# Age, Tectonic Geography and Provenance of the Renner Group, Tomkinson Province, Northern Territory

Thesis submitted in accordance with the requirements of the University of Adelaide for an Honours Degree in Geology

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THE UNIVERSITY of ADELAIDE

# AGE, TECTONIC GEOGRAPHY AND PROVENANCE OF THE RENNER GROUP, TOMKINSON PROVINCE, NORTHERN TERRITORY

## TECTONIC GEOGRAPHY OF THE RENNER GROUP

## ABSTRACT

The informally termed greater McArthur Basin is a Paleoproterozoic to Mesoproterozoic multiphase basin system that records a billion years of Earth's history within the Northern Territory. Sedimentary successions that make up the basin preserve evidence for events that surround the basin during its formation. In this study we present LA-ICP-MS detrital zircon U–Pb, Lu–Hf and REE data that provide new constraints on the Renner Group and reveals provenance variations that exemplify the evolution of the basin. Using the youngest, near-concordant, zircon grains, the maximum depositional age for each formation is determined. The maximum depositional age for the Gleeson Formation has been constrained to being deposited after 1600 ± 42 Ma. Whereas the grains from the Sweetwater Member, Grayling Member and Powell Formation provide maximum depositional ages of 1624 ± 37 Ma, 1554 ± 77 Ma and 1714 ± 50 Ma, respectively. A well as using U-Pb in zircon, we also look at U-Pb in detrital rutile. These data yielded ages of 1731 ± 39 Ma (Sweetwater Member), 1811 ± 45 Ma (Grayling Member) and 1703 ± 32 Ma (Powell Formation, determined by the youngest, near concordant grain. Age variations within stratigraphy propose a subtle change from older, Paleoproterozoic sources to additional input from younger sources. Formations in the Renner Group record age peaks that are consistent with rocks of the Aileron Province, Mount Isa Inlier and the Gawler Craton. By comparing U-Pb and Lu-Hf data, the Renner Group correlates with the Roper Group (McArthur Basin), South Nicholson Group (South Nicholson Basin) and the Tijunna Group (Birrindudu Basin). In particular, the Powell Formation of the Renner Group is equivalent to the Bessie Creek Sandstone of the Roper Group, and shares similarities with the Wondoan Hill Formation of the Tijunna Group. Whereas the Grayling Member, Sweetwater Member and Gleeson Formation are equivalent to the older formations of the Lower Roper Group such as the Arnold Sandstone and Crawford Sandstone. I suggest that the variation in provenance records the exhumation and exposure of these regions as a result of intracratonic rifting and magmatism from 1.5 – 1.4 Ga. The increase in 1860–1650 Ma detritus suggests uplift of the Arunta region.

## KEYWORDS

Renner Group, Tomkinson, Northern Territory, U-Pb, Hf, zircon, geochronology, tectonic geography

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## INTRODUCTION

The Mesoproterozoic is an interesting, yet poorly known time in Earth's history; it is an era that encompasses the amalgamation of Nuna and its transformation to Rodinia (Kirscher et al. 2020) as well as vast shifts in redox resulting in changes to the atmospheric and ocean chemistry (Planavsky et al. 2018). Evidence of this ancient developing Earth system is preserved within sedimentary rocks in intracontinental basins; however, uncertainty surrounds how these basins remain depocenters over extended periods of time (Yang et al. 2019).

The informally named greater McArthur Basin is one of the more studied and accessible of these cratonic basins, which records nearly a billion years of Earth's history from ca. 1.82 Ga to 0.9 Ga (Ahmad and Scrimgeour 2013, Munson 2016a, Munson et al. 2018, Rawlings 1999, Yang 2019). We are able to date and understand deposition of the greater McArthur Basin by using detrital chronology and linking the provenance changes in the McArthur Basin, relating to changes in the tectonic history of the source regions that surround the basin; there, in turn, may relate to major plate tectonic changes (Allen et al. 2015, Sandiford et al. 2001, Yang et al. 2019). Better constraints of sediment age and more knowledge of spatial and stratigraphic changes in provenance can allow a better understanding on the formation of the greater McArthur basin. It has been suggested by Yang et al. (2020) that the ancestral Daly Waters Fault Zone was a palaeo-bathymetric high, separating the Mesoproterozoic Wilton package depocenters in the west (Birrindudu Basin) from the east (East Beetaloo Sub-basin, McArthur Basin and South Nicholson Basin).

The greater McArthur Basin has been subdivided into five distinct sedimentary packages from the Paleoproterozoic to Neoproterozoic (Rawlings 1999), comprising of

successions from the Tomkinson Province, Birrindudu Basin and the McArthur Basin. The focus of this study is the northern Tomkinson Province region that hosts the Gleeson Formation, Sweetwater Member, Grayling Member and Powell Formation of the Renner Group within the Mesoproterozoic Wilton Package.

To constrain the age and possible source of the Renner Group sediments, detrital zircons are used due to their resilience and ability to preserve their radiometric clocks (Cawood et al. 2012, Dickinson and Gehrels 2009, Gehrels 2014, Yang et al. 2018). By using isotopic proxies such as U-Pb and Lu-Hf in zircons, the maximum depositional age, age peaks of major detrital input and therefore provenance of the sands within the Renner Group can be determined. These data will assist in understanding the Mesoproterozoic landscape at the time when the Renner group was being deposited. These data will also allow us to correlate the Renner Group with other Coeval sedimentary rock packages in the Birrindudu Basin and Beetaloo Sub-basin.

## GEOLOGICAL SETTING/BACKGROUND

### Proterozoic North Australian Craton

Precambrian Australia consists of three cratons, the North Australian Craton, the West Australian Craton and the South Australian Craton (P. A. Cawood & R. J. Korsch, 2008; Myers, 1990; Myers, Shaw, & Tyler, 1996). The North Australian Craton (Figure 2) extends across the northern parts of Queensland, the Northern Territory and Western Australia (Cawood and Korsch 2008). Sharing similar characteristics with the SAC, several researchers believe that the two cratons (NAC and SAC) were linked during some of their Archean to Paleoproterozoic evolution (Ahmad & Scrimgeour, 2013; Betts & Giles, 2006; Betts, Giles, Lister, & Frick, 2002; Giles, Betts, & Lister, 2004;

Reddy & Evans, 2009). Yang et al. (2019) suggested that the West Australian Craton collided with the amalgamated North Australian Craton and South Australian Craton by ca. 1200 Ma.

Prior to the final collision, Betts and Giles (2006) interpret a combination of slab rollback and back stepping of a subduction system, behind accreted continental terranes resulting in the southwards migration of the plate margin. This is thought to have led to extension of the North Australian Craton, opening an oceanic basin situated along the eastern margin of the continent (ca. 1660 Ma). At a similar time, in the late Paleoproterozoic, exhumation and divergence along the eastern side of the NAC was occurring due to lithospheric extension related with the rifting of Proterozoic Australia and Laurentia in Nuna (Foster & Ehlers, 1998; B. Yang et al., 2019). The closure of the ocean basin during ca. 1350–1250 Ma resulted in the uplift of the southern margin of the North Australian Craton. The southern regions of the NAC became topographic highs, filling in the basin through north-flowing drainage systems.

## Greater McArthur basin

The greater McArthur Basin (Close, 2014) is an informally termed Paleoproterozoic to Mesoproterozoic multiphase basin system (Figure 1). The basin is a ~5-15km thick platform cover sequence made up of a siliciclastic carbonate succession with bimodal igneous rocks as part of the early basin fill (Jackson et al. 1987, Plumb 1979a, Plumb 1979b, Rawlings 1999). It includes the sedimentary successions of the 'McArthur Basin' itself, which is exposed on the eastern margin of the NAC. In addition, the

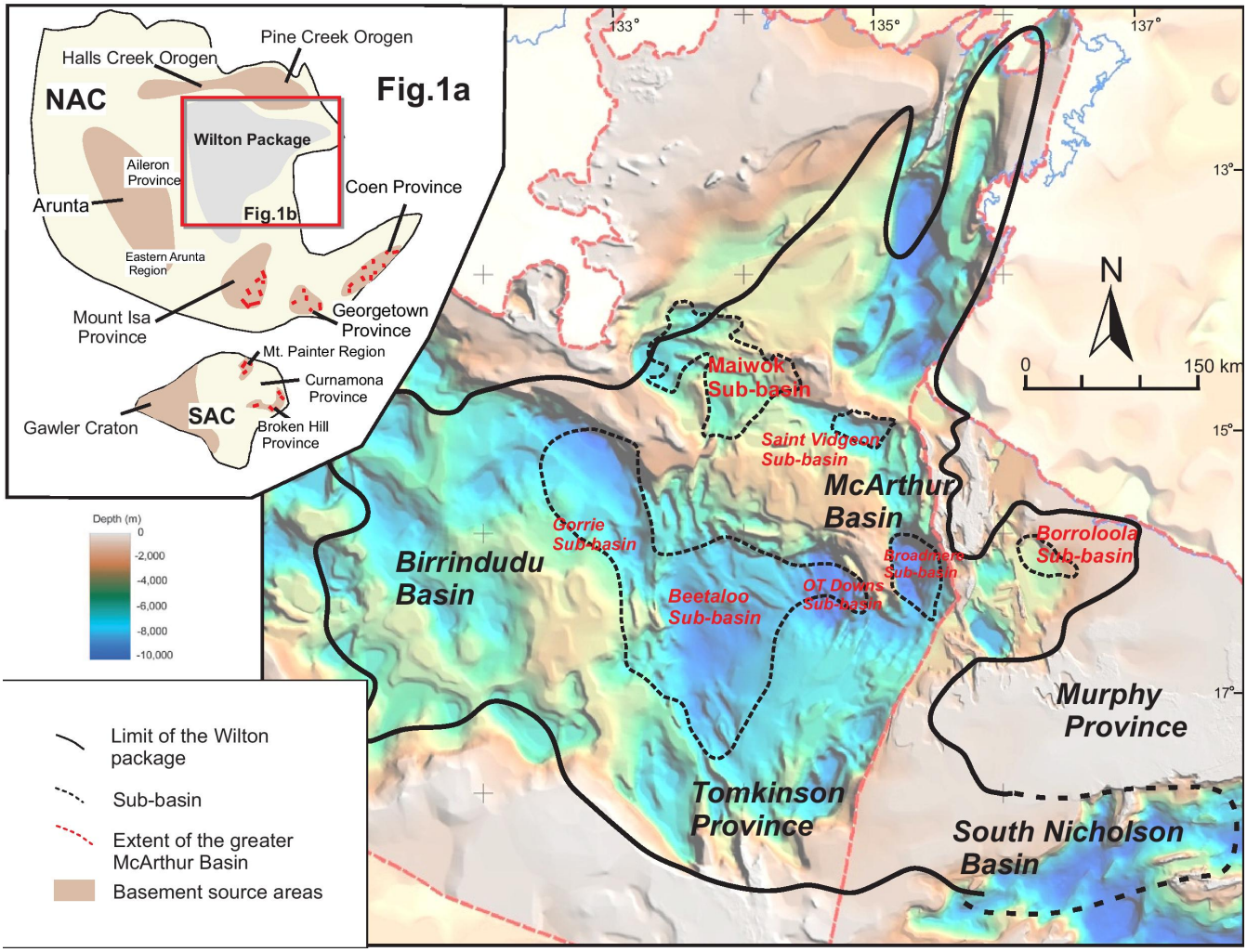


**Figure 1. Location map of the greater McArthur Basin and the extent of the Wilton Package showing the top-to-basement (SEEBASE™) basement surface image after Frogtech Geoscience). Modified after Yang et al. 2018.**

Birrindudu Basin and the Tomkinson Province are also exposed and thought to correlate.

The greater McArthur Basin comprises of five coherent basin phases that have been sectioned into five sedimentary packages. Formally known as supersequences, these packages include the Redbank, Goyder, Glyde, Favenc, and Wilton Packages (Rawlings, 1999).

The Derim Derim Dolerite plays an important part in the formation of the McArthur basin. Bodorkos et al. (2020) used U-Pb dating to date the Derim Derim with a mean $^{207}Pb/^{206}Pb$ date of 1320.1 ± 5.3 Ma, where Yang et al. (2019) presented a baddeleyite age of 1312.9 ± 0.7 Ma. Melville (2010) reported a SHRIMP U-Pb baddeleyite age of 1295 ± 14 Ma from a gabbro intruding the Renner Group in the Tomkinson Province. The gabbro intrusion is in relation to the contemporaneous intraplate mafic magmatism extending across the NAC at this time. The intrusion of the ca. 1.31 Ga Derim Derim LIP gradually uplifted the basin from the north due to its emplacement with the Galiwinku LIP. At the same time, the increased weathering of the rocks increased nutrient supply to the basin, resulting in an enhancement in the primary production in the shallow marine settings (Yang et al. 2020).

## Wilton package

The Wilton package (Rawlings, 1999) is characterised by a group of siliciclastic successions that show subsurface continuity but may have been deposited in numerous geographically separated sub-basins (Yang et al. 2019). The package is one the best sedimentary records for analysing the Mesoproterozoic earths system. The Wilton package (Figure 1) encompass the youngest of the Mesoproterozoic sedimentary successions of the greater McArthur Basin dating at ca. 1500–1400 Ma (Jackson et al.

1987, Powell et al. 1987). The package is interpreted to include the Roper Group (McArthur Basin), Tijunna Group (Birrindudu Basin), South Nicholson Group (South Nicholson Basin) and the Renner Group (Tomkinson Province) (Rawlings, 1999). Widely distributed, the package displays a cyclic sequence of fine and coarse-grained siliciclastic rocks, interpreted to have been deposited in a shallow-marine, near-shore to shelf environment (Jackson et al. 1987, Powell et al. 1987, Rawlings 1999). Age constraints for the Wilton package are limited. SHRIMP U-Pb overlapping ages of ca. 1492 Ma from the lower Mainoru Formation are constraining deposition to being younger than these ages (Jackson et al. 1999, Southgate et al. 2000). More recently a U-Pb TIMS baddeleyite age of 1312.9 ± 0.7 Ma (2SD) was obtained from the Derim Derim Dolerite by (Yang et al. 2020).

## Tomkinson Province

The Tomkinson Province (Blake et al. 1987) makes up the northern area of the Tennant Region including the Davenport and Warramunga provinces.

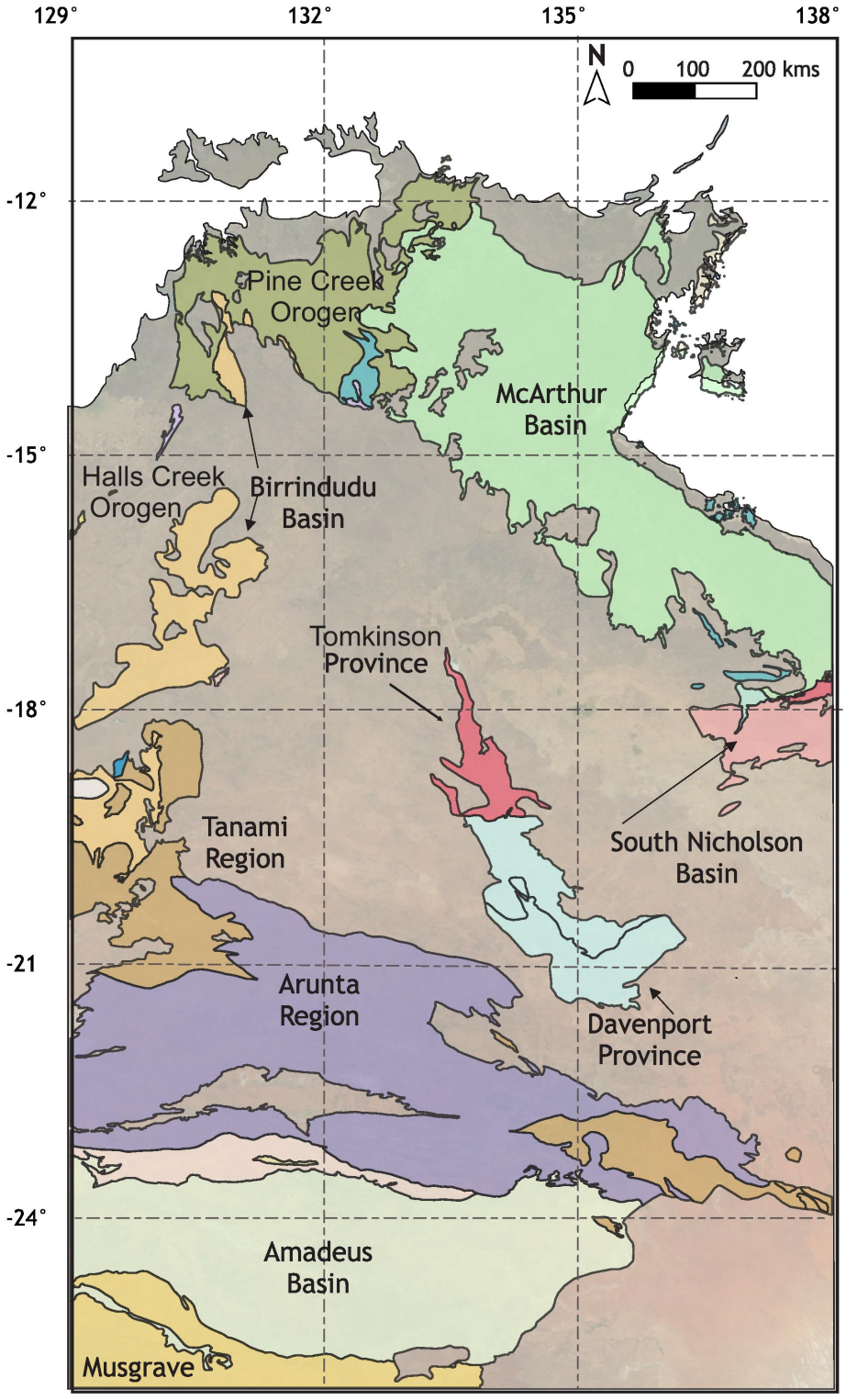


**Figure 2. Location map of the North Australian Craton and its asscoiated provences. Modfied after Blades et al, (2018; in prep).**

The Tomkinson Province is comprised by three groups (Donnellan et al. 2013); the Tomkinson Creek Group (ca. 1810–1660 Ma), the Namerinni Group (ca. 1660–1610 Ma) and the Renner Group (ca. 1500–1430 Ma). Previous works have suggested that the Tomkinson Province are correlatives of other sedimentary successions within North Australia. The Tomkinson Creek Group (Tomkinson Province) is interpreted to correlate with the Redbank Package (McArthur Basin) and the Hatches Creek Group (Davenport Province) (Blake et al. 1987, Donnellan et al. 2001, Donnellan et al. 2013); The Namerinni Group) is interpreted to correlate with the McArthur Basin (Hussey et al. 2001, Jones et al. 1996, Ward 1983); And the Renner Group (Tomkinson Province) is interpreted to correlate with the Roper Group (McArthur Basin), Tijunna Group (Birrindudu Basin), and the South Nicholson Group (South Nicholson Basin) (Yang et al. 2020).

## Renner Group

The Renner Group, the main focus of this study, is a predominately siliciclastic succession, comprising in ascending stratigraphic order (Figure 3), of the Gleeson, Baralandji, Powell, Wiernty and Jangirulu formations (Ahmad & Munson, 2013). The Renner Group is a part of the Tomkinson Province located within the northern area of the Tennant region. The Renner Group accumulated during ca 1500 to 1430 Ma as regional tilting, faulting, and erosion occurred a succession of more than 3500m of fluviatile and shallow-marine sedimentary rocks were deposited (Ahmad & Munson, 2013). Previous work done by Munson (2018) analysed four samples from the Gleeson Formation, Grayling Member, Powell Formation and the Jangirulu Formation. Three samples produced U-Pb isotope maximum deposition ages of ca. 1796 Ma (Gleeson

Formation), ca. 1650 Ma (Grayling Member) and ca. 1584 Ma (Jangirulu Formation). The sample from the Powell Formation resulted in zircons showing young Palaeozoic ages, which was interpreted as contamination (Munson et al. 2018).

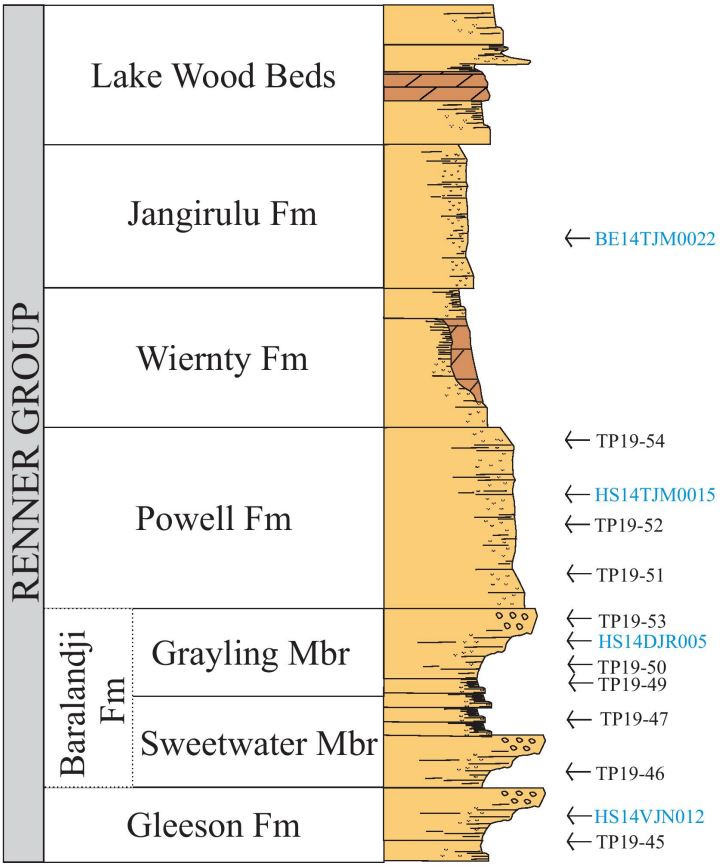


**Figure 3. Composite stratigraphic log of the Renner Group with associated samples collected modified after Blades (in prep). Samples highlighted in blue are from (Munson et al. 2018).**

# METHODS

## Geological mapping

Geological mapping was undertaken to outline the structural features and lithologies of the Newcastle Waters region. Structural data were recorded on both a transparent overlay, forming the basis of the geological map, as well as in a field notebook. Measurements were also recorded on an iPad using the application 'Field Move'. The recorded data included GPS coordinates of locations, rock and mineral identification, structural features, bedding readings and gamma-ray spectrometer (GRS) values.

## Selection and sampling

Nine samples used in this study were obtained from the locations seen in Figure 4.

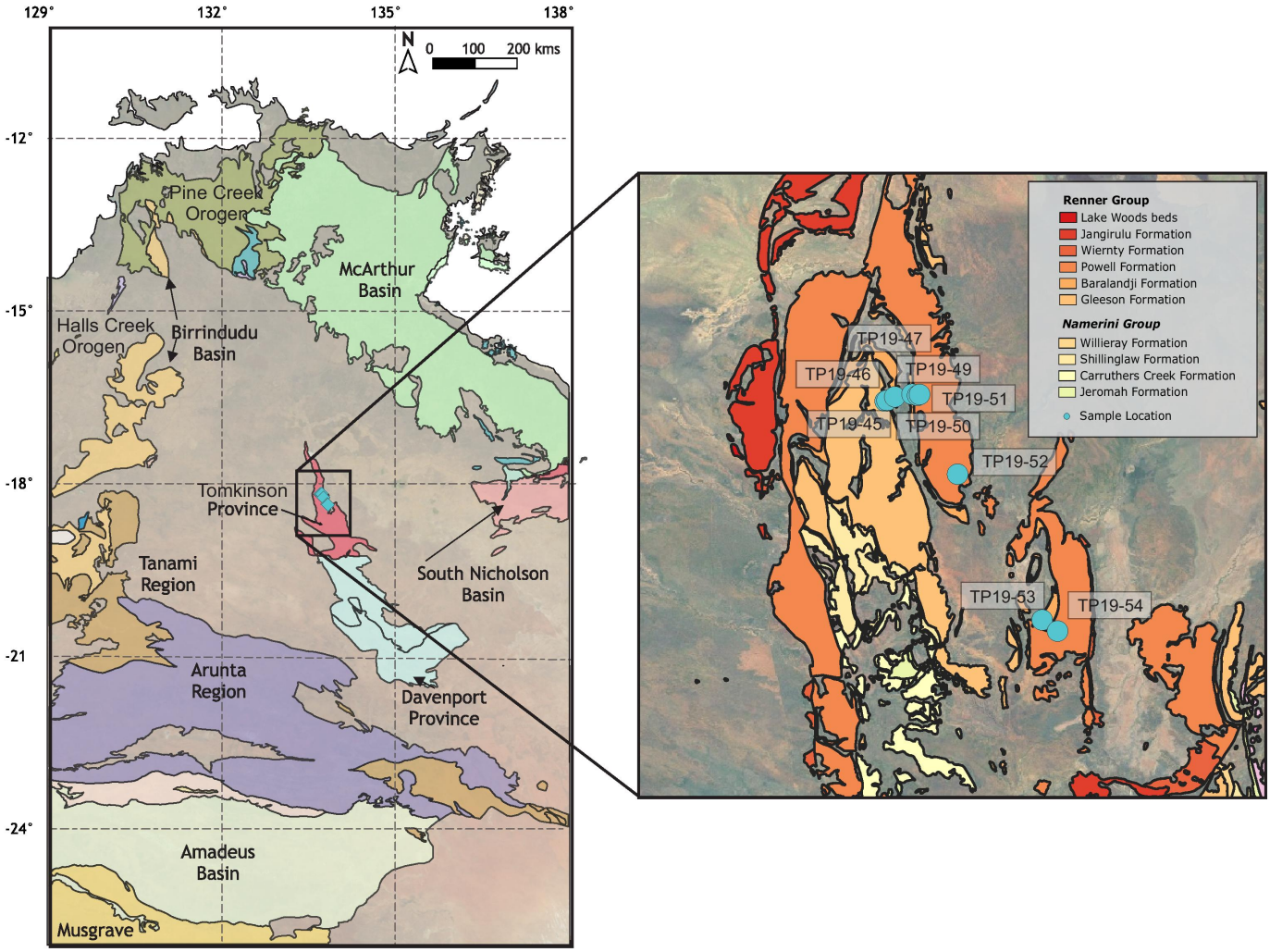


**Figure 4. Location Map of samples collected from the Renner Group, Tomkinson Provenance, Northern Territory. Map is modified after Blades, 2018 (In Prep).**

## U-Pb zircon geochronology

Zircon grains were separated from the host sandstone by crushing and milling in the Adelaide University Laboratory. From the crushed samples, standard panning, neodymium magnet and heavy liquid techniques were applied to separate the grains. Mineral separates were then handpicked and mounted in epoxy resin which were polished to expose the surface of the zircons. Polished mounts were carbon coated and the grains were imaged using cathodoluminescence (CL) on a FEI Quanta 600 Scanning Electron Microscope (SEM) with an attached Gatan CL detector and examined using a Laser Ablation Inductively Coupled Plasma-Mass Spectrometer (LA ICP-MS) at Adelaide Microscopy. A 30µm spot size was used on the zircons with a typical pit depth of 30-50µm. Frequency of the laser was 5Hz with 70% intensity and an ablation period of 30 seconds.

GEMOC GJ-1 zircon was used as a primary standard to correct instrumental fractionation. The standard has a published, $^{207}Pb/^{206}Pb$ age of 607.7 ± 4.3 Ma, $^{206}Pb/^{238}U$ age of 600.7 ± 1.1 Ma and $^{207}Pb/^{235}U$ age of 602.0 ± 1.0 Ma (Jackson et al. 2004). The Plešovice zircon was used as an internal stand to assess the accuracy before and during the analysis of the unknowns , it has a published $^{206}Pb/^{238}U$ age of 337.13 ± 0.37 Ma (Sláma et al. 2008). The Plešovice zircon yields a weighted average mean of $^{206}Pb/^{238}U$ age of 339.38 ± 0.95 (n=44, MSWD = 0.90) and a $^{207}Pb/^{206}Pb$ age of 343 ± 13 (n=44, MSWD = 18).

Data was processed in the software package LADR 1.1.05 (Norris & Dunyushevsky., 2018). Concordia diagrams, and weighted average means were calculated using ISOPLOT 4.15 for excel (Ludwig 2008).

## Hafnium isotope determination

Based on Hartnady et al. (2020), analytical methods for zircon Lu-Hf isotope analysis on zircon grains were selected for ablation and analysis based on concordance and age populations within each sample. Analyses were undertaken using a New Wave/Merchantek LUV213 laser ablation microprobe attached to a Nu Plasma multi-collector LA-MC-ICPMS by Professor Chris Clark at Curtin University. A bean diameter of ~55µm was used during the analysis. A repetition rate of 5 Hz resulted in ablation pits to be ~40–60µm deep. Zircons were ablated in a helium atmosphere. Interference of $^{176}$Lu on $^{176}$Hf was corrected by using the interference-free $^{175}$Lu, and using the invariant $^{176}$Lu/$^{175}$Lu correction factor 1/40.02669 (De Bievre and Taylor 1993). Interference of $^{176}$Yb on $^{176}$Hf was corrected by measuring the interference free $^{172}$Yb isotope and using the $^{176}$Yb/$^{172}$Yb ratio to obtain the interference free $^{176}$Yb/$^{177}$Hf ratio. The primary zircon standard was Mud Tank, which yielded an average mean of 0.2825071 ± 0.0000082 (n=20, MSWD = 0.97). This compares to the published value by Sláma et al. (2008) of 0.282482 ± 0.00001.

## Zircon REE analysis

In addition to the U-Pb analysis and hafnium isotope determination, the abundance of 23 elemental masses were measured: $^{29}$Si, $^{31}$P, $^{47}$Ti, $^{49}$Ti, $^{89}$Y, $^{91}$Zr, $^{93}$Nb, $^{139}$La, $^{140}$Ce, $^{141}$Pr, $^{146}$Nd, $^{147}$Sm, $^{153}$Eu, $^{157}$Gd, $^{159}$Tb, $^{163}$Dy, $^{165}$Ho, $^{166}$Er, $^{169}$Tm, $^{172}$Yb, $^{175}$Lu, $^{177}$Hf and $^{202}$Hg. Trace element abundances were collected simultaneously with U-Pb isotopic ratios. The trace element collected was standardised with the primary standard NIST610, and a secondary standard 91500. Results were normalised to chondrite values taken from Boynton (1984). Data were plotted in the GCDkit package as spider plots to identify changes in REE trends in each of the formations.

