985	0.924	0.1999	1.4%	0.0609	6.2%	0.1071	1.1%
K09-62-66	2675	125	1015	969	106	12230	0.878	0.0987	1.8%	0.0276	5.3%	0.0607	2.1%
K09-64-1	239	3	1129	296	43	13044	0.851	0.0379	1.4%	0.0129	4.3%	0.0527	1.5%
K09-64-2	243	3	318	128	12	10304	0.852	0.0384	1.3%	0.0128	6.0%	0.0510	2.8%
K09-64-3	246	3	1668	255	63	13385	0.852	0.0389	1.1%	0.0128	4.9%	0.0524	1.4%
K09-64-4	246	2	1245	481	49	12180	0.852	0.0390	0.9%	0.0129	4.7%	0.0527	1.5%
K09-64-5	246	3	257	166	11	10591	0.852	0.0391	1.4%	0.0139	5.6%	0.0548	3.4%
K09-64-6	250	3	878	219	35	12083	0.852	0.0396	1.3%	0.0133	4.6%	0.0527	2.0%
K09-64-7	250	3	304	182	13	10385	0.852	0.0396	1.4%	0.0130	5.4%	0.0523	3.0%
K09-64-8	252	3	317	201	14	9313	0.852	0.0400	1.2%	0.0130	4.9%	0.0532	2.9%
K09-64-9	253	4	224	103	10	10065	0.852	0.0400	1.8%	0.0135	6.6%	0.0505	4.3%
K09-64-10	256	5	110	57	5	11134	0.853	0.0407	2.1%	0.0132	6.3%	0.0543	4.6%
K09-64-11	266	3	240	103	10	11053	0.853	0.0422	1.3%	0.0130	5.9%	0.0519	3.0%
K09-64-12	269	3	735	541	35	9816	0.853	0.0426	1.2%	0.0139	3.9%	0.0504	1.6%
K09-64-13	272	3	655	378	31	10031	0.854	0.0432	1.3%	0.0137	4.3%	0.0526	2.2%
K09-64-14	273	3	462	165	20	9783	0.854	0.0433	1.2%	0.0154	5.4%	0.0531	2.3%
K09-64-15	277	3	891	526	43	10634	0.854	0.0444	1.1%	0.0146	5.3%	0.0617	2.1%
K09-64-16	278	3	743	226	33	12512	0.854	0.0440	1.2%	0.0141	4.8%	0.0501	1.8%

K09-64-17	288	3	797	754	43	10383	0.855	0.0458	1.0%	0.0148	4.8%	0.0528	2.1%
K09-64-18	316	8	109	4	4	11154	0.855	0.0459	6.6%	0.0718	29.9%	0.0511	8.8%
K09-64-19	325	5	233	109	13	11278	0.857	0.0517	1.5%	0.0163	6.1%	0.0539	3.4%
K09-64-20	326	5	184	112	11	10650	0.857	0.0520	1.6%	0.0181	6.0%	0.0547	3.6%
K09-64-21	328	4	323	215	18	12389	0.857	0.0522	1.3%	0.0162	4.5%	0.0534	2.3%
K09-64-22	331	4	192	127	11	9523	0.858	0.0529	1.3%	0.0180	5.1%	0.0561	3.3%
K09-64-23	333	31	135	87	8	10551	0.858	0.0543	1.7%	0.0167	5.7%	0.0548	3.6%
K09-64-24	340	6	164	190	14	10054	0.859	0.0555	2.4%	0.0259	6.3%	0.1278	4.0%
K09-64-25	353	6	340	188	21	9674	0.859	0.0563	1.6%	0.0186	4.5%	0.0543	2.1%
K09-64-26	381	9	144	104	11	10466	0.861	0.0615	2.3%	0.0191	6.6%	0.0608	4.5%
K09-64-27	400	8	83	58	6	6114	0.863	0.0646	2.1%	0.0219	7.2%	0.0628	4.9%
K09-64-28	407	4	1608	271	95	13235	0.863	0.0652	1.1%	0.0160	6.2%	0.0562	1.6%
K09-64-29	411	4	589	383	43	10944	0.863	0.0659	1.1%	0.0208	4.0%	0.0564	1.4%
K09-64-30	416	4	962	199	63	12811	0.864	0.0666	1.0%	0.0218	5.3%	0.0538	1.3%
K09-64-31	417	5	255	99	17	10920	0.864	0.0672	1.3%	0.0215	5.8%	0.0591	2.7%
K09-64-32	419	5	578	837	49	9960	0.864	0.0673	1.3%	0.0208	4.4%	0.0574	2.5%
K09-64-33	419	6	220	118	16	11199	0.864	0.0675	1.5%	0.0223	4.9%	0.0588	2.8%
K09-64-34	433	4	1547	401	107	11149	0.865	0.0694	0.9%	0.0218	4.0%	0.0553	1.1%
K09-64-35	434	4	1428	176	92	12143	0.865	0.0697	0.9%	0.0209	5.1%	0.0570	1.2%
K09-64-36	442	6	953	281	67	11779	0.865	0.0703	0.9%	0.0226	4.9%	0.0568	1.3%
K09-64-37	444	5	218	166	17	10597	0.866	0.0716	1.2%	0.0217	5.1%	0.0596	2.4%
K09-64-38	446	6	161	62	12	10259	0.866	0.0715	1.3%	0.0219	6.3%	0.0542	3.0%
K09-64-39	449	9	415	225	30	10912	0.866	0.0729	1.5%	0.0222	5.8%	0.0595	3.1%

K09-64-40	452	7	453	321	36	10838	0.866	0.0709	1.5%	0.0232	4.6%	0.0547	1.7%
K09-64-41	464	5	479	276	38	9600	0.867	0.0746	1.2%	0.0230	4.1%	0.0559	1.5%
K09-64-42	495	5	606	45	46	13132	0.869	0.0800	1.1%	0.0414	7.6%	0.0589	1.5%
K09-64-43	515	24	309	188	30	12316	0.873	0.0877	1.1%	0.0290	4.7%	0.0596	1.8%
K09-64-44	541	5	848	169	229	11729	0.959	0.2740	0.8%	0.0598	4.9%	0.1102	0.5%
K09-64-45	637	11	244	11	25	12986	0.880	0.1036	1.8%	0.0593	10.0%	0.0585	2.4%
K09-64-46	717	8	2853	68	294	13661	0.886	0.1185	1.1%	0.0331	7.3%	0.0693	1.0%
K09-64-47	873	9	226	68	35	10758	0.902	0.1538	1.0%	0.0476	5.3%	0.0705	1.6%
K09-64-48	905	17	226	68	35	10758	0.902	0.1538	1.0%	0.0476	5.3%	0.0705	1.6%
K09-64-49	921	9	479	276	38	9600	0.867	0.0746	1.2%	0.0230	4.1%	0.0559	1.5%
K09-64-50	934	9	258	65	39	12427	0.903	0.1560	1.0%	0.0473	5.1%	0.0707	1.5%
K09-64-51	996	13	62	25	11	8976	0.909	0.1676	1.4%	0.0513	5.4%	0.0750	2.3%
K09-64-52	1016	9	413	253	78	11270	0.910	0.1713	0.9%	0.0525	4.4%	0.0759	1.2%
K09-64-53	1017	12	358	67	62	13562	0.910	0.1708	1.3%	0.0496	4.7%	0.0729	1.1%
K09-64-54	1055	9	308	137	59	11122	0.913	0.1780	0.9%	0.0546	4.6%	0.0749	1.5%
K09-64-55	1209	12	721	647	180	8208	0.927	0.2074	1.0%	0.0656	3.3%	0.0851	0.8%
K09-64-56	1349	12	160	86	40	10657	0.939	0.2329	1.0%	0.0712	4.9%	0.0869	1.4%
K09-64-57	1388	12	434	255	112	11945	0.943	0.2409	0.9%	0.0691	4.0%	0.0902	0.8%
K09-64-58	1392	14	328	111	86	13258	0.943	0.2414	1.1%	0.0753	4.3%	0.0900	1.2%
K09-64-59	1522	14	457	299	139	11228	0.955	0.2657	1.0%	0.0762	4.8%	0.0924	1.3%
K09-64-60	1588	15	195	122	62	11221	0.961	0.2795	1.1%	0.0832	4.0%	0.0985	1.1%
K09-64-61	1673	16	298	136	98	12016	0.971	0.2990	1.1%	0.0885	4.4%	0.1105	0.9%
K09-64-62	1719	26	580	121	162	12979	0.974	0.3055	1.2%	0.0457	6.4%	0.1116	1.1%

K09-64-63	1741	17	831	202	275	10923	0.977	0.3129	1.1%	0.0874	3.8%	0.1142	0.7%
K09-64-64	1771	17	310	157	109	11667	0.980	0.3177	1.1%	0.0931	3.8%	0.1125	0.8%
K09-64-65	1805	29	223	107	83	9015	0.981	0.3210	1.8%	0.0870	5.3%	0.1044	1.8%
K09-64-66	1882	42	1056	100	372	13449	0.993	0.3455	1.2%	0.1195	3.9%	0.1252	0.6%
K09-64-67	1896	21	164	190	14	10054	0.859	0.0555	2.4%	0.0259	6.3%	0.1278	4.0%
K09-64-68	1902	20	343	39	117	13062	0.992	0.3427	1.2%	0.1008	4.7%	0.1151	0.6%
K09-64-69	1940	13	758	79	260	13030	0.995	0.3496	0.8%	0.1022	4.5%	0.1152	0.5%
K09-64-70	1965	22	59	41	24	9806	0.997	0.3537	1.3%	0.0998	5.3%	0.1140	1.8%
K09-64-71	1969	13	462	47	160	12913	0.998	0.3549	0.8%	0.1053	4.8%	0.1151	0.7%
K09-64-72	2465	23	199	106	114	10145	1.064	0.4924	1.0%	0.1372	4.3%	0.1805	0.9%
K09-64-73	2556	22	848	169	229	11729	0.959	0.2740	0.8%	0.0598	4.9%	0.1102	0.5%
K09-64-74	2576	20	304	285	195	9683	1.066	0.4962	0.9%	0.1406	3.4%	0.1808	0.7%
K09-64-75	3249	23	153	101	124	7767	1.133	0.6525	0.9%	0.1693	4.2%	0.2567	0.7%
K09-67-1	229	5	226	169	9	10503	0.851	0.0362	2.2%	0.0109	9.1%	0.0519	5.1%
K09-67-2	248	6	225	180	15	9518	0.859	0.0561	1.6%	0.0197	6.1%	0.0580	3.3%
K09-67-3	249	5	247	117	10	10470	0.852	0.0397	2.0%	0.0127	8.8%	0.0586	4.6%
K09-67-4	253	4	358	279	16	9755	0.852	0.0400	1.6%	0.0123	7.3%	0.0524	4.4%
K09-67-5	253	4	274	324	13	9104	0.852	0.0401	1.8%	0.0124	7.0%	0.0515	4.8%
K09-67-6	257	5	449	123	18	10821	0.853	0.0409	1.8%	0.0144	8.2%	0.0540	4.0%
K09-67-7	261	10	158	143	11	7907	0.860	0.0586	1.9%	0.0180	6.1%	0.0548	3.7%
K09-67-8	266	12	459	563	38	8800	0.864	0.0669	1.6%	0.0207	5.0%	0.0562	2.3%
K09-67-9	269	10	62	54	3	8281	0.854	0.0432	3.5%	0.0158	10.8%	0.0617	10.0%

K09-67-10	269	4	653	730	34	9379	0.853	0.0427	1.4%	0.0136	6.1%	0.0528	3.2%
K09-67-11	272	4	398	249	19	10652	0.855	0.0454	1.7%	0.0142	5.8%	0.0478	3.0%
K09-67-12	273	5	436	239	34	10209	0.866	0.0721	1.5%	0.0253	6.0%	0.0627	2.4%
K09-67-13	275	4	485	211	21	9266	0.854	0.0436	1.6%	0.0140	7.6%	0.0526	3.3%
K09-67-14	278	4	1877	1217	492	13908	0.942	0.2382	1.3%	0.0665	4.4%	0.0891	0.6%
K09-67-15	287	5	675	624	32	9284	0.853	0.0412	1.6%	0.0128	5.2%	0.0502	2.4%
K09-67-16	293	5	483	149	33	11941	0.865	0.0693	1.6%	0.0205	6.1%	0.0558	2.1%
K09-67-17	333	6	479	157	144	12688	0.968	0.2943	1.5%	0.0635	5.6%	0.1086	0.9%
K09-67-18	339	7	185	260	13	10708	0.858	0.0543	2.0%	0.0166	7.2%	0.0579	4.8%
K09-67-19	341	9	429	520	43	10922	0.870	0.0805	1.5%	0.0245	4.9%	0.0593	1.9%
K09-67-20	343	7	135	65	8	9737	0.859	0.0548	2.0%	0.0191	9.5%	0.0560	6.2%
K09-67-21	364	6	398	620	42	10473	0.869	0.0799	1.6%	0.0241	5.0%	0.0581	2.2%
K09-67-22	367	7	839	455	37	9426	0.853	0.0421	1.5%	0.0130	5.3%	0.0521	2.1%
K09-67-23	417	6	119	85	10	10849	0.868	0.0764	2.1%	0.0183	6.7%	0.0538	4.1%
K09-67-24	419	13	76	63	3	9383	0.852	0.0400	2.5%	0.0123	8.2%	0.0505	6.9%
K09-67-25	426	5	713	679	57	9277	0.865	0.0686	1.1%	0.0216	5.9%	0.0592	2.1%
K09-67-26	429	6	225	213	18	9325	0.865	0.0691	1.5%	0.0216	7.2%	0.0592	3.7%
K09-67-27	433	6	503	122	22	10405	0.854	0.0440	1.5%	0.0135	6.9%	0.0560	2.6%
K09-67-28	435	5	494	238	36	11357	0.865	0.0700	1.3%	0.0238	6.7%	0.0578	2.4%
K09-67-29	461	9	446	357	39	10076	0.869	0.0785	1.5%	0.0236	5.2%	0.0592	2.1%
K09-67-30	465	8	212	171	18	9160	0.867	0.0747	1.7%	0.0232	7.0%	0.0555	3.9%
K09-67-31	483	5	181	146	10	9246	0.855	0.0467	1.9%	0.0147	6.3%	0.0540	4.2%
K09-67-32	487	5	590	386	50	9977	0.869	0.0783	1.1%	0.0251	6.3%	0.0555	2.2%

K09-67-33	491	9	207	118	37	9600	0.909	0.1685	1.5%	0.0499	5.3%	0.0738	1.7%
K09-67-34	496	7	221	155	20	9718	0.870	0.0802	1.5%	0.0272	7.0%	0.0599	3.7%
K09-67-35	498	7	55	89	42	9314	1.090	0.5480	1.6%	0.1415	5.1%	0.2038	1.3%
K09-67-36	600	5	1472	1097	73	9863	0.854	0.0441	1.4%	0.0142	5.0%	0.0522	1.6%
K09-67-37	605	6	1457	409	139	12331	0.877	0.0983	1.0%	0.0305	5.9%	0.0593	1.3%
K09-67-38	897	8	1045	426	160	10846	0.900	0.1491	0.9%	0.0462	5.7%	0.0676	1.2%
K09-67-39	1208	17	1399	899	65	10252	0.854	0.0429	1.5%	0.0132	5.1%	0.0520	1.7%
K09-67-40	1375	17	213	171	13	10714	0.858	0.0529	1.8%	0.0155	6.3%	0.0529	3.6%
K09-67-41	1461	14	1186	8	282	17351	0.949	0.2548	1.0%	0.0807	11.6%	0.0933	0.9%
K09-67-42	1522	21	741	491	167	9353	0.927	0.2065	1.5%	0.0578	4.9%	0.0820	1.0%
K09-67-43	1780	15	196	116	12	9361	0.860	0.0580	1.8%	0.0180	6.4%	0.0538	3.2%
K09-67-44	1788	17	410	183	139	11916	0.981	0.3206	1.0%	0.0917	5.8%	0.1119	1.1%
K09-67-45	1929	28	987	115	378	12544	1.002	0.3644	1.5%	0.0997	7.9%	0.1559	1.3%
K09-67-46	2045	23	1013	171	410	12031	1.017	0.3946	1.1%	0.0616	7.5%	0.1741	0.8%
K09-67-47	2288	26	204	78	91	10893	1.031	0.4230	1.1%	0.1162	6.2%	0.1385	1.3%
K09-67-48	2582	31	307	42	153	12409	1.063	0.4888	1.1%	0.1607	7.5%	0.1654	1.0%
K09-76-1	412	4	1250	479	84	11790	0.863	0.0662	1.1%	0.0210	4.0%	0.0570	1.2%
K09-76-2	419	4	417	227	29	10806	0.864	0.0673	1.0%	0.0213	4.2%	0.0570	1.9%
K09-76-3	421	4	608	626	50	10629	0.864	0.0679	1.0%	0.0215	3.8%	0.0592	1.5%
K09-76-4	431	5	676	294	48	11034	0.865	0.0691	1.3%	0.0220	4.1%	0.0554	1.4%
K09-76-5	433	4	671	585	54	10778	0.865	0.0695	1.0%	0.0213	3.7%	0.0560	1.4%
K09-76-6	434	4	578	458	45	12603	0.865	0.0699	0.9%	0.0229	4.4%	0.0589	1.7%

K09-76-7	434	4	372	262	28	9793	0.865	0.0696	1.0%	0.0219	3.9%	0.0560	1.9%
K09-76-8	436	4	617	371	48	9172	0.866	0.0709	1.0%	0.0236	4.8%	0.0653	1.8%
K09-76-9	442	5	165	148	13	10073	0.866	0.0711	1.2%	0.0216	4.4%	0.0579	2.8%
K09-76-10	442	5	370	238	29	10929	0.866	0.0711	1.1%	0.0233	5.0%	0.0575	2.0%
K09-76-11	445	5	256	136	19	10777	0.866	0.0714	1.0%	0.0238	4.2%	0.0550	2.3%
K09-76-12	462	6	126	80	10	9672	0.867	0.0748	1.3%	0.0250	6.0%	0.0616	3.1%
K09-76-13	462	4	719	381	56	11361	0.867	0.0746	1.0%	0.0227	3.8%	0.0596	1.3%
K09-76-14	463	5	478	319	39	10974	0.867	0.0745	1.0%	0.0236	3.7%	0.0566	1.8%
K09-76-15	466	4	548	35	41	13022	0.868	0.0766	1.0%	0.0740	7.0%	0.0735	1.7%
K09-76-16	474	7	1794	630	122	12990	0.864	0.0675	1.2%	0.0213	4.3%	0.0552	1.0%
K09-76-17	515	24	361	75	26	11454	0.871	0.0830	4.9%	0.0255	7.2%	0.0550	4.4%
K09-76-18	520	32	674	193	217	10917	0.969	0.2951	3.5%	0.0765	6.6%	0.1497	0.9%
K09-76-19	562	5	677	357	64	10659	0.874	0.0914	0.9%	0.0253	3.7%	0.0614	1.3%
K09-76-20	610	6	526	260	55	12252	0.878	0.0995	1.0%	0.0270	5.9%	0.0629	1.7%
K09-76-21	626	9	701	25	64	10269	0.879	0.1019	1.5%	0.0383	8.5%	0.0604	1.3%
K09-76-22	627	5	1333	84	128	16399	0.879	0.1025	0.8%	0.0337	5.5%	0.0636	0.9%
K09-76-23	668	85	864	237	173	11121	0.918	0.1878	1.6%	0.0548	4.4%	0.0810	1.1%
K09-76-24	699	11	406	240	51	10434	0.885	0.1150	1.6%	0.0367	4.3%	0.0662	1.3%
K09-76-25	814	7	682	269	94	10599	0.894	0.1349	0.9%	0.0482	3.6%	0.0685	1.0%
K09-76-26	845	7	1644	564	228	12354	0.896	0.1409	0.9%	0.0313	4.5%	0.0721	0.6%
K09-76-27	886	17	32	45	6	7750	0.900	0.1483	2.0%	0.0467	5.7%	0.0733	3.9%
K09-76-28	894	10	643	86	96	13132	0.901	0.1502	1.1%	0.0566	4.7%	0.0767	1.1%
K09-76-29	923	8	551	121	83	13160	0.903	0.1543	1.0%	0.0423	5.0%	0.0719	1.1%

K09-76-30	924	11	1088	273	163	13533	0.900	0.1497	0.8%	0.0425	4.3%	0.0705	0.9%
K09-76-31	931	9	673	311	110	12982	0.903	0.1555	1.1%	0.0465	3.7%	0.0706	0.9%
K09-76-32	938	11	682	185	108	12102	0.904	0.1570	1.2%	0.0478	4.1%	0.0723	1.0%
K09-76-33	945	10	591	103	91	12825	0.904	0.1581	1.1%	0.0494	4.4%	0.0715	1.0%
K09-76-34	958	10	590	103	96	13316	0.906	0.1609	1.2%	0.0419	5.4%	0.0741	1.2%
K09-76-35	967	11	120	83	22	9269	0.906	0.1622	1.2%	0.0504	4.6%	0.0733	2.1%
K09-76-36	975	12	567	209	95	11964	0.907	0.1636	1.3%	0.0518	3.7%	0.0734	0.9%
K09-76-37	978	14	179	59	31	11302	0.907	0.1642	1.6%	0.0501	4.7%	0.0738	1.6%
K09-76-38	992	9	768	150	131	11937	0.908	0.1666	1.0%	0.0523	4.5%	0.0737	1.0%
K09-76-39	1035	8	940	13	152	13452	0.912	0.1745	0.8%	0.0565	7.3%	0.0752	0.7%
K09-76-40	1038	13	65	69	14	9989	0.912	0.1756	1.2%	0.0534	4.4%	0.0782	2.3%
K09-76-41	1039	28	361	75	26	11454	0.871	0.0830	4.9%	0.0255	7.2%	0.0550	4.4%
K09-76-42	1042	9	717	163	123	13199	0.912	0.1757	0.9%	0.0502	4.2%	0.0758	0.8%
K09-76-43	1043	30	346	206	70	9164	0.912	0.1757	3.2%	0.0545	4.9%	0.0751	1.3%
K09-76-44	1057	28	1157	636	186	14020	0.903	0.1562	1.6%	0.0505	4.4%	0.0727	0.8%
K09-76-45	1075	9	375	261	75	10732	0.915	0.1817	0.9%	0.0548	3.4%	0.0763	1.1%
K09-76-46	1109	25	337	76	57	12266	0.918	0.1878	2.5%	0.0531	7.6%	0.0769	2.6%
K09-76-47	1126	8	609	174	117	12786	0.919	0.1904	0.8%	0.0603	4.5%	0.0755	1.0%
K09-76-48	1135	11	510	134	97	11947	0.920	0.1928	1.0%	0.0628	3.7%	0.0792	1.0%
K09-76-49	1158	24	21	1	4	15557	0.922	0.1975	2.2%	0.2041	311.3%	0.0815	4.7%
K09-76-50	1158	9	496	219	99	12307	0.922	0.1967	0.8%	0.0512	3.9%	0.0776	1.0%
K09-76-51	1173	9	780	164	158	13459	0.923	0.1990	0.8%	0.0574	4.8%	0.0765	0.9%
K09-76-52	1220	13	1006	944	238	11689	0.928	0.2096	1.2%	0.0510	4.6%	0.0862	0.7%

K09-76-53	1283	14	755	514	186	10638	0.933	0.2208	1.2%	0.0663	3.7%	0.0854	0.7%
K09-76-54	1303	15	377	276	98	11426	0.935	0.2249	1.2%	0.0677	4.0%	0.0878	1.5%
K09-76-55	1316	11	295	315	82	10832	0.936	0.2267	1.0%	0.0700	3.9%	0.0858	1.0%
K09-76-56	1333	90	821	33	138	14737	0.912	0.1747	1.6%	0.0585	6.4%	0.0790	0.9%
K09-76-57	1338	80	864	237	173	11121	0.918	0.1878	1.6%	0.0548	4.4%	0.0810	1.1%
K09-76-58	1399	130	188	170	32	10912	0.894	0.1359	2.1%	0.0455	6.8%	0.0804	3.3%
K09-76-59	1539	12	283	237	89	10707	0.957	0.2705	0.9%	0.0811	4.1%	0.0984	0.9%
K09-76-60	1604	16	134	144	47	10226	0.963	0.2836	1.0%	0.0871	3.6%	0.1025	1.3%
K09-76-61	1653	16	513	137	143	10882	0.967	0.2913	1.0%	0.0767	3.7%	0.0984	0.9%
K09-76-62	2096	30	118	50	51	10212	1.009	0.3780	1.7%	0.1021	5.1%	0.1154	1.5%
K09-76-63	2439	17	1202	112	591	14984	1.054	0.4696	0.8%	0.1001	5.4%	0.1769	0.4%
K09-76-64	2449	17	790	159	390	13259	1.051	0.4643	0.8%	0.1304	4.0%	0.1635	0.4%
K09-76-65	2533	17	1166	197	613	9694	1.066	0.4953	0.8%	0.0968	4.2%	0.1931	0.3%
K09-76-66	2536	15	674	193	217	10917	0.969	0.2951	3.5%	0.0765	6.6%	0.1497	0.9%
K09-81-1	246	8	93	54	4	9758	0.852	0.0389	3.0%	0.0138	11.5%	0.0491	8.8%
K09-81-2	254	3	420	195	17	8957	0.852	0.0402	1.3%	0.0129	4.6%	0.0501	2.7%
K09-81-3	257	5	200	82	9	10753	0.853	0.0407	2.1%	0.0146	9.7%	0.0524	5.9%
K09-81-4	257	5	193	85	8	10388	0.853	0.0406	2.1%	0.0137	9.9%	0.0505	5.7%
K09-81-5	264	5	351	202	16	10407	0.853	0.0423	1.8%	0.0143	6.3%	0.0605	5.4%
K09-81-6	264	4	354	255	16	10678	0.853	0.0420	1.4%	0.0142	4.6%	0.0548	2.7%
K09-81-7	265	3	389	109	16	11113	0.853	0.0420	1.2%	0.0143	5.2%	0.0532	2.4%
K09-81-8	275	3	387	162	17	9756	0.854	0.0434	1.2%	0.0135	4.9%	0.0499	2.5%