# RESULTS

## U-Pb Detrital Zircon Geochronology

U-Pb detrital zircon geochronology was undertaken on nine samples from four formations throughout the lower Renner Group. Samples analysed are listed in Table 1, with location data and a brief outcrop description. A cut off of 10% was used for concordance on all samples; this ensures that quoted ages are more accurate by filtering out Pb loss and discordant data. All geochronology data are plotted from U-Pb are plotted on Wetherill plots with their corresponding kernel density estimate (Figure 6 and Figure 7). Table 2 shows characteristics of zircons within each sample. The youngest population was calculated with three or more ages that yield a mean with a MSWD less than one, however we quote the youngest single grain as the maximum depositional ages due to there being no real reason that any two detrital zircon grains should have the same age within any particular sample (Dickinson et al. 2010, Spencer et al. 2016). Cathodoluminescence (CL) imaging on the zircons can be seen in Figure 5. Figure 9 indicates the density of $^{207}Pb/^{206}Pb$ ages for each formation shown through a multiple independent probability density plot.

| Sample Number: | Location | GPS Coordinates (DMS) | Formation | Description |
|---|---|---|---|---|
| **TP19-52** | 10km N of Renner Springs on the left side of the highway where it bends | 18°14'30.1", 133°45'16.6" | Powell Formation (Top) | Clean, quartz rich, medium grained sandstone.<br>Weathering orange/red, white in fresh sample.<br>Moving up the unit. It is interbedded with muds moving back into a fine-medium grained sandstone. |
| **TP19-54** | 12km S of Renner Springs bend goes to the right. | 18°22'01.4", 133°50'03.3" | Powell Formation | Medium to coarse grained sandstone. Weathers red/orange, white in fresh sample.<br>Mapped as the Powell Formation at the base of the formation - boundary between that and the Baralandji Formation. |
| **TP19-51** | On Stuart Highway on side of road 20km from Renner | 18°10'40.8", 133°43'27.6" | Powell Formation | Medium grained sandstone. Abundant large scale cross beds, perhaps trough cross bedding. Contains layers that weather more prominently - orange/yellow.<br>Very similar to samples just west. Contains beds ot coaser grained sands.. Laminations are well defined. |
| **TP19-50** | 100m W of Stuart Highway | 18°10'43.4", 133°43'22.0" | Graying Member (Top) | Coarse grained beds - yellow/orange in colour - containing large cross beds. Interbedded with a cleaner sandstone - white in colour. Bedding is well defined at meter scale. |
| **TP19-53** | 10km S of Renner at significant bend in the Stuart Highway, left hand side. | 18°21'29.4", 133°49'19.2" | Grayling Member | Quartz rich medium-fine grained sandstone with 5% lithics. Well defined laminations.<br>Beds dipping to the east.<br>Interbedded with mud and silts. |
| **TP19-49** | 1km from Stuart Highway W. On a ridge adjacent to a small isolated hill. | 18°10'40.4", 133°43'06.0" | Grayling Member | Quartz rich arenite with 5% lithics. Well defined bedding with laminations at a centimeter scale.<br>Cross-bedding present, indicating young to the east. Intraformational conglomerates which are thin, ~20cm width. |
| **TP19-47** | 4km W of Stuart Highway (see original Stuart Highway position) | 18°10'47.5", 133°42'16.5" | Sweetwater Member | Medium grained lithic rich sandstone - lithic arenite, chemically immature.<br>Purple and pink in colour-same as in the previous sample.<br>Topologically separated by a depression, therefore shale or less competent unit is separating the sandstone |
| **TP19-46** | 5km transect just W of creek near oldest unit | 18°10'57.8", 133°41'54.4" | Sweetwater Member | Medium to coarse grained sandstone. 10% lithics present. Boundary between the Gleeson and Sweetwater Member.<br>Mud rip-up clasts present in the unit. Purple in colour weathers pink. |
| **TP19-45** | 20km N of Renner Spring, 5km transect N from roadside outcrop. | 18°10'59.9', 133°41'49" | Gleeson Formation | Medium grained - coarse/pebbly layers. Lithic rich (magnetite). Lithics 15%? Feldspar 5% Quartz 75% (lithic arenite). Mineralogically immature.<br>Mud rip-up clasts, pebbly conglomerate layers. Increase in energy. Cross bedding |

**Table 1. List of samples from the Renner Group, Tomkinson Province, which were analysed for U-Pb, REE and Lu-Hf isotope analysis in zircon. Samples are listed in stratigraphic order of oldest at the base and youngest at the top.**

## GLEESON FORMATION

### *Sample: TP19-45*

One hundred and fifty-four zircons were analysed (U-Pb). Of these 154 analyses, 41 are within the 10% concordance bracket. These near concordant zircon grains yielded a range of $^{207}Pb/^{206}Pb$ ages between ca. 3501 Ma to 1600 Ma, with major peaks forming at ca. 1800 Ma and 2000 Ma. Minor age peaks are present at ca. 2500 Ma and 3500 Ma. These peaks can be seen in Figure 8. The youngest, near concordant grain is 1600 ± 42 Ma; this displays an aspect ratio of 3:1, it is prismatic in shape and displays slight rounding along the edges. The youngest statistically significant population has a weighted mean of 1775 ± 11 Ma (n=9, MSWD=0.97).

## SWEETWATER MEMBER (BARALANDJI FORMATION)

### *Sample: TP19-46*

Of the 154 analyses undertaken, 43 were within 10% of concordance with a $^{207}Pb/^{206}Pb$ age range of ca. 2628 Ma to 1624 Ma. There is one major peak forming at ca. 1800 Ma and a minor peak at ca. 2500 Ma (Figure 8). The youngest, near concordant grain is 1624 ± 37 Ma, whilst the youngest population calculated by the weighted mean average is 1759 ± 19 Ma (n=4, MSWD = 0.75).

### *Sample: TP19-47*

The U-Pb analysis looked at 159 zircons. Forty-one zircons are within 10% concordance with a $^{207}Pb/^{206}Pb$ age range of ca. 2738 Ma to 1626 Ma. There is a major peak occurring at ca. 1850 Ma along with minor peaks at ca. 1650 Ma, 2150 Ma, 2500

Ma and 2700 Ma (figure 8). The youngest, near concordant grain is 1626 ± 38 Ma, with the youngest population calculated by the weighted average is 1799 ± 12 Ma (n=8, MSWD=0.12).

## GRAYLING MEMBER (BARALANDJI FORMATION)

### *Sample: TP19-49*

From the 159 analyses, 43 zircons were in the 10% concordance bracket. Near concordant grains yielded a range of $^{207}Pb/^{206}Pb$ ages between ca. 2578 Ma to 1582 Ma with major peaks at ca. 1800 Ma and 2000 Ma. Minor age peaks are present at ca. 1750 Ma and 2500 Ma (Figure 8). The youngest, near concordant grain is 1582 ± 54 Ma and a weighted average of the youngest population is 1622 ± 26 (n=3, MSWD=0.82).

### *Sample: TP19-50*

Out of 155 zircons were analysed, only 34 grains were within 10% concordance. There is a $^{207}Pb/^{206}Pb$ age range between ca. 2017 Ma and 1718 Ma with a major age peak present at ca. 1800 Ma. There is a minor age peak at ca. 2000 Ma (Figure 8). The youngest, near concordant grain is 1718 ± 32 Ma, whilst the youngest population calculated by the weighted average is 1728 ± 16 Ma (n=5, MSWD=0.13).

### *Sample: TP19-53*

From the U-Pb analysis 170 zircons were analysed with 52 grains being within 10% concordance. There is a $^{207}Pb/^{206}Pb$ age range between ca. 2786 Ma and 1554 Ma with a major age peak at ca. 1850 Ma and a minor age peak at ca. 2500 Ma (Figure 8). The youngest grain is 1554 ± 77 Ma and a weighted average of the youngest population is 1717 ± 39 (n=3, MSWD=0.36).

## POWELL FORMATION

### *Sample: TP19-51*

Twenty-eight zircon analyses out of 155 were within 10% concordance. There is a $^{207}Pb/^{206}Pb$ age range between ca. 2565 Ma and 1740 Ma with a major age peak at ca. 1800 Ma and a minor peak at ca. 2500 Ma (Figure 8). The youngest, near concordant grain is 1740 ± 49 Ma and a weighted average of the youngest population is 1760 ± 10 Ma (n=4, MSWD=1.23).

### *Sample: TP19-52*

Out of 159 zircons analysed, 74 were within 10% concordance. There is a $^{207}Pb/^{206}Pb$ age range between ca. 2502 Ma and 1652 Ma. There is a unimodal major age peak at ca. 1770 Ma and no other major or minor age peaks are present (Figure 8). The youngest, near concordant grain is 1714 ± 50 Ma, with the youngest population calculated by the weighted average being 1767 ± 10 (n=5, MSWD=1.62).

### *Sample: TP19-54*

One hundred and fifty-five zircons were targeted yielding 56 concordant (within 10%) analyses. There is a $^{207}Pb/^{206}Pb$ age range between ca. 3526 Ma and 1734 Ma. A major age peak is present at ca. 1800 Ma with a minor age peak at ca. 2500 Ma (Figure 8). The youngest, near concordant grain is 1734 ± 36 Ma, with the youngest population calculated by the weighted average being 1748 ± 10 Ma (n=5, MSWD=0.63).

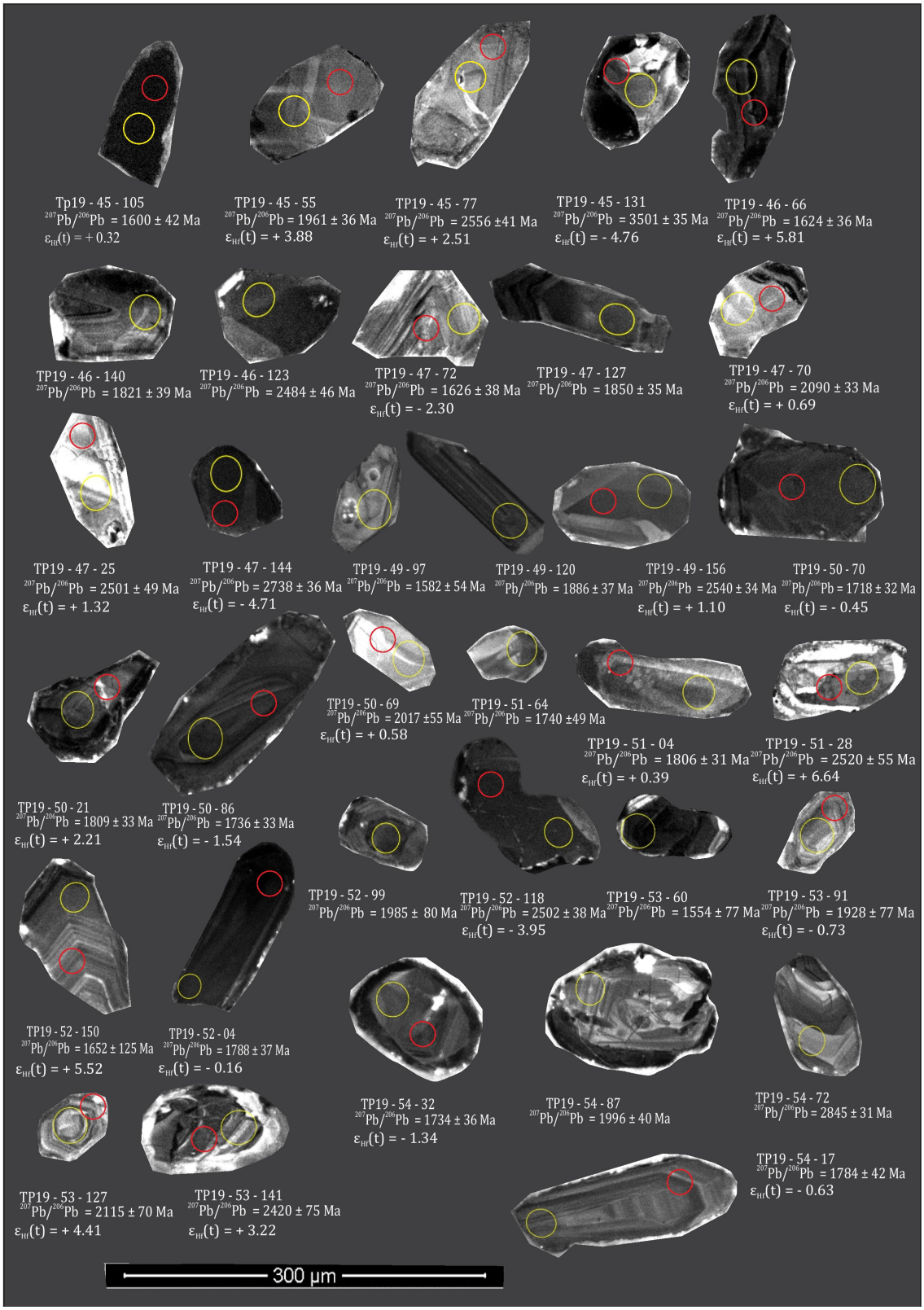


**Figure 5. Cathodoluminescence (CL) images if zircons from the Renner Group with their associated $^{207}Pb/^{206}Pb$ age. The red circles show the location of U-Pb spots and the yellow represents the Lu-Hf spots.**

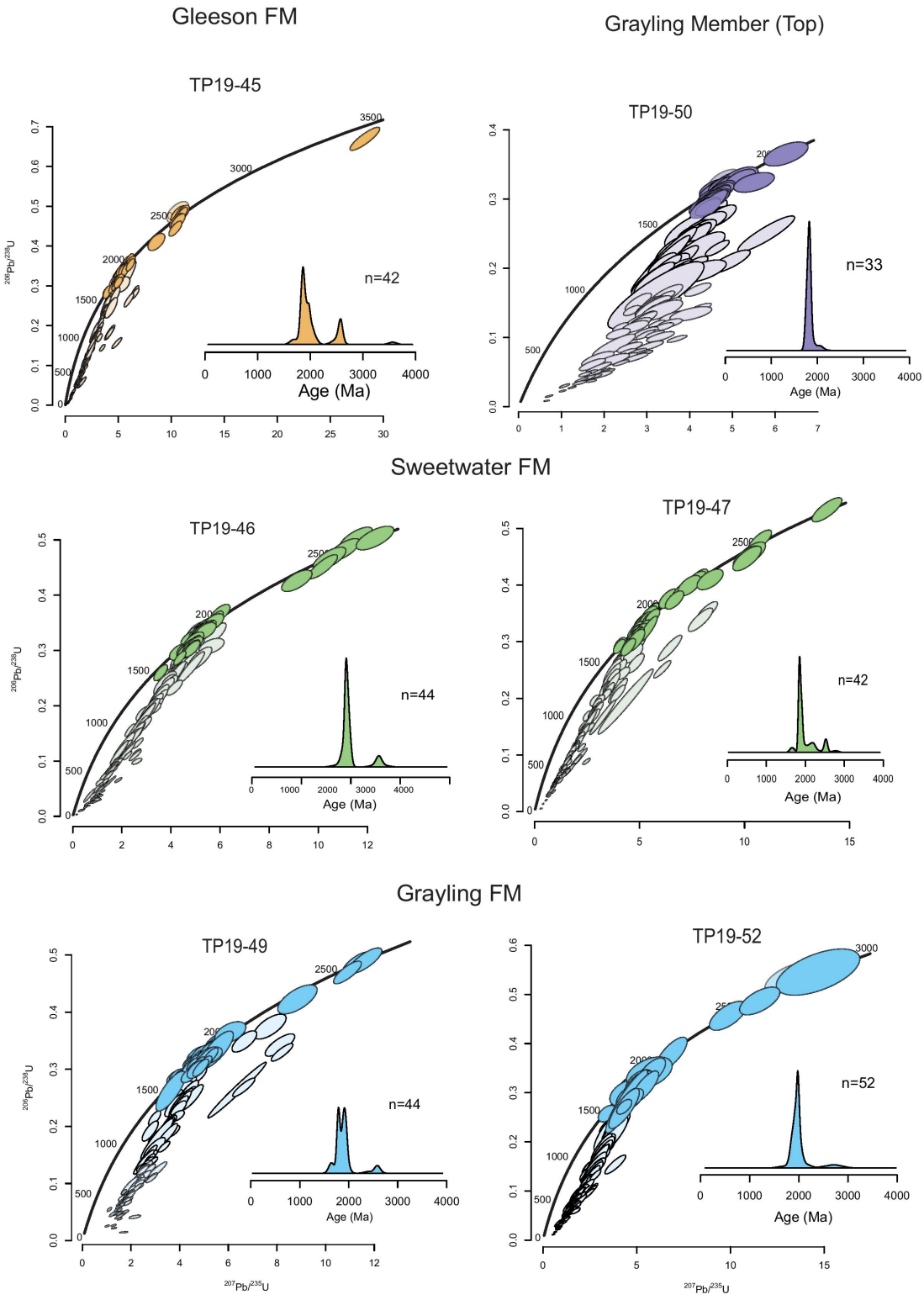


**Figure 6. U-Pb Wetherill Concordia plots of detrital zircon grains from the Renner Group (grains within 10% concordance are marked with a deeper colour). Associated kernel density estimation (KDE) plots are presented showing detrital zircon age from peaks from the Gleeson Formation, Sweetwater, Grayling and Grayling (Top) members with only data >90% concordant displayed.**

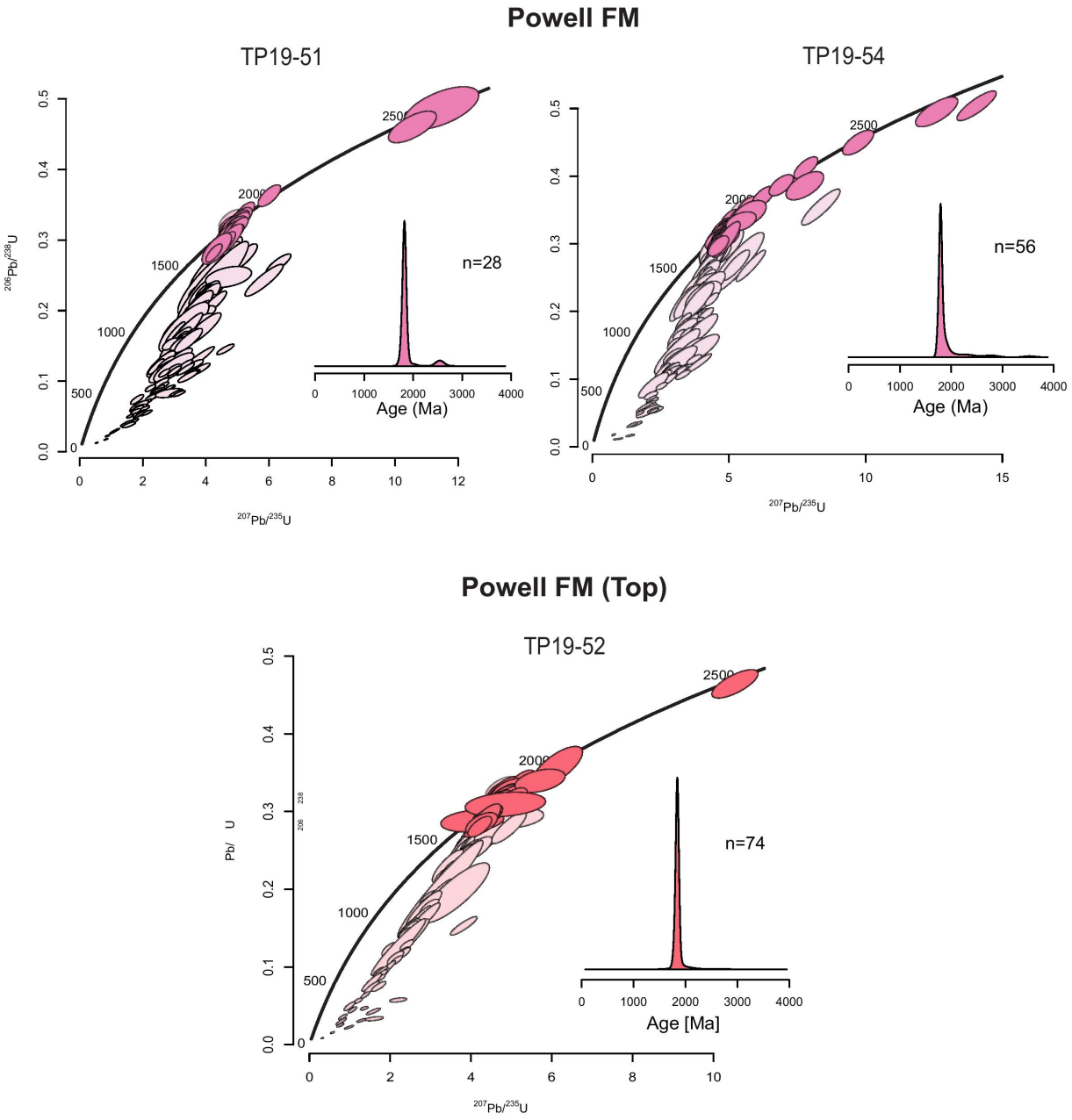


**Figure 7. U-Pb Wetherill Concordia plots of detrital zircon grains from the Renner Group (grains within 10% concordance are marked with a deeper colour). Associated kernel density estimation (KDE) plots are presented showing detrital zircon age from peaks from the Powell and Powell (Top) formations, only showing 10% concordance.**

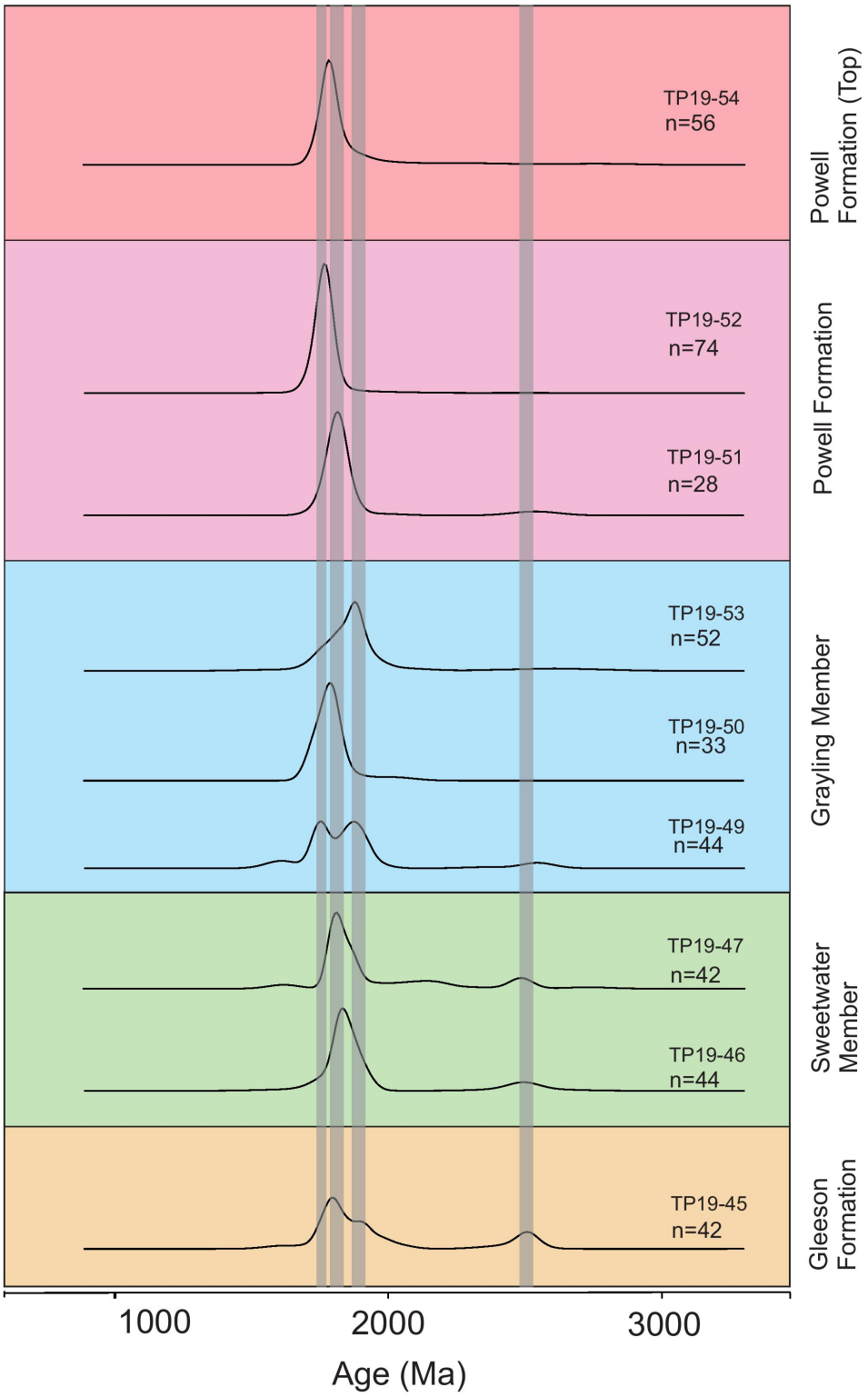


**Figure 8. Kernel Density Estimate (KDE) plot for Renner Group samples within each of the targeted formations. Major peaks have been highlighted with grains only within 10% concordance included in the plot.**

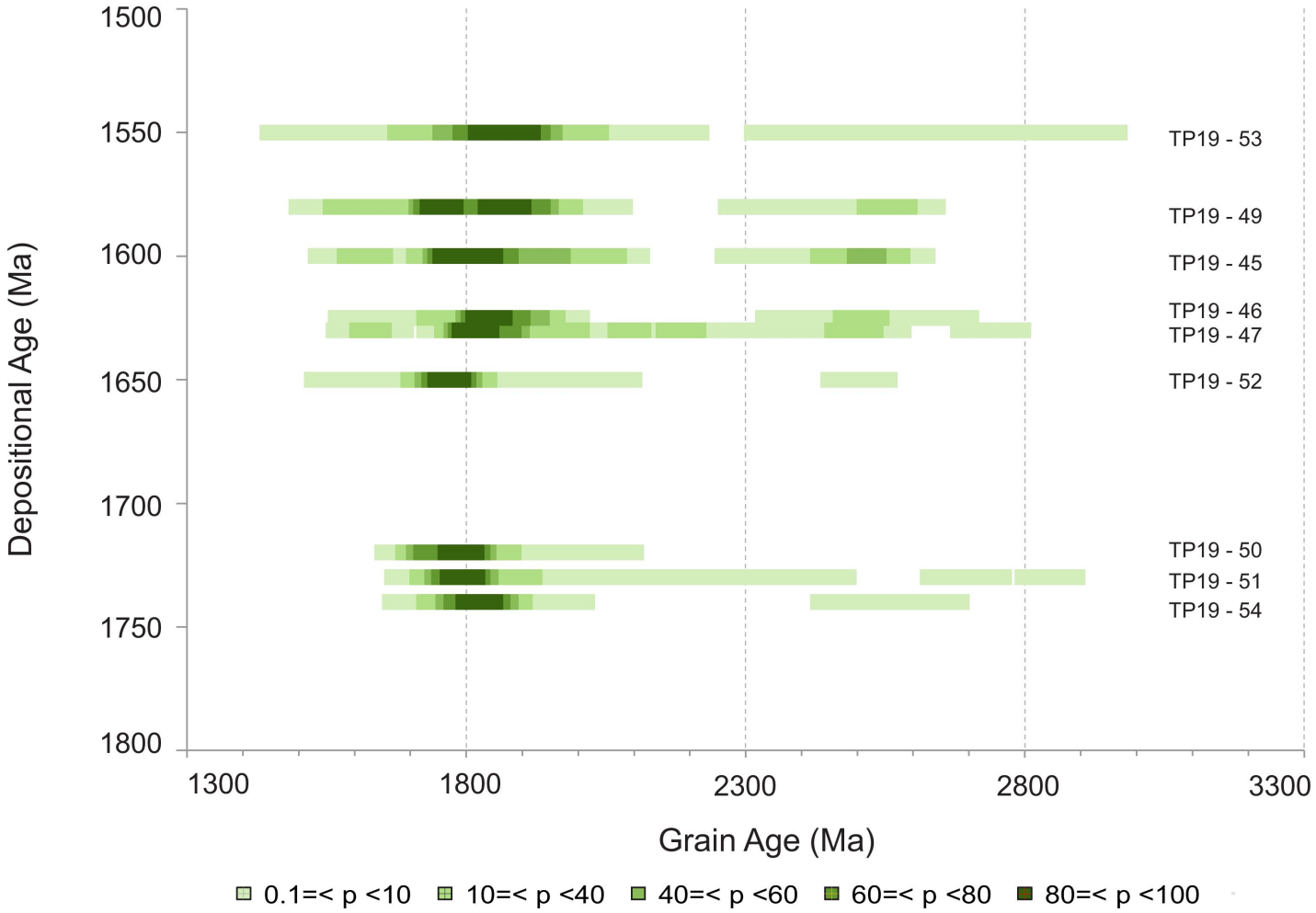


**Figure 9. Multiple independent probability density plot as per Eglington (2016) of the Renner Group, Tomkinson Province, Northern Territory, based on their stratigraphic age hierarchy. Vertical spread is defined by interpreted age of deposition.**

| Sample: | Size µm (long axis) | Aspect Ratio | Crystal Habit | CL Zoning | Characteristics |
|---|---|---|---|---|---|
| TP19-45 | ~ 110 – 200 µm | 2:1, 5:2, 3:2, 5:3, 3:1, 1:1, 3:2 | Mostly pyramidal, some prismatic and little irregularity. | Predominantly complex growth zoning with some patchy and sector zoning. | Zircons within this sample were very similar in shape with slightly rounded edges. Due to the zircons being quite elongated the cores were aimed for, however the rim was also incorporated in the analysis. |
| TP19-46 | ~ 70 – 260 µm | 2:1, 4:3, 3:2, 3:1, 1:1, 5:2, 5:3 | A variety of pyramidal, tabular and prismatic crystal habits. Some equant and irregular zircons. | Mostly complex growth zoning. Zoning is hard to distinguish on several zircons. Minimal patchy and sector zoning. | Zircons showed slightly rounded edges with some being very elongated and large in size. Cores were aimed for however there is a few samples where the rim was shot. Some grains were very dark and did not show zoning. |
| TP19-47 | ~ 75 – 180 µm | 3:2, 5:4, 2:1. 1:1, 3:1 | Predominately prismatic and pyramidal habits along with equant and irregularity to the zircons. | Complex growth zoning is a common trend within the sample, minor sector zoning. | Slightly rounded to rounded edges. A few grains were quit irregular in shape associated with patchy zoning. Cores were targeted as best as possible. |
| TP19-49 | ~ 60 – 200 µm | 2:1, 4:3, 5:2, 1:1, 3:1, 3:2, 5:3 | Mostly prismatic shaped zircons, some pyramidal and minor equant habits. | Complex growth zoning is the most common zoning with very minor patchy zoning. | Zircons are quite elongated with slightly rounded to rounded edges. There is a variety of crystal habits and a few grains displaying no zoning. Cores where aimed for where possible. |
| TP19-50 | ~ 80 – 250 µm | 5:1, 5:3, 2:1, 3:1, 4:1, 6:1 | Mainly pyramidal with minor prismatic and tabular crystal habits. | Predominantly complex growth zoning, very minor patchy and sector zoning. | Very elongated zircons. Most grains have rounded edges and are pyramidal in shape. Cores were targeted but due to the zircons being elongated the rims were sometimes included in the analysis. |
| TP19-51 | ~ 60 – 210 µm | 3:1, 3:2, 5:2, 1:1, 2:1, 5:4, 4:1 | A variety of pyramidal, prismatic and tabular crystal habits. | Mostly complex growth zoning as well as zoning being patchy or non-existent on several grains. | Zircons display slightly rounded edges and have no consistency with the crystal habit between grains. Cores were targeted as best as possible. |
| TP19-52 | ~ 70 – 280 µm | 5:2, 2:1, 3:1, 3:2, 7:4, 1:1, 6:1 | Mostly pyramidal crystal habits, also several tabular and equant grains. | Complex growth zoning occurs on majority of the grains with minor patchy zoning. | Grains are slightly larger than other samples. Slightly rounded to rounded edges. A variety of crystal habits with complex growth zoning. Cores were targeted as best as possible. |
| TP19-53 | ~ 30 – 110 µm | 3:1, 1:1, 5:2, 2:1. 3:2, 4:3, 5:3 | A variety of prismatic, tabular, equant and pyramidal crystal habits. | Most grains display complex growth zoning with a few grains not showing zoning or being patchy. | Zircons within the sample were considerably smaller than other samples. Slightly rounded edges and no distinct crystal habits. Core was targeted but due to the size of grains the rim was often included in the laser spot. |
| TP19-54 | ~ 40 – 260 µm | 4:1, 2:1, 5:2, 1:1, 5:3, 4:3, 13:4, 6:1, 3:1 | Various crystal habits including tabular, pyramidal, prismatic, equant and some cylindrical crystal habits. | Complex growth zoning occurs on almost all grains. Others contain patchy to no zoning. | A few very elongated grains. Sub-rounded to rounded and no distinct crystal habits. Cores were targeted as best as possible. |

**Table 2. Zircon morphologies from Renner Group samples. Aspect ratio, crystal habits, zoning and features of the zircon grains are described above.**

## REE analysis in detrital zircon

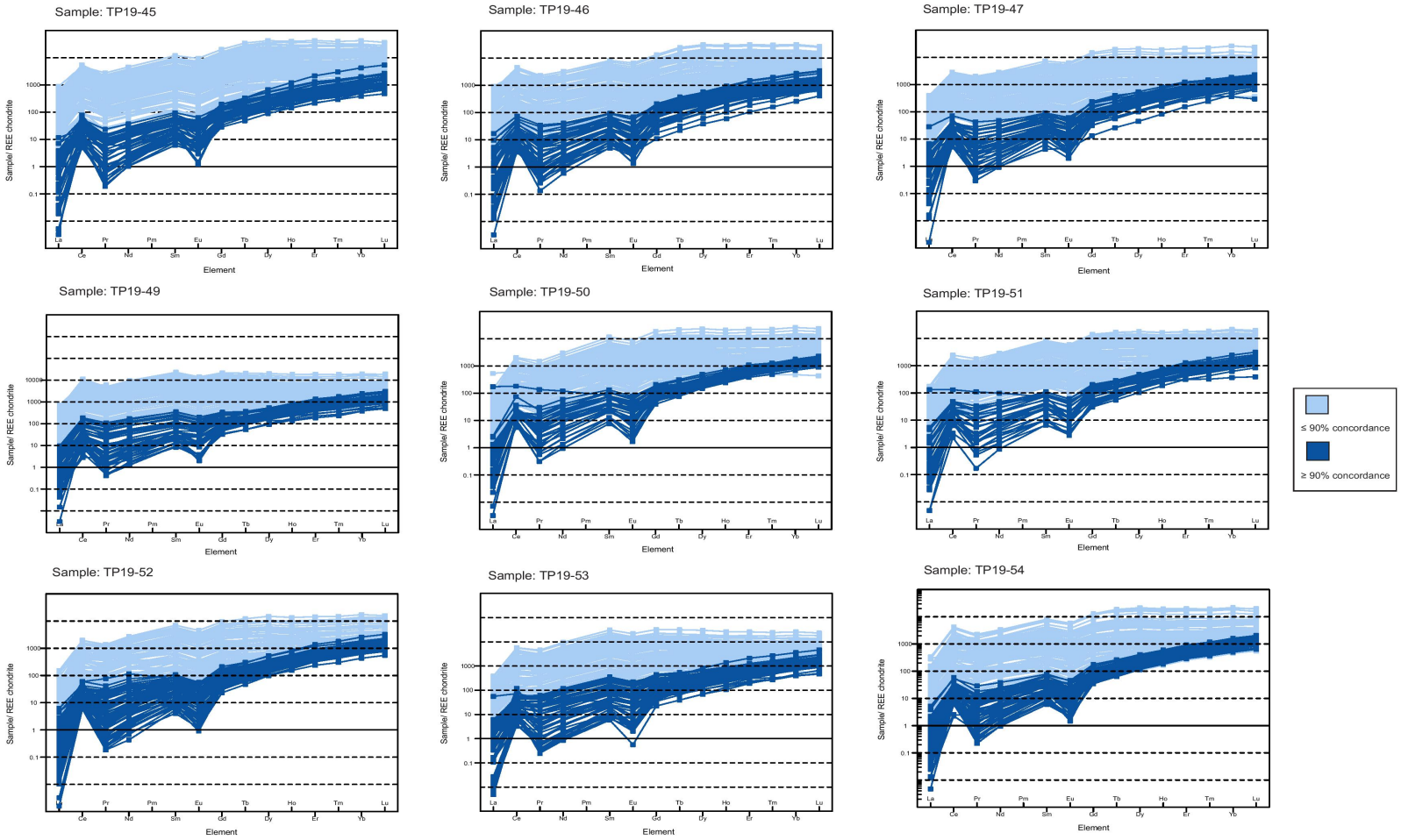

**Figure 10. Chondrite-normalised rare earth element patterns for detrital zircons from the Renner Group. Trends are coloured based on concordance to identify correlations. Chondrite values are from Boynton (1984).**

Rare earth elements were collected simultaneously with U-Pb to assist in the characterisation of the source rock lithology and to compliment the geochronology data. REEs are incompatible in most igneous minerals meaning that they are often incorporated in late crystallising minerals such as zircon, which is particularly able to host the heavy REEs (Belousova et al. 2002). Their high abundance and ratios mean that when they used with the correct proxies they can act as good provenance tools and determine the natures of the magma they grew in. All data, both concordant and discordant were plotted in Figure 10 to determine the relationship between concordance and the loss of REEs.

Figure 10 displays the overall correlation between REE trends and concordance, which suggests that the discordant grains do not reflect the composition of the original grains at the time of crystallisation, because of this I have only used the >10% concordant data in further interpretation. Ce is enriched with respect to the adjacent light REEs, the degree of enrichment is quantified in the Ce anomaly (Nicklas et al. 2019). Ce has two oxidation states ($Ce^{3+}$ and $Ce^{4+}$), which makes it different from all the other REEs except europium (which can also be used as $Eu^{4+}$). $Ce^{4+}$ is highly compatible in zircon where it can substitute for $Zr^{4+}$, so a pronounced cerium anomaly records zircon growth in an oxidised magma (Trail et al. 2012).

As can be seen in Figure 10, Zircon REE patterns do not vary systematically and so the abundance range measured for a single population completely or significantly overlaps

the range for all other populations. Due to these not containing significant variation between samples, the REE data will be discussed collectively.

Zircon REE chondrite normalised patterns seen in Figure 10 are characterised by relatively shallow light REE patterns ($[Sm/Pr]_M$ = 6.9). Their heavy REE patterns (Figure 11a) are enriched compared to the light REE with a median slope (Lu/Gd) of 16.1. These data are characterised by positive Ce anomalies (Ce/Ce*) that range between 1.05 and 266.3 seen in Figure 11b. Characteristic negative Eu anomalies (Eu/Eu*) between 0.03 and 0.74 are seen in Figure 11c. A graph of Ce anomaly versus age displays a major Ce anomaly cluster between ~0–50 and spread of data between ~50–260 at ca. 1750 Ma and 1950 Ma. There is a minor cluster at ~ 2500 Ma between

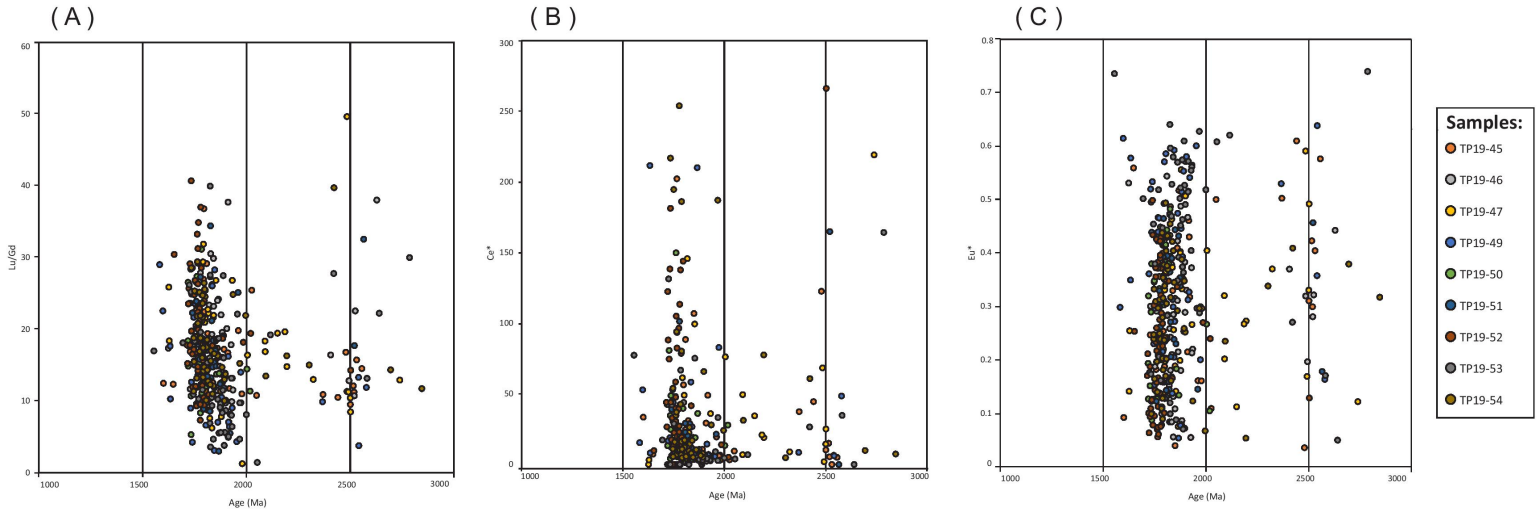


**Figure 11. (A) Heavy REE (Lu/Gd) plotted against age. (B) Calculated Ce* using Taylor and McLennan (1985) values plotted against age. (C) Calculated Eu* using Taylor and McLennan (1985) values plotted against age.**

~0–25 and a spread of data from ~25–270. The negative Eu anomalies graph presents a major spread between 0.05 and 0.75 at ~1800 Ma and a minor spread at ~2500 Ma between ~0.05 and 0.65.

## Detrital Zircon Lu-Hf Isotopic Analysis

Lu-Hf isotopes were analysed on nine samples from the Renner Group; the results are presented in Figure 12. The Lu-Hf isotope system is used in this study to track the history of chemical differentiation between the crust and mantle from the fractionation of Lu from Hf occurring during magma generation (Kinny and Maas 2003). In zircons, the Hf isotopic system records the $^{176}Hf/^{177}Hf$ ratios of the environment in which it grew in during crystallisation and therefore is used to assist in provenance identification (Hawkesworth and Kemp 2006).

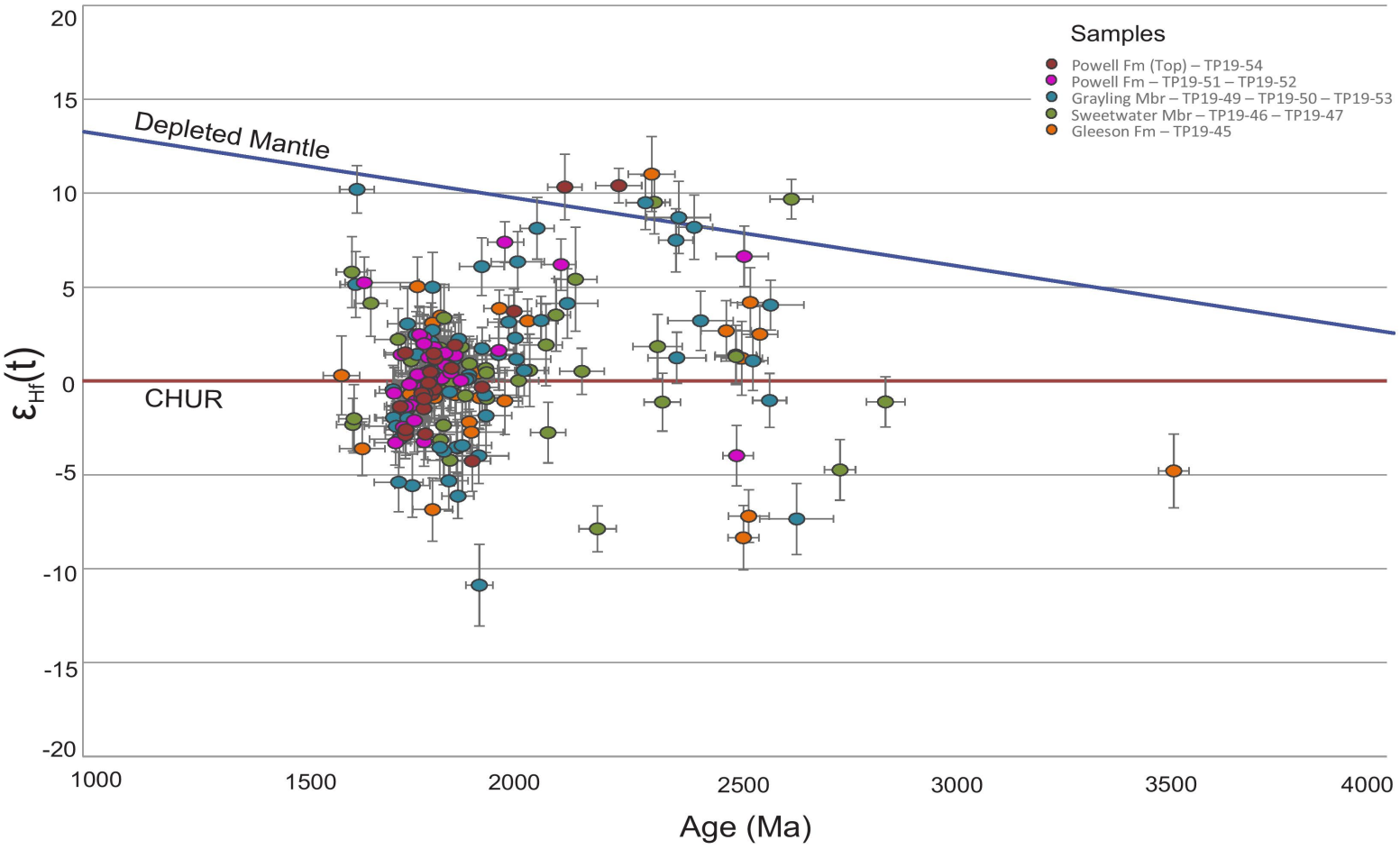


**Figure 12. Epsilon Hf (t) values for samples TP19-45 (Gleeson Formation), TP19-46 and TP19-47 (Sweetwater Member), TP19-49, TP19-50 and TP19-53 (Grayling Member), TP19-51, TP19-52, and TP19-54 (Powell Formation) using grains within 10% concordance and plotted against the corresponding analysed $^{207}Pb/^{206}Pb$ age.**

### GLEESON FORMATION

Thirty hafnium analyses were collected from the Gleeson Formation (TP19-45). Sample TP19-45 yielded a range of $\varepsilon_{Hf}(t)$ values of -8.32 to +11.02. The six youngest grains, in the age range of ca. 1793–1600 Ma have $\varepsilon_{Hf}(t)$ values ranging from +5.04 to -3.59. The oldest zircons range from ca. 3500 Ma to 2500 Ma with $\varepsilon_{Hf}(t)$ values ranging from +4.20 to -8.32. There is a large spread in the $\varepsilon_{Hf}(t)$ data within the 2000–1700Ma zircons with values ranging from +3.88 to -6.82.

### SWEETWATER MEMBER (BARALANDJI FORMATION)

Forty-four zircons were analysed in the Sweetwater Member (TP19-46 and TP19-47). These give a range of $\varepsilon_{Hf}(t)$ values of -7.84 to +16.33. The three youngest grains (ca. 1629 Ma, 1626 Ma and 1624 Ma) have $\varepsilon_{Hf}(t)$ values from -2.30 to +5.81. Four of the oldest grains (ca. 2843 Ma–2628 Ma) have $\varepsilon_{Hf}(t)$ values between +16.33 and -4.71.

### GRAYLING MEMBER (BARALANDJI FORMATION)

Sixty-three Lu–Hf analyses were collected from the Grayling Member (TP19-49, TP19-50, and TP19-53). The $\varepsilon_{Hf}(t)$ values ranged from -10.84 to +10.21. The two youngest zircons (ca. 1635 Ma and 1633 Ma) have $\varepsilon_{Hf}(t)$ values of +5.15 and +10.21, respectively, suggesting that these zircons were derived from a juvenile protolith. The four oldest grains (ca. 2640 Ma – 2540 Ma) had $\varepsilon_{Hf}(t)$ values from -7.32 to +4.05. There is a continuous spread from ca. 2540 Ma to 1959 Ma with $\varepsilon_{Hf}(t)$ values ranging from +0.58 to +8.71.

### POWELL FORMATION

Sixty-nine zircons were analysed for Lu-Hf in the Powell Formation (TP19-51, TP19-52, and TP19-54). These samples yielded a range of $\varepsilon_{Hf}(t)$ values from -4.23 to +15.98. The four youngest grains, ca. 1734 Ma to 1652 Ma, have an $\varepsilon_{Hf}(t)$ range of -3.26 to +5.25. Three of the oldest grains, ca. 2879 Ma to 2507 Ma, show $\varepsilon_{Hf}(t)$ values from +6.64 to +15.98, suggesting these zircons were sourced from an older dominantly juvenile protolith.

## Rutile Data Analysis

Rutile U-Pb analysis was undertaken on six samples from four formations throughout the lower Renner Group. A cut off of 10% was used for concordance on all samples; this ensures the data are more accurate by filtering out lead loss and discordant data. The U-Pb of rutile is used to further improve the understanding of the provenance, as rutile is commonly found as both an accessory phase in igneous rocks, but also as a metamorphic mineral. The chemistry of U-Pb ages from rutile can be used to differentiate between these two origins, so U-Pb ages from rutile can be used to determine metamorphic events in the source region, this is something that can be hard to determine from zircon data alone (Bracciali 2019). Results are displayed in Table 3, with an associated U-Pb Wetherill Concordia plot (Figure 13).

| Sample no. | Formation | Number of rutiles analysed: | Rutiles <10% concordance: | Range of $^{207}Pb/^{206}Pb$ ages: | Youngest, near concordant grain $^{207}Pb/^{206}Pb$ age: | Comments |
|---|---|---|---|---|---|---|
| **TP19-45** | Gleeson Formation | 5 | 0 | - | - | No samples were within 10% concordance and so a $^{207}Pb/^{206}Pb$ age was not determined. |
| **TP19-46** | Sweetwater Member (Baralandji Formation) | 16 | 2 | ca. 4836 Ma to 1731 Ma | 1731 ± 39 Ma | The ca. 4836 Ma age is likely to be full of common Pb and not a real age. |
| **TP19-47** | Sweetwater Member (Baralandji Formation) | 16 | 2 | ca. 4528 Ma to 1783 Ma | 1783 ± 72 Ma | The ca. 4528 Ma age is likely to be full of common Pb and not a real age. |
| **TP19-49** | Grayling Member | 17 | 12 | ca. 4279 Ma to 1811 Ma | 1811 ± 45 Ma | The ca. 4279 Ma age is likely to be full of common Pb and not a real age. |
| **TP19-52** | Powell Formation | 5 | 2 | ca. 1974 Ma to 1703 Ma | 1703 ± 32 Ma | The $^{207}Pb/^{206}Pb$ age is very similar to the U-Pb age from detrital zircons. |
| **TP19-54** | Powell Formation | 5 | 1 | ca. 3627 Ma to 1971 Ma | 1971 ± 55 Ma | The ca. 3627 Ma age is likely to be full of common Pb and not a real age. |

**Table 3. Rutile analysis on numerous samples from the Renner Group. Number of rutiles analysed, concordance, range, youngest, near concordant grains and general comments are described above.**

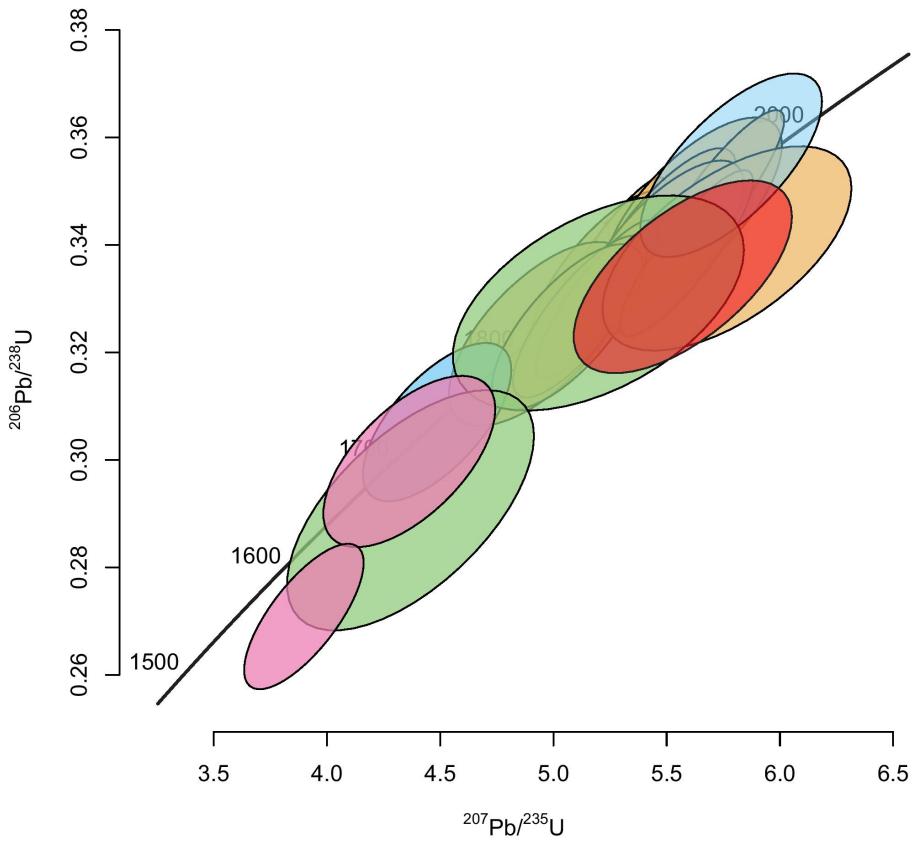


**Figure 13. U-Pb Wetherill Concordia plots of detrital rutile grains from the Renner Group. Samples in the Figure include TP19-46 (Blue), TP19-47 (Green), TP19-49 (Orange), TP19-52 (Pink) and TP19-54 (Red).**

## Structural and Field Relationships

### LITHOLOGY

A geological map of the Newcastle Waters region is presented in Figure 14. Within the Newcastle Waters region three lithological units were identified in the research area.

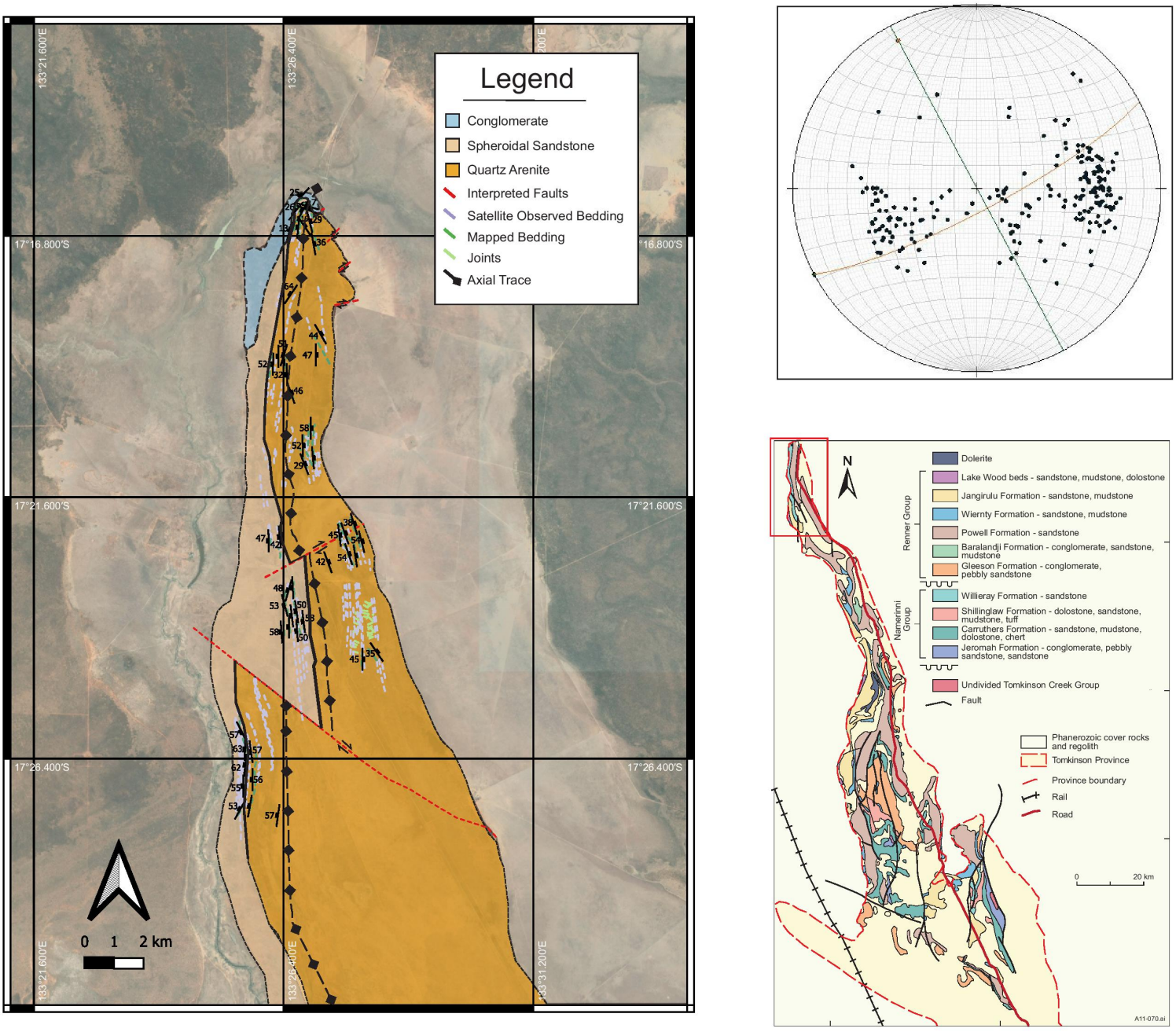


**Figure 14. Geological Map of the Renner Group in the Newcastle Waters region, Northern Territory. Alongside is a stereonet of the collected data with the red line representing the profile plane of the Newcastle Waters anticline and the blue line representing the axial plane; beneath is a simplified outcrop geology map for Namerinni and Renner Groups based on the second edition HELEN SPRINGS geological map (Hussey *et* al 2001). Unpublished mapping in ELLIOTT by KJ Hussey and photo interpretation in LAKE WOODS by N Donnellan. Red box refers to the Newcastle Waters mapping region.**

*Quartz Arenite*

One of these units is a fine to medium grained quartz arenite (Figure 15 C, D &E). The unit was only present on the western side of the fold and formed as large ridges. It was strongly planar cross bedded (~5 cm – 50 cm) and rippled sandstone with occasional trough cross beds (younging to the W). The unit weathered spheroidally and had occurrences of granular medium grained sand as interbeds. Coarse laminations were seen with 15 cm intervals of granular quartz grains ~0.5mm in size. Bedding is defined by a change in grain size and cross beds. Donnellan et al. (2013) suggests that the quartz arenite is the Powell Sandstone, seen in Figure 14.

*Spheroidal Sandstone*

The other unit is a spheroidal white massive sandstone (Figure 15F&G), which has very sparse outcrop and mainly forms sub-crop across the mapping area. Within these areas there is a lot of quartzite float but very little outcrop that is in-situ. The unit is very quartz rich with minimal lithics and fine grained. There are little sedimentary structures in the unit, including bedding, which is difficult to define due to the rocks being massive. The spheroidal sandstone is interpreted to be the Wiernty Formation by Donnellan et al. (2013) (Figure 14).

*Conglomerate*

The conglomerate was identified in the most northern region of the mapping area. The conglomerate lies above both the quartz arenite and spheroidal sandstone and was separated from them by an erosional irregular boundary. The conglomerate was made up of coarse-grained sands that were red/orange in colour (Figure 15A&B). Pebbles,

cobbles and boulders sit in the matrix at a random orientation and are not homogeneously disturbed. White quartz boulders are present within the matrix, which have a similar composition to the quartz-rich sandstone. Areas of the conglomerate have been brecciated and slightly altered by a fluid. The conglomerate is interpreted to be equivalent to the Jamison sandstone from the Roper Group, or a young conglomerate of the Georgina Basin.


**Figure 15. Plate of photos taken in the Newcastle Waters mapping region. (A) and (B): Conglomerate in outcrop and up close. (C), (D) and (E) represent the quartz arenite in ridges, and outcrop displaying the crossbedding and ripple features. (F) and (G) display the spheroidal white sandstone in outcrop and up close.**

## STRUCTURE

A total of 86 bedding measurements were taken using a compass clinometer and drawn onto tracing paper and 207 measurements were taken using the app 'Field Move' on an iPad.

### *Faults*

Within the mapping area at Newcastle Waters three faults were identified that crosscut the research area (Figure 14). The three faults are located within the southern region of the map. The fault furthest to the east is a dextral strike-slip which has a small displacement of 20m. In the valley in the middle of the map there is another strike-slip sinistral fault which has a small displacement of ~30m and has disrupted stratigraphy. The fault to the far east is interpreted to be a very large dextral strike-slip that has a displacement of ~3km. However, there was no evidence in the field to indicate the presence of this fault and this has been inferred using data collected and the satellite imagery.

### *Folding*

In conjunction with structural measurements and observations the mapping area
The older units in the mapping area define a tight antiform with an axial plane that dips 90/332 and an interlimb angle of ~ 95$^{o}$, the hinge of the fold plunges 10 → 332. The fold closes to the N and the axial plane is broadly parallel with the trend of the Daly Waters Fault Zone (Williams, 2019). The axial trace seen in Figure 14 is trending towards NNE.

## Gamma-ray spectrometry data

Along with lithology and structural data, a gamma-ray spectrometer (GRS) was used throughout the Newcastle Waters mapping area to understand the potassium, thorium and uranium contents of the rocks within the area. Seen in Figure 16, a nearest neighbour interpolation of the U and Th contents was constructed from these data.

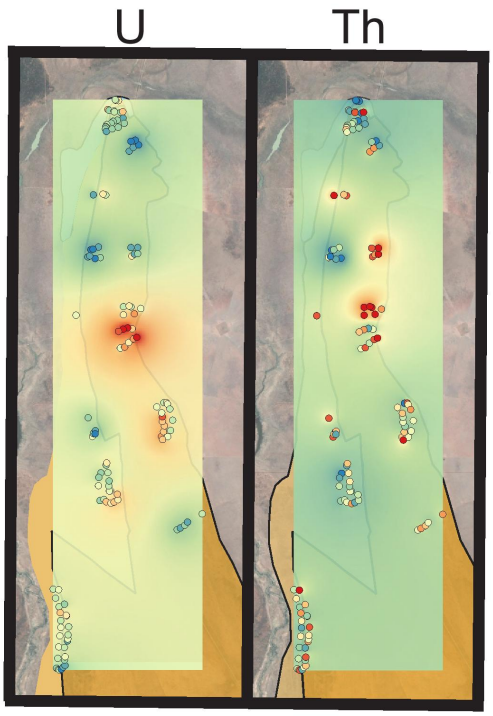


**Figure 16. Gamma-ray spectrometry (GRS) data from the Newcastle Waters mapping region. The GRS data displays values from uranium (U) and thorium (Th). Blue areas indicate low values where red represents high values.**

There is a high in U and Th on the right side of the mapping area. This area was made up of spheroidal white massive sandstone, however due to the sparse amounts of outcrop majority of the GRS results from this area were on soil. Uranium values varied throughout the region resulting in an average of 2.45ppm. There are U lows located on the left side of the hinge within the quartz arenite. Thorium was the highest content throughout the area with an average of 3.83ppm. There are minor Th lows located at the top of the Newcastle Waters region and along the left side of the hinge.