K09-81-9	279	3	484	289	23	10568	0.854	0.0443	1.1%	0.0141	4.2%	0.0531	2.1%
K09-81-10	284	5	74	48	4	9812	0.854	0.0450	1.8%	0.0153	6.6%	0.0501	5.3%
K09-81-11	336	6	256	78	14	11515	0.858	0.0541	1.9%	0.0191	8.8%	0.0619	3.6%
K09-81-12	338	5	141	140	9	11408	0.858	0.0540	1.5%	0.0173	4.5%	0.0543	3.8%
K09-81-13	353	4	413	75	22	14061	0.859	0.0562	1.1%	0.0190	5.5%	0.0531	2.2%
K09-81-14	377	4	826	309	50	10591	0.861	0.0602	1.2%	0.0184	6.7%	0.0550	2.3%
K09-81-15	399	5	1931	225	116	13921	0.863	0.0642	1.2%	0.0239	4.5%	0.0590	1.0%
K09-81-16	413	4	391	221	27	10319	0.864	0.0662	1.1%	0.0211	4.2%	0.0555	2.0%
K09-81-17	430	5	408	335	32	9378	0.865	0.0689	1.1%	0.0218	3.7%	0.0559	2.1%
K09-81-18	431	5	874	563	65	11113	0.865	0.0692	1.1%	0.0224	3.7%	0.0567	1.3%
K09-81-19	435	5	324	168	23	11497	0.865	0.0699	1.1%	0.0226	4.4%	0.0558	2.3%
K09-81-20	439	5	287	314	24	8935	0.865	0.0707	1.1%	0.0224	3.9%	0.0583	2.1%
K09-81-21	442	7	131	90	10	10186	0.866	0.0713	1.6%	0.0236	5.0%	0.0593	2.8%
K09-81-22	446	5	513	103	35	12253	0.866	0.0718	1.2%	0.0238	4.6%	0.0586	1.6%
K09-81-23	450	5	674	490	54	12074	0.866	0.0725	1.1%	0.0226	3.7%	0.0589	1.5%
K09-81-24	454	5	1015	245	71	12559	0.866	0.0731	1.0%	0.0247	4.0%	0.0585	1.4%
K09-81-25	460	5	310	85	22	10039	0.867	0.0740	1.2%	0.0240	5.0%	0.0569	2.3%
K09-81-26	474	7	225	208	20	9974	0.868	0.0764	1.5%	0.0242	7.0%	0.0583	3.4%
K09-81-27	503	5	2304	304	173	18575	0.870	0.0811	1.0%	0.0212	3.9%	0.0566	0.9%
K09-81-28	605	8	664	622	78	10999	0.878	0.0987	1.4%	0.0296	4.1%	0.0621	2.2%
K09-81-29	613	7	250	159	27	10572	0.878	0.0997	1.1%	0.0314	4.2%	0.0596	1.9%
K09-81-30	652	7	210	98	23	9910	0.881	0.1059	1.2%	0.0329	4.5%	0.0582	2.0%
K09-81-31	705	9	292	213	38	11368	0.885	0.1162	1.3%	0.0358	6.5%	0.0673	2.6%

K09-81-32	754	12	125	51	16	9302	0.889	0.1237	1.7%	0.0377	8.1%	0.0614	3.7%
K09-81-33	805	8	252	159	35	10174	0.893	0.1328	1.1%	0.0423	4.2%	0.0643	2.0%
K09-81-34	887	12	173	235	32	8940	0.899	0.1470	1.4%	0.0428	6.2%	0.0657	2.7%
K09-81-35	912	8	466	461	83	11352	0.901	0.1519	0.9%	0.0466	3.4%	0.0691	1.1%
K09-81-36	962	11	676	427	121	12137	0.906	0.1611	1.2%	0.0492	6.2%	0.0720	2.1%
K09-81-37	1111	12	334	94	61	10768	0.918	0.1876	1.1%	0.0532	4.0%	0.0745	1.2%
K09-81-38	1647	325	1931	225	116	13921	0.863	0.0642	1.2%	0.0239	4.5%	0.0590	1.0%
K09-81-39	1676	14	429	378	149	10120	0.970	0.2968	0.9%	0.0881	3.4%	0.1024	0.9%
K09-81-40	1844	19	1153	401	392	11679	0.986	0.3311	1.1%	0.0958	3.4%	0.1125	0.6%
K09-81-41	2283	39	233	14	102	12583	1.032	0.4240	1.6%	0.1266	7.8%	0.1426	1.5%
K09-84-1	251	4	339	96	13	11780	0.852	0.0398	1.6%	0.0131	9.5%	0.0541	4.3%
K09-84-2	251	4	484	139	19	11678	0.852	0.0397	1.6%	0.0119	8.9%	0.0526	3.7%
K09-84-3	251	4	565	157	22	11717	0.852	0.0397	1.4%	0.0128	7.9%	0.0513	3.5%
K09-84-4	252	5	324	193	14	10502	0.852	0.0397	1.8%	0.0124	8.5%	0.0479	5.0%
K09-84-5	252	4	758	318	31	10626	0.852	0.0399	1.5%	0.0130	7.6%	0.0517	3.4%
K09-84-6	253	4	455	57	17	12794	0.852	0.0401	1.6%	0.0119	10.9%	0.0511	3.7%
K09-84-7	574	12	101	64	11	11544	0.876	0.0945	2.1%	0.0354	8.3%	0.0712	4.9%
K09-84-8	1089	60	839	351	92	11699	0.884	0.1139	2.6%	0.0333	8.9%	0.0735	4.3%
K09-84-9	901	16	94	55	15	7385	0.901	0.1511	1.8%	0.0465	7.9%	0.0747	3.7%
K09-84-10	2095	110	545	142	120	10315	0.925	0.2031	1.3%	0.0834	6.4%	0.1420	1.3%
K09-87-1	238	3	1390	71	48	12105	0.851	0.0377	1.2%	0.0145	10.0%	0.0538	2.2%

K09-87-2	240	7	628	89	56	10715	0.874	0.0908	1.9%	0.0255	12.1%	0.0585	3.8%
K09-87-3	240	5	241	112	9	11311	0.852	0.0382	2.1%	0.0118	9.5%	0.0562	5.1%
K09-87-4	242	5	301	120	11	11244	0.852	0.0382	2.1%	0.0112	9.4%	0.0504	4.7%
K09-87-5	244	6	178	109	7	10430	0.852	0.0388	2.6%	0.0123	9.7%	0.0553	6.3%
K09-87-6	246	4	399	219	16	10678	0.852	0.0390	1.7%	0.0119	8.0%	0.0512	4.3%
K09-87-7	252	5	252	138	11	11077	0.852	0.0397	1.9%	0.0128	8.6%	0.0495	4.9%
K09-87-8	369	14	909	259	57	9547	0.862	0.0626	1.6%	0.0316	6.9%	0.0546	2.5%
K09-87-9	485	9	170	62	13	11665	0.869	0.0787	1.9%	0.0243	8.8%	0.0615	4.4%
K09-87-10	568	13	628	89	56	10715	0.874	0.0908	1.9%	0.0255	12.1%	0.0585	3.8%
K09-87-11	753	8	644	346	86	11030	0.889	0.1245	1.2%	0.0382	6.3%	0.0676	1.9%
K09-87-12	843	18	111	81	17	7184	0.896	0.1405	2.2%	0.0404	8.0%	0.0721	3.5%
K09-87-13	1302	20	215	54	52	10215	0.939	0.2338	1.6%	0.0792	7.3%	0.1207	1.9%
K09-88-1	88	5	582	337	40	10990	0.863	0.0645	2.8%	0.0293	6.5%	0.0643	3.3%
K09-88-2	407	13	309	67	22	9860	0.865	0.0690	2.3%	0.0333	8.5%	0.0661	4.8%
K09-88-3	459	9	113	194	13	8896	0.867	0.0746	2.1%	0.0262	5.4%	0.0659	5.8%
K09-88-4	474	5	886	247	67	15690	0.868	0.0766	1.0%	0.0228	5.1%	0.0590	1.4%
K09-88-5	476	4	1595	561	128	12037	0.868	0.0769	0.9%	0.0248	4.6%	0.0590	1.5%
K09-88-6	488	8	1256	169	106	12563	0.874	0.0903	1.7%	0.0334	9.3%	0.0600	2.8%
K09-88-7	489	4	3207	329	242	12667	0.869	0.0790	0.8%	0.0235	4.6%	0.0585	0.8%
K09-88-8	499	5	2990	605	239	14243	0.870	0.0805	1.0%	0.0262	4.1%	0.0586	0.8%
K09-88-9	510	4	1502	196	118	12053	0.870	0.0824	0.8%	0.0262	4.7%	0.0574	0.9%
K09-88-10	524	6	1019	135	83	12946	0.871	0.0846	1.2%	0.0261	4.8%	0.0574	1.1%

K09-88-11	538	12	378	240	36	12060	0.872	0.0849	1.3%	0.0258	4.4%	0.0589	1.8%
K09-88-12	541	5	1488	807	136	11244	0.873	0.0875	0.9%	0.0267	4.4%	0.0581	1.3%
K09-88-13	544	5	2544	126	206	11881	0.873	0.0880	1.0%	0.0314	7.8%	0.0586	1.5%
K09-88-14	611	7	1426	548	152	11786	0.878	0.0996	1.2%	0.0353	5.3%	0.0620	1.8%
K09-88-15	620	70	346	51	143	12588	1.033	0.4268	2.8%	0.1570	4.5%	0.2232	0.9%
K09-88-16	631	6	820	145	85	13561	0.880	0.1035	1.0%	0.0376	5.8%	0.0654	1.6%
K09-88-17	661	21	152	75	19	10403	0.882	0.1090	3.3%	0.0471	9.4%	0.0697	6.0%
K09-88-18	700	9	277	205	38	11424	0.885	0.1151	1.3%	0.0365	5.7%	0.0650	3.1%
K09-88-19	737	11	662	278	89	11288	0.888	0.1216	1.6%	0.0458	7.3%	0.0670	3.9%
K09-88-20	790	10	414	352	63	9740	0.891	0.1281	1.2%	0.0395	4.8%	0.0650	2.1%
K09-88-21	844	15	269	157	39	10644	0.891	0.1297	1.3%	0.0419	4.1%	0.0683	1.7%
K09-88-22	872	7	1526	129	217	12880	0.898	0.1452	0.8%	0.0427	5.5%	0.0704	0.9%
K09-88-23	893	8	729	215	114	13913	0.900	0.1487	0.9%	0.0505	4.8%	0.0700	1.4%
K09-88-24	2362	60	751	151	182	11608	0.941	0.2372	1.3%	0.0975	5.3%	0.1539	1.0%
K09-88-25	2494	19	357	112	168	10981	1.033	0.4268	1.2%	0.1318	3.8%	0.1633	0.7%
K09-88-26	2545	85	582	337	40	10990	0.863	0.0645	2.8%	0.0293	6.5%	0.0643	3.3%
K09-88-27	2609	25	615	260	375	10505	1.073	0.5109	1.1%	0.1470	3.6%	0.1963	0.7%
K09-88-28	2810	29	345	67	236	11639	1.108	0.5891	1.2%	0.1587	4.4%	0.2639	0.6%
K09-88-29	3138	25	346	51	143	12588	1.033	0.4268	2.8%	0.1570	4.5%	0.2232	0.9%
K10-05-1	160	70	3753	227	237	15728	0.868	0.0766	1.4%	0.0260	1.8%	0.0628	0.6%
K10-05-2	188	16	3581	558	189	11977	0.864	0.0664	4.2%	0.0257	3.3%	0.0598	0.9%
K10-05-3	218	75	4884	340	231	14119	0.860	0.0577	1.1%	0.0168	1.8%	0.0601	0.6%

K10-05-4	230	2	2572	720	82	10869	0.851	0.0366	0.9%	0.0112	1.5%	0.0567	0.9%
K10-05-5	238	6	6481	2324	189	15218	0.852	0.0381	2.5%	0.0080	2.9%	0.0616	1.2%
K10-05-6	246	2	11612	1111	337	12876	0.852	0.0389	1.0%	0.0116	1.8%	0.0515	1.0%
K10-05-7	247	3	7548	285	205	21950	0.852	0.0391	1.1%	0.0136	2.9%	0.0518	1.1%
K10-05-8	247	3	9807	755	270	21603	0.852	0.0391	1.2%	0.0116	2.1%	0.0513	1.3%
K10-05-9	249	2	5073	393	163	13772	0.852	0.0394	0.9%	0.0132	1.5%	0.0541	0.6%
K10-05-10	255	2	11276	827	332	13211	0.852	0.0403	0.9%	0.0125	1.5%	0.0512	0.6%
K10-05-11	255	3	3223	142	98	14381	0.853	0.0407	1.0%	0.0135	2.1%	0.0579	0.8%
K10-05-12	258	3	2007	1135	77	10822	0.853	0.0410	1.1%	0.0126	1.5%	0.0533	1.0%
K10-05-13	259	2	2384	323	82	11466	0.853	0.0411	0.9%	0.0145	1.6%	0.0533	0.9%
K10-05-14	261	2	4950	477	173	14417	0.853	0.0416	0.9%	0.0149	1.9%	0.0552	0.8%
K10-05-15	264	3	4155	701	147	14830	0.853	0.0420	1.0%	0.0160	1.9%	0.0565	0.9%
K10-05-16	264	2	1833	305	65	11067	0.853	0.0419	0.9%	0.0137	1.8%	0.0531	1.0%
K10-05-17	268	2	3535	423	123	11566	0.853	0.0425	0.9%	0.0148	1.5%	0.0530	0.8%
K10-05-18	269	3	1147	80	40	11138	0.853	0.0426	1.0%	0.0140	2.4%	0.0516	1.4%
K10-05-19	269	2	1756	116	60	11332	0.853	0.0426	0.9%	0.0139	2.0%	0.0516	1.2%
K10-05-20	270	3	1772	975	71	9317	0.853	0.0427	1.0%	0.0134	1.3%	0.0512	1.1%
K10-05-21	270	2	2011	180	71	11478	0.854	0.0428	0.9%	0.0138	2.0%	0.0521	1.0%
K10-05-22	271	2	1664	326	61	10594	0.854	0.0430	0.9%	0.0143	1.5%	0.0530	1.0%
K10-05-23	273	2	1967	279	71	11092	0.854	0.0434	0.9%	0.0147	1.6%	0.0531	1.1%
K10-05-24	274	3	1238	104	44	10905	0.854	0.0434	1.0%	0.0146	2.1%	0.0515	1.3%
K10-05-25	281	3	542	194	22	12375	0.854	0.0446	1.1%	0.0148	1.8%	0.0519	1.7%
K10-05-26	284	3	403	139	16	10557	0.854	0.0451	1.1%	0.0148	1.8%	0.0536	2.0%

K10-05-27	284	3	3897	298	134	14726	0.855	0.0454	0.9%	0.0148	1.7%	0.0591	0.8%
K10-05-28	349	11	2947	1269	157	14677	0.859	0.0566	3.3%	0.0255	2.8%	0.0673	0.7%
K10-05-29	354	5	2844	135	114	16957	0.860	0.0570	1.3%	0.0166	3.1%	0.0616	1.5%
K10-05-30	358	5	3252	363	156	12770	0.860	0.0576	1.5%	0.0255	3.3%	0.0610	1.7%
K10-05-31	414	7	5684	541	264	13622	0.864	0.0667	1.7%	0.0207	2.2%	0.0602	1.2%
K10-05-32	418	10	3786	357	192	16493	0.864	0.0673	2.3%	0.0941	9.6%	0.0588	1.8%
K10-05-33	461	6	3480	291	212	12782	0.867	0.0747	1.4%	0.0247	3.3%	0.0618	1.6%
K10-05-34	550	6	3564	131	241	16176	0.874	0.0897	1.2%	0.0279	2.5%	0.0649	0.6%
K10-05-35	751	11	1693	1865	224	11156	0.889	0.1237	1.5%	0.0384	1.5%	0.0653	0.6%
K10-05-36	770	23	3581	558	189	11977	0.864	0.0664	4.2%	0.0257	3.3%	0.0598	0.9%
K10-05-37	799	60	3753	227	237	15728	0.868	0.0766	1.4%	0.0260	1.8%	0.0628	0.6%
K10-05-38	815	45	3210	2108	302	12592	0.877	0.0966	2.4%	0.0315	2.5%	0.0658	0.6%
K10-05-39	819	7	981	629	130	11465	0.894	0.1355	0.9%	0.0421	1.3%	0.0664	0.7%
K10-05-40	820	9	1339	361	156	9841	0.894	0.1357	1.1%	0.0451	1.8%	0.0669	1.3%
K10-05-41	893	235	4884	340	231	14119	0.860	0.0577	1.1%	0.0168	1.8%	0.0601	0.6%
K10-08-1	643	7	298	296	34	10169	0.881	0.1056	1.2%	0.0343	1.5%	0.0664	1.6%
K10-08-2	650	7	310	328	36	10512	0.881	0.1066	1.0%	0.0335	1.4%	0.0653	1.4%
K10-08-3	661	8	235	236	27	11490	0.882	0.1081	1.2%	0.0320	1.5%	0.0628	2.0%
K10-08-4	666	13	288	204	32	11925	0.882	0.1093	2.0%	0.0361	2.0%	0.0657	2.7%
K10-08-5	675	10	221	210	28	10193	0.883	0.1112	1.5%	0.0370	1.8%	0.0683	2.8%
K10-08-6	720	13	232	183	27	9908	0.887	0.1188	1.9%	0.0383	2.2%	0.0672	3.3%
K10-08-7	721	8	191	203	25	10199	0.887	0.1190	1.1%	0.0355	1.4%	0.0683	1.6%

K10-08-8	724	8	165	134	20	10360	0.887	0.1190	1.1%	0.0364	1.6%	0.0643	1.8%
K10-08-9	725	8	214	220	27	10669	0.887	0.1195	1.2%	0.0358	1.4%	0.0663	1.7%
K10-08-10	727	11	179	121	19	11071	0.887	0.1193	1.6%	0.0374	2.3%	0.0630	3.3%
K10-08-11	731	8	231	163	26	10152	0.887	0.1203	1.1%	0.0376	1.5%	0.0655	1.7%
K10-08-12	733	11	154	95	16	8908	0.887	0.1206	1.5%	0.0379	1.9%	0.0650	2.9%
K10-08-13	734	9	144	142	18	10375	0.887	0.1207	1.2%	0.0372	1.6%	0.0643	2.1%
K10-08-14	734	12	133	114	15	8893	0.887	0.1206	1.7%	0.0388	2.0%	0.0631	3.0%
K10-08-15	735	11	155	120	17	9452	0.887	0.1209	1.6%	0.0378	2.0%	0.0652	3.1%
K10-08-16	737	13	100	63	12	9712	0.889	0.1238	1.8%	0.0506	2.7%	0.0816	3.4%
K10-08-17	738	12	193	132	23	10480	0.888	0.1212	1.7%	0.0386	2.6%	0.0633	3.7%
K10-08-18	738	10	261	225	34	11838	0.888	0.1213	1.3%	0.0379	1.7%	0.0637	2.5%
K10-08-19	740	8	166	121	20	11164	0.888	0.1217	1.1%	0.0376	1.6%	0.0643	1.8%
K10-08-20	741	15	79	49	9	9011	0.889	0.1237	2.0%	0.0443	2.7%	0.0763	4.1%
K10-08-21	743	8	204	234	27	10766	0.888	0.1222	1.1%	0.0357	1.4%	0.0649	1.6%
K10-08-22	744	10	149	120	17	9606	0.888	0.1221	1.3%	0.0383	1.7%	0.0625	2.8%
K10-08-23	744	16	218	187	28	9830	0.888	0.1220	2.3%	0.0402	2.7%	0.0618	4.1%
K10-08-24	746	9	183	155	23	10967	0.888	0.1229	1.3%	0.0385	1.5%	0.0656	1.7%
K10-08-25	748	10	120	85	14	10008	0.889	0.1235	1.4%	0.0376	1.8%	0.0668	2.4%
K10-08-26	749	10	124	80	14	9422	0.888	0.1231	1.4%	0.0398	1.7%	0.0641	2.4%
K10-08-27	751	8	182	122	22	11363	0.889	0.1233	1.2%	0.0368	1.6%	0.0631	1.7%
K10-08-28	752	8	221	171	28	11167	0.889	0.1240	1.0%	0.0379	1.5%	0.0664	1.5%
K10-08-29	757	8	172	190	23	10314	0.889	0.1247	1.1%	0.0373	1.4%	0.0651	1.8%
K10-08-30	762	9	143	101	17	9916	0.890	0.1257	1.2%	0.0375	1.7%	0.0656	2.2%

K10-08-31	801	14	127	87	17	9937	0.893	0.1338	1.8%	0.0497	2.6%	0.0755	3.8%
K10-18-1	222	15	2285	983	92	13596	0.853	0.0413	6.4%	0.0276	8.5%	0.1707	8.4%
K10-18-2	229	2	3018	471	94	15107	0.851	0.0368	1.0%	0.0182	3.2%	0.0646	1.3%
K10-18-3	237	4	3224	1234	122	14508	0.853	0.0406	1.7%	0.0200	3.1%	0.1117	3.3%
K10-18-4	244	3	1621	263	50	13465	0.852	0.0389	1.3%	0.0155	2.5%	0.0563	2.6%
K10-18-5	247	3	938	301	31	12575	0.852	0.0393	1.3%	0.0124	2.6%	0.0579	3.0%
K10-18-6	250	6	1434	979	47	12767	0.852	0.0396	2.3%	0.0116	2.7%	0.0520	4.2%
K10-18-7	251	3	1293	204	47	14360	0.852	0.0402	1.3%	0.0170	2.6%	0.0604	2.6%
K10-18-8	253	4	3046	280	84	14244	0.852	0.0404	1.7%	0.0172	3.4%	0.0568	2.3%
K10-18-9	254	2	2492	291	74	14041	0.852	0.0401	0.9%	0.0125	1.7%	0.0514	1.2%
K10-18-10	275	3	11087	426	371	23205	0.854	0.0440	1.2%	0.0343	4.6%	0.0588	1.2%
K10-18-11	386	7	2328	417	131	13422	0.863	0.0650	1.7%	0.0586	1.8%	0.0952	1.7%
K10-18-12	679	8	295	327	34	9170	0.883	0.1116	1.2%	0.0358	1.5%	0.0654	1.9%
K10-18-13	754	18	98	58	11	8233	0.889	0.1244	2.4%	0.0387	3.1%	0.0665	4.2%
K10-18-14	1184	12	250	103	42	11603	0.924	0.2017	1.0%	0.0582	1.5%	0.0796	1.4%
K10-18-15	1805	115	380	89	52	10166	0.909	0.1688	2.0%	0.0632	1.8%	0.1019	1.1%
K10-25B-1	430	6	307	213	19	8614	0.865	0.0690	1.4%	0.0211	1.7%	0.0546	2.3%
K10-25B-2	434	4	1659	429	94	10375	0.865	0.0698	0.9%	0.0218	1.4%	0.0573	1.0%
K10-25B-3	438	4	594	268	36	11197	0.865	0.0704	1.0%	0.0224	1.5%	0.0570	1.5%
K10-25B-4	441	4	554	289	34	10197	0.865	0.0708	1.0%	0.0221	1.4%	0.0558	1.6%
K10-25B-5	445	4	744	379	46	11412	0.866	0.0715	1.0%	0.0218	1.4%	0.0557	1.3%

K10-25B-6	445	7	132	90	9	8947	0.866	0.0713	1.6%	0.0234	2.0%	0.0535	3.4%
K10-25B-7	449	5	268	198	18	10092	0.866	0.0721	1.2%	0.0236	1.7%	0.0560	2.1%
K10-25B-8	452	5	387	190	24	10513	0.866	0.0726	1.1%	0.0239	1.7%	0.0560	1.9%
K10-25B-9	454	7	241	171	16	9295	0.866	0.0728	1.5%	0.0229	1.7%	0.0538	2.3%
K10-25B-10	458	6	321	0	17	10825	0.867	0.0735	1.3%	0.0450	29.3%	0.0547	2.1%
K10-25B-11	458	4	850	594	58	10102	0.867	0.0737	1.0%	0.0238	1.3%	0.0558	1.3%
K10-25B-12	459	5	596	312	40	11126	0.867	0.0743	1.0%	0.0251	2.0%	0.0614	1.7%
K10-25B-13	466	6	391	343	31	10806	0.868	0.0763	1.3%	0.0258	1.8%	0.0703	2.7%
K10-25B-14	466	6	353	145	23	10509	0.867	0.0751	1.3%	0.0253	1.7%	0.0571	2.0%
K10-25B-15	467	5	502	301	34	11024	0.867	0.0753	1.1%	0.0232	1.5%	0.0586	1.6%
K10-25B-16	528	7	201	306	20	9805	0.872	0.0857	1.3%	0.0260	1.4%	0.0607	2.3%
K10-25B-17	741	12	623	261	64	10314	0.888	0.1222	1.6%	0.0373	2.0%	0.0666	1.0%
K10-25B-18	741	23	1636	323	350	12668	0.960	0.2779	3.2%	0.0762	2.5%	0.1174	0.9%
K10-25B-19	745	9	169	120	20	8760	0.889	0.1240	1.2%	0.0384	1.8%	0.0743	2.5%
K10-25B-20	774	8	606	427	72	10856	0.891	0.1277	1.0%	0.0393	1.3%	0.0661	1.0%
K10-25B-21	789	23	1304	102	179	12328	0.919	0.1902	2.8%	0.0675	2.1%	0.0811	1.0%
K10-25B-22	857	8	1090	88	122	13459	0.897	0.1423	1.0%	0.0409	2.0%	0.0686	1.1%
K10-25B-23	898	9	762	27	92	12532	0.902	0.1525	1.0%	0.1959	2.1%	0.0853	1.2%
K10-25B-24	902	8	1011	57	115	13640	0.901	0.1501	0.9%	0.0456	1.8%	0.0682	0.8%
K10-25B-25	918	11	291	172	40	9924	0.902	0.1535	1.2%	0.0458	1.5%	0.0719	1.8%
K10-25B-26	923	9	666	43	78	13211	0.902	0.1537	1.0%	0.0482	1.9%	0.0685	1.0%
K10-25B-27	943	12	550	22	69	12702	0.904	0.1569	1.3%	0.0493	6.8%	0.0666	2.1%
K10-25B-28	945	8	494	102	62	11379	0.904	0.1575	0.9%	0.0455	1.5%	0.0686	1.2%

K10-25B-29	950	10	940	80	113	13142	0.905	0.1587	1.1%	0.0517	1.8%	0.0705	0.8%
K10-25B-30	982	10	194	85	27	7934	0.907	0.1646	1.1%	0.0502	1.7%	0.0723	1.6%
K10-25B-31	994	10	406	171	59	10658	0.908	0.1665	1.0%	0.0497	1.5%	0.0717	1.2%
K10-25B-32	998	9	810	144	109	13027	0.909	0.1682	0.9%	0.0502	1.6%	0.0757	0.9%
K10-25B-33	1023	10	474	205	70	10684	0.910	0.1717	1.0%	0.0541	1.4%	0.0722	1.1%
K10-25B-34	1044	10	694	513	116	9470	0.913	0.1765	1.0%	0.0519	1.3%	0.0771	0.7%
K10-25B-35	1056	10	691	310	104	10180	0.913	0.1776	1.0%	0.0507	1.3%	0.0728	0.8%
K10-25B-36	1067	10	426	80	61	12280	0.914	0.1798	1.0%	0.0527	1.6%	0.0741	0.9%
K10-25B-37	1165	12	333	2	49	13370	0.923	0.1982	1.1%	0.3188	6.8%	0.0795	1.1%
K10-25B-38	1170	11	307	150	53	11876	0.923	0.1989	1.0%	0.0595	1.4%	0.0785	1.3%
K10-25B-39	1216	13	200	157	39	9019	0.927	0.2077	1.1%	0.0608	1.4%	0.0810	1.4%
K10-25B-40	1274	12	555	213	103	12023	0.932	0.2176	1.0%	0.0630	1.4%	0.0798	0.9%
K10-25B-41	1421	15	1762	73	323	15692	0.947	0.2487	1.1%	0.0544	2.5%	0.0973	0.6%
K10-25B-42	1457	17	128	72	29	9789	0.949	0.2540	1.2%	0.0738	1.5%	0.0928	1.5%
K10-25B-43	1466	30	1304	102	179	12328	0.919	0.1902	2.8%	0.0675	2.1%	0.0811	1.0%
K10-25B-44	1627	20	130	75	34	10528	0.965	0.2867	1.3%	0.0875	1.6%	0.0989	1.2%
K10-25B-45	1661	24	1438	200	365	15100	0.970	0.2972	1.5%	0.0439	3.2%	0.1116	1.3%
K10-25B-46	1707	16	391	181	106	10248	0.973	0.3030	0.9%	0.0905	1.2%	0.1040	0.7%
K10-25B-47	1751	15	540	88	138	12497	0.977	0.3125	0.9%	0.0931	1.4%	0.1082	0.6%
K10-25B-48	1761	17	226	281	76	10785	0.978	0.3136	1.0%	0.0879	1.3%	0.1066	1.0%
K10-25B-49	2070	19	255	106	86	10487	1.009	0.3781	0.9%	0.1073	1.3%	0.1267	0.8%
K10-25B-50	2133	14	1636	323	350	12668	0.960	0.2779	3.2%	0.0762	2.5%	0.1174	0.9%
K10-25B-51	2202	25	879	561	388	10759	1.038	0.4366	1.1%	0.1382	1.7%	0.1985	0.6%

K10-25B-52	2524	34	157	54	55	9060	1.010	0.3804	1.6%	0.1357	1.5%	0.1585	0.8%
K10-25B-53	2575	75	1015	453	316	10958	0.990	0.3384	1.3%	0.1119	1.2%	0.1507	0.6%
K10-25B-54	3017	32	735	123	111	18253	0.909	0.1678	2.9%	0.0311	2.1%	0.1743	1.5%
K10-25C-1	242	4	1322	482	39	9306	0.852	0.0383	1.6%	0.0135	2.5%	0.0519	3.6%
K10-25C-2	242	4	1322	482	39	9306	0.852	0.0383	1.6%	0.0135	2.5%	0.0519	3.6%
K10-25C-3	248	3	556	419	20	8543	0.852	0.0393	1.2%	0.0124	1.5%	0.0518	2.6%
K10-25C-4	248	3	556	419	20	8543	0.852	0.0393	1.2%	0.0124	1.5%	0.0518	2.6%
K10-25C-5	251	3	539	378	20	8891	0.852	0.0399	1.3%	0.0127	1.7%	0.0551	2.5%
K10-25C-6	251	3	539	378	20	8891	0.852	0.0399	1.3%	0.0127	1.7%	0.0551	2.5%
K10-25C-7	255	4	541	334	19	8434	0.852	0.0404	1.4%	0.0125	1.9%	0.0516	3.0%
K10-25C-8	255	4	541	334	19	8434	0.852	0.0404	1.4%	0.0125	1.9%	0.0516	3.0%
K10-25C-9	255	4	283	134	10	9603	0.852	0.0404	1.6%	0.0129	2.2%	0.0522	3.4%
K10-25C-10	255	4	283	134	10	9603	0.852	0.0404	1.6%	0.0129	2.2%	0.0522	3.4%
K10-25C-11	255	2	2307	783	75	11827	0.852	0.0404	0.9%	0.0120	1.6%	0.0517	1.2%
K10-25C-12	255	2	2307	783	75	11827	0.852	0.0404	0.9%	0.0120	1.6%	0.0517	1.2%
K10-25C-13	256	4	389	255	14	10057	0.853	0.0409	1.4%	0.0143	2.3%	0.0602	3.0%
K10-25C-14	256	4	389	255	14	10057	0.853	0.0409	1.4%	0.0143	2.3%	0.0602	3.0%
K10-25C-15	256	3	1519	757	53	10372	0.853	0.0407	1.1%	0.0132	1.8%	0.0567	1.8%
K10-25C-16	256	3	1519	757	53	10372	0.853	0.0407	1.1%	0.0132	1.8%	0.0567	1.8%
K10-25C-17	256	7	557	163	16	9775	0.852	0.0404	2.9%	0.0129	5.0%	0.0503	4.7%
K10-25C-18	256	7	557	163	16	9775	0.852	0.0404	2.9%	0.0129	5.0%	0.0503	4.7%
K10-25C-19	257	2	2754	449	85	11712	0.853	0.0406	0.9%	0.0132	1.7%	0.0511	1.1%

K10-25C-20	257	2	2754	449	85	11712	0.853	0.0406	0.9%	0.0132	1.7%	0.0511	1.1%
K10-25C-21	257	2	2790	1088	93	12268	0.853	0.0407	0.9%	0.0133	1.3%	0.0517	1.1%
K10-25C-22	257	2	2790	1088	93	12268	0.853	0.0407	0.9%	0.0133	1.3%	0.0517	1.1%
K10-25C-23	259	4	1234	674	45	9867	0.853	0.0415	1.4%	0.0156	1.8%	0.0624	2.2%
K10-25C-24	259	4	1234	674	45	9867	0.853	0.0415	1.4%	0.0156	1.8%	0.0624	2.2%
K10-25C-25	260	3	1928	337	60	12190	0.853	0.0412	1.0%	0.0131	1.7%	0.0523	1.3%
K10-25C-26	260	3	1928	337	60	12190	0.853	0.0412	1.0%	0.0131	1.7%	0.0523	1.3%
K10-25C-27	261	4	1184	782	41	9167	0.853	0.0414	1.4%	0.0124	1.8%	0.0519	2.9%
K10-25C-28	261	4	1184	782	41	9167	0.853	0.0414	1.4%	0.0124	1.8%	0.0519	2.9%
K10-25C-29	263	3	1968	656	65	11659	0.853	0.0416	1.1%	0.0132	1.6%	0.0511	1.3%
K10-25C-30	263	3	1968	656	65	11659	0.853	0.0416	1.1%	0.0132	1.6%	0.0511	1.3%
K10-25C-31	774	10	1017	103	104	13929	0.890	0.1275	1.4%	0.0407	3.0%	0.0650	2.3%
K10-25C-32	774	10	1017	103	104	13929	0.890	0.1275	1.4%	0.0407	3.0%	0.0650	2.3%
K10-29-1	249	3	1108	536	38	10087	0.852	0.0396	1.2%	0.0130	2.8%	0.0571	3.2%
K10-29-2	249	2	1079	426	36	10410	0.852	0.0394	0.9%	0.0131	1.6%	0.0528	1.7%
K10-29-3	251	3	2495	1017	82	11117	0.852	0.0397	1.2%	0.0122	1.4%	0.0511	1.0%
K10-29-4	255	2	1520	225	47	12218	0.852	0.0403	1.0%	0.0134	1.9%	0.0509	1.4%
K10-29-5	255	2	2250	577	72	12009	0.852	0.0403	0.9%	0.0128	1.5%	0.0513	1.1%
K10-29-6	255	2	2783	1278	97	10327	0.852	0.0405	0.9%	0.0133	1.3%	0.0520	1.0%
K10–29–7	255	3	2925	1712	100	11436	0.853	0.0405	1.0%	0.0121	1.4%	0.0523	1.6%
K10-29-8	257	3	4213	2094	140	9922	0.853	0.0406	1.1%	0.0126	1.4%	0.0518	1.2%
K10-29-9	257	7	2063	346	62	11774	0.853	0.0423	2.2%	0.0138	3.0%	0.0551	2.5%

K10-29-10	257	3	1047	593	39	10919	0.853	0.0410	1.3%	0.0134	2.2%	0.0556	2.5%
K10-29-11	258	3	5248	5774	208	9480	0.853	0.0411	1.1%	0.0125	1.3%	0.0564	1.6%
K10-29-12	258	3	1481	210	46	13772	0.853	0.0408	1.0%	0.0144	2.0%	0.0514	1.2%
K10-29-13	259	2	1544	581	52	10453	0.853	0.0409	0.9%	0.0124	1.4%	0.0513	1.3%
K10-29-14	272	4	2094	463	65	11008	0.854	0.0430	1.4%	0.0127	2.9%	0.0516	2.5%
K10-29-15	2120	60	2063	346	62	11774	0.853	0.0423	2.2%	0.0138	3.0%	0.0551	2.5%
K10-36-1	34	1	660	491	3	9026	0.838	0.0053	2.2%	0.0018	2.9%	0.0528	6.1%
K10-36-2	34	1	361	233	2	8348	0.838	0.0053	2.6%	0.0019	4.0%	0.0533	8.4%
K10-36-3	34	1	946	567	5	10194	0.838	0.0055	2.1%	0.0021	3.0%	0.0644	4.7%
K10-36-4	35	1	1665	1904	9	9406	0.838	0.0054	1.7%	0.0017	2.0%	0.0508	3.7%
K10-36-5	35	1	492	403	3	8537	0.838	0.0054	2.6%	0.0017	3.0%	0.0499	7.2%
K10-36-6	35	1	538	553	4	8705	0.838	0.0064	2.9%	0.0036	3.3%	0.1664	5.8%
K10-36-7	35	1	922	603	4	10533	0.838	0.0054	2.0%	0.0017	2.6%	0.0458	5.6%
K10-36-8	35	1	751	399	4	10532	0.838	0.0055	1.9%	0.0019	3.0%	0.0516	5.4%
K10-36-9	36	1	722	640	4	9221	0.838	0.0056	2.2%	0.0018	2.8%	0.0527	6.0%
K10-36-10	36	1	540	392	3	9321	0.838	0.0055	2.4%	0.0018	3.1%	0.0438	8.1%
K10-36-11	36	1	953	576	5	10393	0.838	0.0056	1.8%	0.0018	2.6%	0.0490	4.4%
K10-36-12	36	1	587	376	3	9094	0.838	0.0056	2.2%	0.0018	3.1%	0.0452	6.4%
K10-36-13	36	1	1422	776	7	11817	0.838	0.0056	1.6%	0.0018	2.3%	0.0486	3.8%
K10-36-14	36	1	598	373	3	9794	0.838	0.0056	2.2%	0.0018	2.9%	0.0426	6.1%
K10-36-15	37	1	493	343	3	9394	0.838	0.0058	2.4%	0.0021	3.4%	0.0600	6.9%

K10-73-1	417	10	528	244	26	11543	0.864	0.0667	2.3%	0.0213	4.6%	0.0539	5.5%
K10-73-2	428	6	1181	283	68	12709	0.865	0.0688	1.4%	0.0210	2.1%	0.0563	2.5%
K10-73-3	431	5	430	227	26	10764	0.865	0.0693	1.1%	0.0218	1.5%	0.0562	1.9%
K10-73-4	432	5	225	158	14	9269	0.865	0.0692	1.2%	0.0218	1.7%	0.0547	2.5%
K10-73-5	450	5	525	177	31	11658	0.866	0.0722	1.0%	0.0239	1.6%	0.0553	1.7%
K10-73-6	452	6	424	240	27	11407	0.866	0.0725	1.4%	0.0228	1.6%	0.0553	1.8%
K10-73-7	453	5	422	122	25	11718	0.866	0.0729	1.1%	0.0232	1.8%	0.0560	1.8%
K10-73-8	468	6	289	165	20	9900	0.868	0.0756	1.3%	0.0258	1.9%	0.0597	2.2%
K10-73-9	525	7	198	148	16	10643	0.872	0.0854	1.3%	0.0272	1.6%	0.0624	2.6%
K10-73-10	645	6	804	158	66	11723	0.880	0.1051	0.9%	0.0336	1.6%	0.0608	1.2%
K10-73-11	705	8	196	94	19	10301	0.885	0.1156	1.2%	0.0353	1.7%	0.0631	2.1%
K10-73-12	890	8	533	185	65	11671	0.900	0.1479	1.0%	0.0462	1.4%	0.0678	1.0%
K10-73-13	961	13	197	122	27	9771	0.906	0.1612	1.4%	0.0477	1.9%	0.0731	2.4%
K10-73-14	964	9	471	171	62	11929	0.906	0.1614	1.0%	0.0500	1.5%	0.0722	1.2%
K10-73-15	974	11	210	134	31	10234	0.907	0.1633	1.1%	0.0499	1.6%	0.0723	1.5%
K10-73-16	987	13	97	100	16	12187	0.908	0.1654	1.3%	0.0508	1.6%	0.0718	2.1%
K10-73-17	1001	10	201	77	29	12028	0.909	0.1693	1.1%	0.0593	2.0%	0.0790	1.6%
K10-73-18	1007	14	650	83	79	12854	0.909	0.1695	1.5%	0.0505	2.3%	0.0752	1.4%
K10-73-19	1042	13	114	30	16	10913	0.912	0.1747	1.3%	0.0543	2.2%	0.0711	2.0%
K10-73-20	1067	10	756	360	118	12170	0.914	0.1799	1.0%	0.0601	1.3%	0.0748	0.8%
K10-73-21	1122	10	493	212	80	12123	0.919	0.1901	0.9%	0.0583	1.3%	0.0770	0.9%
K10-73-22	1153	13	96	56	17	10311	0.922	0.1959	1.2%	0.0599	1.8%	0.0784	2.0%
K10-73-23	1343	13	516	100	94	13036	0.938	0.2311	1.0%	0.0664	1.6%	0.0841	0.8%

K10-73-24	1372	12	355	41	65	13193	0.941	0.2371	0.9%	0.0703	1.9%	0.0872	1.0%
K10-73-25	1412	14	265	298	67	8975	0.945	0.2451	1.0%	0.0709	1.3%	0.0903	1.0%
K10-73-26	1632	14	3965	107	558	15070	0.922	0.1960	1.9%	0.0534	3.6%	0.0973	0.5%
K10-73-27	1842	21	261	118	75	11472	0.986	0.3304	1.2%	0.0936	1.5%	0.1116	0.9%
K10-73-28	2429	22	1081	419	442	11887	1.049	0.4602	0.9%	0.1284	1.2%	0.1627	0.4%
K10-73-29	3125	56	185	103	112	10275	1.125	0.6326	1.3%	0.1769	1.4%	0.2530	0.9%

	207 cor	+/-1 ster	<sup>206</sup> Pb/	+/-1	<sup>208</sup> Pb/	+/-1	<sup>207</sup> Pb/	+/-1	<sup>238</sup> U/	+/-1 std	<sup>207</sup> Pb/	+/-1 std	common Pb at
	<sup>206</sup> Pb/ <sup>238</sup> U		<sup>238</sup> U	RSE	<sup>232</sup> Th	RSE	<sup>206</sup> Pb	RSE	<sup>206</sup> Pb	err	<sup>206</sup> Pb	err	age of zircon
	Age (Ma)												
K09-04-1	30	1	0.0046	4.0%	0.0015	2.0%	0.0548	13.5%	215.26	8.54	0.0548	0.0074	0.838
K09-04-2	31	1	0.0048	4.4%	0.0015	2.1%	0.0482	15.9%	207.06	9.14	0.0482	0.0077	0.838
K09-04-3	31	1	0.0049	4.0%	0.0017	2.2%	0.0530	24.8%	203.31	8.16	0.0530	0.0131	0.838
K09-04-4	31	1	0.0049	3.5%	0.0017	1.9%	0.0552	12.6%	202.65	7.06	0.0552	0.0070	0.838
K09-04-5	32	1	0.0049	4.3%	0.0016	1.9%	0.0511	13.2%	202.57	8.68	0.0511	0.0067	0.838
K09-04-6	32	2	0.0049	4.8%	0.0016	2.5%	0.0495	13.5%	202.30	9.75	0.0495	0.0067	0.838
K09-04-7	32	2	0.0050	6.1%	0.0016	4.1%	0.0579	24.3%	199.13	12.17	0.0579	0.0141	0.838
K09-04-8	33	1	0.0051	3.3%	0.0016	1.7%	0.0444	10.8%	197.91	6.56	0.0444	0.0048	0.838
K09-04-9	33	1	0.0052	3.7%	0.0016	1.8%	0.0614	15.0%	193.19	7.19	0.0614	0.0092	0.838
K09-04-10	34	1	0.0054	3.4%	0.0017	1.7%	0.0512	9.5%	185.82	6.41	0.0512	0.0049	0.838
K09-04-11	35	1	0.0055	3.8%	0.0016	2.0%	0.0497	11.1%	181.80	6.86	0.0497	0.0055	0.838
K09-04-12	43	5	0.0065	12.5%	0.0015	3.8%	0.0303	56.6%	154.27	19.27	0.0303	0.0172	0.838
K09-44-2	23	4	0.0037	15.3%	0.0015	3.5%	0.0672	52.7%	267.89	40.88	0.0672	0.0355	0.837
K09-44-3	26	1	0.0042	4.6%	0.0013	2.1%	0.0581	12.1%	240.75	11.05	0.0581	0.0071	0.837
K09-44-4	27	1	0.0042	3.5%	0.0014	1.9%	0.0599	10.6%	238.67	8.38	0.0599	0.0063	0.837

## 3.2 LA-ICPMS U-Th-Pb Monazite Dating

K09-44-5	27	1	0.0042	4.0%	0.0013	1.9%	0.0568	11.6%	236.32	9.48	0.0568	0.0066	0.837
K09-44-6	27	1	0.0043	4.1%	0.0014	2.1%	0.0607	11.6%	232.62	9.43	0.0607	0.0071	0.837
K09-44-7	27	1	0.0043	3.5%	0.0014	1.8%	0.0626	10.9%	231.35	8.09	0.0626	0.0069	0.837
K09-44-8	27	1	0.0043	3.5%	0.0014	2.0%	0.0490	11.0%	235.24	8.20	0.0490	0.0054	0.837
K09-44-9	27	1	0.0045	3.7%	0.0014	1.9%	0.0808	9.5%	224.16	8.20	0.0808	0.0076	0.837
K09-44-10	28	1	0.0044	3.4%	0.0013	2.2%	0.0572	12.2%	229.60	7.87	0.0572	0.0069	0.837
K09-44-11	29	1	0.0045	4.0%	0.0013	1.8%	0.0546	12.4%	221.78	8.90	0.0546	0.0068	0.837
K09-44-12	29	1	0.0045	4.4%	0.0014	2.3%	0.0478	14.4%	223.64	9.86	0.0478	0.0069	0.837
K09-44-13	29	1	0.0045	3.5%	0.0014	2.1%	0.0471	12.2%	222.95	7.90	0.0471	0.0057	0.837
K10-08-3	31	2	0.0049	4.9%	0.0015	1.8%	0.0652	15.3%	202.67	9.99	0.0652	0.0100	0.838
K10-08-4	31	2	0.0049	6.0%	0.0017	3.3%	0.0638	17.1%	202.30	12.15	0.0638	0.0109	0.838
K10-08-5	31	2	0.0050	5.1%	0.0015	1.8%	0.0767	14.0%	198.81	10.05	0.0767	0.0107	0.838
K10-08-6	32	2	0.0051	5.2%	0.0015	3.5%	0.0507	27.9%	197.26	10.31	0.0507	0.0141	0.838
K10-08-7	33	2	0.0052	4.9%	0.0016	3.2%	0.0550	16.9%	193.63	9.41	0.0550	0.0093	0.838
K10-08-8	33	2	0.0052	5.1%	0.0015	1.8%	0.0621	16.6%	190.93	9.75	0.0621	0.0103	0.838
K10-08-9	34	2	0.0054	6.4%	0.0015	3.4%	0.0649	22.9%	186.59	11.96	0.0649	0.0149	0.838
K10-08-10	35	2	0.0053	5.8%	0.0016	2.4%	0.0400	19.6%	187.09	10.79	0.0400	0.0078	0.838
K10-08-11	35	2	0.0054	6.4%	0.0014	1.9%	0.0443	32.8%	186.03	11.98	0.0443	0.0146	0.838
K10-08-12	35	2	0.0055	5.6%	0.0014	1.9%	0.0568	20.0%	182.61	10.18	0.0568	0.0113	0.838
K10-08-13	35	2	0.0055	6.8%	0.0015	1.7%	0.0513	29.1%	181.77	12.28	0.0513	0.0149	0.838
K10-08-14	35	2	0.0055	5.2%	0.0017	3.0%	0.0508	19.5%	180.28	9.43	0.0508	0.0099	0.838
K10-08-15	37	2	0.0057	5.9%	0.0017	3.1%	0.0450	37.0%	175.93	10.44	0.0450	0.0166	0.838