# Discussion

## Detrital zircon analysis

### WHAT ARE THE DEPOSITIONAL AGE CONSTRAINTS ON THE RENNER GROUP?

This study has provided the following maximum depositional ages based on the youngest single grain $^{207}Pb/^{206}Pb$ ages. The Renner group is constrained previously by published U-Pb ages (Munson et al. 2018) from the Gleeson Formation (1796 ±10 Ma), Grayling Member (1650 ± 21 Ma), and the Jangirulu Formation (1584 ± 18 Ma).

Prior to this study no age constraint was available for the Sweetwater Member and the Powell Formation. Therefore, a maximum depositional age for the Sweetwater Member has been identified to be 1624 ± 35 Ma and a maximum depositional age of 1652 ± 125 Ma for the Powell formation.

The youngest concordant grain identified for the Gleeson Formation is 1600 ± 41 Ma (TP19-45). This value represents a younger maximum depositional age compared to the recorded age by Munson et al. (2018), at 1796 ±10 Ma. The maximum depositional age for the Grayling Member is 1554 ± 76 Ma which is slightly younger than what Munson et al. (2018) reported (1650 ± 21 Ma); the value falls within uncertainty however the error is large. The Powell Formation yields a maximum depositional age of 1714 ± 50 Ma. Munson et al. (2018) also analysed the Powell Formation, however, did not determine the maximum depositional age due to his results demonstrating large amounts of contamination.

Limited detrital rutile U-Pb analysis usually yielded youngest grains that were slightly older than the more extensive zircon data. The exception was for the Powell Formation, where a detrital rutile $^{207}Pb/^{206}Pb$ age of 1703 ± 32 Ma provides the maximum depositional age constraint for this formation (Figure 17).

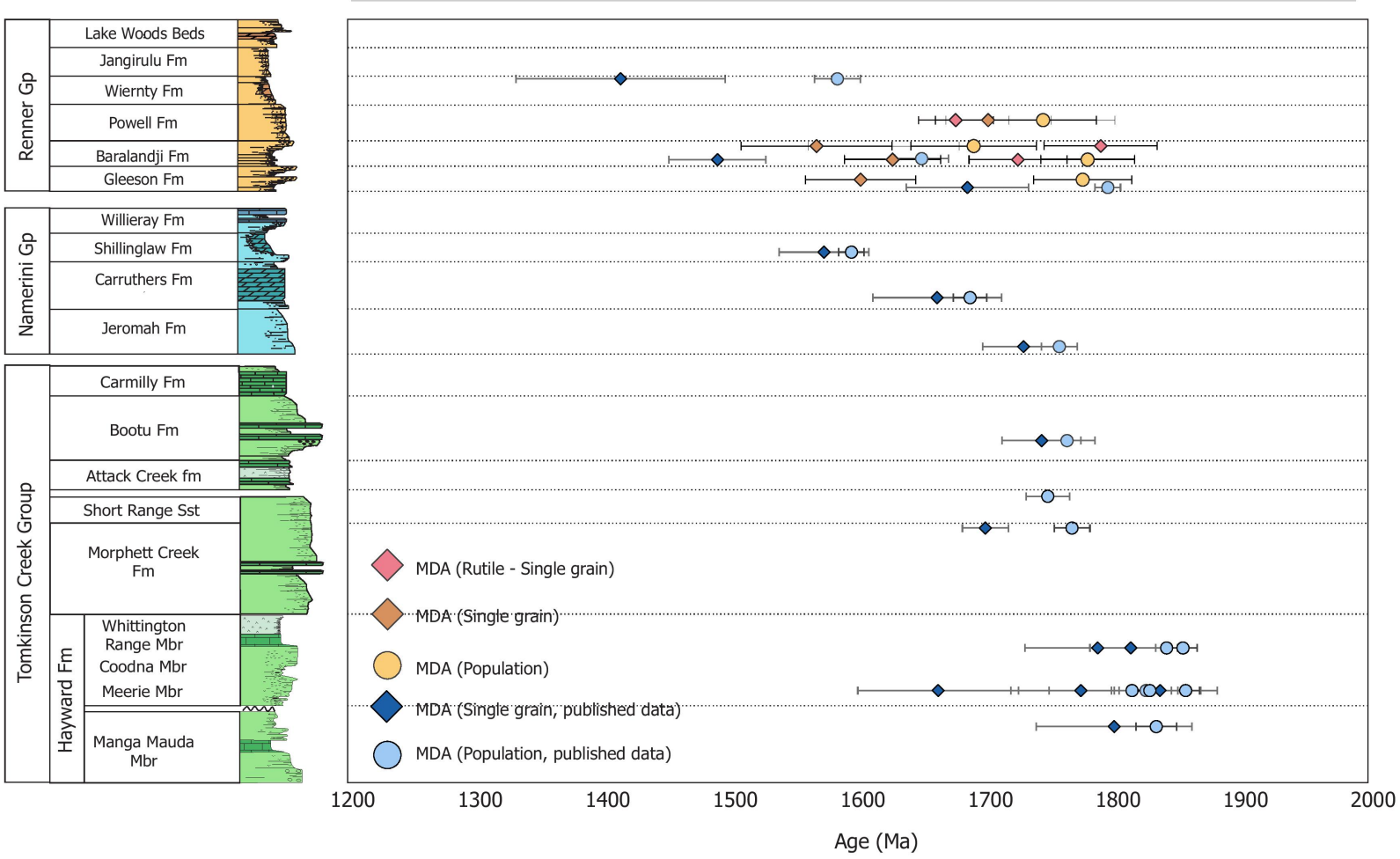


**Figure 17. Compilation of U-Pb data from the Tomkinson Province including the youngest concordant grain and the youngest detrital zircon population (n= >3). The youngest, near concordant rutile grain determined from this research is plotted. Previously published data by Munson (2018) and Blades (in prep) is also displayed. The maximum depositional age has been constrained by the youngest, concordant grain (diamond). Modified after Blades (in prep).**

## Provenance of the Renner Group

A compilation of U-Pb age data from this research and previous publications (Munson et al. 2018, Yang et al. 2019) are coupled with hafnium isotope data in order to further understand the source-sink relationships between the deposition of the Renner Group and surrounding source regions.

By comparing the Renner Groups age distributions using the KDE plot (Figure 8), the formations within the Renner Group appear to be almost identical to one another with very similar minor and major peaks. There are three main peaks at ca. 1800 Ma, 1950 Ma and 2500 Ma. In the Gleeson Formation, Sweetwater Member and the Grayling Member there is a minor peak at ca. 1700 Ma, but this is derived from less than three grains, so no large-scale interpretations can be made. From these formations it suggests that they may be sourced from similar provenance regions.

### HOW DOES THE RENNER GROUP CORRELATE WITH ELSEWHERE IN THE GREATER MCARTHUR BASIN (THE ROPER GROUP, SOUTH NICHOLSON GROUP AND TIJUNNA GROUP?

The Renner Group has often been interpreted to associate with other groups within the greater McArthur Basin. The MDS plot (Multidimensional Scaling) developed by Vermeesch (2013), is a provenance analysis tool that compares the similarities and differences of large U-Pb age data sets. To quantify the dissimilarity between different age distributions the Kolmogorov-Smirnov (K-S) test is performed. Groups with similarity will plot closer together, whereas dissimilar groups will plot further away.

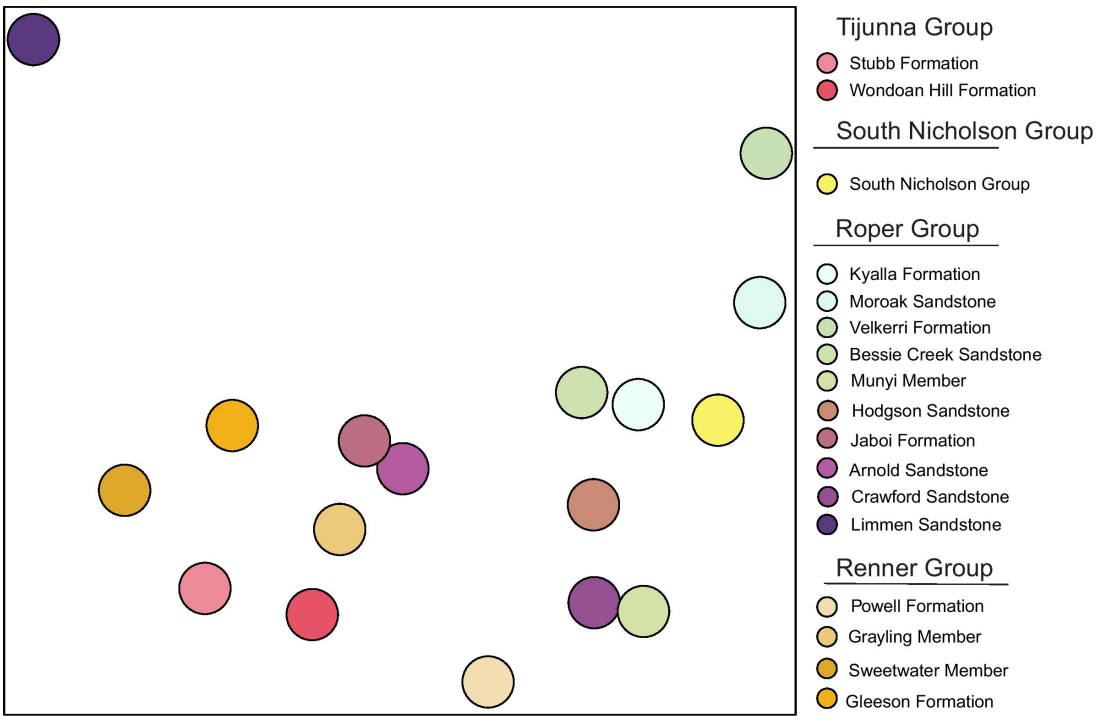


**Figure 18. Multidimensional scaling (MDS) plot of sedimentary samples from the Tijunna Group (Wondoan Hill Formation and Stubb Formation), South Nicholson Group (undifferentiated formation), Renner Group (Gleeson Formation, Sweetwater Member, Grayling Member and Powell Formation) and Roper Group (Limmen Sandstone, Crawford Sandstone, Arnold Sandstone, Jaboi Formation, Hodgson Sandstone, Munyi Member, Bessie Creek Sandstone, Velkerri Formation, Moroak Sandstone and Kyalla Formation). Data from the Renner Group was collected in this study and other data sets are collected from (Cassidy et al. in prep, Munson et al. 2018, Yang et al. 2018).**

Figure 18 shows an MDS plot between formations within the Renner Group, Roper Group, South Nicholson Group and the Tijunna Group. The Powell Formation of the Renner Group is closely associated with the Bessie Creek Sandstone of the Roper Group and the Wondoan Hill Formation of the Tijunna Group. The Sweetwater is similar to the Jaboi Formation, with the Gleeson Formation also being associated with the older Roper Group formations. The Grayling Member is similar to the Arnold Sandstone from the Roper Group.

The Roper Group is a siliciclastic succession characterised by alternating mudrock-rich and cross-bedded sandstone formations (Munson 2016a). It is located within the

McArthur Basin and is a part of the Wilton Package. Previous work by Munson (2016b) shows correlation between the Renner Group formations and Roper Group units; this relationship can be observed through $\varepsilon_{Hf}(t)$ data in Figure 19g where the Renner and Roper Groups are almost identical.

The South Nicholson Group unconformity overlies the Paleoproterozoic Murphy Metamorphics and is made up of quartz sandstone interstratified with siltstone and shale. In Figure 19 there does not seem to be any direct link with the Roper Group, however in Figure 21e, the relationship between the Renner Group and South Nicholson Basin is very strong.

The Tijunna Group comprises sandstone and mudstone assemblages and is divided into two formations. Figure 18 shows the Wondoan Hill Formation and Stubb Formation being closely associated with the older Renner Formations (Gleeson Formation, Sweetwater Member and Grayling Member).

The Derim Derim Dolerite intrusion with the Roper Group was dated using by Bodorkos et al. (2020) and yielded a maximum $^{207}Pb/^{206}Pb$ depositional age of 1324 ± 4 Ma, where Yang et al. (2019) presented a baddeleyite age of 1312.9 ± 0.7 Ma. Within the Tomkinson Province a dolerite intrusion dated at 1295 ± 14 Ma was dated by Melville (2010). Both intrusions are around a similar time to one another, suggesting that both the Renner Group and Roper Group pre-dated ca. 1300 Ma.

The rocks within the Roper Group are essentially flat lying with minor deformation throughout (Williams 2019). Post Roper deformation resulted in a gradual rotation from E-W to N-S under the influence of the N-S faults associated with the Batten Fault Zone (King 2011). Whereas the Renner Group displays open folding caused by block movement, postdating the dolerite sills (Hussey et al. 2001). This deformation is also

observed in Figure 14, where there is a large antiform fold across the Newcastle Waters region. Seismic data from Sweetpea Petroleum, provided by Logan *et* al, (personal communication) seen in Figure 19 interprets the Daly Waters Fault Zone cutting the Roper Group as well as a strike-slip fault system associated with the Daly Waters high. Within Newcastle Waters, the Renner Group is tightly folded along axial planes that are parallel to the Daly Waters Fault Zone faults.

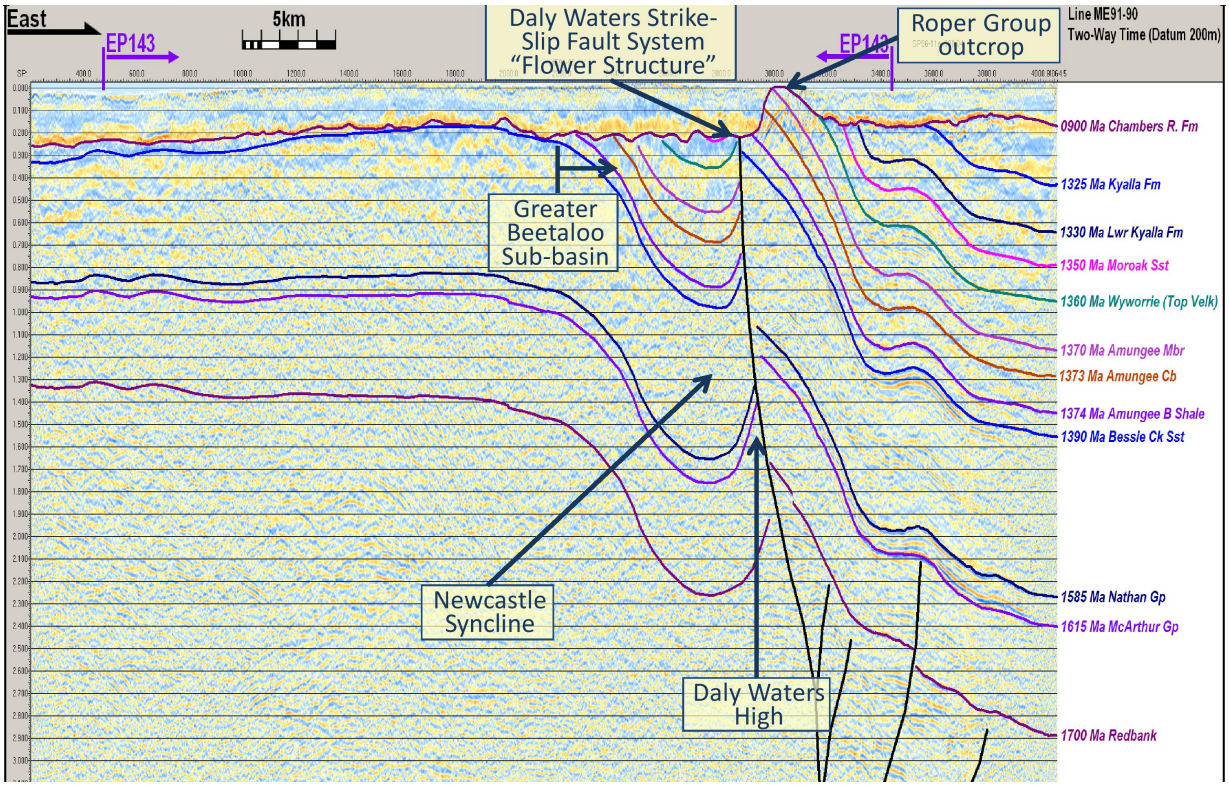


**Figure 19. Interpreted seismic line of the Daly Waters strike-slip fault system. Seismic line cuts through the top of the Newcastle Waters mapping region. Seismic line provided by Logan et al; personal communication.**

## WHAT ARE THE POTENTIAL PROVENANCE SOURCE REGIONS OF THE RENNER GROUP?

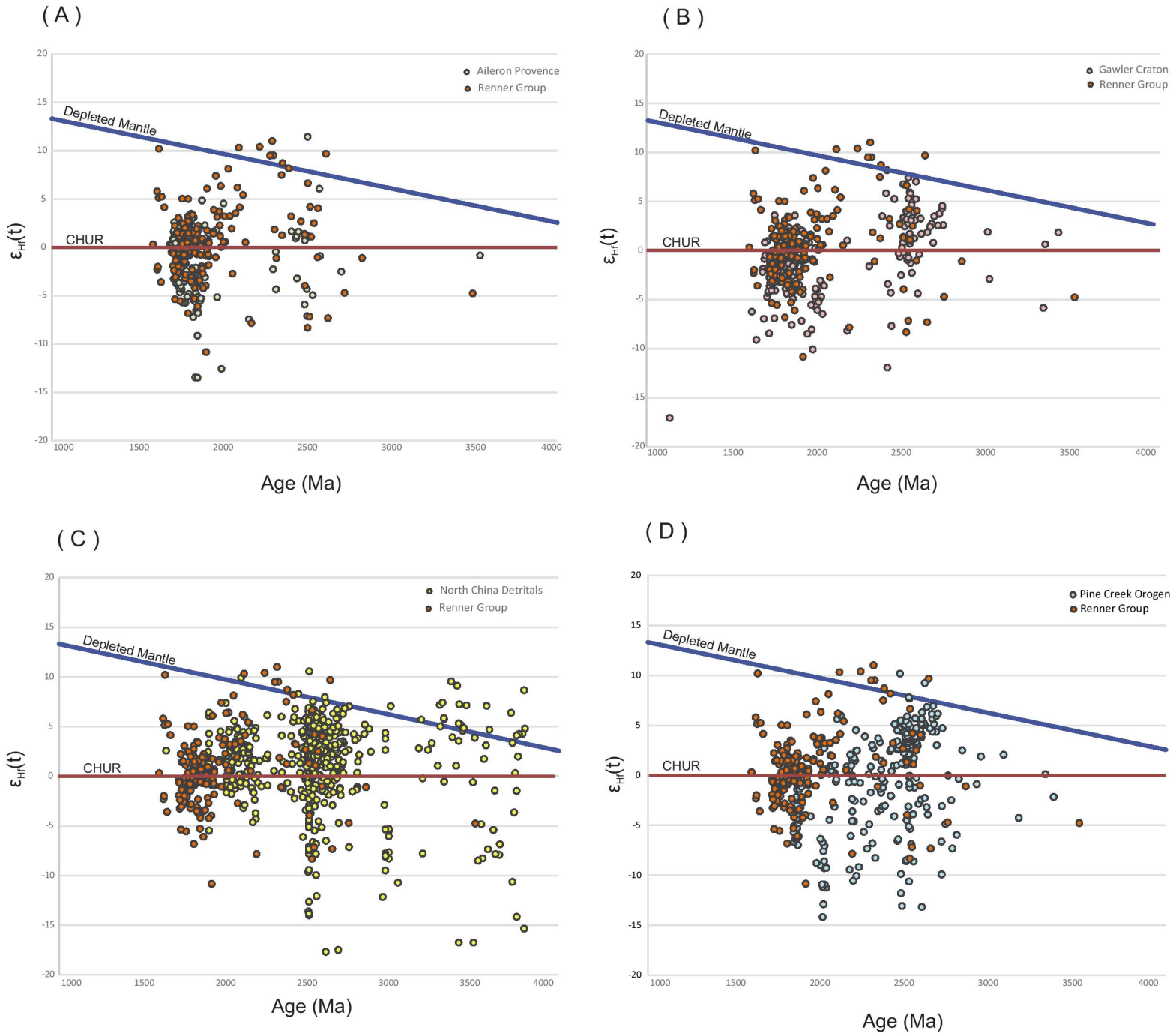


**Figure 20. Epsilon Hf (t) values for the Renner Group and (a) Eastern Arunta (Aileron Province), (b) Gawler Craton, (c) North China, and (d) Pine Creek, to show the correlation between the Renner Group and potential source regions.**

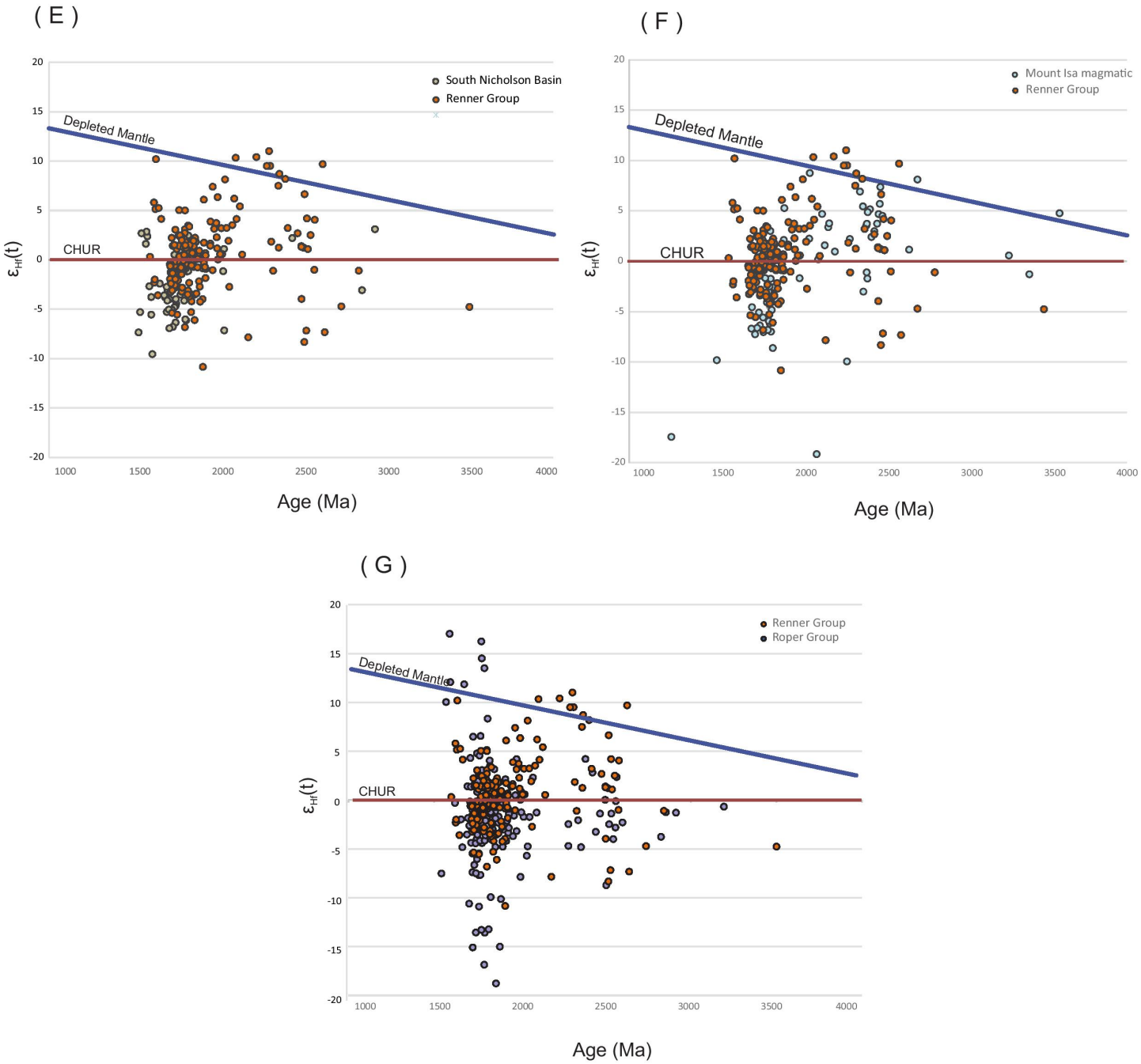


**Figure 21. Epsilon Hf (t) values for the Renner Group and (e) South Nicholson Basin, (f) Mount Isa Inlier, and (g) Roper Group to show the correlation between the Renner Group and potential source regions and relationships.**

## The Arunta Region

The Arunta Region spans over 200,000km$^2$ located to the south of the Tomkinson Province. The region comprises of deformed, Proterozoic rocks, which record a series of geological events spread over a 1.5 billion year period (Claoué-Long and Hoatson 2005). It is comprised of three terranes, all which contain distinct protolith ages and histories: 1800–1790 Ma Aileron Province, 1690–1600 Ma Warumpi Province and the Irindina Province (Scrimgeour and Raith 2001). As seen in Figure 20 (a), both U-Pb and $\varepsilon_{Hf}(t)$ suggest the Aileron Province from the Arunta region is a likely source region during the deposition of the Renner Group due to the moderately evolved hafnium signatures and significant age peak at ca. 1750 Ma.

## The Gawler Craton

The Gawler Craton is located in central South Australia and is a major crustal province tool to understanding the evolution of Proterozoic Australia (Hand et al. 2007). It covers an area approximately 440,000km$^2$ and is made up of predominantly Paleoproterozoic sediments, volcanic rocks and intrusives. Figure 20 (b) displays a cluster of Gawler Craton zircons (similar to Renner) at ca. 1800Ma; however, the Renner Group with age becomes more juvenile ($\varepsilon_{Hf}(t)$ values of ~ 5–12) unlike the Gawler Craton zircons ($\varepsilon_{Hf}(t)$ values of ~ 2–7).

## North China Craton

Containing one of the longest and most complex records of magmatism, sedimentation and deformation on earth, the North China Craton (NCC) spans from 3.8 Ga to present times (Kusky et al. 2007). During the Paleoproterozoic there was much collision and

amalgamation occurring between the North China Craton and the North Australian Craton (Zhao and Zhai 2013). From the $\varepsilon_{Hf}(t)$ data in Figure 20 (c) there appears to be some correlation between 2500–2000 Ma as well as 1500–1900 Ma. Previous authors have proposed a paleogeographic link between the NCC and NAC. The Velkerri Formation in the McArthur Basin is thought to correlate with the Xiamaling Formation in the NCC, both being ca. 1400 Ma carbonaceous shale deposits recording the intrusion of ca. 1300 Ma dolerite sills (Mitchell et al. 2020).

### Pine Creek Orogen

The Pine Creek Orogen is a Paleoproterozoic inlier that covers 66,000km$^2$ of the North Australian Craton (Worden et al. 2008). Zircon ages determined by SHRIMP U-Pb yielded ages 2520–1545 Ma and 2470 ± 47 Ma for the Nanambu Complex (East) and the Rum Jungle (Central Domain) basement rocks (Worden et al. 2008). From the Renner Group data, the age of these terranes are consistent with the older, Neoarchean detrital zircon cluster. However, Figure 20 (d) suggests the $\varepsilon_{Hf}(t)$ values of Pine Creek display a more juvenile cluster at ca. 2500 Ma, whereas in this study there is no cluster identified within the same age bracket.

### South Nicholson basin

The South Nicholson Basin is located between the Mount Isa Province in the east and the McArthur Basin to the northwest (Carson et al. 2020). The basin represents a succession of sandstone and siltstone with little deformation (Ahmad and Munson 2013). Rawlings (1999), has interpreted the age of the South Nicholson Group to be in the range ca. 1500 – 1400 Ma, which is consistent with the age range of the Wilton Package. Figure 21 (e) shows correlation between the South Nicholson Group and the

Renner Group around ca. 1800Ma. The age cluster at ca. 2500Ma is only from the Renner Group $\varepsilon_{Hf}(t)$ values and very few South Nicholson. The Renner Group appears to be overall more juvenile as the South Nicholson Basin only appears to have a maximum $\varepsilon_{Hf}(t)$ of ~ 3.

### Mount Isa Inlier

The Mount Isa Inlier is positioned in the southeast of the McArthur Basin and is made up of ~61,000Km$^2$ of Proterozoic crust preserved on the Australian continent (Blenkinsop et al. 2008). It consists of polydeformed and metamorphosed sedimentary, volcanic and igneous rocks, all of which have been intruded during extension and sedimentation resulting in deformation and metamorphism during crustal shortening (Connors and Page 1995).Yang et al. (2018), identified within the Bessie Creek sandstone a major peak of ca. 1560 Ma, which is consistent with the age of the Isan Orogeny. As seen in Figure 21 (f), both U-Pb and $\varepsilon_{Hf}(t)$ suggest the Mount Isa Inlier is potentially a likely source region during the Renner Group deposition due to the moderately evolved hafnium signatures and significant age peak at ~1800 Ma and ~2450Ma.