## 4.1 Whole Rock Geochemical (XRF and solution ICPMS) Data

## 4.1.1. Silurian–Early Devonian Continental Rift Panjiazhai Metabasalt

Labels	<b>IP-10</b>	P1	IP–4
Lithology	Basalt	Basalt	Basalt
Location	Panjiazhai	Panjiazhai	Panjiazhai
Ref	Li et al., 1999	Shen et al., 1998	Li et al., 1999
SiO <sub>2</sub>	48.21	49.36	50.13
TiO <sub>2</sub>	2.49	2.73	2.94
Al <sub>2</sub> O <sub>3</sub>	17.46	18.14	18.68
FeO*	12.58	13.99	15.74
MnO	0.21	0.24	0.26
MgO	9.43	7.88	6.26
CaO	3.16	1.69	0.32
Na <sub>2</sub> O	2.16	1.40	0.63
K <sub>2</sub> O	3.69	4.14	4.55
$P_2O_5$	0.61	0.43	0.48
LOI	6.57	0.32	7.05
Total	100.00	100.00	100.00
Sc	21.5	28.4	35.2
Ba	957	798	638
V	349	428	507
Cr	1.33	201	268
Ni	64	104	143
Cu	54	55	56
Zn	97	113	129
Rb	85.9	89.2	92.5
Sr	156.7	87.4	18
Y	25.19	23.66	22.13
Zr	264	267	270
Nb	50.5	51.6	52.6
U	1.55	1.7	1.84
Th	10.10	10.70	11.20

La	52.55	52.62	52.68
Ce	113.79	112.33	110.87
Pr	12.84	13	13.16
Nd	46.01	48.37	50.73
Sm	7.99	8.04	8.09
Eu	2.38	2.457	2.53
Gd	6.38	6.542	6.7
Tb	0.94	0.97	1
Dy	5.39	5.301	5.21
Но	0.99	0.996	1
Er	2.66	2.665	2.67
Tm	0.39	0.4	0.41
Yb	2.3	2.347	2.4
Lu	0.33	0.355	0.38
Та	3.78	3.71	3.63
Hf	6.6	6.79	6.98
FeO*/MgO	1.3	1.8	2.5
(La/Sm)n	4.3	4.2	4.2
(La/Yb)n	16.4	27.4	26.8
(Gd/Yb)n	2.3	2.3	2.3
(Th/Yb)n	111.6	115.9	118.6
Zr/Nb	5.23	5.17	5.13
Zr/Y	10.48	11.28	12.20
Nb/Y	2.00	2.18	2.38
Ti/Zr	56.6	61.3	65.2

Suite	DC-1	DC-1	DC-1	DC-1	DC-1	DC-1	DC-1	DC-1
Labels	K09–16B	HH–17	HH–15	HH-20	HH–12	HH–16	SG-02	K09–16C
Lithology	Dolerite	Gabbro	Gabbro	Dolerite	Gabbro	Gabbro	Dolerite	Dolerite
Location	Shuanggou	Shuanggou	Shuanggou	Shuanggou	Shuanggou	Shuanggou	Shuanggou	Shuanggou
Ref	This work	Yumul et	Yumul et	Yumul et	Yumul et al.,	Yumul et al.,	Jian et al.	This work
		al., 2008	al., 2008	al., 2008	2008	2008	2009	
SiO <sub>2</sub>	42.08	47.60	47.72	47.90	48.22	48.60	48.71	50.03
TiO <sub>2</sub>	2.45	0.60	0.70	1.05	0.50	0.78	1.28	1.89
Al <sub>2</sub> O <sub>3</sub>	10.36	20.65	19.21	14.99	14.98	19.30	16.69	14.71
FeO*	19.75	8.42	9.26	12.79	14.50	8.43	10.59	14.18
MnO	0.35	0.11	0.14	0.16	0.12	0.14	0.24	0.27
MgO	18.07	7.13	8.10	9.02	7.32	8.11	9.31	7.07
CaO	6.31	12.21	11.93	11.36	11.01	11.38	9.83	7.85
Na <sub>2</sub> O	0.21	2.84	2.34	2.45	2.99	2.49	2.88	3.57
K <sub>2</sub> O	0.06	0.35	0.52	0.17	0.32	0.69	0.38	0.29
P <sub>2</sub> O <sub>5</sub>	0.36	0.07	0.07	0.10	0.05	0.08	0.09	0.14
LOI	6.85	3.14	2.70	0.47	-4.14	4.55	3.41	-0.99
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Sc	21.2						41.00	50.1
Ba	37							44
v	300						243	352
Cr	32						309	115
Ni	877						515	70
Cu	18						61	74
Zn	172						62	89
Rb	0.90						7.20	5.35
Sr	6.95						317.00	127.73
Y	128.70	13.60	16.10	23.40	21.90	17.50	35.40	46.75
Zr	262.60	30.80	37.90	60.70	37.30	43.70	91.00	122.63
Nb	3.60	0.47	0.60	0.94	0.56	0.61	1.60	1.65
U							0.00	0.05
Th		0.03	0.04	0.06	0.05	0.05	0.10	0.17
La	20.20	0.94	1.20	1.57	1.44	1.23	2.84	3.73
Ce	29.80	3.14	3.88	5.52	5.27	4.10	8.36	12.34
Pr		0.58	0.70	1.02	1.00	0.75	1.78	2.30

4.1.2. Late Devonian–Early Carboniferous CAL Volcanic Passive Margin Magmatism

Nd	47.40	3.31	3.95	5.92	5.74	4.36	9.38	13.10
Sm		1.25	1.50	2.24	2.11	1.68	3.31	4.90
Eu		0.57	0.71	1.02	0.96	0.73	1.12	2.17
Gd		1.95	2.30	3.46	3.21	2.53	4.16	6.85
Tb		0.36	0.42	0.63	0.59	0.47	0.80	1.32
Dy		2.44	2.87	4.20	3.91	3.10	5.33	8.43
Но		0.54	0.64	0.94	0.88	0.72	1.25	1.80
Er		1.59	1.90	2.64	2.58	2.04	3.54	5.35
Tm		0.23	0.28	0.40	0.37	0.31	0.51	0.79
Yb		1.50	1.86	2.54	2.38	1.99	3.32	5.01
Lu		0.23	0.29	0.39	0.35	0.29	0.50	0.75
Ta		0.04	0.05	0.07	0.06	0.06	0.10	0.16
Hf							2.20	3.52
FeO*/MgO	1.1	1.2	1.1	1.4	2.0	1.0	1.1	2.0
(La/Sm)n		0.5	0.5	0.5	0.4	0.5	0.6	0.5
(La/Yb)n		0.4	0.5	0.4	0.4	0.4	0.6	0.5
(Gd/Yb)n		1.1	1.0	1.1	1.1	1.1	1.0	1.1
(Th/Yb)n		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Zr/Nb	72.94	65.53	63.17	64.57	66.61	71.64	56.88	74.32
Zr/Y	2.04	2.26	2.35	2.59	1.70	2.50	2.57	2.62
Nb/Y	0.03	0.03	0.04	0.04	0.03	0.03	0.05	0.04
Ti/Zr	55.8	116.6	110.5	104.2	80.3	106.4	84.6	92.2

Suite	DC-1	DC-1	DC-1	DC-1	DC-1	DC-1	DC-1
Labels	HH–18	HH–14	HH–21	HH–31	SM09-128	HH–19	K09–16A
Lithology	Dolerite	Gabbro	Gabbro	Gabbro	Dolerite	Dolerite	Dolerite
Location	Shuanggou	Shuanggou	Shuanggou	Shuanggou	Shuanggou	Shuanggou	Shuanggou
Ref	Yumul et al.,	Yumul et	Yumul et al.,	Yumul et al.,	This work	Yumul et al.,	This work
	2008	al., 2008	2008	2008		2008	
SiO <sub>2</sub>	50.46	50.59	52.00	52.09	52.41	52.64	53.96
TiO <sub>2</sub>	1.01	0.94	0.56	0.37	1.32	1.81	1.07
Al <sub>2</sub> O <sub>3</sub>	16.12	17.64	16.52	18.23	14.68	14.15	13.86
FeO*	8.18	6.58	6.64	6.63	12.30	10.09	10.13
MnO	0.16	0.16	0.11	0.10	0.21	0.15	0.15
MgO	8.98	8.85	7.79	7.26	7.98	6.91	7.62
CaO	12.34	12.05	13.23	11.48	6.40	10.47	8.48
Na <sub>2</sub> O	2.23	2.65	2.79	3.57	4.55	3.43	4.11
K <sub>2</sub> O	0.41	0.45	0.28	0.20	0.08	0.17	0.53
P <sub>2</sub> O <sub>5</sub>	0.10	0.10	0.08	0.07	0.06	0.18	0.08
LOI	4.21	6.34	3.10	3.16	3.41	5.64	1.47
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Sc					42.5		38.1
Ba					55		65
V					255		231
Cr					362		327
Ni					301		84
Cu					5		21
Zn					58		52
Rb					1.10		9.10
Sr					141.30		170.40
Y	21.30	19.40	18.20	32.80	28.50	39.60	35.70
Zr	57.30	50.70	31.60	81.70	89.40	115.00	65.60
Nb	0.90	0.88	0.42	1.10	1.10	1.93	1.20
U							0.09
Th	0.06	0.06	0.04	0.48		0.15	0.11
La	1.66	1.52	1.41	7.37		3.30	2.69
Ce	5.55	5.11	4.85	20.80		11.00	8.31
Pr	1.01	0.93	0.91	3.05		1.97	1.46
Nd	5.87	5.21	5.15	14.20	4.40	11.00	7.97
Sm	2.16	1.98	1.79	3.78		3.94	2.94
Eu	1.01	0.81	0.89	1.05		1.97	1.12

Gd	3.16	2.88	2.69	5.04		6.00	4.30
Тb	0.59	0.53	0.48	0.87		1.06	0.88
Dy	3.85	3.52	3.20	5.58		7.12	5.95
Но	0.86	0.78	0.71	1.25		1.58	1.34
Er	2.48	2.24	2.12	3.65		4.58	4.26
Tm	0.37	0.34	0.30	0.57		0.68	0.68
Yb	2.34	2.16	1.98	3.56		4.23	4.26
Lu	0.35	0.31	0.30	0.51		0.65	0.63
Та	0.07	0.07	0.04	0.11		0.15	0.11
Hf							2.03
FeO*/MgO	0.9	0.7	0.9	0.9	1.5	1.5	1.3
(La/Sm)n	0.5	0.5	0.5	1.3		0.5	0.6
(La/Yb)n	0.5	0.5	0.5	1.5		0.6	0.5
(Gd/Yb)n	1.1	1.1	1.1	1.2		1.2	0.8
(Th/Yb)n	0.0	0.0	0.0	0.1		0.0	0.0
Zr/Nb	63.67	57.61	75.24	74.27	81.27	59.59	54.67
Zr/Y	2.69	2.61	1.74	2.49	3.14	2.90	1.84
Nb/Y	0.04	0.05	0.02	0.03	0.04	0.05	0.03
Ti/Zr	105.9	111.1	105.7	27.3	88.8	94.5	97.5

Suite	DC-2	DC-2	DC-2	DC-2	DC-2	DC-2
Labels	MHS-1	E-9	<b>M</b> –10	BZ-16	S-16	LZK1–9
Lithology	Basalt	Basalt	Basalt	Basalt	Dolerite	Basalt
Location	Maheshan	Jinshanyakou	Shuanggou	Pingzhang	Shuanggou	Laowangzhai
Ref	Shen et al., 1998	Li et al., 1999	Zhong et al. 1998	Li et al., 1999	Li et al., 1999	Li et al., 1999
SiO <sub>2</sub>	44.13	45.74	49.68	50.77	50.96	51.30
TiO <sub>2</sub>	2.19	0.86	1.40	1.47	1.59	1.13
Al <sub>2</sub> O <sub>3</sub>	22.07	21.26	15.82	16.43	16.72	14.74
FeO*	7.68	11.29	11.67	10.79	7.67	9.28
MnO	0.21	0.15	0.14	0.17	0.19	0.17
MgO	19.90	7.81	9.16	7.23	8.63	8.47
CaO	1.82	6.79	10.35	9.19	10.26	11.00
Na <sub>2</sub> O	1.14	3.33	1.69	3.76	3.20	3.61
K <sub>2</sub> O	0.59	2.66	0.08	0.05	0.65	0.19
P <sub>2</sub> O <sub>5</sub>	0.27	0.12	0.00	0.15	0.13	0.12
LOI	4.32	6.88	0.91	4.24	7.53	4.46
Total	100.00	100.00	100.00	100.00	100.00	100.00
Sc	36.4	20.2	35.0	41.2	35.0	38.3
Ba	88	304	393	71	89	40
$\mathbf{V}$	268	150	149	328	276	274
Cr	274	304	347	236	283	346
Ni	48	104	209	90	164	65
Cu	230	33		931	35	60
Zn	473	164		106	73	73
Rb	9.30	118.20	0.00	1.50	9.10	1.70
Sr	98.30	136.50	379.00	96.00	216.60	152.70
Y	27.70	15.65	27.00	27.48	42.35	22.03
Zr	182.00	71.00	147.00	112.00	109.00	83.00
Nb	9.90	4.00	7.00	6.70	5.40	4.10
U	2.03	0.88	0.83	2.16	0.98	162.00
Th		7.30	0.89	5.80	7.20	6.10
La	12.64	5.92		4.48	5.12	2.49
Ce	30.07	11.36		12.33	13.65	7.77
Pr	4.17	1.60		2.03	2.61	1.27
Nd	17.70	7.30		9.38	14.21	6.96
Sm	4.54	1.99		2.68	4.54	2.29
Eu	1.32	1.45		1.10	1.73	0.94
Gd	4.70	2.66		3.88	5.93	3.05

Tb	0.79	0.51		0.80	1.09	0.52
Dy	5.14	2.95		5.02	7.59	4.13
Но	1.05	0.61		1.06	1.52	0.84
Er	2.94	1.65		3.10	4.48	2.39
Tm	0.44	0.27		0.51	0.64	0.33
Yb	2.67	1.42		3.08	3.89	2.15
Lu	0.39	0.21		0.46	0.54	0.30
Та	0.73	0.41	0.43	1.80	0.29	0.29
Hf						
FeO*/MgO	0.4	1.4	1.3	1.5	0.9	1.1
(La/Sm)n	1.8	1.9		1.1	0.7	0.7
(La/Yb)n	3.4	3.0		1.0	0.9	0.8
(Gd/Yb)n	1.5	1.6		1.0	1.3	1.2
(Th/Yb)n	0.0	5.1		1.9	1.9	2.8
Zr/Nb	18.38	17.75	21.00	16.72	20.19	20.24
Zr/Y	6.57	4.54	5.44	4.08	2.57	3.77
Nb/Y	0.36	0.26	0.26	0.24	0.13	0.19
Ti/Zr	72.3	72.5	57.2	78.8	87.4	81.6

Suite	DC-2	DC-2	DC-2	DC-2
Labels	N-2	E-12	L4	L-2
Lithology	Basalt	Basalt	Basalt	Basalt
Location	Langnitang	Jinshanyakou	Laowangzhai	Laowangzhai
Ref	Li et al.,	Li et al., 1999	Wen and Shen, 1995	Li et al., 1999
	1999			
SiO <sub>2</sub>	51.45	52.09	52.27	52.59
TiO <sub>2</sub>	1.38	1.34	2.08	2.39
Al <sub>2</sub> O <sub>3</sub>	15.24	16.45	20.80	21.90
FeO*	10.32	7.35	9.33	11.46
MnO	0.20	0.17	0.17	0.13
MgO	8.82	7.87	6.11	6.50
CaO	8.69	10.56	2.98	0.47
Na <sub>2</sub> O	3.41	3.25	5.37	3.01
$K_2O$	0.34	0.77	0.66	1.27
$P_2O_5$	0.14	0.14	0.24	0.27
LOI	6.77	7.04	4.41	6.91
Total	100.00	100.00	100.00	100.00
Sc	41.7	36.9	39.3	42.2
Ba	59	93	73	96
$\mathbf{V}$	327	248	350	395
Cr	210	273	237	281
Ni	92	67	70	104
Cu	84	83	30	41
Zn	91	159	360	187
Rb	1.50	17.70	15.90	63.5
Sr	151.80	209.90	254.70	82.3
Y	33.02	24.73	35.02	58.03
Zr	98.00	96.00	152.00	185
Nb	5.50	5.80	7.00	9.8
U	3.10	1.43	1.68	1.31
Th	8.10	7.70	9.50	6.33
La	4.51	4.20	7.17	13.53
Ce	11.43	12.30	18.10	19.68
Pr	1.82	1.81	2.87	4.53
Nd	9.67	9.24	14.29	24.85
Sm	3.00	2.78	4.25	7.2
Eu	1.10	1.33	1.60	2.72

Gd	4.05	3.69	5.23	9.3
Tb	0.77	0.73	0.97	1.74
Dy	5.33	4.52	6.43	10.75
Но	1.14	0.97	1.37	2.26
Er	3.33	2.70	3.98	6.29
Tm	0.51	0.44	0.61	0.97
Yb	3.23	2.58	3.81	5.66
Lu	0.49	0.40	0.58	0.86
Та	0.47	0.35		0.39
Hf				
FeO*/MgO	1.2	0.9	1.5	1.8
(La/Sm)n	1.0	1.0	1.1	1.2
(La/Yb)n	1.0	1.2	1.3	1.7
(Gd/Yb)n	1.0	1.2	1.1	1.4
(Th/Yb)n	2.5	3.0	2.5	1.1
Zr/Nb	17.82	16.55	21.71	18.88
Zr/Y	2.97	3.88	4.34	3.19
Nb/Y	0.17	0.23	0.20	0.17
Ti/Zr	84.6	84.0	82.0	77.5

Labels	YD–1	K09-20B	<b>II10</b>	DP-1	II16	YD-20	K09–22A
Lithology	Gabbro	Gabbro	Basaltic slate	Amphibolite	Basaltic slate	Basalt	Gabbro
Location	Daping	Pingzhang	Santaipo	Daping	Santaipo	Daping	Pingzhang
Ref	Li et al., 1999	This work	Wang et al., 2004	Shen et al.,	Wang et al., 2004	Li et al., 1999	This work
				1998			
SiO <sub>2</sub>	46.61	47.87	48.43	48.49	48.79	49.01	49.54
TiO <sub>2</sub>	0.71	1.30	1.72	0.74	1.24	1.72	1.57
Al <sub>2</sub> O <sub>3</sub>	18.55	18.88	18.10	19.30	15.42	15.48	18.17
FeO*	7.81	8.77	10.24	10.22	13.27	12.05	8.96
MnO	0.14	0.15	0.18	0.15	0.16	0.11	0.14
MgO	7.25	10.34	6.37	7.48	7.64	6.12	8.04
CaO	8.60	7.90	10.53	8.94	9.77	10.94	8.49
Na <sub>2</sub> O	7.55	3.16	3.34	1.78	3.33	4.04	4.08
K <sub>2</sub> O	2.56	1.37	0.91	2.67	0.14	0.09	0.66
$P_2O_5$	0.22	0.27	0.19	0.23	0.22	0.42	0.34
LOI	-2.95	4.56	6.63	-3.11	10.41	11.82	3.84
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Sc	23.50	257.0		23.50		17.4	23.1
Ba	809	20.9	200	809	51	26	236.3
v	124	138.1	300	124	255	163	158.8
Cr	27	352.0	72	27	73	232	237.5
Ni	113	243.0	72	113	73	176	126.8
Cu	105	67.6	15	105	48	48	40.5
Zn	91	62.9	114	91	156	81	64.6
Rb	87	26.10	34	87	4	1.5	13.3
Sr	512	262.95	440	512	225	289	229.3
Y	13	22.3	13	9	19	16.08	27.8
Zr	61	120.80	140	61	120	164	171.70
Nb	5	13.3	11	5	19	27.8	17.3
U	0.42			0.42		1.12	
Th	7.60		6.96		3.20	6.5	
La	14.26	16	14.20	12.33	19.50	27.07	18
Ce	33.97	29	28.80	29.90	36.60	63.29	35
Pr	4.87		3.09	3.64	4.01	6.68	

## 4.1.3. Late Permian CAL Continental Rift Magmatism

Nd

19.89

16

14.40

13.69

19.10

24.8

23

Sm	3.88		2.97	2.69	4.60	5.14	
Eu	1.31		1.28	0.81	1.17	1.79	
Gd	3.45		2.79	2.31	3.70	4.39	
Tb	0.50		0.42	0.35	0.67	8.7	
Dy	2.97		2.77	1.92	4.58	3.57	
Но	0.53		0.51	0.36	0.91	0.66	
Er	1.42		1.19	0.98	2.44	1.63	
Tm	0.22		0.16	0.16	0.38	0.24	
Yb	1.15		0.89	0.86	2.29	1.25	
Lu	0.17		0.12	0.13	0.36	0.17	
Та			1.60	1.74	3.30	1.96	
Hf							
FeO*/MgO	1.1	0.8	1.6	1.4	1.7	2.0	1.1
(La/Sm)n	2.4		4.8	3.0	2.7	3.4	
(La/Yb)n	8.9		16.0	10.3	6.1	15.5	
(Gd/Yb)n	2.5		2.6	2.2	1.3	2.9	
(Th/Yb)n	6.6		7.8	0.0	1.4	5.2	
Zr/Nb	11.30	9.08	12.73	11.30	6.32	5.90	9.92
Zr/Y	4.67	5.42	10.9	6.70	6.42	10.20	6.18
Nb/Y	0.41	0.60	0.86	0.59	1.02	1.73	0.62
Ti/Zr	69.7	61.7	73.6	72.4	62.2	63.0	54.8

			113
K09–22A	118	K09–22C	Eh–1
Gabbro	Dolerite	Gabbro	Basalt
Pingzhang	Santaipo	Pingzhang	Jinshanyakou
This work	Wang et al., 2004	This work	Li et al., 1999
50.33	50.49	51.93	52.31
1.28	1.97	1.31	1.24
20.38	14.80	15.53	21.98
6.94	13.30	10.90	10.63
0.11	0.21	0.16	0.09
6.78	6.13	8.15	7.82
8.50	9.48	6.53	0.93
4.11	2.45	5.09	1.85
1.30	0.81	0.22	3.04
0.27	0.36	0.18	0.12
4.16	2.96	2.81	9.99

\_

Location	Santaipo	Santaipo	Pingzhang	Santaipo	Pingzhang	Jinshanyakou
Ref	Wang et al., 2004	Wang et al., 2004	This work	Wang et al., 2004	This work	Li et al., 1999
SiO <sub>2</sub>	49.97	49.98	50.33	50.49	51.93	52.31
TiO <sub>2</sub>	1.51	1.85	1.28	1.97	1.31	1.24
Al <sub>2</sub> O <sub>3</sub>	13.76	14.27	20.38	14.80	15.53	21.98
FeO*	14.73	12.33	6.94	13.30	10.90	10.63
MnO	0.24	0.21	0.11	0.21	0.16	0.09
MgO	6.07	7.69	6.78	6.13	8.15	7.82
CaO	9.56	10.06	8.50	9.48	6.53	0.93
Na <sub>2</sub> O	2.49	2.39	4.11	2.45	5.09	1.85
K <sub>2</sub> O	1.23	0.90	1.30	0.81	0.22	3.04
$P_2O_5$	0.43	0.32	0.27	0.36	0.18	0.12
LOI	0.78	2.60	4.16	2.96	2.81	9.99
Total	100.00	100.00	100.00	100.00	100.00	100.00
Sc			315.3		205.9	21.2
Ba	330	200	27.0	805	21.1	194
V	290	320	143.0	345	177.5	200
Cr	50	230	325.4	119	535.7	205
Ni	26	72	103.0	50	135.1	23
Cu	73	162	50.1	46	80.1	392
Zn	148	158	55.2	139	90.2	23127
Rb	23	17	28.90	28	7.00	173.3
Sr	300	250	382.30	325	216.95	35.1
Y	23	19	19.0	25	17.6	14.99
Zr	140	140	130.30	130	88.45	90
Nb	16	12	13.3	14	11.3	7.6
U					0.40	1.85
Th	3.30	9.08		8.32	2.11	4.6
La	25.80	15.60	9	19.00	11.25	5.51
Ce	49.30	30.90	26	36.80	23.81	6.24
Pr	6.31	3.72		4.26	2.93	1.36
Nd	25.80	17.20	14	20.70	12.76	6.44
Sm	6.40	3.86		4.64	3.31	1.71
Eu	1.85	1.60		1.88	1.14	1.3
Gd	5.27	3.87		4.59	3.63	2.17
Tb	0.85	0.57		0.75	0.62	0.38

Labels

Lithology

D0536

Gabbro

II41

Dolerite

Dy	5.24	3.97		4.85	3.44	2.49
Но	1.09	0.81		0.98	0.67	0.53
Er	2.81	1.95		2.46	1.80	1.52
Tm	0.41	0.28		0.34	0.25	0.23
Yb	2.42	1.31		1.96	1.47	1.41
Lu	0.41	0.20		0.28	0.21	0.24
Ta	2.50	1.60		2.40	0.98	0.42
Hf					2.28	
FeO*/MgO	2.4	1.6	1.0	2.2	1.3	1.4
(La/Sm)n	4.0	4.0		4.1	2.2	2.1
(La/Yb)n	10.7	11.9		9.7	5.5	2.8
(Gd/Yb)n	1.8	2.4		1.9	2.1	1.3
(Th/Yb)n	1.4	6.9		4.2	1.4	3.3
Zr/Nb	8.75	11.67	9.80	9.29	7.83	11.84
Zr/Y	6.18	7.22	6.86	5.26	5.03	6.00
Nb/Y	0.69	0.62	0.70	0.57	0.64	0.51
Ti/Zr	64.6	79.2	56.7	91.1	86.1	82.5

Labels	K09–22B	II35	YD-38	YD-27	T–1–1
Lithology	Gabbro	Basaltic slate	Andesite	Andesite	Andesite
Location	Pingzhang	Santaipo	Laomeng	Laojinshan	Taizhong
Ref	This work	Wang et al., 2004	Li et al., 1999	Li et al., 1999	Li et al., 1999
SiO <sub>2</sub>	52.73	53.34	54.90	55.63	56.42
TiO <sub>2</sub>	2.21	2.03	1.39	1.60	0.73
Al <sub>2</sub> O <sub>3</sub>	16.98	12.87	15.09	15.03	17.82
FeO*	9.67	15.43	8.97	10.74	8.78
MnO	0.15	0.21	0.15	0.13	0.05
MgO	5.31	3.94	5.22	11.03	2.43
CaO	6.28	7.41	11.26	3.71	2.76
Na <sub>2</sub> O	5.82	3.48	2.71	0.96	4.64
K <sub>2</sub> O	0.35	0.86	0.10	0.98	5.47
<b>P</b> <sub>2</sub> <b>O</b> <sub>5</sub>	0.49	0.43	0.21	0.18	0.89
LOI	3.22	3.28	6.43	9.18	0.27
Total	100.00	100.00	100.00	100.00	100.00
Sc	29.0		29.30	33.1	21.6
Ba	160.7	450	40	189	1401.0
V	205.1	370	297	304	114.0
Cr	26.0	17	110	604	97.0
Ni	20.1	17	551	159	25.0
Cu	44.2	103	81	249	19.0
Zn	67.1	90	80	91	264.0
Rb	8.70	31	2	30.1	204.00
Sr	257.10	260	557	57	176.00
Y	33.1	28	23	20.66	59.5
Zr	240.90	170	123	134	448.00
Nb	26.5	18	12	13.3	45.5
U			1.47	1.31	14.92
Th		8.80	9.70	6.5	27.8
La	20	30.80	14.90	15	121.19
Ce	44	58.60	30.79	29.77	204.87
Pr		6.55	4.29	4.26	25.97
Nd	27	27.30	16.63	17.08	91.52
Sm		5.97	3.77	3.91	17.27
Eu		2.06	1.33	1.33	3.69
Gd		5.26	4.18	4.23	14.05
Tb		0.81	0.74	0.72	2.25

Dy		5.75	4.27	4.07	10.73
Но		1.11	0.85	0.79	1.92
Er		2.81	2.37	2.11	4.49
Tm		0.40	0.37	0.23	0.64
Yb		2.16	2.14	1.86	3.39
Lu		0.32	0.32	0.28	0.49
Ta		2.30		1.16	3.47
Hf					13.45
FeO*/MgO	1.8	3.9	1.7	1.0	3.6
(La/Sm)n		5.2	2.6	2.5	4.5
(La/Yb)n		14.3	5.0	5.8	25.6
(Gd/Yb)n		2.0	1.6	1.9	3.4
(Th/Yb)n		4.1	4.5	3.5	8.2
Zr/Nb	9.09	9.44	10.17	10.08	9.85
Zr/Y	7.28	5.99	5.27	6.49	7.53
Nb/Y	0.80	0.63	0.52	0.64	0.76
Ti/Zr	55.0	71.6	67.7	71.7	9.8

Labels	20SM77	20SM104	WS-15	20SM103	20SM85
Lithology	Basalt	Basalt	Basalt	Basalt	Basalt
Location	Wusu	Wusu	Wusu	Wusu	Wusu
Ref	Fan et al., 2010	Fan et al., 2010	Han et al., 1998	Fan et al., 2010	Fan et al., 2010
SiO <sub>2</sub>	45.88	47.37	47.77	47.78	47.80
TiO <sub>2</sub>	1.73	1.73	1.97	1.74	1.62
Al <sub>2</sub> O <sub>3</sub>	16.68	15.92	15.82	15.84	16.42
FeO*	11.39	11.73	11.63	10.88	10.63
MnO	0.24	0.26	0.22	0.25	0.24
MgO	9.85	8.82	9.91	10.16	10.22
CaO	11.25	10.67	8.83	9.86	9.03
Na <sub>2</sub> O	2.39	2.64	3.23	2.76	3.05
K <sub>2</sub> O	0.41	0.60	0.37	0.45	0.60
<b>P</b> <sub>2</sub> <b>O</b> <sub>5</sub>	0.19	0.25	0.25	0.27	0.20
LOI	4.6	5.1	0.59	4.22	5.17
Total	100.00	100.00	100.00	100.00	100.00
Sc			38.4		
Ba	154	260	139	163	154
V			225		
Cr	502	492	391	401	391
Ni	215	221	180	162	162
Cu					
Zn					
Rb	10.72	14.86	7.6	9.17	15.76
Sr	219	226	240	248	241
Y	34.71	36.63	34	36.6	33.34
Zr	134	146	161	152	131
Nb	7.1	6.6	11.0	6.6	5.0
U	0.41	0.23	0.69	0.32	0.29
Th	1.35	1.42	1.48	1.45	1.06
La	11.44	11.53	13.2	11.87	9.07
Ce	25.68	27.01	26.5	27.39	22.62
Pr	3.63	3.84		3.81	3.41
Nd	17.37	17.16	17	18.14	15.72
Sm	5.16	5.22	4.96	5.34	4.84

4.1.4. Late Carboniferous(?)–Early Permian WAL Continental Rift Mafic Magmatism

Eu	1.61	1.53	1.52	1.57	1.59
Gd	5.79	5.8		5.87	5.49
Tb	0.99	0.98	0.864	1.01	0.86
Dy	6.45	6.46		6.69	6.08
Но	1.35	1.35		1.31	1.25
Er	3.99	3.98		3.93	3.68
Tm	0.58	0.58		0.57	0.55
Yb	3.32	3.56	3.51	3.6	3.43
Lu	0.5	0.5	0.591	0.5	0.49
Та	0.45	0.41	0.373	0.39	0.33
Hf	3.93	4.08	3.97	4.33	3.79
FeO*/MgO	3.9	6.5	1.2	6.1	6.3
(La/Sm)n	1.4	1.3	1.7	1.4	1.2
(La/Yb)n	4.2	3.4	4.6	4.0	3.2
(Gd/Yb)n	1.4	1.4	0.0	1.4	1.3
(Th/Yb)n	10.3	9.5	10.7	10.2	7.9
Zr/Nb	18.82	23.03	14.64	23.00	26.46
Zr/Y	3.86	3.99	4.74	4.15	3.93
Nb/Y	0.21	0.17	0.32	0.18	0.15
Ti/Zr	77.6	69.3	73.5	68.5	74.0

Labels	K10-83A	K10-64B	ZP-12	WS-16	ZP-14
Lithology	Basalt	Basalt	Basalt	Basalt	Basalt
Location	Huashan	Wusu	Wusu	Wusu	Wusu
Ref			Zhou and Zhou,	H ( 1 1000	71 171 1000
	This work	This work	1992	Han et al., 1998	Zhou and Zhou, 1992
SiO <sub>2</sub>	48.14	48.33	48.47	48.59	48.77
TiO <sub>2</sub>	0.82	1.55	1.77	1.85	1.43
Al <sub>2</sub> O <sub>3</sub>	13.84	16.36	16.10	15.45	16.20
FeO*	10.15	11.34	11.93	11.11	13.73
MnO	0.19	0.19	0.18	0.21	0.14
MgO	11.14	9.73	7.84	9.26	8.08
CaO	13.96	8.55	10.61	9.72	8.02
Na <sub>2</sub> O	1.21	3.01	2.27	3.28	2.57
K <sub>2</sub> O	0.45	0.71	0.54	0.31	0.76
P <sub>2</sub> O <sub>5</sub>	0.09	0.23	0.27	0.23	0.30
LOI	3.95	5.67	4.48	1.13	3.39
Total	100.00	100.00	100.00	100.00	100.00
Sc	43	28		32.8	
Ba	167	244		146	
v	213	242		219	
Cr	899	312		363	
Ni	153	186		161	
Cu	61	31			
Zn	76	107			
Rb	4	17		6.8	
Sr	181	234		271	
Y	18	28		31	
Zr	54	116	134	152	129
Nb	3.7	4.1		10.0	
U	<2	<2		1.68	
Th	0.61	0.94		1.05	
La	5.337	8.537		11.5	
Ce	10.934	20.284		21.2	
Pr	1.552	2.888			
Nd	7.288	13.900		13.9	
Sm	2.136	4.029		4.43	
Eu	0.872	1.497		1.61	
Gd	2.720	4.857			

Tb	0.486	0.850		0.879	
Dy	3.068	5.225			
Но	0.644	1.079			
Er	1.902	3.125			
Tm	0.274	0.449			
Yb	1.748	2.861		3.45	
Lu	0.258	0.430		0.531	
Ta	0.3			0.435	
Hf				3.77	
FeO*/MgO	0.9	1.2	1.5	1.2	1.7
(La/Sm)n		1.4		1.7	
(La/Yb)n	3.7	3.6		4.1	
(Gd/Yb)n	1.3	1.4			
(Th/Yb)n	8.9	8.3		7.7	
Zr/Nb	14.68	28.32		15.20	
Zr/Y	3.10	4.13		4.90	
Nb/Y	0.21	0.15		0.32	
Ti/Zr	91.0	79.9	79.2	72.9	66.3

Labels	SM09-152A	20SM101	K10-64E	20SM98	ZP–22
ithology	Basalt	Basalt	Basalt	Basalt	Basalt
Location	W Mojiang	Wusu	Wusu	Wusu	Wusu
Ref	This work	Fan et al., 2010	This work	Fan et al., 2010	Zhou and Zhou, 1992
SiO <sub>2</sub>	49.02	49.10	49.44	49.62	49.63
TiO <sub>2</sub>	2.45	1.73	1.17	1.36	1.64
Al <sub>2</sub> O <sub>3</sub>	16.99	15.68	16.18	17.45	16.11
FeO*	14.26	11.34	8.75	10.12	11.25
MnO	0.33	0.26	0.18	0.18	0.17
MgO	5.88	8.63	10.54	8.82	7.40
CaO	4.83	9.07	9.29	8.45	9.72
Na <sub>2</sub> O	5.82	3.52	3.02	2.74	2.67
K <sub>2</sub> O	0.05	0.47	1.23	1.38	1.15
P <sub>2</sub> O <sub>5</sub>	0.37	0.20	0.19	0.17	0.26
LOI	3.49	4.83	3.36	4.59	3.12
Total	100.00	100.00	100.00	100.00	100.00
Sc	33		36		
Ba	44	173	845	348	
V	379		220		
Cr	3	452	718	148	
Ni	4	182	141	72	
Cu	9		61		
Zn	148		58		
Rb	0.5	9.55	33	26.8	
Sr	166	260	321	252	
Y	51	35.38	22	25.61	
Zr	217	149	76	86	125
Nb	7.7	6.2	2.8	3.4	
U	<2	0.24	<2	0.21	
Th	3.80	1.30	0.68	1.01	
La	13	10.24	6.185	8.42	
Ce	34	24.71	15.344	19.28	
Pr		3.67	2.172	2.8	
Nd	23	17.1	10.403	12.63	
Sm		5.03	3.092	3.61	
Eu		1.46	1.152	1.16	
Gd		5.58	3.862	3.99	
Tb		0.91	0.681	0.68	

Dy		6.01	4.232	4.58	
Но		1.26	0.877	0.85	
Er		3.84	2.527	2.68	
Tm		0.53	0.355	0.4	
Yb		3.27	2.242	2.31	
Lu		0.51	0.338	0.35	
Та		0.37		0.21	
Hf		3.85		2.51	
FeO*/MgO	2.4	6.3	3.6	3.6	1.5
(La/Sm)n		1.4	1.3	1.2	
(La/Yb)n		4.0	3.4	3.3	
(Gd/Yb)n		1.4	1.4	1.4	
(Th/Yb)n		10.1	7.7	7.4	
Zr/Nb	28.21	22.26	27.18	28.18	
Zr/Y	4.23	3.99	3.54	3.99	
Nb/Y	0.15	0.18	0.13	0.14	
Ti/Zr	67.6	71.1	92.5	66.9	78.5

Labels	ZP-19	WS-6	W22	20SM80	20SM65
Lithology	Basalt	Basalt	Basalt	Basalt	Basalt
Location	Wusu	Wusu	Wusu	Wusu	Wusu
Ref	Zhou and Zhou, 1992	Han et al., 1998	Li et al., 1999	Fan et al., 2010	Fan et al., 2010
SiO <sub>2</sub>	49.65	50.05	50.26	50.30	50.77
TiO <sub>2</sub>	1.45	1.56	1.66	1.75	1.71
Al <sub>2</sub> O <sub>3</sub>	16.05	17.16	15.28	16.44	15.73
FeO*	12.25	9.32	10.18	9.74	10.36
MnO	0.19	0.18	0.20	0.25	0.25
MgO	8.82	8.01	8.38	10.27	11.00
CaO	6.50	9.14	10.20	7.29	6.72
Na <sub>2</sub> O	4.59	3.54	2.78	3.77	2.72
K <sub>2</sub> O	0.22	0.86	0.82	0.55	0.58
$P_2O_5$	0.28	0.18	0.23	0.19	0.17
LOI	4.23	0.63	3.67	3.96	3.16
Total	100.00	100.00	100.00	100.00	100.00
Sc		33.9	31.8		
Ba		259	248	220	144
V		212	291		
Cr		139	252	228	299
Ni		79	100	91	124
Cu			51		
Zn			81		
Rb		29	17.9	11.2	19.97
Sr		312	277.1	342	289
Y		24	26.41	37.48	38.33
Zr	113	98	146	150	153
Nb		6.0	8.6	5.9	5.4
U		0.949	1.35	0.3	0.3
Th		0.82	6.50	1.14	1.06
La		7.82	10.21	10.48	9.85
Ce		15.1	25	25.49	23.88
Pr			3.95	3.6	3.58
Nd		14.2	15.51	18.4	17.66
Sm		3.49	4.04	5.26	5.1
Eu		1.21	1.44	1.6	1.62
Gd			4.53	5.81	5.96
Tb		0.711	0.8	1.01	1.04

Dy			5.1	6.8	6.65
Но			1.03	1.35	1.36
Er			2.86	4.18	3.86
Tm			0.41	0.55	0.55
Yb		2.42	2.47	3.65	3.64
Lu		0.384	0.35	0.57	0.53
Та		0.592	0.31	0.36	0.37
Hf		2.29	3.77	4.03	4.2
FeO*/MgO	1.4	1.2	1.2	6.4	3.9
(La/Sm)n		1.4	1.6	1.3	1.6
(La/Yb)n		3.9	5.0	3.5	4.7
(Gd/Yb)n		0.0	1.5	1.3	1.4
(Th/Yb)n		8.6	66.9	7.9	16.5
Zr/Nb		16.33	16.98	25.55	24.94
Zr/Y		4.08	5.53	4.00	4.48
Nb/Y		0.25	0.33	0.16	0.18
Ti/Zr	77.1	95.5	68.2	70.1	61.6

Labels	ZP-6	K09-33	ZD-107	20SM106	20SM102
Lithology	Basalt	Basalt	Basalt	Basalt	Basalt
Location	Wusu	W Mojiang	Wusu	Wusu	Wusu
Ref	Zhou and Zhou,		Zhou and Zhou,	Fan et al., 2010	Fan et al., 2010
	1992	This work	1992	Fail et al., 2010	Fail et al., 2010
SiO <sub>2</sub>	50.88	51.15	51.17	51.34	51.34
TiO <sub>2</sub>	1.49	1.82	1.51	1.73	1.69
Al <sub>2</sub> O <sub>3</sub>	16.18	16.00	15.79	15.03	15.20
FeO*	10.94	10.48	11.05	10.25	10.33
MnO	0.20	0.16	0.19	0.24	0.25
MgO	9.63	7.35	8.32	10.95	8.76
CaO	5.19	7.32	6.55	7.13	7.67
Na <sub>2</sub> O	5.05	4.76	5.09	2.55	4.24
K <sub>2</sub> O	0.16	0.68	0.07	0.58	0.33
P <sub>2</sub> O <sub>5</sub>	0.28	0.28	0.26	0.19	0.18
LOI	6.05	3.22	6.2	3.83	3.86
Total	100.00	100.00	100.00	100.00	100.00
Sc		35			
Ba		143		252	146
V		285			
Cr		169		254	303
Ni		81		101	126
Cu		40			
Zn		77			
Rb		9.9		19.42	4.09
Sr		292		213	257
Y		32		37.23	36.59
Zr	123	131	107	150	146
Nb		4.7		5.5	6.3
U		<2		0.27	0.25
Th		<2		1.09	1.36
La		11		10.6	10.25
Ce		25		25.06	24.91
Pr		13		3.57	3.58
Nd				17.72	17.19
Sm				5.06	5.06
Eu				1.51	1.54
Gd				5.81	5.84

Тb				1.02	1.02
Dy				6.54	6.62
Но				1.35	1.33
Er				4.05	3.88
Tm				0.54	0.56
Yb				3.73	3.63
Lu				0.53	0.49
Та				0.36	0.36
Hf				4.16	3.94
FeO*/MgO	1.1	1.4	1.3	7.3	4.4
(La/Sm)n				1.4	1.5
(La/Yb)n				4.0	4.2
(Gd/Yb)n				1.3	1.3
(Th/Yb)n				9.8	12.5
Zr/Nb		27.94		23.22	22.30
Zr/Y		4.13		3.67	4.24
Nb/Y		0.15		0.16	0.19
Ti/Zr	72.8	83.0	84.3	72.2	72.0

Labels	20SM107	ZP-3	K10-65	20SM92	20SM81
Lithology	Basalt	Basalt	Basalt	Basalt	Basalt
Location	Wusu	Wusu	Wusu	Wusu	Wusu
Ref	Fan et al., 2010	Zhou and Zhou, 1992	This work	Fan et al., 2010	Fan et al., 2010
SiO <sub>2</sub>	51.37	51.49	51.49	51.58	51.74
TiO <sub>2</sub>	1.84	1.54	0.61	2.18	2.61
Al <sub>2</sub> O <sub>3</sub>	14.63	13.84	18.97	14.95	14.04
FeO*	10.81	12.60	6.94	11.85	12.06
MnO	0.26	0.18	0.13	0.38	0.36
MgO	10.77	7.38	5.33	8.46	7.29
CaO	7.23	7.25	12.12	6.35	6.49
Na <sub>2</sub> O	2.43	3.79	4.23	4.57	3.88
K <sub>2</sub> O	0.48	1.66	0.04	0.82	0.37
P <sub>2</sub> O <sub>5</sub>	0.18	0.28	0.14	0.24	0.21
LOI	3.58	2.19	5.09	3.43	3.44
Total	100.00	100.00	100.00	100.00	100.00
Sc			26		
Ba	218		76	278	263
V			157		
Cr	283		170	90	49
Ni	112		81	37	26
Cu			27		
Zn			52		
Rb	15.03		1	10.84	5.14
Sr	209		516	251	297
Y	43.1		17	47.33	51.18
Zr	164	132	75	212	217
Nb	6.0		3.3	8.5	9.7
U	0.39		<2	0.77	0.6
Th	1.25		<2	3.08	2.49
La	11.19		7	18.21	17.48
Ce	28.02		18	42.84	41.04
Pr	4.1		11	5.78	5.8
Nd	19.05			27.65	27.59
Sm	5.59			7.2	7.65
Eu	1.77			2.13	2.38
Gd	6.53			8.19	8
Tb	1.12			1.33	1.37

Dy	7.51			8.85	8.8
Но	1.52			1.79	1.87
Er	4.46			4.97	5.57
Tm	0.58			0.71	0.8
Yb	4.05			4.74	5.05
Lu	0.63			0.69	0.78
Та	0.4			0.86	0.59
Hf	4.6			6.21	5.62
FeO*/MgO	5.6	1.7	3.6	5.0	7.2
(La/Sm)n	1.3			1.4	1.5
(La/Yb)n	3.8			3.5	4.4
(Gd/Yb)n	1.3			1.4	1.3
(Th/Yb)n	10.1			7.4	11.1
Zr/Nb	24.07		22.58	27.22	25.67
Zr/Y	4.21		4.49	4.03	3.36
Nb/Y	0.17		0.20	0.15	0.13
Ti/Zr	69.5	69.7	49.4	69.1	94.5

Labels	20SM97	ZP–5	K09–32	I–5
Lithology	Basalt	Basalt	Basalt	Basalt
Location	Wusu	Wusu	W Mojiang	Yaxuanqiao
Ref	Fan et al., 2010	Zhou and Zhou, 1992	This work	Zhong et al. 1998
SiO <sub>2</sub>	51.98	52.73	53.08	54.05
TiO <sub>2</sub>	1.53	1.34	1.60	0.84
Al <sub>2</sub> O <sub>3</sub>	14.60	14.59	14.11	20.35
FeO*	9.91	10.96	10.07	13.68
MnO	0.24	0.21	0.16	0.11
MgO	8.70	8.84	7.60	2.12
CaO	8.36	6.34	9.51	2.74
Na <sub>2</sub> O	2.45	4.31	3.35	5.66
K <sub>2</sub> O	0.47	0.44	0.29	0.20
P <sub>2</sub> O <sub>5</sub>	0.19	0.25	0.24	0.26
LOI	5.62	5.53	4.75	3.74
Total	100.00	100.00	100.00	100.00
Sc			31	22.0
Ba	254		105	150.0
V			256	171.0
Cr	270		320	10.5
Ni	119		150	37
Cu			36	
Zn			81	
Rb	10.2		5.0	
Sr	204		261	189
Y	34.56		30	21
Zr	127	107	130	117
Nb	5.5		5.4	4.6
U	0.23		<2	
Th	1.25		<2	2.78
La	10.58		9	7.44
Ce	24.58		22	16.50
Pr	3.6		12	
Nd	17.61			10.10
Sm	4.97			3.25
Eu	1.58			0.79
Gd	5.61			
Tb	0.96			0.62

Dy	6.43			
Но	1.28			
Er	3.67			
Tm	0.51			
Yb	3.23			2.50
Lu	0.46			0.41
Та	0.33			0.29
Hf	3.85			3.11
FeO*/MgO	6.4	1.2	1.3	6.5
(La/Sm)n	1.3			1.5
(La/Yb)n	3.4			3.6
(Gd/Yb)n	1.4			
(Th/Yb)n	7.8			28.3
Zr/Nb	27.33		23.98	25.22
Zr/Y	3.81		4.33	5.57
Nb/Y	0.14		0.18	0.22
Ti/Zr	67.3	74.9	73.9	43.1

1	2	1
-	.5	т

Labels	WS–5	ZD-122	ZD 282	P-30	ZP-30
Lithology	Basaltic andesite	Basaltic andesite	Basaltic andesite	Basaltic andesite	Basaltic andesite
Location	Wusu	Wusu	Yaxuanqiao	Wusu	Wusu
Ref	Han et al., 1998	Zhou and Zhou, 1992	Zhong et al. 1998	Zhong et al. 1998	Zhou and Zhou, 1992
SiO <sub>2</sub>	54.43	55.45	55.50	55.81	55.81
TiO <sub>2</sub>	1.67	2.66	0.56	2.07	2.07
Al <sub>2</sub> O <sub>3</sub>	19.34	14.19	20.80	15.21	15.21
FeO*	0.00	11.82	7.72	12.59	12.59
MnO	0.14	0.16	0.10	0.19	0.19
MgO	8.59	3.50	2.81	3.28	3.54
CaO	11.86	5.30	6.09	3.54	3.28
Na <sub>2</sub> O	2.44	6.12	5.65	6.74	6.74
K <sub>2</sub> O	1.34	0.64	0.59	0.18	0.18
P <sub>2</sub> O <sub>5</sub>	0.18	0.15	0.17	0.40	0.40
LOI	2.64	1.61	2.09	2.21	2.21
Total	100.00	100.00	100.00	100.00	100.00
Sc	33.8		18.0	29.1	
Ba	265		240.0	44	
$\mathbf{V}$	213		140.0	282	
Cr	160		63.0	7042	
Ni	80		42	37	
Cu					
Zn					
Rb	47		14.6	0	
Sr	233		458	100	
Y	23		15	48	
Zr	101	249	62	180	180
Nb	6.4		3	6.2	
U	0.733				
Th	935.00		0.95	2.29	
La	8.55		5.45	16.4	
Ce	19.5		12.00	36.7	
Pr					
Nd	12.4		6.90	26.5	
Sm	3.73		2.03	6.75	
Eu	1.25		0.72	1.91	
Gd					
Тb	0.765		0.48	1.53	