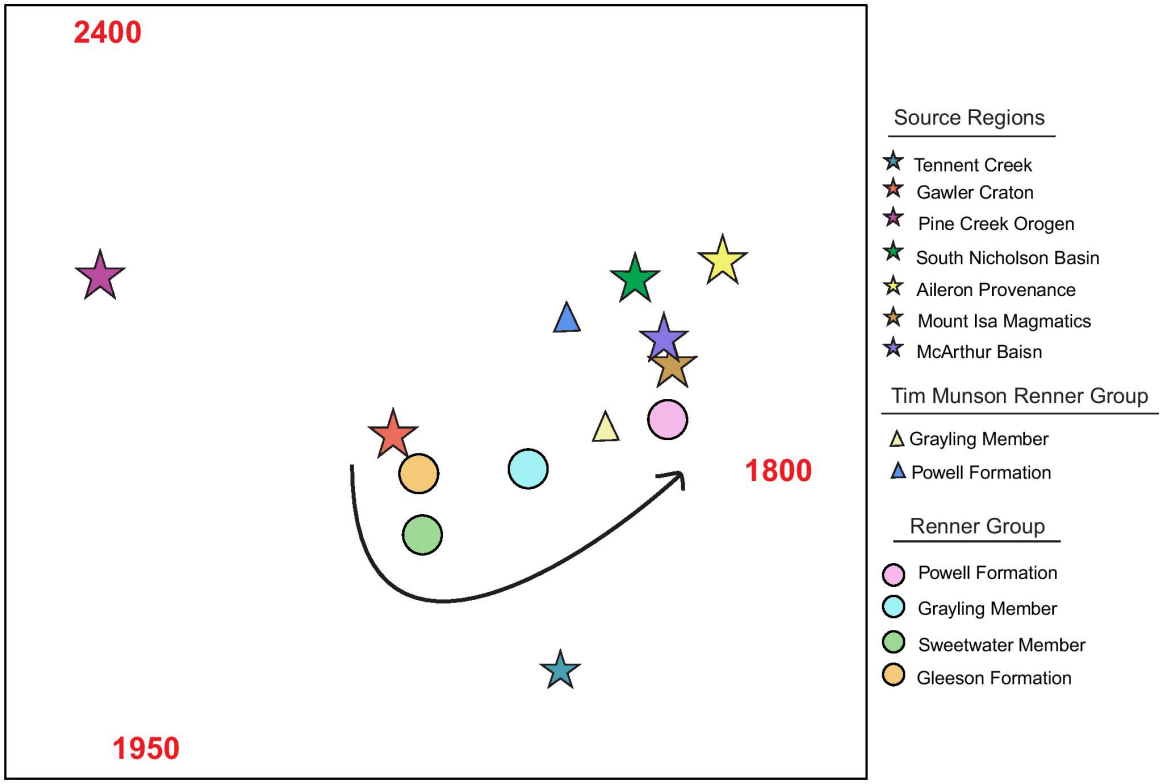


**Figure 22. Multidimensional scaling (MDS) plot of sedimentary samples from the Renner Group, Tennant Creek region, Gawler Craton, Pine Creek Orogen, South Nicholson Basin, Aileron Provenance, Mount Isa Inlier and the McArthur Basin. Similar samples plot closer together whereas the more dissimilar samples are the further apart they are.**

Figure 22 shows the sedimentary units of the Renner Group compared with possible provenance sources from the south (Aileron Provenance, Tennant Creek region, Mount Isa and Gawler Craton) and north (Pine Creek Orogen, South Nicholson Basin and McArthur Basin) of the basin systems. The MDS plot (Figure 22) shows that the older formations are most similar to data from the distal Gawler Craton. As the formations get younger, their detritus gets more similar to the older McArthur Basin detrital zircons as well as the Aileron Province. This may indicate uplift and erosion of these more proximal regions and inversion of the McArthur Basin, possibly due to tectonism associated with the Isan Orogeny, or the closure of the Mirning Ocean as the WAC collided with the NAC (Yang et al. 2018; in press). Ages from the Renner Group are

consistent with the Arunta region, Gawler Craton and the South Nicholson Basin which is observed through the epsilon Hf (t) plots (Figures 20 and 21). In particular the Aileron Province of the Arunta region where silicate melts were thought to be intruded between ca. 1.86 Ga and 1.79 Ga (Reno et al. 2017).

Trace element geochemistry from detrital zircon has been used in this study to explore the provenance and parental melts of zircon grains. Igneous melts display a heavy REE depletion in zircon, reflecting its competition with garnet during crystallisation; whereas if there is a negative Eu anomaly in zircon it infers that it coexisted with plagioclase and is a known sink for Eu during crystallisation. There are three main hypotheses about the growth of the detrital zircons which we can see through their rare earth elements; the magma in which the zircons grew in was governed by garnet, zircon and garnet crystallised at the same time in the magma or the magma is coming from a metamorphic source. The increase in slope with time (Figure 11a) suggests that the magmas may have had garnet stable when the zircon was crystallising. This is likely to be deep crystallisation or similarly deep melting, so it seems to show decreasing pressure of the magma source/crystallisation with time.

The Eu anomalies (Figure 11c) span the same range in the zircons in both the Neoarchean/early Paleoproterozoic and in the late Proterozoic population. Detrital zircon data from McKenzie et al. (2018) shows zircons collected from the Indian Craton is similar to the Renner Group data collected, as the global record has higher values for Eu anomaly, which may suggest that contemporaneous tectono-magmatic processes in India and Australia may have been different from the rest of the world; producing zircons with more negative Eu anomalies, possibly due to more feldspar fractionation in

magmas at lower pressures (Holder et al. 2020). An increase in the Ce anomaly with time (Figure 11b) may reflect increased magma oxia with time as $Ce^{4+}$ is the oxic ion and is easily incorporated into zircon; this can be supported by the mantle also being increasingly oxidised (Nicklas et al. 2019).

## WHAT IS THE TECTONIC GEOGRAPHY DURING THE DEPOSITION OF THE RENNER GROUP?

By analysing the U-Pb age data with associated $\varepsilon_{Hf}(t)$ values, we can try to constrain the tectonic geography and its evolution throughout the deposition of the Renner Group. Data from across all formations suggests an early source from Gawler Craton followed by increasing derivation from the Aileron Provenance in the Arunta region.

Yang at al. (2018; in press) documented a transition to southern (Aileron Province) derived sources during deposition of the Wilton Package in both the Beetaloo Sub-basin (Upper Roper Group) and Birrindudu Basin (Tijunna Group). We suggest the data here also supports this interpretation.

Widespread magmatism is seen between the Australian Cratons and Laurentia at 1.45 Ga (Morrissey et al. (2019). It is suggested by Cawood and Korsch (2008) that continuous subduction off the southern margin of the NAC prompted the building and magmatism of the Aileron Provenance. The rifting between the Australian Cratons and Laurentia caused extension and uplift of the Arunta region, leading to the deposition of the Renner Group (Figure 23).

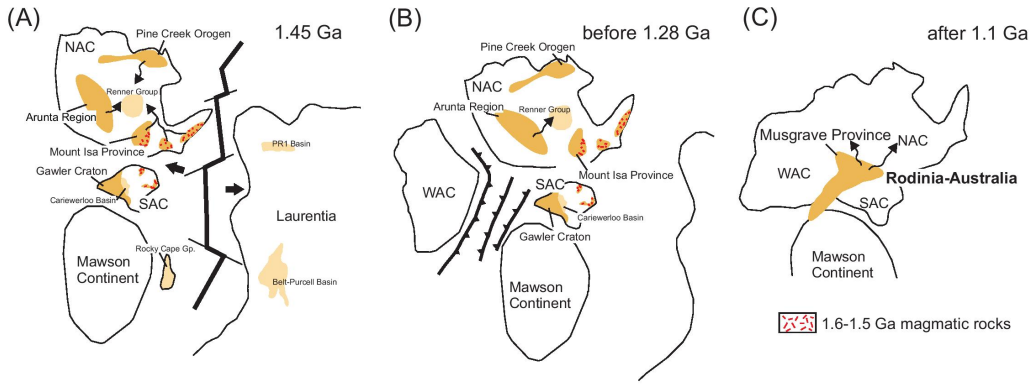


**Figure 23. Tectonic scenario showing the collision of the North Australian Craton (NAC), West Australian Craton (WAC) and the South Australian Craton (SAC) and the associated deposition history between 1.45Ga and after 1.1Ga. (A) Rifting between the North Australia Craton and Laurentia, forming a number of extensional basins. (B) Collision between the West Australia Craton and the combined North Australian Craton and South Australian Craton, uplifting and exposing the Arunta region. (C) Exhumation of the Musgrave Province after final amalgamation of the Australian part of Rodinia and emplacement of the Warakurna igneous province. (Modified after Yang et al.,2019)**

## Conclusions

Analysing U-Pb and Lu-Hf data from detrital zircons, this study provides new constraints on the provenance, age, and tectonic geography of the Renner Group. Main conclusions from this study include:

- New U-Pb detrital zircon age data which provides constrains on the maximum depositional ages for sands within the Renner Group. The youngest unit, the Gleeson Formation yielded a maximum depositional age of 1600 ± 41 Ma, 1624 ± 35 Ma for the Sweetwater Member, 1554 ± 76 Ma for the Grayling Member and 1652 ± 125 Ma for the Powell Formation.
- Subtle provenance changes occur within formations with a spread of data from ca. 2.5 Ga to ca. 2.0 – 1.8 Ga within the Renner Group. We interpret the age spectra from ca 2.0 – 1.8 Ga detritus to be related to the Aileron Province, Mount Isa Inlier and Gawler Craton, consistent with intracratonic rifting during the Mesoproterozoic. The older ca. 2.5 Ga cluster is predicted to be associated

with the north regions of the NAC as the $\varepsilon_{Hf}(t)$ signatures appear to be related with the Pine Creek Orogen and North China Craton.

- The rifting of the Australia Cratons (NAC and SAC) lead to exhumation, uplift and erosion of these regions post 1.45 Ga, leading to the deposition of the Renner Group.

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## Appendix A: Supplementary Tables: U-Pb in detrital zircons for all samples.

| Analysis | 206Pb/238U Age (Ma) | 206Pb/238U Age (Ma) | 207Pb/206Pb Age (Ma) | 207Pb/206Pb Age (Ma) | 207Pb/235U(calc) Age (Ma) | 207Pb/235U(calc) Age (Ma) | Concordance % | 207Pb/235U(calc) | 207Pb/235U(calc) | 206Pb/238U | 206Pb/238U |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-45 - 6 | < DL | 14144.7 | < DL | 3535.5 | < DL | 7957.9 | #VALUE! | < DL | 385.5819437 | < DL | 5.430155988 |
| TP19-45 - 155 | 2552.0 | 61.6 | 2440.5 | 80.5 | 2501.6 | 109.1 | 105 | 10.74812044 | 0.4687767 | 0.485699456 | 0.011722661 |
| TP19-45 - 147 | 1983.2 | 39.0 | 1918.8 | 42.6 | 1961.5 | 73.4 | 103 | 5.90204152 | 0.220904683 | 0.360221943 | 0.007076032 |
| TP19-45 - 30 | 1909.1 | 38.0 | 1850.1 | 41.8 | 1891.2 | 70.9 | 103 | 5.440027098 | 0.203807375 | 0.344679125 | 0.006860454 |
| TP19-45 - 142 | 1849.1 | 37.0 | 1793.3 | 39.3 | 1833.4 | 72.3 | 103 | 5.083965581 | 0.200542258 | 0.332218854 | 0.006644898 |
| TP19-45 - 27 | 1874.6 | 40.3 | 1822.6 | 41.7 | 1857.8 | 70.0 | 103 | 5.231963988 | 0.196995969 | 0.337502367 | 0.00725075 |
| TP19-45 - 92 | 1804.4 | 35.0 | 1757.7 | 40.3 | 1793.3 | 67.5 | 103 | 4.847936696 | 0.182428165 | 0.323000378 | 0.006257962 |
| TP19-45 - 55 | 2010.4 | 38.3 | 1961.0 | 35.5 | 1995.9 | 70.9 | 103 | 6.139818233 | 0.218085623 | 0.365974683 | 0.006968775 |
| TP19-45 - 47 | 1838.3 | 34.3 | 1798.4 | 33.9 | 1829.1 | 65.0 | 102 | 5.057771148 | 0.179627632 | 0.329990762 | 0.006165083 |
| TP19-45 - 23 | 2532.1 | 53.2 | 2479.0 | 56.9 | 2513.0 | 91.5 | 102 | 10.8805359 | 0.39618302 | 0.481108096 | 0.010107301 |
| TP19-45 - 135 | 1803.0 | 34.8 | 1765.8 | 38.0 | 1797.4 | 66.3 | 102 | 4.871949018 | 0.179602426 | 0.32272797 | 0.006229867 |
| TP19-45 - 58 | 1894.9 | 37.3 | 1860.6 | 31.6 | 1888.0 | 67.5 | 102 | 5.42013349 | 0.1937179 | 0.341716102 | 0.00672024 |
| TP19-45 - 150 | 1773.9 | 31.4 | 1758.9 | 24.0 | 1777.1 | 59.3 | 101 | 4.755902921 | 0.15876718 | 0.316765847 | 0.005600228 |
| TP19-45 - 138 | 2535.6 | 50.2 | 2514.9 | 47.2 | 2536.5 | 91.9 | 101 | 11.15892972 | 0.404244708 | 0.481911764 | 0.0095316 |
| TP19-45 - 34 | 1785.9 | 34.8 | 1773.9 | 39.1 | 1790.3 | 67.5 | 101 | 4.83068901 | 0.182203025 | 0.319226451 | 0.006221764 |
| TP19-45 - 85 | 1817.6 | 37.5 | 1808.6 | 47.7 | 1823.9 | 75.7 | 100 | 5.027294567 | 0.2087691 | 0.325718331 | 0.006715691 |
| TP19-45 - 105 | 1607.7 | 30.3 | 1600.6 | 41.9 | 1614.9 | 62.1 | 100 | 3.905919234 | 0.150094191 | 0.283248333 | 0.005342385 |
| TP19-45 - 51 | 1899.6 | 36.0 | 1892.3 | 46.2 | 1906.5 | 76.0 | 100 | 5.538180148 | 0.220852114 | 0.342693706 | 0.006503395 |
| TP19-45 - 89 | 1800.3 | 36.0 | 1793.5 | 42.6 | 1807.7 | 68.9 | 100 | 4.931983911 | 0.187894895 | 0.322161025 | 0.006440735 |
| TP19-45 - 112 | 1734.5 | 37.0 | 1729.5 | 41.6 | 1743.2 | 66.6 | 100 | 4.566552586 | 0.174545767 | 0.308742293 | 0.006589134 |
| TP19-45 - 24 | 2515.9 | 49.9 | 2518.6 | 35.0 | 2527.9 | 84.7 | 100 | 11.05692593 | 0.370557703 | 0.477403241 | 0.009472206 |
| TP19-45 - 116 | 1879.2 | 42.7 | 1897.0 | 72.5 | 1897.4 | 89.7 | 99 | 5.479668305 | 0.259149706 | 0.33845348 | 0.007695788 |
| TP19-45 - 44 | 1888.4 | 38.9 | 1910.5 | 50.3 | 1909.6 | 79.0 | 99 | 5.557953193 | 0.230020944 | 0.340360953 | 0.007018598 |
| TP19-45 - 67 | 2454.7 | 47.4 | 2501.0 | 46.7 | 2489.5 | 88.2 | 98 | 10.60957528 | 0.375974837 | 0.463441772 | 0.008945705 |
| TP19-45 - 145 | 1938.6 | 39.0 | 1978.1 | 39.8 | 1968.5 | 70.9 | 98 | 5.949754513 | 0.214165265 | 0.350835855 | 0.007051836 |
| TP19-45 - 81 | 1612.7 | 39.3 | 1648.0 | 51.6 | 1636.7 | 74.2 | 98 | 4.012271082 | 0.181880742 | 0.284236406 | 0.006931644 |
| TP19-45 - 144 | 1977.1 | 39.7 | 2025.7 | 47.6 | 2010.2 | 76.9 | 98 | 6.24096911 | 0.238645296 | 0.358935429 | 0.007214055 |
| TP19-45 - 80 | 2447.9 | 48.4 | 2530.7 | 46.7 | 2504.0 | 88.8 | 97 | 10.77549893 | 0.38222945 | 0.461892666 | 0.009124912 |
| TP19-45 - 7 | 1747.2 | 36.0 | 1813.6 | 35.0 | 1786.2 | 66.3 | 96 | 4.807448646 | 0.178425147 | 0.311319225 | 0.006406263 |
| TP19-45 - 64 | 1741.5 | 36.2 | 1808.5 | 45.5 | 1781.2 | 69.3 | 96 | 4.778676289 | 0.185965068 | 0.310169458 | 0.006444317 |
| TP19-45 - 68 | 1890.4 | 41.0 | 1973.4 | 40.4 | 1940.6 | 73.4 | 96 | 5.761004612 | 0.217842906 | 0.340776293 | 0.00739263 |
| TP19-45 - 43 | 1759.7 | 35.4 | 1849.7 | 39.3 | 1809.9 | 66.4 | 95 | 4.944793621 | 0.181541004 | 0.313876133 | 0.006314792 |
| TP19-45 - 136 | 1948.0 | 39.1 | 2049.1 | 38.0 | 2008.0 | 71.0 | 95 | 6.225263591 | 0.220176127 | 0.352807023 | 0.007090136 |
| TP19-45 - 131 | 3303.2 | 64.9 | 3501.3 | 34.8 | 3439.6 | 113.3 | 94 | 28.59155826 | 0.941703402 | 0.669307723 | 0.013156177 |
| TP19-45 - 52 | 1714.6 | 35.5 | 1827.0 | 42.3 | 1774.3 | 68.6 | 94 | 4.739721661 | 0.183198674 | 0.304713981 | 0.006299981 |
| TP19-45 - 101 | 1684.5 | 34.4 | 1795.3 | 37.3 | 1744.1 | 64.3 | 94 | 4.571627367 | 0.168459674 | 0.298629304 | 0.006103659 |
| TP19-45 - 122 | 1658.3 | 31.4 | 1767.4 | 31.2 | 1717.0 | 61.6 | 94 | 4.424972537 | 0.158667244 | 0.293358454 | 0.005546832 |
| TP19-45 - 28 | 2218.1 | 51.5 | 2369.1 | 72.4 | 2308.0 | 100.0 | 94 | 8.708342174 | 0.377241845 | 0.410699406 | 0.009541447 |

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| TP19-45 - 10 | 1739.8 | 34.6 | 1868.2 | 34.4 | 1807.9 | 64.0 | 93 | 4.932862707 | 0.174704564 | 0.309822003 | 0.006153227 |
| TP19-45 - 77 | 2365.6 | 46.4 | 2556.0 | 41.2 | 2481.2 | 87.2 | 93 | 10.51401498 | 0.369694882 | 0.443348441 | 0.008703049 |
| TP19-45 - 2 | 1699.9 | 32.1 | 1838.0 | 28.1 | 1770.7 | 61.0 | 92 | 4.719623321 | 0.162660107 | 0.301744125 | 0.005706335 |
| TP19-45 - 99 | 1761.7 | 39.4 | 1916.1 | 52.6 | 1844.7 | 72.7 | 92 | 5.152128647 | 0.20296845 | 0.314283883 | 0.00703637 |
| TP19-45 - 143 | 1732.6 | 33.8 | 1921.7 | 48.2 | 1830.7 | 68.7 | 90 | 5.067361853 | 0.190054284 | 0.308359623 | 0.006022864 |
| TP19-45 - 40 | 1619.1 | 38.5 | 1814.6 | 42.6 | 1714.5 | 65.5 | 89 | 4.411455234 | 0.168458698 | 0.285524804 | 0.006784559 |
| TP19-45 - 17 | 1580.2 | 38.9 | 1772.1 | 32.1 | 1672.6 | 62.7 | 89 | 4.192721401 | 0.157164049 | 0.277791199 | 0.006843401 |
| TP19-45 - 154 | 1623.7 | 33.4 | 1862.7 | 59.3 | 1739.9 | 76.2 | 87 | 4.548779648 | 0.199264552 | 0.286433944 | 0.005899811 |
| TP19-45 - 153 | 1816.5 | 72.9 | 2128.6 | 43.9 | 1978.6 | 97.0 | 85 | 6.019324506 | 0.295147543 | 0.325491972 | 0.013071511 |
| TP19-45 - 111 | 1625.3 | 40.8 | 1926.2 | 43.7 | 1771.1 | 70.7 | 84 | 4.721711252 | 0.188357435 | 0.286754424 | 0.007193669 |
| TP19-45 - 90 | 1568.5 | 35.6 | 1860.2 | 31.6 | 1707.1 | 63.4 | 84 | 4.37219936 | 0.162278651 | 0.275461533 | 0.006253507 |
| TP19-45 - 66 | 1707.8 | 33.9 | 2041.8 | 50.6 | 1873.0 | 70.7 | 84 | 5.325832012 | 0.201158623 | 0.303340534 | 0.006018189 |
| TP19-45 - 95 | 1577.8 | 37.1 | 1889.2 | 62.2 | 1724.6 | 74.4 | 84 | 4.465614616 | 0.192592132 | 0.277303826 | 0.006517613 |
| TP19-45 - 56 | 1713.3 | 46.6 | 2088.9 | 93.3 | 1898.2 | 123.7 | 82 | 5.484358118 | 0.357402085 | 0.30443508 | 0.008281187 |
| TP19-45 - 88 | 1475.7 | 58.0 | 1864.6 | 63.8 | 1652.4 | 94.3 | 79 | 4.090598348 | 0.233384979 | 0.257245181 | 0.010110888 |
| TP19-45 - 106 | 1428.4 | 56.7 | 1847.4 | 55.8 | 1614.9 | 85.1 | 77 | 3.905739692 | 0.20583363 | 0.248043084 | 0.009848798 |
| TP19-45 - 87 | 1549.3 | 50.0 | 2013.4 | 50.9 | 1773.7 | 75.6 | 77 | 4.736617664 | 0.201789466 | 0.271678863 | 0.008767196 |
| TP19-45 - 60 | 1391.1 | 31.9 | 1851.6 | 39.6 | 1593.4 | 62.2 | 75 | 3.803192516 | 0.148437493 | 0.240844708 | 0.005516108 |
| TP19-45 - 146 | 1439.4 | 34.1 | 1988.6 | 41.4 | 1680.3 | 67.8 | 72 | 4.232031954 | 0.170882162 | 0.250175051 | 0.005932566 |
| TP19-45 - 73 | 1369.0 | 28.1 | 1893.5 | 33.6 | 1597.5 | 55.8 | 72 | 3.822423519 | 0.133620109 | 0.236602437 | 0.004860334 |
| TP19-45 - 45 | 1367.5 | 41.5 | 1925.6 | 47.7 | 1609.8 | 66.5 | 71 | 3.881362412 | 0.160389438 | 0.23632224 | 0.007176375 |
| TP19-45 - 13 | 1317.4 | 27.3 | 1900.3 | 30.2 | 1565.3 | 53.7 | 69 | 3.672039454 | 0.126074661 | 0.226750432 | 0.004692214 |
| TP19-45 - 74 | 1266.5 | 36.2 | 1858.4 | 28.8 | 1513.7 | 60.7 | 68 | 3.440566872 | 0.137950767 | 0.217101176 | 0.006208399 |
| TP19-45 - 72 | 1408.4 | 60.1 | 2077.1 | 70.3 | 1707.8 | 82.2 | 68 | 4.375682844 | 0.210512204 | 0.244176256 | 0.010417305 |
| TP19-45 - 31 | 1237.0 | 39.1 | 1875.5 | 37.8 | 1497.6 | 70.8 | 66 | 3.370729223 | 0.159383801 | 0.211529994 | 0.006684872 |
| TP19-45 - 71 | 2030.0 | 94.1 | 3125.5 | 416.5 | 2635.1 | 487.6 | 65 | 12.39950381 | 2.294179536 | 0.370127565 | 0.017158118 |
| TP19-45 - 127 | 1625.6 | 32.9 | 2520.1 | 29.3 | 2066.9 | 73.0 | 65 | 6.656533696 | 0.234949989 | 0.286807596 | 0.005808654 |
| TP19-45 - 120 | 1591.8 | 33.8 | 2557.5 | 36.5 | 2065.3 | 72.8 | 62 | 6.644556675 | 0.234252453 | 0.280095268 | 0.005948571 |
| TP19-45 - 18 | 1164.9 | 52.9 | 1922.0 | 49.7 | 1467.1 | 71.4 | 61 | 3.241456966 | 0.157744876 | 0.19806018 | 0.008992604 |
| TP19-45 - 151 | 1075.1 | 59.5 | 1774.7 | 40.3 | 1342.0 | 81.7 | 61 | 2.749593658 | 0.167316343 | 0.181491218 | 0.010039285 |
| TP19-45 - 42 | 1511.5 | 42.5 | 2506.9 | 39.1 | 1986.7 | 78.5 | 60 | 6.075082203 | 0.240187133 | 0.264245209 | 0.007423322 |
| TP19-45 - 9 | 1177.7 | 25.8 | 1998.6 | 31.9 | 1508.8 | 54.1 | 59 | 3.419230001 | 0.122544326 | 0.200445837 | 0.004392002 |
| TP19-45 - 126 | 1007.5 | 46.3 | 1885.7 | 45.6 | 1338.5 | 58.5 | 53 | 2.736874756 | 0.119593494 | 0.169168093 | 0.007765893 |
| TP19-45 - 152 | 1065.2 | 39.9 | 2032.4 | 35.1 | 1442.1 | 68.5 | 52 | 3.138147714 | 0.149118201 | 0.179675472 | 0.006729584 |
| TP19-45 - 54 | 1004.8 | 40.8 | 1923.8 | 36.0 | 1347.9 | 65.7 | 52 | 2.771476645 | 0.135027431 | 0.16867206 | 0.006855337 |
| TP19-45 - 20 | 1050.7 | 43.5 | 2014.9 | 46.0 | 1426.6 | 71.0 | 52 | 3.075622891 | 0.153097475 | 0.17702443 | 0.007327025 |
| TP19-45 - 37 | 1060.1 | 21.5 | 2067.9 | 41.4 | 1452.8 | 52.8 | 51 | 3.181968833 | 0.115717745 | 0.178741798 | 0.003632748 |
| TP19-45 - 114 | 1008.5 | 25.7 | 2207.6 | 50.4 | 1473.1 | 61.2 | 46 | 3.266447581 | 0.135620263 | 0.169351385 | 0.004317509 |
| TP19-45 - 84 | 884.0 | 59.6 | 1950.3 | 56.1 | 1257.4 | 92.3 | 45 | 2.449872937 | 0.179840175 | 0.146974897 | 0.00991015 |
| TP19-45 - 82 | 1078.9 | 44.1 | 2525.0 | 51.6 | 1680.9 | 87.0 | 43 | 4.235460105 | 0.219117891 | 0.182185285 | 0.007453862 |
| TP19-45 - 123 | 1075.4 | 34.1 | 2534.3 | 44.9 | 1682.3 | 72.2 | 42 | 4.242414211 | 0.18214155 | 0.181536566 | 0.005759516 |
| TP19-45 - 49 | 796.0 | 18.9 | 1929.0 | 44.8 | 1169.5 | 45.8 | 41 | 2.163678127 | 0.08469136 | 0.131428253 | 0.003124263 |
| TP19-45 - 50 | 770.0 | 17.4 | 1881.3 | 38.4 | 1127.4 | 41.3 | 41 | 2.035334991 | 0.074615827 | 0.126878229 | 0.002859044 |
| TP19-45 - 36 | 845.2 | 18.6 | 2130.4 | 51.5 | 1295.2 | 51.7 | 40 | 2.58072668 | 0.102956392 | 0.140088229 | 0.003084725 |
| TP19-45 - 141 | 757.0 | 31.0 | 1911.0 | 36.2 | 1123.6 | 56.2 | 40 | 2.023954545 | 0.101163361 | 0.124600944 | 0.005099787 |
| TP19-45 - 86 | 810.8 | 22.3 | 2092.4 | 37.7 | 1248.8 | 52.8 | 39 | 2.420665981 | 0.102296475 | 0.134028716 | 0.003693774 |
| TP19-45 - 4 | 800.5 | 18.0 | 2097.9 | 32.9 | 1241.5 | 44.0 | 38 | 2.396221643 | 0.084897015 | 0.132219712 | 0.002970905 |

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| TP19-45 - 70 | 677.7 | 32.4 | 1945.6 | 55.9 | 1061.4 | 59.0 | 35 | 1.844328589 | 0.102496501 | 0.110850051 | 0.005299842 |
| TP19-45 - 79 | 750.3 | 15.9 | 2160.9 | 43.0 | 1218.5 | 46.4 | 35 | 2.320200501 | 0.088436295 | 0.123441183 | 0.002620628 |
| TP19-45 - 75 | 678.7 | 14.2 | 1963.2 | 37.6 | 1069.5 | 39.0 | 35 | 1.86717357 | 0.068125906 | 0.11102298 | 0.002322727 |
| TP19-45 - 46 | 711.9 | 78.9 | 2079.5 | 70.7 | 1159.1 | 113.7 | 34 | 2.13148696 | 0.209072071 | 0.116770484 | 0.012940515 |
| TP19-45 - 65 | 870.9 | 22.1 | 2616.8 | 47.4 | 1538.3 | 58.3 | 33 | 3.549314826 | 0.134450894 | 0.144652249 | 0.003669236 |
| TP19-45 - 76 | 672.4 | 23.6 | 2022.3 | 39.5 | 1084.6 | 48.3 | 33 | 1.910094605 | 0.08512636 | 0.109935578 | 0.003857757 |
| TP19-45 - 134 | 638.6 | 22.0 | 1988.7 | 51.9 | 1036.6 | 42.4 | 32 | 1.775647097 | 0.072614026 | 0.104129956 | 0.003590142 |
| TP19-45 - 148 | 708.1 | 14.7 | 2221.6 | 34.8 | 1199.8 | 42.6 | 32 | 2.259714928 | 0.080253108 | 0.116112648 | 0.002413657 |
| TP19-45 - 94 | 935.4 | 34.5 | 3025.1 | 49.3 | 1804.9 | 84.4 | 31 | 4.915380159 | 0.229835659 | 0.15615859 | 0.005760485 |
| TP19-45 - 149 | 630.1 | 16.7 | 2106.9 | 43.9 | 1071.1 | 39.4 | 30 | 1.871616495 | 0.068839744 | 0.10268195 | 0.002720929 |
| TP19-45 - 63 | 655.7 | 30.9 | 2194.9 | 41.0 | 1132.3 | 59.2 | 30 | 2.049906223 | 0.107146683 | 0.10706251 | 0.00504485 |
| TP19-45 - 97 | 624.4 | 11.5 | 2106.5 | 36.8 | 1064.8 | 37.3 | 30 | 1.853965537 | 0.064951126 | 0.101699529 | 0.001876423 |
| TP19-45 - 78 | 581.9 | 13.6 | 2136.8 | 50.2 | 1027.0 | 40.2 | 27 | 1.749493835 | 0.068408183 | 0.094475475 | 0.002208118 |
| TP19-45 - 107 | 549.6 | 28.6 | 2034.5 | 54.6 | 952.8 | 61.6 | 27 | 1.555869909 | 0.100628839 | 0.088988633 | 0.004633128 |
| TP19-45 - 41 | 594.2 | 15.7 | 2315.4 | 47.4 | 1108.7 | 41.7 | 26 | 1.980043993 | 0.074456093 | 0.096563962 | 0.002548534 |
| TP19-45 - 129 | 543.7 | 12.8 | 2208.3 | 43.0 | 1008.7 | 37.8 | 25 | 1.700391888 | 0.063659072 | 0.088006428 | 0.002078078 |
| TP19-45 - 29 | 516.4 | 11.7 | 2103.0 | 39.1 | 935.4 | 35.4 | 25 | 1.512387055 | 0.057270671 | 0.083399572 | 0.001895904 |
| TP19-45 - 103 | 503.3 | 18.8 | 2152.3 | 49.9 | 936.6 | 45.1 | 23 | 1.515316542 | 0.072920559 | 0.08120803 | 0.003035433 |
| TP19-45 - 1 | 495.5 | 14.4 | 2122.3 | 30.6 | 916.6 | 34.1 | 23 | 1.466239302 | 0.054550822 | 0.079902634 | 0.002317475 |
| TP19-45 - 62 | 504.3 | 12.2 | 2199.2 | 46.1 | 956.3 | 37.4 | 23 | 1.564687104 | 0.061130013 | 0.081370863 | 0.001974844 |
| TP19-45 - 133 | 464.7 | 17.1 | 2139.8 | 56.1 | 884.1 | 41.2 | 22 | 1.38855313 | 0.064641868 | 0.07474082 | 0.002745754 |
| TP19-45 - 38 | 451.8 | 11.1 | 2173.6 | 46.6 | 877.6 | 35.9 | 21 | 1.373251934 | 0.056198968 | 0.07260472 | 0.001776957 |
| TP19-45 - 125 | 488.0 | 22.4 | 2355.2 | 49.9 | 995.9 | 51.2 | 21 | 1.66658217 | 0.085633577 | 0.07864042 | 0.003614297 |
| TP19-45 - 128 | 473.5 | 13.1 | 2344.3 | 45.8 | 967.6 | 34.4 | 20 | 1.593230856 | 0.056683665 | 0.076209054 | 0.0021098 |
| TP19-45 - 137 | 408.5 | 25.7 | 2289.9 | 62.9 | 856.9 | 47.2 | 18 | 1.325395823 | 0.072973038 | 0.065424924 | 0.004122887 |
| TP19-45 - 104 | 373.4 | 31.4 | 2120.0 | 55.4 | 748.8 | 59.1 | 18 | 1.090700902 | 0.086066162 | 0.059634545 | 0.005018977 |
| TP19-45 - 14 | 411.0 | 10.0 | 2438.0 | 55.8 | 910.3 | 32.6 | 17 | 1.451124818 | 0.051894562 | 0.065829107 | 0.001595367 |
| TP19-45 - 12 | 384.5 | 9.7 | 2458.6 | 38.9 | 877.4 | 33.0 | 16 | 1.372917988 | 0.05161017 | 0.061468586 | 0.001549564 |
| TP19-45 - 96 | 363.0 | 9.3 | 2324.6 | 47.2 | 799.1 | 30.3 | 16 | 1.196680789 | 0.045417042 | 0.057925598 | 0.001488273 |
| TP19-45 - 69 | 349.1 | 18.6 | 2260.1 | 56.5 | 757.1 | 43.9 | 15 | 1.107700955 | 0.064178039 | 0.055641525 | 0.002964798 |
| TP19-45 - 98 | 372.8 | 7.7 | 2444.9 | 45.4 | 855.5 | 29.8 | 15 | 1.322219297 | 0.046005311 | 0.059539107 | 0.001225892 |
| TP19-45 - 102 | 346.8 | 22.8 | 2308.8 | 53.5 | 774.1 | 57.2 | 15 | 1.143375408 | 0.084438658 | 0.055264971 | 0.003629522 |
| TP19-45 - 100 | 324.0 | 15.5 | 2445.0 | 66.1 | 773.5 | 35.0 | 13 | 1.142113317 | 0.051672728 | 0.051540596 | 0.002463852 |
| TP19-45 - 35 | 303.0 | 9.5 | 2299.2 | 42.5 | 692.7 | 27.6 | 13 | 0.978213655 | 0.038951651 | 0.048118789 | 0.001507001 |
| TP19-45 - 32 | 361.6 | 31.2 | 2812.5 | 115.5 | 966.7 | 61.5 | 13 | 1.591042634 | 0.101275181 | 0.057693376 | 0.004982681 |
| TP19-45 - 83 | 304.6 | 7.3 | 2743.7 | 46.5 | 837.5 | 28.1 | 11 | 1.281416381 | 0.042944471 | 0.048380952 | 0.001164401 |
| TP19-45 - 48 | 260.8 | 8.4 | 2470.5 | 60.0 | 666.8 | 31.5 | 11 | 0.92836852 | 0.043793792 | 0.041279983 | 0.001325737 |
| TP19-45 - 109 | 232.1 | 6.7 | 2421.3 | 59.0 | 597.1 | 24.1 | 10 | 0.800497031 | 0.032301397 | 0.036663682 | 0.001054812 |
| TP19-45 - 33 | 217.6 | 4.7 | 2323.1 | 41.9 | 544.1 | 20.8 | 9 | 0.708918919 | 0.02708057 | 0.034326232 | 0.000737041 |
| TP19-45 - 93 | 231.3 | 13.1 | 2529.7 | 64.4 | 625.9 | 32.8 | 9 | 0.852262529 | 0.044635722 | 0.0365388 | 0.002071125 |
| TP19-45 - 130 | 216.6 | 9.3 | 2413.6 | 64.1 | 564.5 | 30.4 | 9 | 0.743567944 | 0.039995062 | 0.034165024 | 0.001472622 |
| TP19-45 - 26 | 197.3 | 17.4 | 2507.7 | 144.7 | 548.9 | 34.9 | 8 | 0.717023887 | 0.045571857 | 0.031086261 | 0.00273644 |
| TP19-45 - 110 | 191.9 | 6.6 | 2450.8 | 57.2 | 521.5 | 25.2 | 8 | 0.671232945 | 0.032377901 | 0.030216424 | 0.001033148 |
| TP19-45 - 124 | 189.8 | 6.6 | 2620.4 | 43.7 | 560.0 | 23.5 | 7 | 0.735841053 | 0.030910158 | 0.029884296 | 0.001042077 |
| TP19-45 - 57 | 177.0 | 10.1 | 2567.1 | 61.8 | 516.8 | 29.4 | 7 | 0.663595263 | 0.037752171 | 0.027832911 | 0.001586327 |
| TP19-45 - 22 | 171.9 | 7.8 | 2673.3 | 65.5 | 529.6 | 27.2 | 6 | 0.684752288 | 0.03522659 | 0.027026434 | 0.001231733 |
| TP19-45 - 25 | 168.3 | 3.8 | 2732.1 | 78.0 | 536.0 | 20.8 | 6 | 0.695306593 | 0.026923561 | 0.026448346 | 0.000604932 |

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| TP19-45 - 21 | 162.9 | 6.9 | 2716.3 | 41.5 | 518.9 | 24.9 | 6 | 0.666950638 | 0.031980879 | 0.025589482 | 0.001076235 |
| TP19-45 - 91 | 154.5 | 3.8 | 2603.7 | 48.8 | 472.1 | 18.3 | 6 | 0.591910694 | 0.022905298 | 0.024256252 | 0.000594619 |
| TP19-45 - 115 | 138.7 | 3.7 | 2768.1 | 60.7 | 468.1 | 18.6 | 5 | 0.585684893 | 0.023268472 | 0.021753634 | 0.000577259 |
| TP19-45 - 61 | 137.7 | 6.2 | 2803.1 | 67.8 | 472.7 | 23.5 | 5 | 0.592793544 | 0.029421687 | 0.021588185 | 0.000974277 |
| TP19-45 - 11 | 132.2 | 12.8 | 2710.8 | 67.7 | 435.5 | 38.1 | 5 | 0.535574759 | 0.046838264 | 0.020724678 | 0.002007125 |
| TP19-45 - 117 | 116.5 | 7.3 | 2929.3 | 100.3 | 439.5 | 28.0 | 4 | 0.541631647 | 0.034450588 | 0.018235726 | 0.00114707 |
| TP19-45 - 108 | 119.3 | 5.7 | 3010.2 | 87.8 | 468.7 | 24.4 | 4 | 0.586660682 | 0.030560904 | 0.018679465 | 0.000898222 |
| TP19-45 - 113 | 97.3 | 3.5 | 3044.9 | 85.6 | 401.8 | 19.9 | 3 | 0.485492905 | 0.024077144 | 0.015205164 | 0.000540704 |
| TP19-45 - 140 | 96.4 | 2.4 | 3243.8 | 58.0 | 441.8 | 15.8 | 3 | 0.54513519 | 0.019460148 | 0.01506319 | 0.000382745 |
| TP19-45 - 53 | 86.9 | 5.0 | 3122.8 | 109.9 | 380.0 | 21.3 | 3 | 0.453895299 | 0.025400976 | 0.013566057 | 0.000777467 |
| TP19-45 - 121 | 68.4 | 3.2 | 3121.9 | 68.3 | 309.4 | 16.3 | 2 | 0.356224088 | 0.018728124 | 0.010660456 | 0.000503822 |
| TP19-45 - 5 | 69.2 | 2.9 | 3289.0 | 74.7 | 342.8 | 13.3 | 2 | 0.401578694 | 0.015572098 | 0.010790893 | 0.000456058 |
| TP19-45 - 8 | 57.8 | 1.5 | 2988.2 | 64.4 | 248.4 | 9.6 | 2 | 0.27712133 | 0.010661522 | 0.009012438 | 0.000230585 |
| TP19-45 - 119 | 57.7 | 2.0 | 3342.8 | 64.2 | 303.0 | 12.3 | 2 | 0.347651882 | 0.014077528 | 0.008996759 | 0.000312297 |
| TP19-45 - 59 | 50.6 | 1.7 | 3118.6 | 84.0 | 237.5 | 9.1 | 2 | 0.263486283 | 0.010129471 | 0.007875758 | 0.000263722 |
| TP19-45 - 118 | 43.3 | 1.4 | 3747.8 | 96.8 | 295.7 | 13.2 | 1 | 0.338084474 | 0.015107219 | 0.006744917 | 0.000219773 |
| TP19-45 - 19 | 34.2 | 1.0 | 3864.6 | 157.4 | 256.3 | 12.0 | 1 | 0.287117646 | 0.013462136 | 0.005317004 | 0.000163266 |
| TP19-45 - 16 | 29.2 | 0.9 | 3693.3 | 90.0 | 201.6 | 10.0 | 1 | 0.219682889 | 0.010869077 | 0.004546007 | 0.000142028 |
| TP19-45 - 132 | 29.3 | 1.2 | 3939.1 | 85.4 | 233.3 | 10.4 | 1 | 0.25824464 | 0.011539573 | 0.004553105 | 0.000192103 |
| TP19-45 - 3 | 23.9 | 0.8 | 3625.5 | 118.9 | 160.5 | 6.8 | 1 | 0.171240188 | 0.00722031 | 0.003711276 | 0.000119925 |
| TP19-45 - 139 | 25.5 | 0.6 | 4002.8 | 104.9 | 215.0 | 9.1 | 1 | 0.235862416 | 0.00995953 | 0.003968998 | 9.99233E-05 |
| TP19-45 - 15 | 22.9 | 0.7 | 3728.8 | 86.8 | 165.0 | 7.8 | 1 | 0.176399691 | 0.008360333 | 0.003566286 | 0.000112641 |
| TP19-45 - 39 | 8.5 | 0.3 | 3556.9 | 192.6 | 57.7 | 3.3 | 0 | 0.058518161 | 0.003359021 | 0.001324292 | 5.03175E-05 |
| TP19-46 - 52 | 1873.0 | 36.8 | 1784.8 | 42.6 | 1842.1 | 70.3 | 105 | 5.136214358 | 0.195939907 | 0.337154597 | 0.006632479 |
| TP19-46 - 154 | 2018.9 | 40.5 | 1935.5 | 39.6 | 1988.0 | 72.2 | 104 | 6.08401569 | 0.221026582 | 0.367764108 | 0.007372901 |
| TP19-46 - 117 | 2626.6 | 50.1 | 2524.2 | 42.0 | 2580.0 | 89.2 | 104 | 11.69181161 | 0.404349345 | 0.502978765 | 0.00958829 |
| TP19-46 - 33 | 1847.5 | 37.2 | 1778.7 | 40.6 | 1825.4 | 68.9 | 104 | 5.036171694 | 0.190123549 | 0.331886045 | 0.00667652 |
| TP19-46 - 82 | 1894.8 | 36.1 | 1833.3 | 40.4 | 1875.1 | 68.8 | 103 | 5.338961142 | 0.1958 | 0.341700832 | 0.006513467 |
| TP19-46 - 68 | 1878.7 | 33.3 | 1827.1 | 23.1 | 1864.2 | 61.8 | 103 | 5.27130703 | 0.174798634 | 0.338344142 | 0.006004058 |
| TP19-46 - 151 | 1796.9 | 34.9 | 1752.0 | 40.5 | 1785.6 | 67.4 | 103 | 4.803901999 | 0.181358601 | 0.321468852 | 0.00625231 |
| TP19-46 - 27 | 1969.0 | 36.0 | 1926.6 | 28.9 | 1959.0 | 67.6 | 102 | 5.885052212 | 0.202935485 | 0.357218493 | 0.006526105 |
| TP19-46 - 24 | 1880.1 | 36.3 | 1841.2 | 39.6 | 1871.7 | 69.0 | 102 | 5.317318877 | 0.19606306 | 0.338630344 | 0.006544968 |
| TP19-46 - 19 | 1903.4 | 39.2 | 1865.1 | 45.1 | 1896.5 | 72.7 | 102 | 5.47386038 | 0.209940925 | 0.343484762 | 0.007076768 |
| TP19-46 - 67 | 1913.9 | 37.6 | 1883.4 | 42.2 | 1909.7 | 71.3 | 102 | 5.558550002 | 0.20766531 | 0.345663948 | 0.006785676 |
| TP19-46 - 119 | 1852.5 | 34.8 | 1823.3 | 30.2 | 1848.4 | 63.7 | 102 | 5.174274705 | 0.178389941 | 0.332926871 | 0.006261438 |
| TP19-46 - 124 | 1870.1 | 33.9 | 1841.5 | 26.5 | 1865.9 | 62.5 | 102 | 5.28138614 | 0.176971654 | 0.336570152 | 0.006097386 |
| TP19-46 - 32 | 1862.3 | 35.7 | 1834.7 | 38.2 | 1859.3 | 68.9 | 102 | 5.240930184 | 0.194199743 | 0.334945978 | 0.006418995 |
| TP19-46 - 140 | 1846.3 | 37.0 | 1821.1 | 38.7 | 1845.0 | 68.3 | 101 | 5.153956626 | 0.190726552 | 0.331638852 | 0.006644623 |
| TP19-46 - 45 | 1869.5 | 35.0 | 1849.2 | 34.4 | 1869.7 | 67.0 | 101 | 5.304927319 | 0.190153042 | 0.336447021 | 0.006293952 |
| TP19-46 - 125 | 2543.3 | 48.6 | 2519.7 | 41.3 | 2541.9 | 88.2 | 101 | 11.22333501 | 0.389552354 | 0.483691164 | 0.009249476 |
| TP19-46 - 132 | 1842.1 | 36.4 | 1833.7 | 33.0 | 1847.5 | 64.2 | 100 | 5.169090517 | 0.179712988 | 0.330774063 | 0.006540337 |
| TP19-46 - 26 | 1940.5 | 38.9 | 1931.7 | 46.5 | 1947.0 | 75.3 | 100 | 5.803709443 | 0.224331609 | 0.351243812 | 0.007049903 |
| TP19-46 - 2 | 1885.1 | 34.1 | 1877.9 | 33.2 | 1892.1 | 66.9 | 100 | 5.445565593 | 0.19257619 | 0.339676394 | 0.006150618 |
| TP19-46 - 48 | 2630.8 | 52.1 | 2628.3 | 48.8 | 2640.6 | 93.5 | 100 | 12.47237605 | 0.4414054 | 0.503960688 | 0.009984186 |
| TP19-46 - 145 | 1824.7 | 44.4 | 1828.2 | 31.3 | 1836.2 | 69.5 | 100 | 5.100353731 | 0.192928371 | 0.327183592 | 0.007959962 |
| TP19-46 - 123 | 2474.8 | 49.7 | 2484.3 | 46.3 | 2489.9 | 88.4 | 100 | 10.61348015 | 0.376852559 | 0.467994421 | 0.009393168 |
| TP19-46 - 70 | 1894.8 | 34.3 | 1905.9 | 28.6 | 1910.1 | 64.6 | 99 | 5.561116167 | 0.188023592 | 0.341687542 | 0.006181818 |

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| TP19-46 - 54 | 1812.5 | 33.7 | 1832.7 | 33.0 | 1830.1 | 65.2 | 99 | 5.063936411 | 0.180404687 | 0.324681086 | 0.006039334 |
| TP19-46 - 71 | 1889.3 | 36.3 | 1930.0 | 27.5 | 1917.9 | 66.6 | 98 | 5.611955724 | 0.194748359 | 0.340543346 | 0.006549779 |
| TP19-46 - 143 | 1866.6 | 39.0 | 1911.6 | 49.8 | 1897.3 | 74.8 | 98 | 5.478921541 | 0.215970541 | 0.335829956 | 0.00701831 |
| TP19-46 - 53 | 1680.6 | 38.7 | 1729.8 | 53.8 | 1711.5 | 74.1 | 97 | 4.39537686 | 0.190226706 | 0.297842275 | 0.006861008 |
| TP19-46 - 69 | 1703.7 | 31.0 | 1760.0 | 29.0 | 1739.0 | 60.6 | 97 | 4.543568776 | 0.158381941 | 0.302503129 | 0.005498846 |
| TP19-46 - 102 | 2407.1 | 51.0 | 2494.3 | 32.9 | 2465.4 | 86.6 | 97 | 10.33704871 | 0.363139709 | 0.452672524 | 0.009590854 |
| TP19-46 - 43 | 1769.8 | 44.7 | 1848.2 | 51.0 | 1816.8 | 82.1 | 96 | 4.985092058 | 0.225154101 | 0.315924171 | 0.007981707 |
| TP19-46 - 3 | 2289.3 | 45.7 | 2405.9 | 49.2 | 2362.4 | 86.8 | 95 | 9.24300764 | 0.33975554 | 0.426372462 | 0.00851871 |
| TP19-46 - 35 | 1753.4 | 36.6 | 1862.1 | 27.8 | 1814.8 | 64.5 | 94 | 4.973133864 | 0.176696456 | 0.312586016 | 0.006516361 |
| TP19-46 - 116 | 1733.1 | 36.1 | 1841.9 | 40.5 | 1792.6 | 72.5 | 94 | 4.844344106 | 0.195890721 | 0.308449323 | 0.006426318 |
| TP19-46 - 55 | 1743.9 | 34.1 | 1860.5 | 37.3 | 1808.2 | 65.2 | 94 | 4.934616161 | 0.177946174 | 0.31065383 | 0.006066357 |
| TP19-46 - 29 | 1687.1 | 32.3 | 1811.2 | 36.6 | 1753.2 | 64.7 | 93 | 4.621976442 | 0.170475008 | 0.299162549 | 0.005725087 |
| TP19-46 - 12 | 1730.9 | 41.2 | 1861.2 | 39.8 | 1800.7 | 67.2 | 93 | 4.891231594 | 0.182655891 | 0.308001464 | 0.007337497 |
| TP19-46 - 63 | 1750.7 | 33.6 | 1889.7 | 37.9 | 1824.9 | 67.4 | 93 | 5.03288587 | 0.185799571 | 0.312042886 | 0.005987258 |
| TP19-46 - 66 | 1494.9 | 35.2 | 1624.3 | 35.6 | 1558.8 | 61.1 | 92 | 3.642092381 | 0.142794732 | 0.26098435 | 0.006138224 |
| TP19-46 - 99 | 1703.6 | 40.5 | 1877.1 | 26.5 | 1792.6 | 66.6 | 91 | 4.844123191 | 0.180055197 | 0.302478917 | 0.007182657 |
| TP19-46 - 93 | 1721.4 | 33.7 | 1898.6 | 28.1 | 1812.5 | 61.4 | 91 | 4.959575319 | 0.168031172 | 0.306080245 | 0.005985503 |
| TP19-46 - 107 | 1697.3 | 35.8 | 1874.7 | 37.0 | 1787.7 | 66.5 | 91 | 4.816283942 | 0.179110571 | 0.301209555 | 0.006353539 |
| TP19-46 - 150 | 1715.6 | 36.4 | 1897.7 | 35.8 | 1808.6 | 65.3 | 90 | 4.937188523 | 0.178139467 | 0.304911511 | 0.006461051 |
| TP19-46 - 127 | 1628.1 | 32.4 | 1809.6 | 26.8 | 1718.6 | 59.2 | 90 | 4.433378997 | 0.152712716 | 0.287318298 | 0.005719089 |
| TP19-46 - 40 | 1833.5 | 45.5 | 2063.1 | 41.1 | 1955.0 | 77.0 | 89 | 5.857598719 | 0.230785999 | 0.328986571 | 0.008173198 |
| TP19-46 - 22 | 1474.9 | 30.4 | 1667.7 | 37.3 | 1565.5 | 59.2 | 88 | 3.672750425 | 0.138941324 | 0.257091474 | 0.005295496 |
| TP19-46 - 56 | 1604.4 | 38.2 | 1816.0 | 41.2 | 1708.6 | 67.5 | 88 | 4.380143854 | 0.172962552 | 0.282592933 | 0.006728957 |
| TP19-46 - 109 | 1620.0 | 34.2 | 1879.0 | 33.6 | 1745.2 | 64.0 | 86 | 4.577748844 | 0.167935265 | 0.285699594 | 0.006032922 |
| TP19-46 - 95 | 1597.1 | 44.5 | 1856.0 | 35.3 | 1724.9 | 69.5 | 86 | 4.46697768 | 0.179863233 | 0.28114128 | 0.007837762 |
| TP19-46 - 138 | 2635.6 | 166.1 | 3069.1 | 460.3 | 2900.6 | 712.3 | 86 | 16.40277608 | 4.028338404 | 0.505092034 | 0.031826253 |
| TP19-46 - 1 | 1547.5 | 33.4 | 1850.5 | 38.3 | 1690.2 | 63.0 | 84 | 4.283316063 | 0.159555649 | 0.271324537 | 0.005855514 |
| TP19-46 - 152 | 1578.7 | 64.0 | 1920.0 | 39.1 | 1741.4 | 78.5 | 82 | 4.557019835 | 0.205384667 | 0.277493685 | 0.011242686 |
| TP19-46 - 72 | 1537.0 | 41.5 | 1886.5 | 38.8 | 1700.9 | 62.2 | 81 | 4.339428601 | 0.158807688 | 0.269252136 | 0.007273906 |
| TP19-46 - 73 | 1468.7 | 33.0 | 1811.8 | 38.7 | 1624.7 | 60.4 | 81 | 3.953284158 | 0.146914371 | 0.255883822 | 0.00574112 |
| TP19-46 - 122 | 1735.8 | 35.9 | 2141.9 | 67.3 | 1938.4 | 100.8 | 81 | 5.746866178 | 0.298778932 | 0.309004983 | 0.006392233 |
| TP19-46 - 65 | 1596.6 | 41.0 | 2000.4 | 34.8 | 1788.7 | 67.9 | 80 | 4.821754278 | 0.182974696 | 0.281033616 | 0.007224037 |
| TP19-46 - 133 | 1532.7 | 28.1 | 1925.2 | 31.6 | 1715.2 | 59.7 | 80 | 4.415070117 | 0.153652112 | 0.268406743 | 0.004926938 |
| TP19-46 - 31 | 1493.1 | 45.1 | 1881.3 | 32.5 | 1671.7 | 64.6 | 79 | 4.188189484 | 0.161852451 | 0.260642841 | 0.007877165 |
| TP19-46 - 120 | 1466.9 | 32.9 | 1848.8 | 31.0 | 1639.9 | 61.3 | 79 | 4.028066792 | 0.150691986 | 0.25551503 | 0.005731635 |
| TP19-46 - 136 | 1460.3 | 33.2 | 1898.4 | 29.6 | 1658.4 | 61.4 | 77 | 4.120651703 | 0.152615463 | 0.254230996 | 0.005775398 |
| TP19-46 - 50 | 1490.6 | 52.1 | 1939.7 | 48.6 | 1695.9 | 76.3 | 77 | 4.313160774 | 0.193930582 | 0.260142935 | 0.009087745 |
| TP19-46 - 39 | 1618.2 | 46.3 | 2117.5 | 51.1 | 1858.9 | 77.9 | 76 | 5.238259144 | 0.219602316 | 0.285338584 | 0.008168962 |
| TP19-46 - 57 | 1453.0 | 59.8 | 1927.7 | 34.1 | 1666.7 | 75.0 | 75 | 4.16283248 | 0.18742195 | 0.252811246 | 0.010411437 |
| TP19-46 - 6 | 1385.5 | 52.7 | 1856.1 | 62.0 | 1595.8 | 78.8 | 75 | 3.814237304 | 0.188326966 | 0.239775744 | 0.009114934 |
| TP19-46 - 23 | 1412.2 | 30.6 | 1892.7 | 39.5 | 1626.0 | 61.3 | 75 | 3.95984245 | 0.149344238 | 0.244911573 | 0.00531012 |
| TP19-46 - 85 | 1883.0 | 45.3 | 2527.6 | 34.8 | 2218.6 | 78.1 | 74 | 7.890785996 | 0.277705833 | 0.339237684 | 0.008155209 |
| TP19-46 - 78 | 1536.3 | 69.8 | 2095.1 | 35.7 | 1796.2 | 89.5 | 73 | 4.864939334 | 0.242516552 | 0.26912113 | 0.012229568 |
| TP19-46 - 134 | 1332.3 | 29.5 | 1871.5 | 32.3 | 1563.9 | 59.0 | 71 | 3.665434909 | 0.138241556 | 0.229582235 | 0.005086595 |
| TP19-46 - 98 | 1368.7 | 43.6 | 1950.6 | 44.8 | 1626.6 | 64.1 | 70 | 3.962791906 | 0.15609599 | 0.23654769 | 0.007537491 |
| TP19-46 - 46 | 2058.6 | 49.9 | 3041.7 | 59.9 | 2603.6 | 99.3 | 68 | 11.98907445 | 0.457222839 | 0.376211251 | 0.009113511 |
| TP19-46 - 139 | 1296.5 | 62.5 | 1921.4 | 53.7 | 1559.7 | 91.8 | 67 | 3.646154041 | 0.214706183 | 0.222773168 | 0.010746765 |

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| TP19-46 - 113 | 1664.1 | 35.6 | 2512.7 | 35.9 | 2085.1 | 75.5 | 66 | 6.794878907 | 0.246156405 | 0.294526803 | 0.006300876 |
| TP19-46 - 104 | 1260.4 | 49.8 | 1918.8 | 44.4 | 1535.8 | 65.2 | 66 | 3.538004226 | 0.150101502 | 0.215945232 | 0.008527659 |
| TP19-46 - 47 | 1347.0 | 33.6 | 2089.0 | 41.2 | 1672.9 | 63.6 | 64 | 4.19442216 | 0.159545243 | 0.23238372 | 0.005790169 |
| TP19-46 - 8 | 1245.1 | 38.6 | 1965.6 | 35.1 | 1546.7 | 63.8 | 63 | 3.587334364 | 0.148078447 | 0.213068565 | 0.00660751 |
| TP19-46 - 49 | 1207.8 | 44.0 | 1930.3 | 44.0 | 1503.8 | 71.0 | 63 | 3.397548536 | 0.160374126 | 0.20605815 | 0.007509261 |
| TP19-46 - 147 | 1555.6 | 89.6 | 2527.5 | 49.9 | 2023.8 | 137.0 | 62 | 6.338863608 | 0.429029484 | 0.272927518 | 0.015719558 |
| TP19-46 - 83 | 1102.3 | 28.8 | 1804.9 | 28.4 | 1374.1 | 52.6 | 61 | 2.870139743 | 0.109792623 | 0.18649086 | 0.004864866 |
| TP19-46 - 114 | 1100.7 | 31.5 | 1819.7 | 47.6 | 1379.2 | 61.2 | 60 | 2.889431349 | 0.128121177 | 0.186194538 | 0.005328666 |
| TP19-46 - 129 | 1139.4 | 49.7 | 1897.3 | 38.9 | 1440.6 | 78.8 | 60 | 3.132072514 | 0.171397232 | 0.193327449 | 0.008426749 |
| TP19-46 - 11 | 1178.4 | 33.0 | 2015.2 | 30.7 | 1520.6 | 58.9 | 58 | 3.470755769 | 0.134378798 | 0.200578812 | 0.005617282 |
| TP19-46 - 64 | 1127.3 | 23.8 | 1955.8 | 40.2 | 1458.8 | 52.9 | 58 | 3.206898386 | 0.116317408 | 0.191097741 | 0.004039305 |
| TP19-46 - 44 | 1149.3 | 25.4 | 2009.5 | 49.4 | 1497.5 | 61.0 | 57 | 3.370358719 | 0.137283927 | 0.195171101 | 0.004306319 |
| TP19-46 - 77 | 1107.9 | 54.1 | 1952.1 | 42.6 | 1439.5 | 70.0 | 57 | 3.127733918 | 0.152065504 | 0.187513241 | 0.009158941 |
| TP19-46 - 100 | 1049.4 | 61.1 | 1913.6 | 37.7 | 1376.7 | 84.6 | 55 | 2.879961864 | 0.177059131 | 0.176785207 | 0.010298941 |
| TP19-46 - 149 | 1025.0 | 82.7 | 1914.3 | 31.6 | 1359.0 | 109.9 | 54 | 2.812909097 | 0.227565032 | 0.172349666 | 0.013899859 |
| TP19-46 - 76 | 931.0 | 27.7 | 1774.0 | 31.9 | 1227.7 | 48.8 | 52 | 2.350525462 | 0.093364636 | 0.155373523 | 0.004629519 |
| TP19-46 - 20 | 997.3 | 87.2 | 1935.6 | 42.9 | 1345.9 | 108.9 | 52 | 2.76416992 | 0.223645205 | 0.167306918 | 0.014623874 |
| TP19-46 - 130 | 1005.8 | 34.2 | 1976.0 | 30.5 | 1370.9 | 56.8 | 51 | 2.857881718 | 0.118492577 | 0.168856406 | 0.005748709 |
| TP19-46 - 101 | 993.7 | 32.1 | 2072.6 | 40.4 | 1401.5 | 60.6 | 48 | 2.976125123 | 0.128620691 | 0.166655631 | 0.005390747 |
| TP19-46 - 16 | 910.3 | 48.9 | 2011.4 | 44.7 | 1305.3 | 80.8 | 45 | 2.616736148 | 0.161958118 | 0.151668982 | 0.008145511 |
| TP19-46 - 75 | 876.7 | 75.6 | 2001.3 | 51.3 | 1271.1 | 103.9 | 44 | 2.496897604 | 0.204009438 | 0.145676784 | 0.01256491 |
| TP19-46 - 13 | 894.1 | 21.3 | 2075.9 | 35.8 | 1319.0 | 48.6 | 43 | 2.665656692 | 0.098281703 | 0.148783805 | 0.003538848 |
| TP19-46 - 38 | 852.0 | 35.5 | 2022.7 | 53.4 | 1247.5 | 58.5 | 42 | 2.416483052 | 0.113296949 | 0.141302387 | 0.005887855 |
| TP19-46 - 58 | 866.2 | 36.6 | 2060.1 | 39.6 | 1279.1 | 61.0 | 42 | 2.524442974 | 0.120478153 | 0.143822545 | 0.006069559 |
| TP19-46 - 111 | 764.0 | 70.9 | 1950.1 | 62.8 | 1148.8 | 103.3 | 39 | 2.099940444 | 0.188914254 | 0.125824817 | 0.01168436 |
| TP19-46 - 142 | 794.7 | 18.6 | 2030.0 | 34.2 | 1208.6 | 45.5 | 39 | 2.288054641 | 0.086146478 | 0.131199747 | 0.003075469 |
| TP19-46 - 87 | 709.8 | 60.0 | 1940.7 | 46.0 | 1092.8 | 99.7 | 37 | 1.933606734 | 0.176449504 | 0.116393499 | 0.009846907 |
| TP19-46 - 86 | 768.1 | 22.3 | 2178.2 | 42.5 | 1242.7 | 47.9 | 35 | 2.400202368 | 0.092479463 | 0.126548086 | 0.003674329 |
| TP19-46 - 34 | 801.3 | 23.2 | 2295.7 | 35.3 | 1326.1 | 48.5 | 35 | 2.691441269 | 0.098521407 | 0.132365822 | 0.00382899 |
| TP19-46 - 21 | 704.4 | 37.3 | 2208.1 | 38.2 | 1194.5 | 65.4 | 32 | 2.242654556 | 0.122751326 | 0.115458847 | 0.006113414 |
| TP19-46 - 153 | 618.0 | 17.9 | 2069.6 | 38.9 | 1042.9 | 43.9 | 30 | 1.792850375 | 0.075421769 | 0.100615092 | 0.002910008 |
| TP19-46 - 25 | 671.6 | 19.9 | 2315.2 | 35.6 | 1199.3 | 44.6 | 29 | 2.258099962 | 0.083942351 | 0.109796191 | 0.003248141 |
| TP19-46 - 121 | 708.2 | 15.3 | 2493.8 | 33.4 | 1315.0 | 46.7 | 28 | 2.651204714 | 0.09423634 | 0.116117861 | 0.002503933 |
| TP19-46 - 118 | 578.8 | 30.6 | 2103.7 | 52.5 | 1009.2 | 56.6 | 28 | 1.701894873 | 0.095514128 | 0.093947065 | 0.00496621 |
| TP19-46 - 9 | 674.6 | 23.8 | 2532.2 | 39.1 | 1294.2 | 57.4 | 27 | 2.577230158 | 0.114327735 | 0.110318965 | 0.003892868 |
| TP19-46 - 128 | 581.4 | 27.8 | 2193.3 | 52.6 | 1046.4 | 54.2 | 27 | 1.8026721 | 0.093428185 | 0.094382314 | 0.004509144 |
| TP19-46 - 74 | 580.7 | 12.7 | 2197.9 | 34.3 | 1049.0 | 39.0 | 26 | 1.809875914 | 0.067246029 | 0.094267094 | 0.002060366 |
| TP19-46 - 59 | 510.2 | 39.8 | 2089.7 | 50.8 | 924.4 | 73.4 | 24 | 1.485380569 | 0.117859364 | 0.0823635 | 0.006418837 |
| TP19-46 - 126 | 523.3 | 38.3 | 2150.2 | 50.2 | 965.5 | 59.8 | 24 | 1.587888721 | 0.098360503 | 0.084555413 | 0.006195964 |
| TP19-46 - 148 | 511.2 | 18.1 | 2104.7 | 43.2 | 930.4 | 41.5 | 24 | 1.500098816 | 0.066980348 | 0.082527743 | 0.002917733 |
| TP19-46 - 15 | 530.3 | 13.5 | 2273.3 | 36.2 | 1015.9 | 41.3 | 23 | 1.719615057 | 0.069954612 | 0.085742122 | 0.002185308 |
| TP19-46 - 60 | 498.3 | 33.8 | 2184.4 | 44.7 | 943.3 | 57.6 | 23 | 1.531922346 | 0.093505469 | 0.080373031 | 0.005446308 |
| TP19-46 - 94 | 612.9 | 14.6 | 2743.8 | 58.5 | 1314.7 | 51.4 | 22 | 2.650218675 | 0.103618829 | 0.099740233 | 0.002378249 |
| TP19-46 - 112 | 441.9 | 14.4 | 2051.2 | 48.2 | 824.5 | 33.7 | 22 | 1.252420771 | 0.051246373 | 0.070951465 | 0.00231902 |
| TP19-46 - 137 | 481.5 | 13.7 | 2256.3 | 38.6 | 946.4 | 39.6 | 21 | 1.539852505 | 0.064376149 | 0.077548924 | 0.002201302 |
| TP19-46 - 62 | 445.3 | 28.9 | 2282.4 | 54.0 | 907.4 | 51.3 | 20 | 1.443949958 | 0.081607348 | 0.071516658 | 0.004635843 |
| TP19-46 - 14 | 380.8 | 16.4 | 2111.1 | 88.3 | 760.7 | 47.8 | 18 | 1.115332846 | 0.070150782 | 0.060844861 | 0.002626639 |