Dy					
Но					
Er					
Tm					
Yb	2.19		1.47	4.8	
Lu	0.391		0.235	0.75	
Та	0.326		0.21	0.386	
Hf	2.7		1.52	4.58	
FeO*/MgO	0.0	3.4	2.7	3.8	3.6
(La/Sm)n	1.5	5.7	1.7	1.6	5.0
(La/Yb)n	4.8		4.5	4.2	
(Gd/Yb)n					
(Th/Yb)n	10.9		16.4	12.1	
Zr/Nb	15.78		18.45	29.15	
Zr/Y	4.39		4.13	3.75	
Nb/Y	0.28		0.22	0.13	
Ti/Zr	99.1	63.9	54.5	69.0	69.0

Labels	K10-49B	K10-47C
Lithology	Diorite	Diorite
Location	NE Banpo	NE Banpo
Ref	This work	This work
SiO <sub>2</sub>	64.49	66.01
TiO <sub>2</sub>	0.89	1.12
Al <sub>2</sub> O <sub>3</sub>	13.32	14.43
FeO*	5.97	6.47
MnO	0.14	0.11
MgO	2.52	2.99
CaO	7.19	3.18
Na <sub>2</sub> O	3.56	3.68
K <sub>2</sub> O	1.79	1.86
<b>P</b> <sub>2</sub> <b>O</b> <sub>5</sub>	0.13	0.15
LOI	6.34	3.33
Total	100.00	100.00
Sc	17	17
Ba	287	317
V	145	196
Cr	48	72
Ni	18	24
Cu	18	24
Zn	69	65
Rb	49	49
Sr	219	254
Y	23	21
Zr	97	118
Nb	4.8	4.8
U	<2	<2
Th	2.25	3.30
La	14	13
Ce	29	29
Pr	18	16
Nd		
Sm		
Eu		
Gd		
Тb		

Dy		
Но		
Er		
Tm		
Yb		
Lu		
Та		
Hf		
FeO*/MgO	3.6	3.6
(La/Sm)n		
(La/Yb)n		
(Gd/Yb)n		
(Th/Yb)n		
Zr/Nb	20.23	24.65
Zr/Y	4.22	5.71
Nb/Y	0.21	0.23
Ti/Zr	55.2	57.0

Labels	AL-6	SM09156	SM09-152B	SM09-142B	SM09-160A	SM09154
Lithology	Basalt	Basalt	Basalt	Basalt	Basalt	Basalt
Location	Mojiang	Wusu	W. Mojiang	Yayi	W. Mojiang	Wusu
Ref	Dong et al. 2000	This work	This work	This work	This work	This work
SiO <sub>2</sub>	47.26	47.83	48.17	48.33	49.67	49.69
TiO <sub>2</sub>	1.18	1.57	1.71	1.77	1.87	1.51
Al <sub>2</sub> O <sub>3</sub>	20.58	16.61	18.04	16.59	15.99	16.19
FeO*	9.53	11.31	13.34	10.74	10.90	10.66
MnO	0.21	0.19	0.38	0.21	0.19	0.21
MgO	7.01	10.73	9.65	7.95	7.35	8.78
CaO	10.25	9.01	3.22	11.16	10.08	7.89
Na <sub>2</sub> O	3.09	2.05	4.74	2.35	2.81	3.77
K <sub>2</sub> O	0.68	0.47	0.42	0.66	0.91	1.08
P <sub>2</sub> O <sub>5</sub>	0.21	0.22	0.34	0.25	0.24	0.21
LOI	1.55	3.85	4.75	2.80	2.09	4.30
Total	100.00	100.00	100.00	100.00	100.00	100.00
Sc	30.8	30	25	34	27	34
Ba	82	110	154	321	155	215
v	249	250	238	272	269	279
Cr	146	491	7	313	197	500
Ni	58.6	209	7	132	99	210
Cu	56.2	54	28	60	46	16
Zn	61.4	85	119	86	87	81
Rb	6.34	15	6	20	25	15
Sr	270	176	259	266	218	84
Y	21.5	29	38	34	37	30
Zr	75	111	129	145	147	118
Nb	2.5	3.7	4.1	4.4	4.5	3.9
U	0.21	0	<2	<2	<2	<2
Th	0.58	0.71	<2	<2	<2	<2
La	5.92	7	11	8	8	6
Ce	14.3	19	21	18	22	18
Pr	2.09	2.81				
Nd	10.1	13.54	15	15	15	12
Sm	2.64	4.01				
Eu	1.03	1.34				

## 4.1.5. Earliest Mid Permian WAL Continental Rift Mafic Magmatism

Gd	3.29	4.90				
Tb	0.52	0.88				
Dy	3.31	5.36				
Но	0.67	1.10				
Er	1.95	3.25				
Tm	0.28	0.47				
Yb	1.73	2.96				
Lu	0.26	0.44				
Та	0.14	0.25				
Hf	1.56	2.82				
FeO*/MgO	1.4	1.1	1.4	1.4	1.5	1.2
(La/Sm)n	1.4	1.2				
(La/Yb)n	4.2	3.0				
(Gd/Yb)n	1.6	1.4				
(Th/Yb)n	8.5	6.1				
Zr/Nb	29.8	29.9	31.4	33.0	32.8	30.2
Zr/Y	3.49	3.78	3.41	4.32	4.03	3.88
Nb/Y	0.12	0.13	0.11	0.13	0.12	0.13
Ti/Zr	94.2	85.3	79.5	73.3	76.1	76.8

Labels	K09-34	SM09-142A	K10-85A	K09-25	ZD-290	AL-4
Lithology	Basalt	Basalt	Basalt	Gabbro	Basalt	Basalt
Location	W. Mojiang	Wusu	Taichong	Pingzhang	Mojiang	Mojiang
Ref	This work	This work	This work	This work	Zhou et al. 1992	Dong et al. 200
SiO <sub>2</sub>	49.74	50.24	50.35	50.40	50.66	50.92
TiO <sub>2</sub>	1.57	1.53	1.15	1.92	0.52	1.04
Al <sub>2</sub> O <sub>3</sub>	16.24	16.43	17.65	10.97	20.13	17.92
FeO*	10.31	10.39	4.73	13.81	8.46	10.85
MnO	0.16	0.18	0.38	0.27	0.15	0.15
MgO	6.80	7.70	1.78	9.73	7.56	5.32
CaO	11.59	8.83	17.29	10.44	9.27	8.98
Na <sub>2</sub> O	2.83	3.54	5.63	2.21	2.52	4.17
<b>K</b> <sub>2</sub> <b>O</b>	0.55	0.92	0.87	0.07	0.56	0.40
P <sub>2</sub> O <sub>5</sub>	0.22	0.24	0.18	0.17	0.17	0.25
LOI	2.28	2.74	13.60	0.00	2.72	-2.35
Total	100.00	100.00	100.00	100.00	100.00	100.00
Sc	32	28	24	21		35.6
Ba	85	123	171	66	312	112
v	270	209	275	413	182	317
Cr	230	193	5	26	120	179
Ni	96	98	5	40	81	56.3
Cu	60	53	16	66		78.9
Zn	73	86	38	92		51.3
Rb	17	20	32	1.6	15	4.89
Sr	510	304	356	176	329	378
Y	29	32	22	36		24.4
Zr	114	125	66	107	42	87.4
Nb	3.6	4.3	2.1	3.3		3.1
U	<2	0	13	<2		0.23
Th	<2	0.90	1.90	<2	0.40	0.71
La	9	9	14	5	2.06	5.94
Ce	18	22	35	14	5.54	15.2
Pr		3.18	17			2.25
Nd	14	15		12	3.61	11.1
Sm		4.44			1.54	2.95
Eu		1.54			0.593	1.09
Gd		5.33				3.69
Тb		0.95				0.59

Dy		5.76				3.77
Но		1.19				0.78
Er		3.44				2.27
Tm		0.51				0.33
Yb		3.14			1.47	2.02
Lu		0.48			0.26	0.31
Та		0.32				0.17
Hf		3.07			1.04	1.86
		1.2				• •
FeO*/MgO	0.0	1.3	2.7	1.4	1.1	2.0
(La/Sm)n		1.3			0.9	1.3
(La/Yb)n		3.5			1.7	3.6
(Gd/Yb)n		1.4				1.5
(Th/Yb)n		7.3			6.9	8.9
Zr/Nb	31.6	29.1	31.29	32.5		28.5
Zr/Y	3.94	3.93	2.95	2.97		3.58
Nb/Y	0.13	0.14	0.09	0.09		0.13
Ti/Zr	82.6	73.5	104.8	107.2	73.9	71.0

Labels	AL-5	K10-62	AL-10	AL-8	AL-7	SM09-162A	AL-9
Lithology	Basalt	Basalt	Basalt	Basalt	Basalt	Basalt	Basalt
Location	Mojiang	Yaxuanqiao	Mojiang	Mojiang	Mojiang	Wusu	Mojiang
Ref	Dong et al.		Dong et al.	Dong et al.	Dong et al.		Dong et al
	2000	This work	2000	2000	2000	This work	2000
SiO <sub>2</sub>	51.11	51.45	51.45	51.81	51.88	52.04	52.48
TiO <sub>2</sub>	1.07	1.90	1.02	1.09	1.08	1.27	1.05
Al <sub>2</sub> O <sub>3</sub>	18.75	15.61	18.06	16.80	16.85	15.86	19.07
FeO*	8.81	9.94	9.11	9.02	10.73	9.24	9.08
MnO	0.17	0.18	0.14	0.17	0.18	0.17	0.20
MgO	6.08	5.97	4.73	6.19	6.24	6.21	6.61
CaO	8.49	9.16	10.31	10.14	7.79	9.29	5.76
Na <sub>2</sub> O	4.45	5.46	4.83	3.78	4.48	5.40	5.41
K <sub>2</sub> O	0.89	0.06	0.17	0.84	0.63	0.36	0.22
P <sub>2</sub> O <sub>5</sub>	0.18	0.28	0.18	0.16	0.14	0.17	0.13
LOI	0.61	4.28	-0.4	0.06	-1.94	3.19	0.09
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Sc	31	35	34.7	37.2	37.7	30	36
Ba	111	26	49.5	83.8	116	36	76.9
V	249	258	288	309	277	244	242
Cr	155	172	174	180	178	183	176
Ni	60.1	66	53.7	54.8	63.9	64	68
Cu	41.9	12	35	138	28.3	42	47.3
Zn	58.9	101	46.1	52.6	58.6	60	66.9
Rb	8.4	1	2.32	10.8	7.7	5	3.31
Sr	246	216	264	238	306	223	214
Y	21.7	33	23.2	24	24.8	22	24.8
Zr	83.3	146	88	86.6	89.4	83	93.6
Nb	2.7	4.7	3.0	3.0	3.0	2.9	3.1
U	0.23	<2	0.35	0.24	0.27	0	0.22
Th	0.67	<2	0.67	0.70	0.70	0.72	0.74
La	4.92	10	5.82	6.14	6.11	7	6.92
Ce	12.9	24	14.6	15.1	15.4	16	16.2
Pr	1.93	20	2.13	2.24	2.28	2.32	2.39
Nd	9.53		10.5	10.9	11.2	11.07	11.5
Sm	2.6		2.74	2.9	2.95	3.16	2.99
Eu	0.85		1.03	1.04	1.18	1.01	0.99

3.44

3.63

3.71

3.78

3.7

3.25

Gd

Tb	0.54		0.56	0.6	0.61	0.68	0.6
Dy	3.44		3.56	3.79	3.89	4.17	3.82
Но	0.7		0.72	0.77	0.79	0.86	0.79
Er	2.04		2.11	2.25	2.29	2.51	2.26
Tm	0.3		0.3	0.33	0.33	0.38	0.33
Yb	1.86		1.89	2.02	2.07	2.34	2.02
Lu	0.27		0.28	0.3	0.3	0.35	0.3
Та	0.15		0.16	0.17	0.17	0.21	0.16
Hf	1.7		1.75	1.87	1.88	2.10	1.89
FeO*/MgO	1.5	1.7	1.9	1.5	1.7	1.5	1.4
(La/Sm)n	1.2		1.4	1.4	1.3	1.4	1.5
(La/Yb)n	3.2		3.8	3.7	3.6	3.5	4.2
(Gd/Yb)n	1.4		1.5	1.5	1.5	1.3	1.5
(Th/Yb)n	9.2		9.0	8.8	8.6	7.8	9.3
Zr/Nb	30.4	31.04	29.4	28.9	29.5	28.5	30.3
Zr/Y	3.84	4.37	3.79	3.61	3.60	3.81	3.77
Nb/Y	0.13	0.14	0.13	0.13	0.12	0.13	0.12
Ti/Zr	76.8	77.9	69.2	75.5	72.4	91.9	67.3

Labels	K10-58	20SM30	20SM44	20SM29	20SM33	20SM35
Lithology	Basalt	Basalt	Basalt	Basalt	Basalt	Basalt
Location	Shuanglong	Yaxuanqiao	Yaxuanqiao	Yaxuanqiao	Yaxuanqiao	Yaxuanqiao
Ref	This work	Fan et al., 2010				
SiO <sub>2</sub>	49.89	51.44	51.69	51.89	52.22	52.31
TiO <sub>2</sub>	1.24	0.88	0.74	0.84	1.00	0.93
Al <sub>2</sub> O <sub>3</sub>	18.64	19.87	21.35	19.37	19.64	18.69
FeO*	10.03	14.18	9.86	15.55	12.07	14.74
MnO	0.16	0.06	0.06	0.08	0.10	0.09
MgO	5.44	1.94	2.86	1.93	3.80	3.13
CaO	9.21	6.84	7.25	6.28	5.51	5.34
Na <sub>2</sub> O	4.86	4.31	4.64	3.56	4.52	4.02
K <sub>2</sub> O	0.39	0.31	1.37	0.31	0.99	0.59
$P_2O_5$	0.15	0.17	0.18	0.19	0.17	0.17
LOI	3.52	4.27	5.02	3.28	3.87	4.11
Total	100.00	100.00	100.00	100.00	100.00	100.00
Sc	38					
Ba	42	249	325	215	489	256
$\mathbf{V}$	350					
Cr	63	83.1	38.8	80.3	98.3	95.8
Ni	31	38.1	22.5	37.7	43.4	39.4
Cu	20					
Zn	67					
Rb	4	5.33	52.38	4.58	30.85	17.12
Sr	168	501	695	463	660	441
Y	20	20.11	20.08	18.54	20.62	19.41
Zr	41	39.2	44.5	37.5	45.2	41.1
Nb	2.1	1.8	2.9	1.5	2.3	1.8
U	<2	0.18	0.28	0.17	0.15	0.19
Th	1.31	0.50	0.79	0.50	0.56	0.60
La	8.20	3.35	4.45	3.64	4.05	3.95
Ce	15.35	8.38	7.91	8.6	8.99	8.94
Pr	2.24	1.34	1.19	1.26	1.32	1.34
Nd	10.27	6.37	6.04	5.84	7.06	6.53
Sm	2.80	2.12	2.32	1.91	2.46	1.97

## 4.1.5. Mid Permian WAL Arc/Backarc Basin Mafic Magmatism

Eu	1.07	0.83	0.81	0.8	0.89	0.82
Gd	3.35	2.78	2.85	2.63	2.57	2.79
Tb	0.57	0.45	0.47	0.48	0.42	0.51
Dy	3.53	3.36	3.65	3.31	3.17	3.31
Но	0.74	0.71	0.79	0.68	0.65	0.71
Er	2.15	2.07	2.29	2.18	1.99	2.12
Tm	0.30	0.31	0.38	0.29	0.3	0.29
Yb	1.86	2.19	2.21	1.96	2	1.98
Lu	0.28	0.3	0.33	0.31	0.32	0.31
Ta		0.16	0.14	0.13	0.11	0.09
Hf		1.47	1.77	1.42	1.21	1.64
FeO*/MgO	1.8	7.3	3.4	8.1	3.2	4.7
(La/Sm)n	1.9	1.0	1.2	1.2	1.1	1.3
(La/Yb)n	5.4	1.9	2.5	2.3	2.5	2.4
(Gd/Yb)n	1.5	1.1	1.1	1.1	1.1	1.2
(Th/Yb)n	17.9	5.8	9.1	6.5	7.1	7.7
Zr/Nb	19.3	22.3	15.4	24.4	19.4	23.1
Zr/Y	2.04	1.95	2.22	2.02	2.19	2.12
Nb/Y	0.11	0.09	0.14	0.08	0.11	0.09
Ti/Zr	184.0	134.5	99.5	134.1	132.8	135.7

143
-----

Labels	20SM59	SM09-145	20SM51	20SM48	20SM45	20SM76
Lithology	Basalt	Basalt	Basalt	Basaltic andesite	Basaltic andesite	Basaltic andesite
Location	Yaxuanqiao	Yayi	Yaxuanqiao	Yaxuanqiao	Yaxuanqiao	Yaxuanqiao
Ref	Fan et al., 2010	This work	Fan et al., 2010	Fan et al., 2010	Fan et al., 2010	Fan et al., 2010
SiO <sub>2</sub>	52.77	53.22	54.18	54.88	55.26	55.71
TiO <sub>2</sub>	0.64	0.51	0.72	1.24	1.26	1.61
Al <sub>2</sub> O <sub>3</sub>	22.75	20.04	18.79	18.30	18.12	17.22
FeO*	12.66	7.58	14.36	8.67	9.17	9.70
MnO	0.06	0.12	0.06	0.19	0.20	0.28
MgO	2.13	6.27	3.48	4.68	3.68	3.96
CaO	3.65	6.71	3.93	4.54	4.92	4.19
Na <sub>2</sub> O	3.15	5.24	3.53	5.82	5.93	6.42
K <sub>2</sub> O	2.05	0.27	0.80	1.54	1.32	0.45
$P_2O_5$	0.14	0.03	0.14	0.13	0.14	0.46
LOI	2.54	5.02	2.94	3.09	3.23	3.5
Total	100.00	100.00	100.00	100.00	100.00	100.00
Sc		27				
Ba	782	96	473	445	445	
$\mathbf{V}$		196				
Cr	13.9	51	41.3	21	21	
Ni	16.7	33	22.7	11.3	11.5	
Cu		45				
Zn		54				
Rb	61.21	7.9	16.33	34.69	28.7	
Sr	357	188	655	458	520	
Y	16.8	13	20.46	33.85	33.79	
Zr	33.5	31	41.7	84.9	87.8	
Nb	1.4	1.1	2.2	3.6	4.4	
U	0.18	<2	0.24	0.39	0.39	
Th	0.54	<2	0.72	1.39	1.45	
La	3.33	4	4.23	7.73	9.16	
Ce	7.21	<6	9.14	18.56	21.19	
Pr	1.01	<4	1.28	2.69	3.11	
Nd	4.76		6.03	13.88	15.11	
Sm	1.74		2.13	4.24	4.54	
Eu	0.63		0.75	1.33	1.6	
Gd	2.15		2.71	4.83	5.12	
Tb	0.37		0.52	0.87	0.92	

Dy	2.74		3.29	5.64	5.62	
Но	0.6		0.73	1.2	1.2	
Er	1.91		2.23	3.65	3.92	
Tm	0.27		0.35	0.56	0.56	
Yb	1.76		2.16	3.64	3.55	
Lu	0.29		0.32	0.57	0.56	
Та	0.09		0.16	0.22	0.26	
Hf	1.25		1.68	3.02	3.04	
FeO*/MgO	5.9	1.2	4.1	1.8	2.5	2.4
(La/Sm)n	1.2		1.3	1.2	1.3	
(La/Yb)n	2.3		2.4	2.6	3.1	
(Gd/Yb)n	1.0		1.0	1.1	1.2	
(Th/Yb)n	7.8		8.5	9.7	10.4	
Zr/Nb	23.9	27.9	19.0	23.8	20.1	
Zr/Y	1.99	2.34	2.04	2.51	2.60	
Nb/Y	0.08	0.08	0.11	0.11	0.13	
Ti/Zr	114.1	99.0	103.9	87.6	86.3	

	145	; ;

Labels	20SM75	20SM50	20SM49	20SM72	20SM47	20SM42
Lithology	Basaltic	Basaltic	Basaltic	Basaltic	A 1	A d
	andesite	andesite	andesite	andesite	Andesite	Andesite
Location	Yaxuanqiao	Yaxuanqiao	Yaxuanqiao	Yaxuanqiao	Yaxuanqiao	Yaxuanqiao
Ref	Fan et al., 2010					
SiO <sub>2</sub>	55.59	56.39	57.35	57.91	57.21	57.71
TiO <sub>2</sub>	1.50	0.90	0.91	1.81	0.87	0.87
Al <sub>2</sub> O <sub>3</sub>	17.72	17.52	17.31	14.60	17.03	16.77
FeO*	9.95	12.57	12.24	7.11	12.73	12.52
MnO	0.26	0.09	0.08	0.29	0.09	0.08
MgO	3.56	3.72	3.69	6.66	3.92	4.30
CaO	3.99	3.44	3.39	5.60	3.45	3.17
Na <sub>2</sub> O	6.55	4.37	4.48	5.45	3.84	3.95
K <sub>2</sub> O	0.48	0.81	0.41	0.16	0.69	0.47
$P_2O_5$	0.41	0.18	0.15	0.41	0.15	0.16
LOI	2.34	2.12	2.95	2.58	1.93	1.78
Total	100.00	100.00	100.00	100.00	100.00	100.00
Sc						
Ba		445	361		417	325
V						
Cr		11.7	11.5		15.7	16.5
Ni		5.6	6.8		7.2	7.9
Cu						
Zn						
Rb		15.72	5.48		10.28	7.03
Sr		452	500		300	336
Y		27.9	28.81		25.66	26.58
Zr		59.6	57.9		54.3	54.4
Nb		3.6	2.4		2.5	2.2
U		0.36	0.32		0.31	0.33
Th		1.11	1.04		0.90	0.95
La		5.73	6.06		5.5	5.44
Ce		12.92	13.1		11.6	11.75
Pr		1.83	1.79		1.61	1.73
Nd		8.34	8.31		8	7.38
Sm		2.95	2.78		2.62	2.69
Eu		0.97	0.98		0.97	0.95
Gd		3.49	3.38		3.38	3.43

Tb		0.66	0.62		0.61	0.64
Dy		4.64	4.39		4.06	4.38
Но		0.97	0.91		0.9	0.86
Er		3.18	2.87		2.75	2.96
Tm		0.45	0.46		0.4	0.42
Yb		2.85	2.84		2.71	2.76
Lu		0.45	0.48		0.42	0.41
Ta		0.15	0.16		0.24	0.17
Hf		2.34	2.13		2.13	2.13
FeO*/MgO	2.8	3.4	3.3	1.1	3.2	2.9
(La/Sm)n		1.3	1.4		1.4	1.3
(La/Yb)n		2.5	2.6		2.5	2.4
(Gd/Yb)n		1.0	1.0		1.0	1.0
(Th/Yb)n		9.9	9.3		8.4	8.7
Zr/Nb		16.7	24.2		21.6	24.6
Zr/Y		2.14	2.01		2.12	2.05
Nb/Y		0.13	0.08		0.10	0.08
Ti/Zr		90.6	94.1		95.9	95.6

Labels	K09-80
Lithology	Dolerite
Location	Daheishan
Ref	This work
SiO <sub>2</sub>	52.36
TiO <sub>2</sub>	2.72
Al <sub>2</sub> O <sub>3</sub>	16.04
FeO*	13.61
MnO	0.18
MgO	4.93
CaO	4.33
Na <sub>2</sub> O	5.44
K <sub>2</sub> O	0.04
P <sub>2</sub> O <sub>5</sub>	0.34
LOI	0.01
Total	100.00
Sc	105
Ba	38
V	340
Cr	9
Ni	12
Cu	33
Zn	105
Rb	1.4
Sr	411
Y	38
Zr	149
Nb	5.0
U	0.44
Th	1.42
La	13.73
Ce	33.69
Pr	4.77
Nd	22.49
Sm	6.22

4.1.6. Early Triassic	WAL Post–collisional	Mafic Magmatism

Eu	2.21		
Gd	7.19		
Тb	1.27		
Dy	7.58		
Но	1.54		
Er	4.49		
Tm	0.65		
Yb	4.09		
Lu	0.62		
Та	0.37		
Hf	4.01		
FeO*/MgO	2.8		
(La/Sm)n	1.4		
(La/Yb)n	4.1		
(Gd/Yb)n	1.5		
(Th/Yb)n	8.8		
Zr/Nb	29.87		
Zr/Y	3.91		
Nb/Y	0.13		
Ti/Zr	109.4		