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| TP19-46 - 81 | 666.0 | 58.4 | 3857.8 | 78.8 | 1947.2 | 193.6 | 17 | 5.805178622 | 0.577132427 | 0.10884706 | 0.009543664 |
| TP19-46 - 144 | 398.3 | 14.8 | 2359.8 | 49.1 | 864.2 | 40.2 | 17 | 1.342340045 | 0.06244972 | 0.063730075 | 0.002370671 |
| TP19-46 - 106 | 360.1 | 10.0 | 2282.9 | 43.8 | 781.3 | 32.8 | 16 | 1.158545388 | 0.048711833 | 0.05745592 | 0.001593675 |
| TP19-46 - 96 | 386.0 | 28.5 | 2598.2 | 32.2 | 930.4 | 69.6 | 15 | 1.499993362 | 0.112275353 | 0.061703152 | 0.004548328 |
| TP19-46 - 5 | 409.7 | 11.8 | 2870.4 | 40.2 | 1074.0 | 42.7 | 14 | 1.879708103 | 0.074650213 | 0.065618063 | 0.001896251 |
| TP19-46 - 61 | 335.3 | 8.0 | 2444.5 | 58.5 | 793.0 | 29.8 | 14 | 1.183606805 | 0.044479316 | 0.053397127 | 0.001277651 |
| TP19-46 - 51 | 306.0 | 17.8 | 2248.9 | 60.5 | 681.5 | 38.4 | 14 | 0.95653687 | 0.053935 | 0.048612512 | 0.002832272 |
| TP19-46 - 155 | 306.3 | 14.8 | 2512.5 | 55.1 | 765.8 | 35.5 | 12 | 1.125942454 | 0.052208433 | 0.048662287 | 0.00235781 |
| TP19-46 - 28 | 238.4 | 31.3 | 2097.9 | 79.5 | 529.2 | 62.2 | 11 | 0.683998038 | 0.080394028 | 0.037669685 | 0.004953141 |
| TP19-46 - 146 | 290.0 | 5.9 | 2789.5 | 33.2 | 825.7 | 27.8 | 10 | 1.255096818 | 0.042243281 | 0.046014091 | 0.000936522 |
| TP19-46 - 41 | 270.7 | 11.8 | 2614.5 | 51.4 | 729.9 | 32.0 | 10 | 1.052104693 | 0.046096554 | 0.0428922 | 0.001875497 |
| TP19-46 - 88 | 245.7 | 5.8 | 2839.4 | 40.2 | 749.4 | 25.4 | 9 | 1.091932785 | 0.037075794 | 0.038851883 | 0.000917952 |
| TP19-46 - 37 | 223.1 | 7.1 | 2652.1 | 43.4 | 643.2 | 25.6 | 8 | 0.884140455 | 0.035188204 | 0.035210011 | 0.001122974 |
| TP19-46 - 92 | 239.1 | 5.9 | 2926.9 | 52.8 | 763.9 | 31.7 | 8 | 1.122017687 | 0.046505208 | 0.037791985 | 0.000927823 |
| TP19-46 - 91 | 224.9 | 15.0 | 2785.4 | 43.9 | 687.7 | 43.0 | 8 | 0.968547242 | 0.060608255 | 0.035508523 | 0.002364178 |
| TP19-46 - 36 | 221.7 | 6.5 | 2749.7 | 45.3 | 667.9 | 27.2 | 8 | 0.930588768 | 0.037876091 | 0.034991089 | 0.001032351 |
| TP19-46 - 108 | 237.8 | 5.9 | 2982.6 | 54.4 | 779.3 | 27.5 | 8 | 1.154327382 | 0.040799238 | 0.037584654 | 0.000934501 |
| TP19-46 - 97 | 207.7 | 8.0 | 2651.9 | 51.4 | 608.7 | 27.0 | 8 | 0.821160333 | 0.036406255 | 0.032746529 | 0.001264921 |
| TP19-46 - 105 | 193.6 | 7.9 | 2781.6 | 55.4 | 612.0 | 29.6 | 7 | 0.827042529 | 0.039959742 | 0.030481763 | 0.001244828 |
| TP19-46 - 30 | 189.7 | 6.3 | 3121.7 | 178.5 | 703.8 | 55.3 | 6 | 1.000038054 | 0.07863882 | 0.029864214 | 0.000995816 |
| TP19-46 - 131 | 181.6 | 11.5 | 3069.0 | 155.7 | 666.1 | 72.3 | 6 | 0.927003781 | 0.100580557 | 0.028569588 | 0.001813544 |
| TP19-46 - 90 | 162.6 | 5.7 | 2810.4 | 46.7 | 542.2 | 22.5 | 6 | 0.705779114 | 0.029294567 | 0.025546989 | 0.000896232 |
| TP19-46 - 84 | 169.1 | 4.5 | 2973.5 | 55.7 | 603.4 | 23.2 | 6 | 0.811615804 | 0.031246576 | 0.026583136 | 0.000701323 |
| TP19-46 - 10 | 167.9 | 6.7 | 3002.7 | 53.1 | 608.4 | 24.9 | 6 | 0.820608151 | 0.033608632 | 0.026383561 | 0.001057637 |
| TP19-46 - 18 | 164.2 | 5.8 | 3046.3 | 62.3 | 610.8 | 26.2 | 5 | 0.82491773 | 0.035376469 | 0.025802196 | 0.000910564 |
| TP19-46 - 141 | 166.1 | 5.7 | 3182.3 | 40.7 | 656.8 | 28.4 | 5 | 0.909491489 | 0.039281785 | 0.02610829 | 0.000893254 |
| TP19-46 - 115 | 139.3 | 6.7 | 2677.6 | 57.0 | 449.0 | 23.5 | 5 | 0.556102146 | 0.029092181 | 0.021843461 | 0.001052565 |
| TP19-46 - 80 | 124.2 | 2.5 | 3176.3 | 41.8 | 523.4 | 17.6 | 4 | 0.674493015 | 0.022625524 | 0.019450104 | 0.000387865 |
| TP19-46 - 17 | 114.2 | 4.4 | 2966.2 | 69.8 | 440.8 | 19.5 | 4 | 0.543673637 | 0.024068175 | 0.01786611 | 0.000695862 |
| TP19-46 - 103 | 105.1 | 3.6 | 2982.9 | 65.5 | 414.8 | 17.7 | 4 | 0.50455622 | 0.021476582 | 0.016431839 | 0.000566952 |
| TP19-46 - 4 | 105.9 | 4.0 | 3026.2 | 79.3 | 426.5 | 22.2 | 3 | 0.522077371 | 0.027209112 | 0.016564627 | 0.000623362 |
| TP19-46 - 42 | 104.4 | 4.4 | 3032.6 | 53.4 | 423.5 | 19.8 | 3 | 0.517517929 | 0.024240058 | 0.016332495 | 0.000684564 |
| TP19-46 - 7 | 81.9 | 1.9 | 3215.2 | 74.7 | 379.7 | 14.9 | 3 | 0.453438208 | 0.017749658 | 0.012779569 | 0.000290799 |
| TP19-46 - 89 | 67.3 | 6.9 | 2894.6 | 124.1 | 273.2 | 17.9 | 2 | 0.308718925 | 0.020220507 | 0.010494438 | 0.001075737 |
| TP19-46 - 135 | 72.3 | 2.8 | 3259.2 | 66.2 | 350.2 | 15.4 | 2 | 0.411853272 | 0.01805743 | 0.011272715 | 0.00043242 |
| TP19-46 - 110 | 22.6 | 0.7 | 3691.4 | 83.2 | 159.1 | 6.8 | 1 | 0.169603473 | 0.007249564 | 0.003509821 | 0.000103918 |
| TP19-46 - 79 | 19.6 | 0.6 | 3717.1 | 94.3 | 141.0 | 6.3 | 1 | 0.149010667 | 0.006660633 | 0.003038281 | 9.68139E-05 |
| TP19-47 - 10 | 1958.0 | 38.3 | 1873.9 | 33.6 | 1927.1 | 67.6 | 104 | 5.671951675 | 0.199056692 | 0.354918289 | 0.006937395 |
| TP19-47 - 105 | 1855.2 | 34.2 | 1793.5 | 33.2 | 1835.2 | 64.6 | 103 | 5.094646036 | 0.179309287 | 0.333484823 | 0.006147665 |
| TP19-47 - 4 | 2065.5 | 42.8 | 2005.1 | 46.3 | 2044.3 | 79.8 | 103 | 6.48841305 | 0.2533393 | 0.377692111 | 0.007817725 |
| TP19-47 - 89 | 1917.2 | 43.3 | 1864.6 | 43.3 | 1901.0 | 73.2 | 103 | 5.502653321 | 0.211847286 | 0.346370181 | 0.007826705 |
| TP19-47 - 72 | 1672.2 | 33.0 | 1626.5 | 37.5 | 1660.8 | 62.6 | 103 | 4.132615166 | 0.155849944 | 0.296154803 | 0.005839516 |
| TP19-47 - 157 | 1876.6 | 36.4 | 1825.5 | 39.2 | 1860.9 | 68.7 | 103 | 5.250975386 | 0.193731867 | 0.337904889 | 0.006553354 |
| TP19-47 - 41 | 1859.9 | 33.7 | 1817.4 | 30.2 | 1849.3 | 63.9 | 102 | 5.179766731 | 0.178981276 | 0.33445829 | 0.006053692 |
| TP19-47 - 150 | 1848.6 | 35.0 | 1814.5 | 37.5 | 1841.7 | 67.1 | 102 | 5.133530459 | 0.186993293 | 0.332103586 | 0.006295313 |
| TP19-47 - 91 | 2529.1 | 46.7 | 2484.5 | 34.1 | 2514.2 | 83.8 | 102 | 10.8948313 | 0.36323832 | 0.480415446 | 0.008875414 |
| TP19-47 - 159 | 1886.3 | 37.4 | 1853.6 | 34.5 | 1879.3 | 65.8 | 102 | 5.364866558 | 0.187901804 | 0.339919885 | 0.006741793 |

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| TP19-47 - 8 | 1653.7 | 33.7 | 1629.0 | 35.1 | 1652.4 | 60.6 | 102 | 4.090359061 | 0.150018099 | 0.292445753 | 0.005957235 |
| TP19-47 - 70 | 2121.3 | 39.2 | 2090.6 | 32.6 | 2115.9 | 72.1 | 101 | 7.035289226 | 0.239566753 | 0.389661359 | 0.007206034 |
| TP19-47 - 108 | 2225.1 | 44.1 | 2195.2 | 37.7 | 2218.6 | 77.8 | 101 | 7.890375543 | 0.276591897 | 0.412219917 | 0.008164682 |
| TP19-47 - 114 | 2209.8 | 43.6 | 2185.4 | 42.3 | 2206.4 | 81.9 | 101 | 7.784615677 | 0.289019887 | 0.40888361 | 0.008071394 |
| TP19-47 - 77 | 2171.1 | 44.4 | 2149.5 | 50.9 | 2169.4 | 82.6 | 101 | 7.47013079 | 0.284411247 | 0.40045002 | 0.008191258 |
| TP19-47 - 144 | 2763.4 | 51.5 | 2738.9 | 35.5 | 2758.7 | 91.2 | 101 | 14.13275422 | 0.467301123 | 0.535212385 | 0.009969164 |
| TP19-47 - 6 | 1809.4 | 34.2 | 1796.1 | 35.0 | 1812.6 | 67.2 | 101 | 4.960574873 | 0.183869847 | 0.324037217 | 0.006131616 |
| TP19-47 - 109 | 1805.8 | 34.7 | 1802.2 | 35.1 | 1812.8 | 64.4 | 100 | 4.961779295 | 0.176200918 | 0.323288697 | 0.006218005 |
| TP19-47 - 146 | 1803.2 | 35.9 | 1800.9 | 34.6 | 1810.4 | 67.4 | 100 | 4.947633165 | 0.18424469 | 0.322767779 | 0.006424319 |
| TP19-47 - 96 | 1801.1 | 37.1 | 1800.0 | 40.4 | 1809.2 | 68.6 | 100 | 4.940399923 | 0.187415487 | 0.322327303 | 0.006633859 |
| TP19-47 - 56 | 1879.2 | 35.1 | 1881.4 | 25.1 | 1889.1 | 63.6 | 100 | 5.426749369 | 0.18261533 | 0.338453638 | 0.006315612 |
| TP19-47 - 11 | 1780.9 | 33.2 | 1790.8 | 28.3 | 1794.9 | 62.5 | 99 | 4.85713284 | 0.169090007 | 0.318202066 | 0.005937655 |
| TP19-47 - 16 | 1911.3 | 34.9 | 1932.4 | 37.1 | 1931.1 | 69.3 | 99 | 5.698286852 | 0.204619254 | 0.345135644 | 0.006303594 |
| TP19-47 - 9 | 1774.8 | 36.9 | 1803.1 | 45.9 | 1797.8 | 70.2 | 98 | 4.873967869 | 0.190425726 | 0.316945137 | 0.006598381 |
| TP19-47 - 126 | 2052.4 | 40.6 | 2089.8 | 42.0 | 2080.9 | 76.6 | 98 | 6.763379454 | 0.249123744 | 0.374890713 | 0.007411929 |
| TP19-47 - 107 | 1770.1 | 33.1 | 1806.6 | 27.8 | 1795.7 | 61.0 | 98 | 4.862066689 | 0.16503189 | 0.315989657 | 0.00590303 |
| TP19-47 - 155 | 1785.2 | 36.1 | 1842.1 | 46.4 | 1820.4 | 75.1 | 97 | 5.006567804 | 0.206557221 | 0.319064708 | 0.006447406 |
| TP19-47 - 25 | 2421.0 | 50.7 | 2501.5 | 48.8 | 2474.9 | 89.7 | 97 | 10.44307129 | 0.378449359 | 0.455808942 | 0.009547404 |
| TP19-47 - 103 | 2400.9 | 48.0 | 2491.7 | 49.7 | 2459.8 | 91.8 | 96 | 10.27459775 | 0.383606739 | 0.451264729 | 0.009017821 |
| TP19-47 - 139 | 2222.1 | 45.4 | 2322.3 | 56.2 | 2284.7 | 87.6 | 96 | 8.48865664 | 0.325620555 | 0.411572037 | 0.008416313 |
| TP19-47 - 88 | 1815.9 | 37.3 | 1900.6 | 41.2 | 1864.4 | 68.9 | 96 | 5.272234117 | 0.194763256 | 0.325378293 | 0.006688075 |
| TP19-47 - 93 | 2385.9 | 51.5 | 2500.2 | 46.9 | 2458.0 | 87.8 | 95 | 10.25489357 | 0.36613795 | 0.447899191 | 0.009670454 |
| TP19-47 - 90 | 1788.8 | 34.7 | 1875.5 | 35.6 | 1838.4 | 65.4 | 95 | 5.113599488 | 0.181998852 | 0.319800791 | 0.006211018 |
| TP19-47 - 149 | 1737.9 | 39.0 | 1824.4 | 40.9 | 1785.4 | 71.6 | 95 | 4.803096436 | 0.192555584 | 0.309424118 | 0.006947385 |
| TP19-47 - 127 | 1761.2 | 34.8 | 1850.3 | 35.4 | 1810.8 | 65.2 | 95 | 4.949949891 | 0.178185634 | 0.314179565 | 0.006200149 |
| TP19-47 - 123 | 1694.1 | 32.0 | 1837.1 | 30.9 | 1768.3 | 61.6 | 92 | 4.705867875 | 0.163999483 | 0.300573186 | 0.005681059 |
| TP19-47 - 100 | 1668.0 | 37.4 | 1823.7 | 45.7 | 1746.4 | 71.5 | 91 | 4.584047496 | 0.187700129 | 0.295305023 | 0.006626969 |
| TP19-47 - 111 | 1809.0 | 48.3 | 1980.0 | 32.0 | 1898.7 | 75.5 | 91 | 5.487571251 | 0.218266392 | 0.323945158 | 0.008649542 |
| TP19-47 - 86 | 1713.1 | 50.8 | 1879.5 | 35.4 | 1798.2 | 75.3 | 91 | 4.876677533 | 0.204143515 | 0.30441252 | 0.009032069 |
| TP19-47 - 73 | 1663.8 | 33.0 | 1833.7 | 31.3 | 1748.9 | 62.4 | 91 | 4.597986522 | 0.164058438 | 0.294467154 | 0.005840878 |
| TP19-47 - 42 | 1703.7 | 46.0 | 1883.5 | 50.4 | 1797.9 | 75.1 | 90 | 4.874781137 | 0.203705212 | 0.302509975 | 0.008169357 |
| TP19-47 - 17 | 1647.3 | 38.6 | 1824.7 | 40.8 | 1736.4 | 67.2 | 90 | 4.529246793 | 0.175179926 | 0.291147598 | 0.006823952 |
| TP19-47 - 140 | 1729.6 | 37.7 | 1935.8 | 38.7 | 1832.9 | 70.8 | 89 | 5.080741825 | 0.196390504 | 0.30775484 | 0.006702201 |
| TP19-47 - 64 | 1695.7 | 42.0 | 1904.3 | 30.6 | 1801.9 | 67.6 | 89 | 4.898007246 | 0.183851008 | 0.300891286 | 0.00744965 |
| TP19-47 - 63 | 1594.8 | 33.2 | 1814.5 | 32.5 | 1700.7 | 62.0 | 88 | 4.338508734 | 0.158069895 | 0.280681013 | 0.005843683 |
| TP19-47 - 76 | 1585.5 | 44.8 | 1851.4 | 30.6 | 1712.3 | 64.3 | 86 | 4.39963165 | 0.165113719 | 0.278845211 | 0.007877139 |
| TP19-47 - 151 | 1547.0 | 31.7 | 1813.4 | 43.5 | 1673.8 | 64.9 | 85 | 4.198800971 | 0.162809988 | 0.271215392 | 0.005562101 |
| TP19-47 - 21 | 1666.5 | 58.5 | 1953.7 | 45.4 | 1804.7 | 84.2 | 85 | 4.914059079 | 0.229265901 | 0.295010015 | 0.010362353 |
| TP19-47 - 154 | 1586.3 | 30.4 | 1869.0 | 34.2 | 1720.0 | 61.4 | 85 | 4.440766235 | 0.158535707 | 0.278993728 | 0.005338559 |
| TP19-47 - 112 | 1524.5 | 31.1 | 1801.5 | 45.6 | 1651.9 | 65.4 | 85 | 4.088015186 | 0.161750519 | 0.266785552 | 0.005441461 |
| TP19-47 - 148 | 1519.9 | 27.9 | 1806.3 | 31.2 | 1652.3 | 57.6 | 84 | 4.089842277 | 0.142468477 | 0.26588283 | 0.004884085 |
| TP19-47 - 152 | 1504.2 | 33.0 | 1788.5 | 32.9 | 1636.5 | 59.9 | 84 | 4.011547247 | 0.146839406 | 0.262804559 | 0.005765588 |
| TP19-47 - 47 | 1566.7 | 38.0 | 1865.4 | 30.7 | 1707.5 | 63.5 | 84 | 4.374225716 | 0.162696067 | 0.275107144 | 0.006668614 |
| TP19-47 - 134 | 1600.3 | 43.6 | 1982.7 | 60.9 | 1781.6 | 77.9 | 81 | 4.781194843 | 0.209018691 | 0.281783642 | 0.007670209 |
| TP19-47 - 141 | 1431.3 | 53.0 | 1790.4 | 47.8 | 1590.0 | 84.5 | 80 | 3.786908797 | 0.201139271 | 0.248602137 | 0.009202577 |
| TP19-47 - 125 | 1957.3 | 42.7 | 2543.5 | 37.2 | 2267.8 | 78.5 | 77 | 8.332038317 | 0.288269312 | 0.354756046 | 0.007742928 |
| TP19-47 - 118 | 1445.3 | 44.8 | 1904.3 | 41.5 | 1651.6 | 70.4 | 76 | 4.086596462 | 0.174275999 | 0.251330842 | 0.007798537 |

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| TP19-47 - 71 | 1367.7 | 55.0 | 1828.7 | 45.9 | 1567.4 | 74.7 | 75 | 3.6817168 | 0.175401718 | 0.236359605 | 0.009508309 |
| TP19-47 - 68 | 1885.7 | 51.1 | 2550.0 | 43.0 | 2232.9 | 86.2 | 74 | 8.016931769 | 0.309458587 | 0.339794408 | 0.009209322 |
| TP19-47 - 14 | 1373.8 | 37.6 | 1872.2 | 39.9 | 1591.5 | 61.9 | 73 | 3.793936296 | 0.147507865 | 0.237516569 | 0.006503436 |
| TP19-47 - 147 | 1507.1 | 44.0 | 2142.8 | 46.0 | 1799.9 | 80.3 | 70 | 4.886400636 | 0.218007336 | 0.263380817 | 0.007695988 |
| TP19-47 - 51 | 1272.6 | 32.0 | 1821.4 | 30.5 | 1501.5 | 59.2 | 70 | 3.387596713 | 0.133652258 | 0.218247249 | 0.005485502 |
| TP19-47 - 83 | 1413.4 | 27.7 | 2039.4 | 45.4 | 1692.9 | 61.7 | 69 | 4.297385801 | 0.156536976 | 0.245144797 | 0.0047967 |
| TP19-47 - 145 | 1288.6 | 27.7 | 1887.8 | 38.1 | 1540.6 | 57.1 | 68 | 3.559704578 | 0.131838255 | 0.221274507 | 0.004763308 |
| TP19-47 - 113 | 1160.4 | 25.2 | 1730.6 | 41.2 | 1383.9 | 52.7 | 67 | 2.907510768 | 0.110810951 | 0.197231294 | 0.004277505 |
| TP19-47 - 81 | 1641.8 | 52.4 | 2475.5 | 39.3 | 2051.7 | 89.4 | 66 | 6.542637109 | 0.285209406 | 0.290060326 | 0.009261505 |
| TP19-47 - 143 | 1283.7 | 53.2 | 1942.8 | 42.0 | 1561.7 | 77.8 | 66 | 3.655422432 | 0.182042085 | 0.220336981 | 0.009125764 |
| TP19-47 - 160 | 1244.3 | 39.1 | 1952.2 | 35.6 | 1537.8 | 67.2 | 64 | 3.54720364 | 0.154904584 | 0.212916459 | 0.006690982 |
| TP19-47 - 35 | 1218.7 | 24.5 | 1954.3 | 37.7 | 1521.6 | 54.2 | 62 | 3.475224681 | 0.123865038 | 0.208095422 | 0.004175141 |
| TP19-47 - 102 | 1159.2 | 26.4 | 1872.6 | 45.0 | 1442.6 | 57.0 | 62 | 3.140266735 | 0.124054351 | 0.197008809 | 0.004481536 |
| TP19-47 - 119 | 1123.4 | 27.1 | 1857.2 | 37.9 | 1410.8 | 51.1 | 60 | 3.012638795 | 0.109115269 | 0.19036822 | 0.004589666 |
| TP19-47 - 74 | 1252.8 | 47.2 | 2163.4 | 42.3 | 1641.1 | 76.2 | 58 | 4.034183836 | 0.187261942 | 0.214503594 | 0.008074707 |
| TP19-47 - 115 | 1009.8 | 23.1 | 1762.8 | 41.8 | 1284.3 | 48.0 | 57 | 2.542568816 | 0.095045496 | 0.16957494 | 0.003880333 |
| TP19-47 - 50 | 1048.5 | 28.5 | 1878.9 | 37.5 | 1363.9 | 53.9 | 56 | 2.831348195 | 0.111965013 | 0.176618664 | 0.004793886 |
| TP19-47 - 124 | 1225.1 | 37.3 | 2204.3 | 42.1 | 1639.7 | 71.7 | 56 | 4.027064872 | 0.176150743 | 0.209304941 | 0.00637759 |
| TP19-47 - 60 | 1449.7 | 38.3 | 2611.2 | 31.1 | 1999.8 | 77.7 | 56 | 6.166788899 | 0.239515625 | 0.252174558 | 0.006659772 |
| TP19-47 - 138 | 1056.3 | 37.1 | 1906.9 | 31.7 | 1380.5 | 61.3 | 55 | 2.89452061 | 0.128513833 | 0.178044627 | 0.006256462 |
| TP19-47 - 65 | 1067.2 | 26.2 | 1950.7 | 37.6 | 1409.1 | 50.5 | 55 | 3.006030355 | 0.107739095 | 0.180039643 | 0.004424644 |
| TP19-47 - 75 | 1078.2 | 29.9 | 1974.4 | 34.8 | 1426.7 | 54.7 | 55 | 3.075980447 | 0.117844692 | 0.182056659 | 0.005052229 |
| TP19-47 - 130 | 1019.8 | 27.8 | 1988.5 | 43.8 | 1386.4 | 60.8 | 51 | 2.917333366 | 0.127940706 | 0.171388827 | 0.004678359 |
| TP19-47 - 156 | 972.6 | 25.4 | 1930.2 | 31.7 | 1323.8 | 51.6 | 50 | 2.683042245 | 0.104601838 | 0.16285545 | 0.004260243 |
| TP19-47 - 52 | 922.2 | 22.0 | 1867.9 | 30.1 | 1257.1 | 47.8 | 49 | 2.449037769 | 0.093196817 | 0.153790278 | 0.003667337 |
| TP19-47 - 13 | 950.6 | 18.9 | 1949.5 | 35.4 | 1314.0 | 47.4 | 49 | 2.647789789 | 0.095426914 | 0.158898197 | 0.003163354 |
| TP19-47 - 28 | 903.7 | 27.8 | 1881.2 | 63.2 | 1246.7 | 62.0 | 48 | 2.413779577 | 0.120131707 | 0.150488353 | 0.004635758 |
| TP19-47 - 132 | 1158.2 | 114.5 | 2474.5 | 65.5 | 1715.4 | 194.4 | 47 | 4.416357863 | 0.500533916 | 0.196813643 | 0.019461247 |
| TP19-47 - 2 | 879.8 | 27.2 | 1904.9 | 42.0 | 1235.2 | 54.0 | 46 | 2.375291331 | 0.103831148 | 0.146235441 | 0.004521084 |
| TP19-47 - 120 | 865.3 | 23.6 | 1898.6 | 41.0 | 1219.8 | 51.9 | 46 | 2.324604213 | 0.098986982 | 0.143654338 | 0.003923197 |
| TP19-47 - 7 | 880.3 | 71.3 | 1940.4 | 38.4 | 1249.0 | 99.4 | 45 | 2.421468166 | 0.192757292 | 0.146326205 | 0.011843542 |
| TP19-47 - 94 | 890.4 | 23.1 | 1963.3 | 34.3 | 1268.0 | 50.1 | 45 | 2.486283038 | 0.09821343 | 0.148109681 | 0.003847916 |
| TP19-47 - 106 | 988.4 | 90.6 | 2243.0 | 37.9 | 1471.4 | 132.9 | 44 | 3.259109128 | 0.294445549 | 0.165699935 | 0.015193914 |
| TP19-47 - 66 | 900.2 | 19.6 | 2093.4 | 37.3 | 1330.4 | 47.0 | 43 | 2.707086644 | 0.095687785 | 0.149859465 | 0.003259856 |
| TP19-47 - 104 | 840.0 | 21.2 | 1971.6 | 30.2 | 1226.9 | 46.8 | 43 | 2.347790761 | 0.089631575 | 0.139173635 | 0.003507677 |
| TP19-47 - 79 | 829.9 | 39.1 | 1990.5 | 41.3 | 1226.8 | 59.6 | 42 | 2.347408644 | 0.11412441 | 0.137387572 | 0.006481191 |
| TP19-47 - 133 | 794.8 | 20.1 | 1915.7 | 33.6 | 1163.7 | 43.2 | 41 | 2.145890493 | 0.079683101 | 0.131225003 | 0.00331493 |
| TP19-47 - 87 | 802.6 | 24.8 | 1966.6 | 38.7 | 1190.0 | 48.3 | 41 | 2.228194101 | 0.090482078 | 0.132586287 | 0.004096883 |
| TP19-47 - 122 | 740.5 | 16.1 | 1962.4 | 36.1 | 1129.6 | 43.6 | 38 | 2.041844579 | 0.0787823 | 0.121726575 | 0.002639518 |
| TP19-47 - 5 | 724.8 | 19.5 | 1952.9 | 50.4 | 1111.3 | 48.5 | 37 | 1.987649305 | 0.086720759 | 0.118997352 | 0.003204538 |
| TP19-47 - 95 | 721.5 | 42.8 | 2018.4 | 49.9 | 1132.7 | 68.8 | 36 | 2.051214433 | 0.124522204 | 0.118429708 | 0.007019596 |
| TP19-47 - 57 | 694.4 | 21.6 | 1974.6 | 34.0 | 1089.0 | 42.9 | 35 | 1.922696945 | 0.075703481 | 0.113731034 | 0.003539325 |
| TP19-47 - 39 | 692.2 | 31.2 | 2001.3 | 38.2 | 1097.9 | 55.3 | 35 | 1.948300237 | 0.098158172 | 0.11335597 | 0.005106914 |
| TP19-47 - 26 | 696.7 | 20.8 | 2015.9 | 38.2 | 1107.2 | 45.8 | 35 | 1.975456333 | 0.081726535 | 0.114125165 | 0.003414632 |
| TP19-47 - 97 | 693.4 | 16.4 | 2037.4 | 38.6 | 1111.7 | 40.8 | 34 | 1.988903115 | 0.072933906 | 0.113570595 | 0.002680627 |
| TP19-47 - 22 | 656.2 | 26.3 | 1974.5 | 46.5 | 1048.5 | 48.8 | 33 | 1.808285755 | 0.084091283 | 0.1071475 | 0.004286613 |
| TP19-47 - 1 | 620.7 | 13.6 | 1955.5 | 42.3 | 1003.8 | 39.0 | 32 | 1.687338285 | 0.065568715 | 0.101076353 | 0.002213675 |