Labels	K10–29	K10–25c	G1–1	G1–2	G1–3	G1–5
Lithology	Granites	Granites	Granites	Granites	Granites	Granites
Location	Pinghe	Pinghe	Ailaoshan	Ailaoshan	Ailaoshan	Ailaoshan
Ref			Xiong et al.,	Xiong et al.,	Xiong et al.,	Xiong et al.
	This work	This work	1998	1998	1998	1998
SiO <sub>2</sub>	70.27	72.08	74.57	74.57	75.31	75.60
TiO <sub>2</sub>	0.41	0.38	0.63	0.15	0.24	0.36
Al <sub>2</sub> O <sub>3</sub>	16.22	15.05	14.23	13.82	12.98	12.73
FeO*	2.97	2.69	3.56	3.05	3.87	2.76
MnO	0.05	0.05	0.04	0.02	0.07	0.04
MgO	1.28	1.15	0.04	0.02	0.07	0.04
CaO	0.80	0.42	0.26	0.41	0.24	0.80
Na <sub>2</sub> O	2.92	1.82	0.82	2.14	1.94	1.97
K <sub>2</sub> O	4.94	6.21	5.76	5.65	5.15	5.61
<b>P</b> <sub>2</sub> <b>O</b> <sub>5</sub>	0.14	0.15	0.08	0.17	0.14	0.08
LOI	0.00	0.00	3.15	0.9	1.37	0.11
Total	100.00	100.00	100.00	100.00	100.00	100.00
Sc	8.8	7.7				
Ba	437.4	912.8				
v	44.2	33.4				
Cr	27.7	27.2				
Ni	9.5	8.7				
Cu	5.6	9.2				
Zn	42.5	51.2				
Rb	206.87	230.91				
Sr	129.26	110.68				
Y	26.39	23.01				
Zr	116.49	116.03				
Nb	12.50	13.10				
Sn	7.80	14.80				
Pb	43.35	51.28				
U	6.07	5.51				
Th	17.07	13.36				
La	26.66	24.71				
Ce	57.98	47.20				

# 4.1.7. Late Permian WAL Syn-or Post-collisional Granites

Pr	6.28	5.65
Nd	23.75	19.76
Sm	5.30	3.98
Eu	0.78	0.92
Gd	4.94	3.56
Tb	0.83	0.65
Dy	4.83	3.98
Но	0.95	0.84
Er	2.83	2.60
Tm	0.43	0.41
Yb	2.76	2.56
Lu	0.42	0.40
Та	1.76	1.73
Hf	3.52	3.37
Со	47.24	56.55
Ga	17.91	16.15
FeO*/MgO	2.32	2.35
(La/Yb)n	6.9	6.9
(Gd/Yb)n	1.5	1.1
Rb/Nb	16.6	17.6
10000Ga/Al	2.1	2.0

Labels	G1-4	G1-8	G1-6	G1-7	G1–9	K10–18
Lithology	Granites	Granites	Granites	Granites	Granites	Granites
Location	Ailaoshan	Ailaoshan	Ailaoshan	Ailaoshan	Ailaoshan	Pinghe
Ref	Xiong et al.,					
	1998	1998	1998	1998	1998	This work
SiO <sub>2</sub>	75.92	77.15	77.20	77.20	77.49	77.92
TiO <sub>2</sub>	0.32	0.20	0.05	0.15	0.07	0.11
Al <sub>2</sub> O <sub>3</sub>	12.81	11.46	12.43	12.03	11.94	12.66
FeO*	2.84	3.48	2.52	2.96	2.68	0.84
MnO	0.06	0.03	0.03	0.03	0.05	0.01
MgO	0.06	0.03	0.03	0.03	0.05	0.15
CaO	0.57	0.13	0.21	0.43	0.14	0.31
Na <sub>2</sub> O	2.25	1.82	1.62	1.88	1.22	2.41
K <sub>2</sub> O	5.04	5.52	5.39	5.20	6.26	5.44
$P_2O_5$	0.12	0.17	0.51	0.09	0.09	0.14
LOI	1.11	1.18	1.07	0.71	0.92	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00
Sc						2.2
Ba						67.7
v						2.0
Cr						2.1
Ni						3.4
Cu						15.5
Zn						25.5
Rb						358.54
Sr						16.28
Y						24.84
Zr						83.11
Nb						8.40
Sn						10.40
Pb						25.32
U						7.99
Th						11.53
La						6.90
Ce						16.79
Pr						2.11
Nd						7.77
Sm						2.52

Eu	0.11
Gd	2.96
ТЬ	0.68
Dy	4.55
Но	0.94
Er	2.92
Tm	0.44
Yb	2.77
Lu	0.39
Та	0.34
Hf	3.06
Со	70.06
Ga	16.31
FeO*/MgO	5.45
(La/Yb)n	1.8
(Gd/Yb)n	0.9
Rb/Nb	42.7
10000Ga/Al	2.4

Labels	G1-10	G1-12	G1–11
Lithology	Granites	Granites	Granites
Location	Ailaoshan	Ailaoshan	Ailaoshan
Ref	Xiong et al., 1998	Xiong et al., 1998	Xiong et al., 1998
SiO <sub>2</sub>	78.88	78.97	79.21
TiO <sub>2</sub>	0.17	0.26	0.15
Al <sub>2</sub> O <sub>3</sub>	13.38	12.83	11.25
FeO*	1.57	3.01	2.10
MnO	0.04	0.06	0.11
MgO	0.04	0.06	0.11
CaO	0.32	0.31	0.26
Na <sub>2</sub> O	0.77	0.21	3.32
K <sub>2</sub> O	4.80	4.19	3.31
P <sub>2</sub> O <sub>5</sub>	0.02	0.10	0.16
LOI	2.31	1.55	1.94
Total	100.00	100.00	100.00
Sc			
Ba			
V			
Cr			
Ni			
Cu			
Zn			
Rb			
Sr			
Y			
Zr			
Nb			
Sn			
Pb			
U			
Th			
La			
Ce			
Pr			
Nd			
Sm			
Eu			

Gd			
Tb			
Dy			
Но			
Er			
Tm			
Yb			
Lu			
Та			
Hf			
Со			
Ga			
O*/MgO			
La/Yb)n			

FeO\*/N

(La/Y

(Gd/Yb)n

Rb/Nb

10000Ga/Al

Labels	K09–28	K09-84
Lithology	Granites	Granites
Location	Pingzhang	Huangcaoling
Ref	This work	This work
SiO <sub>2</sub>	76.67	73.81
TiO <sub>2</sub>	0.14	0.42
Al <sub>2</sub> O <sub>3</sub>	12.19	13.40
FeO*	1.89	2.02
MnO	0.02	0.01
MgO	0.22	0.60
CaO	0.21	0.09
Na <sub>2</sub> O	2.56	2.76
K <sub>2</sub> O	4.81	5.45
P <sub>2</sub> O <sub>5</sub>	0.14	0.07
LOI	1.15	1.37
Total	100.00	100.00
Sc	3.4	5.6
Ba	81.8	653.6
V	5.6	26.1
Cr		11.3
Ni		5.7
Cu		0.7
Zn		29.3
Rb	408.28	194.48
Sr	31.03	65.71
Y	35.19	30.85
Zr	98.76	245.47
Nb	9.93	10.20
Sn		
Pb	24.13	11.45
U	7.92	5.62
Th	17.98	25.41
La	14.59	29.57
Ce	29.39	58.76
Pr	3.59	7.11

4.1.8. Early Triassic CAL Syn–or Post–collisional Granites	
1.1.0. Early Trassic Che Syn of Tost consistent Orannes	

Nd	12.70	26.36
Sm	3.55	5.76
Eu	0.21	0.65
Gd	3.80	5.70
Tb	0.89	1.01
Dy	5.82	6.16
Но	1.19	1.20
Er	3.56	3.46
Tm	0.56	0.49
Yb	3.35	3.04
Lu	0.45	0.45
Та	1.57	1.31
Hf	3.54	6.82
Со		27.56
Ga	18.08	16.79
FeO*/MgO	8.61	3.36
(La/Yb)n	3.1	7.0
(Gd/Yb)n	0.9	1.6
Rb/Nb	41.1	19.1
10000Ga/Al	2.8	2.4

Labels	WS-12	K09-35	WS-9	SM09-151	W12
Lithology	Dacite	Rhyolite	Rhyolite	Rhyolite	Rhyolite
Location	Wusu	Wusu	Wusu	Wusu	Wusu
Ref	Han et al., 1998	This work	Han et al., 1998	This work	Li et al., 1999
SiO <sub>2</sub>	63.60	69.63	70.76	70.77	71.57
TiO <sub>2</sub>	0.68	0.36	0.21	0.30	0.39
Al <sub>2</sub> O <sub>3</sub>	15.65	15.31	13.06	14.60	13.96
FeO*	10.16	4.73	5.99	4.77	4.19
MnO	0.14	0.08	0.15	0.12	0.05
MgO	1.51	0.57	1.44	1.49	0.65
CaO	1.11	0.47	2.84	0.24	0.31
Na <sub>2</sub> O	6.88	5.64	5.13	5.61	5.19
K <sub>2</sub> O	0.13	3.17	0.39	2.07	3.61
$P_2O_5$	0.14	0.04	0.04	0.03	0.08
LOI	1.5	0.05	3.97	1.48	1.82
Total	100.00	100.00	100.00	100.00	100.00
Sc	11.6	436	4	9	7.1
Ba	32	474	59	662	585
V	39	3	17	4	25
Cr	3	<1	3	2	25
Ni	9.1	6	9.2	2	20
Cu		9		5	101
Zn		98		115	140
Rb	2	48	4.9	27	42.9
Sr	40	115	117	61	28.7
Y	76	104	76	78	62.41
Zr	741	803	537	664	660
Nb	24	22.5	21	16.3	21.3
Sn					
Pb					
U	1.86	2.0	2.45	<2	1.55
Th	9.69	10	8.07	8	7.5
La	50.4	41.0	40.9	34	15.62
Ce	112	99.2	93.4	98	38.31
Pr		11.9			5.26

4.1.9. Late Carboniferous(?)–Early Permian WAL Continental Rift Rhyolite

Nd    54.6    49.5    49.7    52    22.83      Sm    12.9    12.5    11.4    5.69      Eu    2.59    2.3    2.19    1.14      Gd    14.1    5.62    11.4      Gd    14.1    5.62    11.7      Dy    18.0    8.9      Ho    3.87    2.28      Er    12.3    8.42      Tm    2.0    1.5      Yb    10.9    13.0    11.5      Lu    1.78    2.0    1.78      Ta    1.52    3.87    1.33      Hf    19.1    12.29    15.5      Ga						
Eu    2.59    2.3    2.19    1.14      Gd    14.1    5.62      Tb    2.69    2.8    2.75    1.17      Dy    18.0    8.9    2.28      Ho    3.87    2.28      Er    12.3    8.42      Tm    2.0    1.5      Vb    10.9    13.0    11.5    10.5      Lu    1.78    2.0    1.78    1.68      Ta    1.52    3.87    1.33    1.48      Hf    19.1    12.29    15.5    17.74      Co    20    1.97    25    5      Ga    T    8.4    4.2    3.2    6.4      (La/Yb)n    3.3    2.3    2.6    1.1      (Gd/Yb)n    1.2    0.9    0.0    0.4      Kb/Nb    0.1    2.1    0.2    1.7    2.0	Nd	54.6	49.5	49.7	52	22.83
Gd  14.1  5.62    Tb  2.69  2.8  2.75  1.17    Dy  18.0  8.9    Ho  3.87  2.28    Er  12.3  8.42    Tm  2.0  1.5    Yb  10.9  13.0  11.5    Lu  1.78  2.0  1.68    Ta  1.52  3.87  1.33    Hf  19.1  12.29  15.5  17.74    Co  20  1.97  25  5    Ga	Sm	12.9	12.5	11.4		5.69
Tb  2.69  2.8  2.75  1.17    Dy  18.0  8.9    Ho  3.87  2.28    Er  12.3  8.42    Tm  2.0  1.5    Yb  10.9  13.0  11.5  10.5    Lu  1.78  2.0  1.68    Ta  1.52  3.87  1.33  1.48    Hf  19.1  12.29  15.5  17.74    Co  20  1.97  25  5    Ga	Eu	2.59	2.3	2.19		1.14
Dy  18.0  8.9    Ho  3.87  2.28    Er  12.3  8.42    Tm  2.0  1.5    Yb  10.9  13.0  11.5  10.5    Lu  1.78  2.0  1.68    Ta  1.52  3.87  1.33  1.48    Hf  19.1  12.29  15.5  17.74    Co  20  1.97  25  5    Ga	Gd		14.1			5.62
Ho  3.87  2.28    Er  12.3  8.42    Tm  2.0  1.5    Yb  10.9  13.0  11.5  10.5    Lu  1.78  2.0  1.78  1.68    Ta  1.52  3.87  1.33  1.48    Hf  19.1  12.29  15.5  17.74    Co  20  1.97  25  5    Ga  Teo*/MgO  6.7  8.4  4.2  3.2  6.4    (La/Yb)n  3.3  2.3  2.6  1.1  1.1    (Gd/Yb)n  1.2  0.9  0.0  0.4    Rb/Nb  0.1  2.1  0.2  1.7  2.0	Tb	2.69	2.8	2.75		1.17
Er  12.3  8.42    Tm  2.0  1.5    Yb  10.9  13.0  11.5  10.5    Lu  1.78  2.0  1.78  168    Ta  1.52  3.87  1.33  1.48    Hf  19.1  12.29  15.5  17.74    Co  20  1.97  25  5    Ga	Dy		18.0			8.9
Tm  2.0  1.5    Yb  10.9  13.0  11.5  10.5    Lu  1.78  2.0  1.78  1.68    Ta  1.52  3.87  1.33  1.48    Hf  19.1  12.29  15.5  17.74    Co  20  1.97  25  5    Ga	Но		3.87			2.28
Yb    10.9    13.0    11.5    10.5      Lu    1.78    2.0    1.78    1.68      Ta    1.52    3.87    1.33    1.48      Hf    19.1    12.29    15.5    17.74      Co    20    1.97    25    5      Ga	Er		12.3			8.42
Lu  1.78  2.0  1.78  1.68    Ta  1.52  3.87  1.33  1.48    Hf  19.1  12.29  15.5  17.74    Co  20  1.97  25  5    Ga  7  8.4  4.2  3.2  6.4    (La/Yb)n  3.3  2.3  2.6  1.1    (Gd/Yb)n  1.2  0.9  0.0  0.4    Rb/Nb  0.1  2.1  0.2  1.7  2.0	Tm		2.0			1.5
Ta  1.52  3.87  1.33  1.48    Hf  19.1  12.29  15.5  17.74    Co  20  1.97  25  5    Ga  5  5  5    FeO*/MgO  6.7  8.4  4.2  3.2  6.4    (La/Yb)n  3.3  2.3  2.6  1.1    (Gd/Yb)n  1.2  0.9  0.0  0.4    Rb/Nb  0.1  2.1  0.2  1.7  2.0	Yb	10.9	13.0	11.5		10.5
Hf  19.1  12.29  15.5  17.74    Co  20  1.97  25  5    Ga  7  8.4  4.2  3.2  6.4    (La/Yb)n  3.3  2.3  2.6  1.1    (Gd/Yb)n  1.2  0.9  0.0  0.4    Rb/Nb  0.1  2.1  0.2  1.7  2.0	Lu	1.78	2.0	1.78		1.68
Co  20  1.97  25  5    Ga  5  5  5    FeO*/MgO  6.7  8.4  4.2  3.2  6.4    (La/Yb)n  3.3  2.3  2.6  1.1    (Gd/Yb)n  1.2  0.9  0.0  0.4    Rb/Nb  0.1  2.1  0.2  1.7  2.0	Ta	1.52	3.87	1.33		1.48
Ga  FeO*/MgO  6.7  8.4  4.2  3.2  6.4    (La/Yb)n  3.3  2.3  2.6  1.1    (Gd/Yb)n  1.2  0.9  0.0  0.4    Rb/Nb  0.1  2.1  0.2  1.7  2.0	Hf	19.1	12.29	15.5		17.74
FeO*/MgO6.78.44.23.26.4(La/Yb)n3.32.32.61.1(Gd/Yb)n1.20.90.00.4Rb/Nb0.12.10.21.72.0	Со	20	1.97	25		5
(La/Yb)n  3.3  2.3  2.6  1.1    (Gd/Yb)n  1.2  0.9  0.0  0.4    Rb/Nb  0.1  2.1  0.2  1.7  2.0	Ga					
(La/Yb)n  3.3  2.3  2.6  1.1    (Gd/Yb)n  1.2  0.9  0.0  0.4    Rb/Nb  0.1  2.1  0.2  1.7  2.0						
(Gd/Yb)n1.20.90.00.4Rb/Nb0.12.10.21.72.0	FeO*/MgO	6.7	8.4	4.2	3.2	6.4
<b>Rb/Nb</b> 0.1 2.1 0.2 1.7 2.0	(La/Yb)n	3.3	2.3	2.6		1.1
	(Gd/Yb)n	1.2	0.9	0.0		0.4
10000Ga/Al	Rb/Nb	0.1	2.1	0.2	1.7	2.0
	10000Ga/Al					

Labels	ZD-155	WS-10	WS-13
Lithology	Andesite	Rhyolite	Rhyolite
Location	Wusu	Wusu	Wusu
Ref	Zhou and Zhou, 1992	Han et al., 1998	Han et al., 1998
SiO <sub>2</sub>	72.14	75.28	76.31
TiO <sub>2</sub>	0.35	0.23	0.23
Al <sub>2</sub> O <sub>3</sub>	14.38	13.29	11.79
FeO*	4.47	3.02	3.20
MnO	0.02	0.08	0.08
MgO	0.11	0.75	0.45
CaO	0.21	0.40	0.03
Na <sub>2</sub> O	4.97	5.12	1.66
K <sub>2</sub> O	3.21	1.81	6.22
P <sub>2</sub> O <sub>5</sub>	0.15	0.02	0.02
LOI	1.61	2.29	0.23
Total	100.00	100.00	100.00
Sc		3.19	5.5
Ba		165	1180
v		19	23
Cr		3	3
Ni		15	6.9
Cu			
Zn			
Rb		22	100
Sr		26	25
Y		60	70
Zr	656	631	588
Nb		24	19
Sn			
Pb			
U		1.76	1.84
Th		9.78	9.08
La		34.8	39.7
Ce		78.5	80.5
Pr			
Nd		41.5	43.6
Sm		10.2	10.6
Eu		1.96	1.75

Gd			
Tb		2.09	2.47
Dy			
Но			
Er			
Tm			
Yb		10.8	10.4
Lu		1.75	1.61
Та		1.65	1.46
Hf		18.5	16.9
Со		97	71
Ga			
FeO*/MgO	39.7	4.0	7.0
(La/Yb)n		2.3	2.7
(Gd/Yb)n			
Rb/Nb		0.9	5.3
10000Ga/Al			

Labels	ZD 317	P-31	ZD 275
Lithology	Dacite	Dacite	Rhyolite
Location	Yaxuanqiao	Yaxuanqiao	Yaxuanqiao
Ref	Zhong et al., 1998	Zhou and Zhou, 1992	Zhong et al., 1998
SiO <sub>2</sub>	63.45	65.81	69.86
TiO <sub>2</sub>	0.64	1.67	0.29
Al <sub>2</sub> O <sub>3</sub>	16.26	11.50	15.11
FeO*	9.88	9.66	4.94
MnO	0.17	0.20	0.09
MgO	1.81	1.92	2.22
CaO	1.82	2.77	1.10
Na <sub>2</sub> O	5.61	5.99	5.74
K <sub>2</sub> O	0.17	0.16	0.52
P <sub>2</sub> O <sub>5</sub>	0.20	0.31	0.14
LOI	3.73	1.47	2.48
Total	100.00	100.00	100.00
Sc	15.7		12.0
Ba	120.0		190.0
V	117.0		62.0
Cr	11.9		63.0
Ni	32		49
Cu			
Zn			
Rb			16.8
Sr	260		420
Y	18		19
Zr	94	160	82
Nb	3.2		4.48
Sn			
Pb			
U			
Th	1.83		2.13
La			
Ce			
Pr	20.70		8.90

# 4.1.10. Mid Permian WAL Arc/Backarc Basin Rhyolite

Nd	26.50		15.80
Sm	10.60		6.32
Eu	2.79		1.46
Gd	1.07		0.45
Tb	0.6		0.17
Dy			
Но			
Er	2.10		1.00
Tm			
Yb			
Lu	0.32		0.16
Та	0.2		0.28
Hf	2.5		2.04
Со			
Ga			
FeO*/MgO	5.5	5.0	2.2
(La/Yb)n			
(Gd/Yb)n			
Rb/Nb	0		3.7
10000Ga/Al			

Labels	NC-16	YN146
Lithology	Rhyolite	Rhyolite
Location	Gaoshanzhai	Luchun
Ref	Li et al. 1999	This work
SiO <sub>2</sub>	70.51	82.67
TiO <sub>2</sub>	0.48	0.18
Al <sub>2</sub> O <sub>3</sub>	12.92	10.10
FeO*	7.57	1.42
MnO	0.03	0.02
MgO	0.76	0.41
CaO	0.37	0.00
Na <sub>2</sub> O	2.39	0.01
K <sub>2</sub> O	4.82	2.88
P <sub>2</sub> O <sub>5</sub>	0.14	0.02
LOI	-2.18	0.07
Total	100.00	100.00
Sc	8.6	611
Ba	1059	607
V	53	2
Cr	27	
Ni	16	3
Cu	43	27
Zn	61	45
Rb	203.80	232
Sr	113	21
Y	30.5	98
Zr	249	258
Nb	14.2	16.0
Sn		10.96
Pb		8.93
U	4.38	8.25
Th	14.4	35.56
La	35.08	80.09
Ce	60.17	90.71
Pr	9.46	20.11

4.1.11. Early Triassic WAL Post-collisional Rhyolite

Nd	34.47	77.17
Sm	7.07	18.51
Eu	1.29	1.81
Gd	6.42	17.84
Tb	1.1	3.09
Dy	6.36	18.36
Но	1.21	3.64
Er	3.24	10.73
Tm	0.53	1.65
Yb	3.13	10.39
Lu	0.46	1.52
Та	0.55	1.17
Hf	6.05	8.84
Со	9.80	17.48
Ga		
FeO*/MgO	9.9	3.5
(La/Yb)n	8.0	5.5
(Gd/Yb)n	1.7	1.4
Rb/Nb	14.4	14.5
10000Ga/Al		

Labels	SM09-118	SM09-119	K09–02	K09–44
Lithology	Schist	Schist	Metagranite	Gneiss
Location	Yangdoujie	Yangdoujie	Yuanjiang	Laomeng
Ref	This work	This work	This work	This work
SiO <sub>2</sub>	79.04	75.25	74.09	73.07
TiO <sub>2</sub>	0.08	0.38	0.32	0.54
Al <sub>2</sub> O <sub>3</sub>	13.27	13.70	13.49	13.59
FeO*	0.99	2.78	2.20	2.71
MnO	0.01	0.04	0.08	0.03
MgO	0.54	0.78	0.49	0.97
CaO	0.48	0.71	1.07	2.07
Na <sub>2</sub> O	3.32	1.52	4.22	2.82
K <sub>2</sub> O	2.15	4.67	3.97	3.96
$P_2O_5$	0.12	0.18	0.07	0.25
LOI	2.60	2.75	0.31	0.47
Total	100.00	100.00	100.00	100.00
Sc	4	6	4	9
Ba	166	355	451	615
V	3	25	15	55
Cr	6	30	3	49
Ni	5	8	4	17
Cu	5	15	3	18
Zn	12	22	49	36
Rb	108	241	121	147
Sr	69	61	97	174
Y	26	37	55	27
Zr	68	159	231	308
Nb	10.9	18.2	11.1	11.9
Sn	5	4	4	<2
Pb	16	21	17	48
U	6.1	6.7	2.5	5.5
Th	27.8	37.8	7.8	16.7
La	13	27	22	23
Ce	31	67	54	59
Pr				

Nd	13	29	27	24
Sc				

Labels	K09–19	K09-88	K09–18	K10-73	K09–24	K09-76	K09–21
Lithology	Metasandstone	Metasandstone	Metasandstone	Metasandstone	Metasandstone	Metasandstone	Metasandston
Location	Pingzhang	Laomeng	Bainadu	Panjiazhai	Pingzhang	Qimaba	Pingzhang
Ref	This work	This work					
SiO <sub>2</sub>	65.18	66.59	78.45	79.33	80.42	84.82	86.56
TiO <sub>2</sub>	0.91	0.81	0.55	0.55	0.53	0.53	0.29
Al <sub>2</sub> O <sub>3</sub>	18.99	18.79	11.69	10.26	10.00	8.26	6.87
FeO*	6.62	5.01	4.02	4.93	3.85	3.37	2.24
MnO	0.04	0.06	0.05	0.06	0.03	0.02	0.02
MgO	3.29	2.81	1.96	2.48	1.48	0.37	0.88
CaO	0.10	0.80	0.12	0.05	0.17	0.07	0.15
Na <sub>2</sub> O	0.58	1.59	0.00	0.12	1.90	0.63	1.92
K <sub>2</sub> O	4.12	3.21	2.92	2.13	1.48	1.82	0.98
P <sub>2</sub> O <sub>5</sub>	0.17	0.33	0.23	0.10	0.14	0.10	0.10
LOI	5.48	5.33	3.69	2.90	1.72	2.29	1.07
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Sc	20	16	12	10	9	7	5
Ba	1113	457	566	382	328	304	165
v	179	112	172	75	64	63	33
Cr	143	91	79	70	67	51	28
Ni	60	27	47	39	25	24	14
Cu	56	36	43	13	14	12	4
Zn	115	68	84	123	51	54	32
Rb	178	148	126	105	71	84	37
Sr	12	149	7	14	47	41	69
Y	45	30	27	29	22	22	15
Zr	216	247	138	280	242	240	242
Nb	17.8	15.1	10.8	11.3	10.7	10.7	6.1
Sn	3	3	3	2	2	2	<2
Pb	16	26	20	18	26	16	6
U	5.8	4.4	4.3	3.6	3.7	3.3	2.1
Th	20.8	17.4	12.6	15.1	15.4	14.6	7.8
La	43	32	20	36	26	29	18
Ce	90	66	50	65	62	67	39
Pr							

4.1.13. Silurian–Early Devonian Ailaoshan Metasandstones

Nd	44	28	24	38	26	27	18
Sc							

Labels	SM09-161	K10–61C	K09–67	K09–15
Lithology	Sandstone	Sandstone	Sandstone	Sandstone
Location	Bulong	Bulong	W Luchun	W Yuanjiang
Ref	This work	This work	This work	This work
SiO <sub>2</sub>	64.49	65.04	73.80	74.94
TiO <sub>2</sub>	0.89	0.79	0.84	0.40
Al <sub>2</sub> O <sub>3</sub>	13.32	14.31	17.33	14.20
FeO*	5.97	4.09	4.56	0.99
MnO	0.14	0.15	0.02	0.00
MgO	2.52	1.45	0.25	0.58
CaO	7.19	9.92	0.20	0.12
Na <sub>2</sub> O	3.56	3.03	0.15	1.04
K <sub>2</sub> O	1.79	1.12	2.66	7.61
P <sub>2</sub> O <sub>5</sub>	0.13	0.09	0.18	0.10
LOI	6.34	10.24	4.70	1.33
Total	100.00	100.00	100.00	100.00
Sc	17	15	16	6
Ba	287	135	379	661
V	145	78	142	33
Cr	48	88	88	23
Ni	18	26	20	5
Cu	18	12	24	4
Zn	69	66	53	7
Rb	49	42	125	238
Sr	219	171	46	67
Y	23	23	25	34
Zr	97	174	301	185
Nb	4.8	10.1	11.2	11.3
Sn	<2	3	4	
Pb	8	22	3	11
U	<2	3.2	4.0	10.1
Th	2.3	10.2	12.8	33.3
La	14	29	28	33
Ce	29	54	55	69
Pr				

### 4.1.14. Late Permian–Triassic WAL Sandstones

Nd	18	26	26	28
Sc				

Labels	K09-06	SM09–124	K09–64	K09–62
Lithology	Sandstone	Sandstone	Sandstone	Sandstone
Location	W Yuanjiang	Mojiang	W Mojiang	E Pinghe
Ref	This work	This work	This work	This work
SiO <sub>2</sub>	84.18	86.11	88.99	93.35
TiO <sub>2</sub>	0.47	0.42	0.32	0.21
Al <sub>2</sub> O <sub>3</sub>	9.05	6.39	6.59	3.85
FeO*	2.16	2.40	2.79	1.47
MnO	0.01	0.02	0.03	0.01
MgO	0.69	1.88	0.12	0.32
CaO	0.07	0.30	0.01	0.00
Na <sub>2</sub> O	0.81	0.39	0.00	0.00
K <sub>2</sub> O	2.47	1.96	1.08	0.78
P <sub>2</sub> O <sub>5</sub>	0.07	0.13	0.06	0.02
LOI	2.00	1.67	2.13	1.11
Total	100.00	100.00	100.00	100.00
Sc	6	6	7	3
Ba	506	376	97	78
V	51	49	54	22
Cr	41	55	35	22
Ni	12	55	16	19
Cu	2	10	14	4
Zn	9	28	20	23
Rb	131	76	52	43
Sr	29	10	9	6
Y	17	12	16	10
Zr	186	287	120	119
Nb	10.0	8.1	4.9	3.4
Sn	3	<2	<2	2
Pb	17	6	4	3
U	4.6	2.5	2.3	2.5
Th	12.7	10.0	6.5	6.5
La	14	19	17	11
Ce	35	44	38	23
Pr				
Nd	16	18	18	26
Sc				

Spots	SiO <sub>2</sub>	MgO	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Cr <sub>2</sub> O <sub>3</sub>	Total	Al	Ti	Fe	Mg	Cr	Mg#	Cr#
SM09-125-1	0.02	14.60	0.51	22.75	41.43	98.90	12.04	0.30	17.85	6.26	28.34	0.26	0.70
SM09-125-2	0.07	12.32	0.39	21.29	41.24	98.36	11.27	0.23	19.77	5.28	28.22	0.21	0.71
SM09-125-3	0.02	14.60	0.46	22.71	40.75	98.43	12.02	0.27	18.05	6.26	27.88	0.26	0.70
SM09-125-4	0.02	14.36	0.47	22.61	40.94	98.63	11.97	0.28	18.31	6.15	28.01	0.25	0.70
SM09-125-5	0.32	13.53	0.33	23.20	39.06	99.39	12.28	0.20	19.93	5.80	26.73	0.23	0.69
SM09-125-6	0.05	12.29	0.40	21.07	41.86	98.54	11.15	0.24	19.64	5.27	28.64	0.21	0.72
SM09-125-7	0.04	12.83	0.48	21.86	42.15	99.62	11.57	0.29	19.34	5.50	28.84	0.22	0.71
SM09-127-1	0.03	9.37	0.14	23.27	47.84	99.40	10.88	0.06	15.34	6.25	32.73	0.29	0.75
SM09-127-2	0.03	11.44	0.12	27.05	44.43	99.37	12.65	0.05	13.61	7.62	30.40	0.36	0.71
SM09-127-3	0.04	11.31	0.17	27.36	43.59	99.22	12.79	0.08	14.13	7.54	29.82	0.35	0.70
SM09-127-4	0.01	12.38	0.25	26.01	45.95	98.82	12.16	0.12	12.03	8.26	31.44	0.41	0.72
SM09-127-5	0.04	12.38	0.24	26.24	46.47	99.44	12.26	0.11	11.93	8.26	31.79	0.41	0.72
SM09-127-6	0.03	12.48	0.26	28.02	44.16	98.61	13.10	0.12	11.79	8.32	30.21	0.41	0.70
SM09-127-7	0.02	12.56	0.27	28.11	44.08	98.68	13.14	0.13	11.83	8.37	30.16	0.41	0.70
SM09-127-8	0.02	12.85	0.24	27.43	45.20	98.73	12.82	0.11	11.18	8.57	30.92	0.43	0.71
SM09-127-9	0.01	12.45	0.27	29.32	42.88	98.67	13.70	0.13	11.97	8.30	29.34	0.41	0.68
SM09-127-10	0.03	12.66	0.25	30.27	41.38	98.46	14.15	0.12	12.10	8.44	28.31	0.41	0.67
SM09-127-11	0.05	11.67	0.15	32.84	38.18	98.31	15.35	0.07	13.44	7.78	26.12	0.37	0.63
SM09-127-12	0.02	12.51	0.24	30.22	41.82	98.64	14.13	0.11	12.06	8.34	28.62	0.41	0.67
SM09-127-13	0.03	12.39	0.23	30.72	41.19	98.71	14.36	0.11	12.37	8.26	28.18	0.40	0.66
SM09-127-14	0.06	12.59	0.24	29.26	43.26	99.23	13.68	0.11	12.00	8.39	29.60	0.41	0.68
SM09-127-15	0.01	12.62	0.17	31.83	40.72	99.15	14.88	0.08	12.11	8.41	27.86	0.41	0.65
SM09-128-1	0.01	23.70	0.30	44.74	26.07	97.58	20.92	0.14	11.21	10.16	17.84	0.48	0.46
SM09-128-2	0.01	22.95	0.33	42.82	27.19	97.03	20.02	0.15	11.66	9.84	18.60	0.46	0.48
SM09-128-3	0.02	22.54	0.28	42.59	27.59	97.30	19.91	0.13	11.89	9.66	18.88	0.45	0.49
SM09-128-4	0.02	22.11	0.30	41.55	29.06	97.60	19.42	0.14	11.91	9.48	19.88	0.44	0.51
SM09-128-5	0.03	21.32	0.32	38.74	31.49	97.59	18.11	0.15	12.35	9.14	21.55	0.43	0.54
SM09-128-6	0.08	20.88	0.38	36.82	33.01	97.00	17.21	0.18	12.13	8.95	22.59	0.42	0.57
SM09-128-7	0.04	20.36	0.38	35.52	33.55	97.52	16.60	0.18	13.40	8.73	22.95	0.39	0.58
SM09-128-8	0.03	20.14	0.42	34.62	35.44	98.48	16.18	0.19	13.30	8.63	24.25	0.39	0.60
SM09-128-9	0.05	19.26	0.39	33.38	35.58	97.71	15.60	0.18	13.92	8.26	24.35	0.37	0.61
SM09-128-10	0.05	19.38	0.41	33.26	36.37	97.67	15.55	0.19	13.14	8.30	24.88	0.39	0.62

# 4.2 Peridotitic Cr-spinel Geochemical (Electron Microprobe) Data

SM09-128-11	0.01	13.82	0.50	26.49	39.79	98.63	12.38	0.23	18.74	5.92	27.23	0.24	0.69
SM09-128-12	0.02	14.64	0.55	25.97	40.18	97.81	12.14	0.26	17.79	6.28	27.49	0.26	0.69
SM09-128-13	0.05	12.97	0.38	24.57	41.28	97.63	11.49	0.18	18.63	5.56	28.25	0.23	0.71
K09-09-1	0.03	13.34	0.68	24.53	39.91	98.92	12.98	0.41	15.38	8.04	27.30	0.34	0.68
K09-09-2	0.03	13.06	0.79	23.30	40.59	99.56	12.33	0.47	16.34	7.88	27.77	0.33	0.69
K09-09-3	0.02	12.57	0.79	22.40	41.54	99.39	11.86	0.47	16.63	7.58	28.42	0.31	0.71
K09-09-4	0.03	12.81	0.77	23.07	40.47	98.90	12.21	0.46	16.36	7.73	27.69	0.32	0.69
K09-09-5	0.03	10.70	0.75	21.78	40.98	99.16	11.53	0.45	18.70	6.45	28.04	0.26	0.71
K09-09-6	0.02	12.47	0.82	22.39	41.85	98.99	11.85	0.49	16.12	7.52	28.63	0.32	0.71
K09-09-7	0.01	11.59	0.73	21.99	41.60	99.21	11.64	0.44	17.43	6.99	28.47	0.29	0.71
K09-09-8	0.04	11.20	0.73	21.51	41.58	98.78	11.38	0.44	17.83	6.76	28.45	0.27	0.71
K09-09-9	0.04	8.97	0.75	19.54	42.56	99.51	10.34	0.45	20.73	5.41	29.12	0.21	0.74
K09-09-10	0.03	12.89	0.77	23.20	41.20	99.06	12.28	0.46	15.77	7.77	28.19	0.33	0.70
K09-09-11	0.01	13.07	0.74	22.97	41.30	99.13	12.16	0.44	15.85	7.88	28.26	0.33	0.70
K09-09-12	0.02	14.33	0.62	27.98	37.05	99.23	14.81	0.37	14.50	8.64	25.35	0.37	0.63
K09-09-13	0.01	10.18	0.68	22.35	39.42	98.96	11.83	0.40	19.68	6.14	26.97	0.24	0.70
K09-09-14	0.04	8.98	0.65	20.28	41.15	98.31	10.73	0.39	20.36	5.42	28.16	0.21	0.72
K09-09-15	0.02	10.49	0.59	23.28	40.42	99.49	12.32	0.36	18.44	6.33	27.66	0.26	0.69
K09-09-16	0.05	9.00	0.43	21.60	39.86	97.95	11.43	0.26	20.14	5.43	27.27	0.21	0.70

Label	Location	207/206	+/ <b>-1s</b>	208/206	+/ <b>-1s</b>	206/204	+/ <b>-1s</b>	207/204	+/ <b>-1s</b>	208/204	+/ <b>-1s</b>	206/238	+/ <b>-1s</b>	208/232
K09-84	Luchun	0.842	0.004	2.088	0.006	18.787	0.064	15.742	0.046	39.200	0.110	210.528	0	365.857
K10-25	Pinghe	0.844	0.001	2.091	0.002	18.566	0.031	15.668	0.029	38.829	0.060	508.271	0	3412.881
K10-29	Pinghe	0.845	0.001	2.097	0.002	18.600	0.030	15.755	0.021	39.009	0.050	1864.585	0	5549.388

4.3 Granite K-feldspar Pb-isotope Geochemical (LA-ICPMS) Data

Label	207/206	+/ <b>-1s</b>	208/206	+/ <b>-1s</b>	206/204	+/ <b>-1s</b>	207/204	+/ <b>-1s</b>	208/204	+/ <b>-1s</b>	206/238	+/ <b>-1s</b>	208/232	+/ <b>-1s</b>
K09-84-1	0.8473	0.001	2.1081	0.008	18.5306	0.165	15.7160	0.149	39.0624	0.259	337	0.001	448	0.001
K09-84-2	0.8415	0.004	2.0818	0.006	18.5718	0.142	15.6433	0.090	38.6617	0.250	441	0.045	1523	0.001
K09-84-3	0.8288	0.003	2.0779	0.007	18.8366	0.131	15.6267	0.093	39.1392	0.214	15	0.001	22	0.000
K09-84-4	0.8330	0.003	2.0961	0.010	18.8736	0.290	15.7374	0.215	39.5598	0.620	84	0.001	115	0.000
K09-84-5	0.8375	0.003	2.0810	0.006	18.9000	0.157	15.8433	0.116	39.3296	0.283	27	0.017	34	0.004
K09-84-6	0.8462	0.003	2.1073	0.008	18.9296	0.176	16.0339	0.127	39.8888	0.337	849	0.000	788	0.000
K09–84–7	0.8211	0.004	2.0701	0.014	19.2059	0.242	15.7842	0.189	39.7569	0.407	46	0.004	34	0.000
K10-25-1	0.8341	0.003	2.0796	0.007	18.4314	0.158	15.3879	0.128	38.3281	0.238	221	0.000	132	0.000
K10-25-2	0.8448	0.002	2.0880	0.006	18.4518	0.101	15.6023	0.104	38.5262	0.250	10	0.015	1154	0.035
K10-25-3	0.8430	0.002	2.0966	0.003	18.5309	0.052	15.6372	0.055	38.8504	0.089	259	0.263	8507	0.000
K10–25–4	0.8461	0.003	2.0937	0.007	18.5472	0.094	15.7082	0.063	38.8298	0.183	1621	0.009	5419	0.004
K10–25–5	0.8385	0.003	2.0872	0.005	18.5688	0.092	15.5854	0.079	38.7558	0.192	84	0.001	395	0.000
K10–25–6	0.8453	0.002	2.0868	0.005	18.6627	0.081	15.7913	0.079	38.9438	0.190	113	0.001	7287	0.000
K10–25–7	0.8449	0.002	2.0908	0.005	18.7122	0.094	15.8260	0.095	39.1219	0.173	1250	0.002	996	0.000
K10–25–8	0.8370	0.003	2.0868	0.006	18.8309	0.068	15.7763	0.054	39.2945	0.136	54	0.001	67	0.000
K10-25-9	0.8369	0.002	2.0821	0.007	18.9532	0.077	15.8769	0.077	39.4601	0.172	42	0.000	507	0.000
K10-25-1	0.8384	0.003	2.0686	0.005	18.9662	0.086	15.9169	0.116	39.2326	0.186	2	0.010	279	0.000
0														
K10–29–1	0.8458	0.003	2.1088	0.009	18.4459	0.104	15.6163	0.070	38.8970	0.194	212	0.001	569	0.000
K10–29–2	0.8550	0.002	2.1047	0.006	18.4622	0.090	15.7997	0.064	38.8551	0.182	5243	0.001	31959	0.000

K10-29-3	0.8475	0.003	2.0955	0.005	18.5372	0.098	15.7250	0.075	38.8429	0.177	2794	0.008	5787	0.017
K10–29–4	0.8477	0.002	2.0964	0.005	18.5727	0.071	15.7586	0.056	38.9343	0.110	4535	0.004	3654	0.004
K10–29–5	0.8437	0.004	2.1046	0.007	18.5905	0.115	15.7006	0.064	39.1232	0.229	1314	0.000	800	0.000
K10–29–6	0.8485	0.004	2.0906	0.007	18.5947	0.101	15.7927	0.083	38.8731	0.182	263	0.001	577	0.001
K10–29–7	0.8433	0.001	2.0979	0.004	18.6211	0.081	15.7191	0.057	39.0627	0.126	2491	0.001	9005	0.001
K10–29–8	0.8434	0.003	2.0903	0.006	18.6408	0.114	15.7370	0.098	38.9632	0.176	1147	0.002	1596	0.000
K10-29-9	0.8437	0.002	2.0890	0.008	18.7702	0.084	15.8515	0.052	39.2087	0.133	546	0.001	1352	0.000
K10-29-1	0.8411	0.004	2.0871	0.008	18.8089	0.119	15.8348	0.117	39.2539	0.178	101	0.000	195	0.000
0														

## **4.4 Detection Limits**

S	olution			Electron	Microprobe			
Ι	CPMS		XRF					
Element	<b>Detection Limit</b>	Element	<b>Detection Limit</b>	<b>Detection</b>				
	(ppm)		(ppm)	Element	(ppm)			
7 Li	0.011	Sc	1.5	Mg	254			
9 Be	0.002	Ba	4	Al	200			
45 Sc	0.008	V	3	Si	181			
47 Ti	0.565	Cr	1	Ca	118			
51 V	0.021	Ni	1	Ti	126			
52 Cr	0.012	Cu	1	Fe	295			
53 Cr	0.049	Zn	1	Mn	181			
55 Mn	0.041	As	3	Cr	1079			
59 Co	0.003	Rb	0.5	Co	198			
60 Ni	0.034	Sr	1	Zn	452			
63 Cu	0.022	Y	1	V	261			
65 Cu	0.039	Zr	1					
66 Zn	0.092	Nb	0.5					
71 Ga	0.007	Sn	2					
75 As	1.000	Pb	1.5					
85 Rb	0.018	Bi	2					
88 Sr	0.007	U	2					
89 Y	0.004	Th	2					
90 Zr	0.021	La	4					
93 Nb	0.002	Ce	6					
95 Mo	0.007	Nd	4					
107 Ag	0.100							
111 Cd	0.100							
118 Sn	0.007							
121 Sb	0.002							
125 Te	0.100							
133 Cs	0.002							
137 Ba	0.040							
139 La	0.005							
140 Ce	0.022							

141	Pr	0.002
146	Nd	0.006
147	Sm	0.004
153	Eu	0.001
157	Gd	0.002
159	Tb	0.001
163	Dy	0.005
165	Но	0.001
166	Er	0.001
169	Tm	0.001
172	Yb	0.003
175	Lu	0.001
178	Hf	0.002
181	Та	0.001
182	W	0.046
205	T1	0.005
Tota	l Pb	0.020
209	Bi	0.001
232	Th	0.006
238	U	0.001

#### REFERENCES

Andersen, T., 2005. Detrital zircons as tracers of sedimentary provenance: limiting conditions from statistics and numerical simulation. Chemical Geology 216, 249-270. Baker, J., Peate, D., Waight, T., Meyzen, C., 2004. Pb isotopic analysis of standards and samples using a 207Pb–204Pb double spike and thallium to correct for mass bias with a double-focusing MC-ICP-MS. Chemical Geology 211, 275-303.

Berry, R.F., Steele, D.A., Meffre, S., 2008. Proterozoic metamorphism in Tasmania: Implications for tectonic reconstructions. Precambrian Research 166, 387-396.

Black, L.P., Gulson, B.L., 1978. The age of the mud tank carbonatite, Strangways Range, Northern Territory. BMR Journal of Australian Geology and Geophysics 3, 227-232.

Black, L.P., Kamo, S.L., Allen, C.M., Aleinikoff, J.N., Davis, D.W., Korsch, R.J., Foudoulis, C., 2003a. TEMORA 1: a new zircon standard for Phanerozoic U–Pb geochronology. Chemical Geology 200, 155-170.

Black, L.P., Kamo, S.L., Allen, C.M., Aleinikoff, J.N., Davis, D.W., Korsch, R.J., Foudoulis, C., 2003b. TEMORA 1: a new zircon standard for Phanerozoic U–Pb geochronology. Chemical Geology 200, 155-170.

Dickinson, W.R., Gehrels, G.E., 2009. Use of U–Pb ages of detrital zircons to infer maximum depositional ages of strata: A test against a Colorado Plateau Mesozoic database. Earth and Planetary Science Letters 288, 115-125.

Gehrels, G., 2011. Detrital Zircon U-Pb Geochronology: Current Methods and New Opportunities, Tectonics of Sedimentary Basins. John Wiley & Sons, Ltd, pp. 45-62.

Gehrels, G., Valencia, V., Pullen, A., 2006. Detrital zircon geochronology by laser-ablation multicollector ICPMS at the Arizona LaserChron Center. Paleontological Society Papers 12, 67-76.

Jackson, S.E., Pearson, N.J., Griffin, W.L., Belousova, E.A., 2004. The application of laser ablation-inductively coupled plasma-mass spectrometry to in situ U–Pb zircon geochronology. Chemical Geology 211, 47-69.

Kamenetsky, V.S., Crawford, A.J., Meffre, S., 2001. Factors controlling chemistry of magmatic spinel: an empirical study of associated olivine, Cr-spinel and melt inclusions from primitive rocks. Journal of Petrology 42, 655-671.

Meffre, S., Large, R.R., Scott, R., Woodhead, J., Chang, Z.S., Gilbert, S.E., Danyushevsky, L.V., Maslennikov, V., Hergt, J.M., 2008. Age and pyrite Pb-isotopic composition of the giant Sukhoi Log sediment-hosted gold deposit, Russia. Geochimica et Cosmochimica Acta 72, 2377-2391.

Meffre, S., Scott, R.J., Glen, R.A., Squire, R.J., 2007. Re-evaluation of contact relationships between Ordovician volcanic belts and the quartz-rich turbidites of the

Lachlan Orogen. Australian Journal of Earth Sciences 54, 363-383.

Page, R.W., Stevens, B.P.J., Gibson, G.M., 2005. Geochronology of the Sequence Hosting the Broken Hill Pb-Zn-Ag Orebody, Australia. Economic Geology 100, 633-661.

Paton, C., Woodhead, J.D., Hellstrom, J.C., Hergt, J.M., Greig, A., Maas, R., 2010. Improved laser ablation U-Pb zircon geochronology through robust down-hole fractionation correction. Geochemistry, Geophysics, Geosystems 11, 1525-2027.

Robinson, P., 2003. XRF analysis of flux-fused discs, Geoanalysis 2003, In: Carignan (Ed.), The 5th International Conference on the Analysis of Geological and Environmental Materials. Geological Survey of Finland and International Association of Geoanalysis, Finland: Rovaniemi, p. 90.

Robinson, P., Townsend, A.T., Yu, Z., Münker, C., 1999. Determination of scandium, yttrium and rare earth elements in rocks by high resolution inductively coupled plasma-mass spectrometry. Geostandards Newsletter 23, 31-46.

Rubatto, D., Williams, I.S., Buick, I.S., 2001. Zircon and monazite response to prograde metamorphism in the Reynolds Range, central Australia. Contribution to Mineralogy and Petrology 140, 458-468.

Sack, P.J., Berry, R.F., Meffre, S., Falloon, T.J., Gemmell, J.B., Friedman, R.M., 2011. In situ location and U-Pb dating of small zircon grains in igneous rocks using laser ablation-inductively coupled plasm-quadrupole mass spectrometry. Geochem. Geophys. Geosyst. 12, Q0AA14.

Watson, J.S., 1996. Fast, simple method of powder pellet preparation for X-ray fluorescence analysis. X-Ray Spectrom 25, 173-174.

Wiedenbeck, M., AllÉ, P., Corfu, F., Griffin, W.L., Meier, M., Oberli, F., Quadt, A.V., Roddick, J.C., Spiegel, W., 1995. Three natural zircon standards for U-Th-Pb, Lu-Hf, trace element and REE analyses. Geostandards Newsletter 19, 1-23.

Woodhead, J., Hergt, J., Meffre, S., Large, R.R., Danyushevsky, L.V., Gilbert, S.E., 2009. In situ Pb-isotope analysis of pyrite by laser ablation (multi-collector and quadrupole) ICPMS. Chemical Geology: An International Journal 262, 344-354.

Yu, Z.S., Robinson, P., Townsend, A.T., Munker, C., Crawford, A.J., 2000. Determination of high field strength elements, Rb, Sr, Mo, Sb, Cs, Tl and Bi at ng g(-1) levels in geological reference materials by magnetic sector ICP-MS after HF/HClO4 high pressure digestion. Geostand. Newsl. 24, 39-50.