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| TP19-47 - 29 | 620.4 | 17.6 | 2003.1 | 45.6 | 1022.0 | 44.8 | 31 | 1.736122873 | 0.076088884 | 0.101029771 | 0.002872503 |
| TP19-47 - 34 | 607.6 | 20.5 | 1964.8 | 39.5 | 994.5 | 41.3 | 31 | 1.662892285 | 0.06901972 | 0.098840543 | 0.003342583 |
| TP19-47 - 80 | 694.3 | 18.7 | 2271.0 | 43.6 | 1204.7 | 45.4 | 31 | 2.275564121 | 0.085782468 | 0.113723475 | 0.003061073 |
| TP19-47 - 153 | 582.6 | 18.7 | 2054.7 | 38.2 | 999.1 | 39.8 | 28 | 1.67507191 | 0.066717896 | 0.094593117 | 0.003040222 |
| TP19-47 - 53 | 569.1 | 19.7 | 2047.5 | 34.1 | 979.6 | 42.9 | 28 | 1.624028017 | 0.071136621 | 0.092300886 | 0.003199901 |
| TP19-47 - 98 | 556.4 | 11.5 | 2014.2 | 45.7 | 952.6 | 35.5 | 28 | 1.555193089 | 0.057907979 | 0.090154228 | 0.001858643 |
| TP19-47 - 12 | 527.5 | 37.5 | 2034.7 | 40.9 | 927.0 | 63.3 | 26 | 1.491698204 | 0.101885176 | 0.085270995 | 0.006065896 |
| TP19-47 - 43 | 537.9 | 12.8 | 2197.9 | 40.3 | 997.3 | 35.5 | 24 | 1.670312428 | 0.059414679 | 0.087025749 | 0.002067533 |
| TP19-47 - 61 | 479.8 | 14.4 | 1987.1 | 40.6 | 852.8 | 33.1 | 24 | 1.316083627 | 0.051139729 | 0.077273893 | 0.002322411 |
| TP19-47 - 135 | 493.7 | 12.1 | 2061.5 | 52.0 | 893.2 | 39.1 | 24 | 1.410144144 | 0.061805384 | 0.079587679 | 0.001955364 |
| TP19-47 - 36 | 588.7 | 43.2 | 2470.4 | 49.0 | 1165.7 | 88.2 | 24 | 2.151941144 | 0.162903207 | 0.095618016 | 0.007011483 |
| TP19-47 - 19 | 482.3 | 11.4 | 2097.5 | 37.5 | 891.7 | 33.7 | 23 | 1.406465791 | 0.053127078 | 0.077682981 | 0.001841583 |
| TP19-47 - 37 | 560.6 | 24.2 | 2470.1 | 39.0 | 1130.7 | 58.6 | 23 | 2.045064835 | 0.105992882 | 0.090852411 | 0.003926361 |
| TP19-47 - 31 | 485.5 | 10.9 | 2148.0 | 45.7 | 912.5 | 33.8 | 23 | 1.456406696 | 0.053972886 | 0.078218665 | 0.001758755 |
| TP19-47 - 54 | 422.3 | 18.0 | 2067.8 | 37.3 | 802.8 | 34.7 | 20 | 1.204880988 | 0.052125264 | 0.067702404 | 0.002884264 |
| TP19-47 - 85 | 432.3 | 13.0 | 2166.2 | 38.4 | 846.3 | 32.1 | 20 | 1.301420237 | 0.049405489 | 0.069365598 | 0.002079599 |
| TP19-47 - 46 | 454.2 | 10.6 | 2344.8 | 35.4 | 940.3 | 34.3 | 19 | 1.524634596 | 0.055569491 | 0.072999363 | 0.001711672 |
| TP19-47 - 32 | 550.3 | 14.5 | 2843.1 | 44.1 | 1275.3 | 51.0 | 19 | 2.511235084 | 0.100351348 | 0.089112769 | 0.002346107 |
| TP19-47 - 92 | 409.2 | 12.2 | 2126.2 | 42.4 | 802.6 | 32.5 | 19 | 1.204349848 | 0.048761362 | 0.065529948 | 0.001948415 |
| TP19-47 - 128 | 453.8 | 17.3 | 2417.1 | 51.9 | 965.1 | 49.2 | 19 | 1.586969372 | 0.080894476 | 0.072938911 | 0.002775571 |
| TP19-47 - 59 | 463.0 | 29.1 | 2484.2 | 47.2 | 1002.3 | 77.1 | 19 | 1.683583262 | 0.129464958 | 0.074460503 | 0.004675088 |
| TP19-47 - 15 | 443.8 | 12.4 | 2463.0 | 42.6 | 969.1 | 40.6 | 18 | 1.59707512 | 0.066969287 | 0.07127549 | 0.001991028 |
| TP19-47 - 117 | 370.2 | 11.8 | 2135.4 | 48.7 | 750.6 | 31.7 | 17 | 1.094419108 | 0.04623701 | 0.059116184 | 0.001891963 |
| TP19-47 - 78 | 354.2 | 9.6 | 2110.4 | 36.9 | 719.2 | 28.7 | 17 | 1.030504951 | 0.041142778 | 0.05647901 | 0.001535774 |
| TP19-47 - 44 | 404.2 | 9.9 | 2427.8 | 48.6 | 896.7 | 36.7 | 17 | 1.41843422 | 0.058117516 | 0.064705113 | 0.001582588 |
| TP19-47 - 99 | 359.3 | 8.0 | 2162.1 | 38.7 | 742.4 | 28.7 | 17 | 1.077388265 | 0.041587775 | 0.057319948 | 0.001269199 |
| TP19-47 - 131 | 346.8 | 10.2 | 2182.9 | 47.4 | 728.7 | 31.9 | 16 | 1.049562553 | 0.045895775 | 0.055274184 | 0.001631263 |
| TP19-47 - 20 | 324.4 | 10.4 | 2117.1 | 33.6 | 675.8 | 27.2 | 15 | 0.945648455 | 0.038030152 | 0.051616817 | 0.001662174 |
| TP19-47 - 116 | 329.1 | 7.2 | 2154.7 | 48.1 | 692.7 | 29.9 | 15 | 0.978245252 | 0.04219713 | 0.05237225 | 0.00115114 |
| TP19-47 - 137 | 340.2 | 10.9 | 2251.6 | 44.2 | 739.3 | 33.6 | 15 | 1.071162112 | 0.048666677 | 0.054184971 | 0.001744044 |
| TP19-47 - 30 | 317.8 | 10.4 | 2172.1 | 40.9 | 681.2 | 26.3 | 15 | 0.955892186 | 0.036926339 | 0.050528331 | 0.001650936 |
| TP19-47 - 69 | 317.2 | 7.1 | 2173.8 | 36.3 | 680.5 | 23.6 | 15 | 0.95459179 | 0.033149428 | 0.050443279 | 0.001123759 |
| TP19-47 - 58 | 336.3 | 16.3 | 2333.3 | 41.4 | 762.0 | 41.8 | 14 | 1.117940585 | 0.061277226 | 0.053552142 | 0.00259808 |
| TP19-47 - 3 | 347.6 | 14.9 | 2465.3 | 56.0 | 819.3 | 39.9 | 14 | 1.240969143 | 0.060480907 | 0.055409605 | 0.002376821 |
| TP19-47 - 158 | 310.5 | 9.2 | 2215.5 | 46.6 | 680.2 | 28.9 | 14 | 0.953951874 | 0.040543949 | 0.049338999 | 0.001463557 |
| TP19-47 - 48 | 311.9 | 8.6 | 2238.2 | 52.8 | 690.9 | 26.0 | 14 | 0.974635836 | 0.036612363 | 0.049576593 | 0.001363675 |
| TP19-47 - 82 | 307.4 | 8.6 | 2250.6 | 37.0 | 686.0 | 26.0 | 14 | 0.965250578 | 0.036643308 | 0.048842448 | 0.001360008 |
| TP19-47 - 55 | 289.7 | 13.0 | 2195.3 | 44.4 | 640.7 | 27.6 | 13 | 0.879566185 | 0.037861198 | 0.045963622 | 0.002065111 |
| TP19-47 - 49 | 288.3 | 5.8 | 2271.9 | 36.3 | 660.1 | 23.7 | 13 | 0.915745778 | 0.032833009 | 0.045738282 | 0.00091819 |
| TP19-47 - 33 | 285.7 | 8.1 | 2253.2 | 42.3 | 650.7 | 25.6 | 13 | 0.898116567 | 0.035345687 | 0.045312842 | 0.001284242 |
| TP19-47 - 40 | 289.3 | 7.7 | 2315.3 | 36.7 | 674.2 | 25.8 | 12 | 0.942578043 | 0.036126462 | 0.045896769 | 0.001214779 |
| TP19-47 - 45 | 283.0 | 6.4 | 2293.7 | 29.9 | 657.2 | 23.4 | 12 | 0.910346073 | 0.032426248 | 0.044881876 | 0.001015294 |
| TP19-47 - 101 | 284.0 | 10.1 | 2360.5 | 47.1 | 677.4 | 27.7 | 12 | 0.948682862 | 0.038833031 | 0.045042946 | 0.001597217 |
| TP19-47 - 136 | 279.0 | 8.5 | 2381.2 | 46.4 | 674.5 | 24.6 | 12 | 0.943142735 | 0.034451023 | 0.044222182 | 0.001351582 |
| TP19-47 - 142 | 269.5 | 13.8 | 2332.3 | 49.3 | 643.6 | 33.2 | 12 | 0.884868309 | 0.045653035 | 0.042685742 | 0.002182434 |
| TP19-47 - 38 | 263.3 | 7.0 | 2308.3 | 39.9 | 625.9 | 24.7 | 11 | 0.852335989 | 0.033683839 | 0.041691748 | 0.001114575 |
| TP19-47 - 62 | 220.1 | 8.6 | 2354.9 | 44.7 | 556.9 | 23.8 | 9 | 0.730557994 | 0.031188268 | 0.034730805 | 0.001352559 |

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| TP19-47 - 129 | 221.8 | 15.4 | 2384.9 | 75.7 | 568.1 | 34.0 | 9 | 0.749744526 | 0.044855422 | 0.035005123 | 0.002424294 |
| TP19-47 - 84 | 225.5 | 8.5 | 2687.2 | 44.6 | 657.8 | 27.3 | 8 | 0.911390276 | 0.037848871 | 0.035592095 | 0.001344798 |
| TP19-47 - 67 | 200.9 | 4.9 | 2408.1 | 42.1 | 530.5 | 19.0 | 8 | 0.686208354 | 0.024621112 | 0.031650074 | 0.000770858 |
| TP19-47 - 110 | 203.9 | 5.4 | 2507.9 | 58.0 | 561.2 | 22.3 | 8 | 0.737851122 | 0.029360523 | 0.032141036 | 0.000857099 |
| TP19-47 - 24 | 197.6 | 7.7 | 2453.3 | 57.3 | 534.5 | 23.6 | 8 | 0.692884291 | 0.030649067 | 0.031129266 | 0.001208775 |
| TP19-47 - 23 | 177.2 | 6.5 | 2660.8 | 51.9 | 539.9 | 25.4 | 7 | 0.701908863 | 0.032985559 | 0.027870046 | 0.001015042 |
| TP19-47 - 121 | 129.0 | 3.5 | 2814.8 | 59.3 | 450.8 | 18.2 | 5 | 0.55892835 | 0.022571899 | 0.02021185 | 0.000546089 |
| TP19-47 - 18 | 88.4 | 2.2 | 2931.8 | 66.6 | 349.9 | 13.8 | 3 | 0.411442438 | 0.016205562 | 0.013810894 | 0.000348103 |
| TP19-47 - 27 | 35.8 | 1.9 | 3906.2 | 143.3 | 274.0 | 12.1 | 1 | 0.309708516 | 0.01368981 | 0.00556315 | 0.000290662 |
| TP19-49 - 18 | 7583.9 | 1983.1 | 4533.8 | 854.4 | 5337.0 | 1402.1 | 167 | 190.7418369 | 50.11058639 | 2.242866605 | 0.586472812 |
| TP19-49 - 99 | 1819.0 | 40.6 | 1751.5 | 45.8 | 1795.8 | 73.4 | 104 | 4.862533798 | 0.198658701 | 0.325999985 | 0.007277153 |
| TP19-49 - 153 | 1812.4 | 42.0 | 1746.4 | 60.7 | 1789.9 | 80.8 | 104 | 4.828351664 | 0.217909446 | 0.324656132 | 0.007523351 |
| TP19-49 - 53 | 1826.4 | 38.1 | 1766.4 | 45.7 | 1807.0 | 71.1 | 103 | 4.927770233 | 0.193839652 | 0.327527632 | 0.006829356 |
| TP19-49 - 36 | 1893.9 | 35.5 | 1840.7 | 32.6 | 1876.7 | 66.7 | 103 | 5.348741413 | 0.190131975 | 0.341504443 | 0.006408247 |
| TP19-49 - 97 | 1623.2 | 34.1 | 1582.4 | 53.7 | 1613.2 | 71.2 | 103 | 3.897516771 | 0.171914343 | 0.286336973 | 0.006017607 |
| TP19-49 - 43 | 1793.9 | 32.9 | 1750.2 | 29.7 | 1782.2 | 63.0 | 102 | 4.784692416 | 0.169066635 | 0.320852272 | 0.005884647 |
| TP19-49 - 80 | 1922.4 | 40.2 | 1878.9 | 49.7 | 1910.0 | 74.0 | 102 | 5.560668385 | 0.21557317 | 0.347456131 | 0.007264236 |
| TP19-49 - 155 | 1787.3 | 35.0 | 1748.4 | 32.3 | 1776.9 | 62.8 | 102 | 4.754753103 | 0.168101653 | 0.319500978 | 0.006262064 |
| TP19-49 - 144 | 1631.5 | 34.9 | 1597.4 | 46.6 | 1624.8 | 66.3 | 102 | 3.95370716 | 0.161362408 | 0.287987232 | 0.00616045 |
| TP19-49 - 1 | 1885.0 | 36.3 | 1847.5 | 36.6 | 1876.5 | 68.4 | 102 | 5.347794211 | 0.195033881 | 0.339651472 | 0.006545837 |
| TP19-49 - 52 | 1903.4 | 35.7 | 1866.4 | 36.4 | 1894.3 | 67.9 | 102 | 5.459606916 | 0.195573601 | 0.343481523 | 0.006442271 |
| TP19-49 - 84 | 2009.2 | 47.9 | 1973.2 | 73.0 | 1999.9 | 95.0 | 102 | 6.167781951 | 0.292836448 | 0.365710034 | 0.008724127 |
| TP19-49 - 6 | 1872.4 | 39.4 | 1845.6 | 43.9 | 1867.5 | 71.2 | 101 | 5.291698861 | 0.201663296 | 0.337028842 | 0.007087508 |
| TP19-49 - 40 | 1787.1 | 35.8 | 1762.2 | 40.0 | 1784.1 | 66.9 | 101 | 4.795179136 | 0.179865306 | 0.319463462 | 0.006393788 |
| TP19-49 - 16 | 1754.8 | 39.1 | 1731.3 | 55.7 | 1752.0 | 75.9 | 101 | 4.61529172 | 0.200069517 | 0.312865353 | 0.006969958 |
| TP19-49 - 124 | 1755.3 | 35.9 | 1735.7 | 47.0 | 1754.3 | 73.1 | 101 | 4.628049818 | 0.192906997 | 0.312979046 | 0.006398884 |
| TP19-49 - 156 | 2563.2 | 46.6 | 2540.0 | 34.0 | 2559.2 | 86.0 | 101 | 11.43380126 | 0.384237632 | 0.488281868 | 0.008868139 |
| TP19-49 - 39 | 1828.6 | 41.8 | 1813.5 | 64.7 | 1830.3 | 85.0 | 101 | 5.065386094 | 0.235199135 | 0.327975722 | 0.007499733 |
| TP19-49 - 132 | 1799.4 | 36.6 | 1789.5 | 41.9 | 1802.6 | 67.0 | 101 | 4.901829514 | 0.182327738 | 0.321988311 | 0.006545423 |
| TP19-49 - 146 | 2579.5 | 54.5 | 2578.3 | 38.6 | 2587.3 | 87.6 | 100 | 11.78255872 | 0.398711391 | 0.492038201 | 0.010393211 |
| TP19-49 - 14 | 1876.8 | 39.9 | 1876.3 | 39.0 | 1885.2 | 71.8 | 100 | 5.402169025 | 0.20567761 | 0.337958476 | 0.007186251 |
| TP19-49 - 158 | 1629.2 | 31.6 | 1633.2 | 35.6 | 1639.0 | 61.6 | 100 | 4.023585114 | 0.151114159 | 0.287533507 | 0.005574965 |
| TP19-49 - 148 | 1826.2 | 35.1 | 1835.6 | 39.3 | 1838.7 | 67.1 | 99 | 5.115682815 | 0.18666511 | 0.327490869 | 0.006287313 |
| TP19-49 - 7 | 1752.9 | 36.8 | 1767.1 | 45.8 | 1767.7 | 69.8 | 99 | 4.702369889 | 0.185712591 | 0.31247788 | 0.006567516 |
| TP19-49 - 50 | 1698.7 | 31.5 | 1723.0 | 35.0 | 1717.8 | 63.9 | 99 | 4.429371204 | 0.164751389 | 0.301499619 | 0.00559457 |
| TP19-49 - 90 | 1712.2 | 38.0 | 1739.6 | 41.4 | 1733.0 | 66.7 | 98 | 4.511145946 | 0.173693732 | 0.304219125 | 0.006749734 |
| TP19-49 - 130 | 2488.7 | 48.4 | 2541.5 | 32.5 | 2527.3 | 84.3 | 98 | 11.04904719 | 0.368448648 | 0.471179529 | 0.009163341 |
| TP19-49 - 160 | 1732.3 | 34.2 | 1772.6 | 37.0 | 1759.0 | 64.2 | 98 | 4.654047384 | 0.169864713 | 0.308297188 | 0.00608836 |
| TP19-49 - 30 | 1864.6 | 42.3 | 1914.1 | 68.5 | 1896.7 | 90.4 | 97 | 5.475041194 | 0.261016829 | 0.335412017 | 0.007605618 |
| TP19-49 - 120 | 1829.4 | 36.8 | 1886.1 | 37.4 | 1864.1 | 67.1 | 97 | 5.27067576 | 0.189652786 | 0.328150179 | 0.006607752 |
| TP19-49 - 83 | 1845.0 | 38.6 | 1918.1 | 45.2 | 1887.6 | 72.4 | 96 | 5.417216421 | 0.207680193 | 0.331367403 | 0.00693358 |
| TP19-49 - 76 | 2276.3 | 59.2 | 2366.6 | 66.4 | 2334.9 | 92.3 | 96 | 8.969178325 | 0.354531555 | 0.423486843 | 0.0110058 |
| TP19-49 - 82 | 1867.1 | 77.6 | 1953.3 | 61.7 | 1917.5 | 102.9 | 96 | 5.609393216 | 0.300999523 | 0.335946621 | 0.013971096 |
| TP19-49 - 42 | 1815.6 | 37.4 | 1913.0 | 68.1 | 1870.1 | 87.2 | 95 | 5.307518701 | 0.247622415 | 0.325307085 | 0.006707574 |
| TP19-49 - 58 | 1782.0 | 44.1 | 1881.3 | 39.1 | 1837.2 | 69.2 | 95 | 5.106517016 | 0.192294431 | 0.318422138 | 0.007886352 |
| TP19-49 - 25 | 1701.4 | 33.0 | 1805.2 | 35.1 | 1756.7 | 63.1 | 94 | 4.640917012 | 0.166710335 | 0.30202836 | 0.005863244 |
| TP19-49 - 9 | 1781.9 | 48.7 | 1891.4 | 46.1 | 1840.5 | 79.0 | 94 | 5.126669572 | 0.220167797 | 0.31838903 | 0.008698216 |

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| TP19-49 - 55 | 1738.2 | 35.9 | 1845.5 | 34.4 | 1795.5 | 63.2 | 94 | 4.860703208 | 0.170985389 | 0.309491725 | 0.006399662 |
| TP19-49 - 142 | 1812.6 | 35.5 | 1932.0 | 29.6 | 1876.8 | 64.7 | 94 | 5.349593414 | 0.184384645 | 0.324689754 | 0.006354272 |
| TP19-49 - 89 | 1505.3 | 76.6 | 1634.5 | 67.4 | 1567.3 | 87.0 | 92 | 3.681281678 | 0.204250448 | 0.263026359 | 0.01338941 |
| TP19-49 - 154 | 1643.4 | 34.5 | 1797.8 | 42.9 | 1720.4 | 65.4 | 91 | 4.442787322 | 0.16883707 | 0.290384961 | 0.006092279 |
| TP19-49 - 91 | 1696.7 | 39.3 | 1862.7 | 50.8 | 1780.5 | 74.1 | 91 | 4.775148244 | 0.198761199 | 0.301082565 | 0.006977654 |
| TP19-49 - 147 | 1739.1 | 37.1 | 1921.3 | 32.4 | 1831.6 | 63.3 | 91 | 5.073237648 | 0.175403133 | 0.309676536 | 0.006604488 |
| TP19-49 - 151 | 1709.0 | 38.4 | 1905.2 | 33.5 | 1807.2 | 63.3 | 90 | 4.928646466 | 0.172763939 | 0.303566923 | 0.006827208 |
| TP19-49 - 86 | 2057.3 | 51.7 | 2337.3 | 60.8 | 2210.7 | 97.3 | 88 | 7.82173042 | 0.344342898 | 0.375946149 | 0.009447819 |
| TP19-49 - 139 | 1934.4 | 45.6 | 2208.7 | 49.4 | 2078.5 | 76.5 | 88 | 6.744572582 | 0.248183803 | 0.349968995 | 0.008244712 |
| TP19-49 - 136 | 1619.5 | 32.3 | 1862.5 | 30.2 | 1736.5 | 59.6 | 87 | 4.529838329 | 0.155387985 | 0.285593974 | 0.005687746 |
| TP19-49 - 109 | 1641.8 | 34.1 | 1891.0 | 33.2 | 1762.1 | 61.2 | 87 | 4.671374825 | 0.162297323 | 0.290056033 | 0.006021624 |
| TP19-49 - 29 | 1649.5 | 41.1 | 1921.1 | 51.2 | 1779.5 | 73.8 | 86 | 4.769503515 | 0.197686259 | 0.291602812 | 0.007257036 |
| TP19-49 - 34 | 1574.2 | 36.3 | 1871.0 | 46.5 | 1712.6 | 67.4 | 84 | 4.401569333 | 0.173171525 | 0.276599713 | 0.006375023 |
| TP19-49 - 104 | 2382.7 | 53.6 | 2854.5 | 36.2 | 2655.0 | 93.9 | 83 | 12.66482547 | 0.447879227 | 0.447182302 | 0.010062354 |
| TP19-49 - 75 | 1529.1 | 34.0 | 1873.7 | 58.8 | 1688.5 | 79.1 | 82 | 4.274496775 | 0.200160318 | 0.267701542 | 0.00594445 |
| TP19-49 - 137 | 1446.7 | 36.4 | 1793.1 | 56.9 | 1599.9 | 70.1 | 81 | 3.833737129 | 0.168076661 | 0.251594312 | 0.006328108 |
| TP19-49 - 60 | 1254.6 | 33.0 | 1635.9 | 39.3 | 1410.7 | 52.0 | 77 | 3.012006112 | 0.110975387 | 0.214849928 | 0.00565339 |
| TP19-49 - 69 | 3251.1 | 1654.2 | 4311.2 | 2366.7 | 3970.7 | 2103.8 | 75 | 48.92568434 | 25.92283844 | 0.655870953 | 0.333716423 |
| TP19-49 - 32 | 1476.4 | 57.8 | 1980.7 | 47.3 | 1704.3 | 74.8 | 75 | 4.357653099 | 0.191213531 | 0.257376675 | 0.010082362 |
| TP19-49 - 28 | 1436.7 | 33.4 | 1934.1 | 41.9 | 1660.7 | 69.2 | 74 | 4.132295269 | 0.172170885 | 0.249660547 | 0.005810412 |
| TP19-49 - 64 | 1416.3 | 29.7 | 1915.5 | 30.8 | 1637.0 | 56.9 | 74 | 4.013615602 | 0.139602342 | 0.245716388 | 0.00514704 |
| TP19-49 - 21 | 1905.3 | 48.5 | 2577.7 | 50.9 | 2257.4 | 89.7 | 74 | 8.236803033 | 0.327281421 | 0.343884396 | 0.008758161 |
| TP19-49 - 72 | 1375.6 | 45.7 | 1893.3 | 48.9 | 1600.3 | 61.7 | 73 | 3.835996595 | 0.14779522 | 0.237872849 | 0.007900674 |
| TP19-49 - 31 | 1459.5 | 39.4 | 2014.7 | 36.1 | 1710.9 | 71.2 | 72 | 4.392384761 | 0.182717777 | 0.254084429 | 0.006865282 |
| TP19-49 - 67 | 1392.6 | 58.7 | 1993.8 | 55.3 | 1656.6 | 98.6 | 70 | 4.111347625 | 0.244656455 | 0.241135652 | 0.010159032 |
| TP19-49 - 101 | 1844.6 | 39.3 | 2658.5 | 30.8 | 2267.1 | 77.5 | 69 | 8.325542632 | 0.284437312 | 0.33128591 | 0.007059758 |
| TP19-49 - 59 | 1455.5 | 53.5 | 2100.6 | 43.9 | 1747.4 | 79.6 | 69 | 4.589709758 | 0.20914928 | 0.253300304 | 0.009313585 |
| TP19-49 - 112 | 1373.1 | 57.9 | 1995.1 | 40.3 | 1643.2 | 73.0 | 69 | 4.044522978 | 0.179716901 | 0.23739639 | 0.010005464 |
| TP19-49 - 129 | 1361.5 | 44.5 | 1996.7 | 43.0 | 1636.7 | 66.4 | 68 | 4.012285797 | 0.162764415 | 0.235153925 | 0.007690103 |
| TP19-49 - 114 | 1348.5 | 34.5 | 2016.0 | 45.5 | 1639.0 | 64.4 | 67 | 4.023920879 | 0.158181331 | 0.232673159 | 0.005947391 |
| TP19-49 - 145 | 1137.4 | 45.5 | 1722.5 | 52.9 | 1364.2 | 75.5 | 66 | 2.832492153 | 0.15685325 | 0.192971149 | 0.007720211 |
| TP19-49 - 95 | 1278.3 | 25.9 | 2099.9 | 47.4 | 1628.6 | 62.7 | 61 | 3.972489325 | 0.152849979 | 0.219322764 | 0.004438586 |
| TP19-49 - 113 | 1218.7 | 33.9 | 2014.5 | 34.2 | 1548.1 | 60.7 | 60 | 3.593624511 | 0.140989631 | 0.208102428 | 0.005793571 |
| TP19-49 - 128 | 1225.6 | 27.2 | 2047.5 | 38.5 | 1567.3 | 57.1 | 60 | 3.681093352 | 0.13409149 | 0.209401421 | 0.004644361 |
| TP19-49 - 44 | 1204.0 | 30.1 | 2041.8 | 36.9 | 1549.1 | 59.5 | 59 | 3.598080827 | 0.13825622 | 0.20534601 | 0.005140017 |
| TP19-49 - 157 | 1515.9 | 105.4 | 2606.5 | 37.5 | 2039.7 | 148.8 | 58 | 6.454359504 | 0.470920129 | 0.265107933 | 0.018425679 |
| TP19-49 - 159 | 1536.8 | 41.1 | 2647.9 | 35.1 | 2075.9 | 82.7 | 58 | 6.724709844 | 0.267762835 | 0.26920615 | 0.007202022 |
| TP19-49 - 143 | 1071.2 | 30.4 | 1940.8 | 40.3 | 1406.0 | 57.0 | 55 | 2.993489361 | 0.121394142 | 0.18077962 | 0.005129364 |
| TP19-49 - 11 | 1113.9 | 24.7 | 2056.6 | 38.6 | 1490.9 | 54.1 | 54 | 3.341971944 | 0.121268612 | 0.188628126 | 0.004177096 |
| TP19-49 - 127 | 1116.1 | 23.3 | 2106.7 | 36.6 | 1513.4 | 52.9 | 53 | 3.439066353 | 0.120206541 | 0.189023754 | 0.003948009 |
| TP19-49 - 47 | 1088.4 | 24.7 | 2059.1 | 41.3 | 1471.0 | 54.0 | 53 | 3.257633136 | 0.119538789 | 0.183920753 | 0.004166367 |
| TP19-49 - 12 | 1107.5 | 27.9 | 2125.0 | 36.3 | 1515.4 | 57.2 | 52 | 3.447853199 | 0.130252588 | 0.187439877 | 0.004717692 |
| TP19-49 - 51 | 1054.1 | 82.2 | 2034.4 | 64.7 | 1433.7 | 100.2 | 52 | 3.104183316 | 0.216865357 | 0.177637523 | 0.013856115 |
| TP19-49 - 2 | 1132.3 | 26.0 | 2254.1 | 39.9 | 1593.5 | 59.1 | 50 | 3.803691874 | 0.141067994 | 0.192018919 | 0.004413672 |
| TP19-49 - 133 | 1095.4 | 50.5 | 2189.1 | 49.0 | 1533.9 | 69.2 | 50 | 3.529577247 | 0.159164346 | 0.185210441 | 0.008544413 |
| TP19-49 - 98 | 1023.9 | 23.0 | 2121.4 | 33.7 | 1446.6 | 50.9 | 48 | 3.15639506 | 0.111121571 | 0.172134881 | 0.003874529 |
| TP19-49 - 119 | 1022.1 | 22.4 | 2151.4 | 34.5 | 1458.5 | 51.3 | 48 | 3.205652571 | 0.112856801 | 0.171821655 | 0.003761468 |

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| TP19-49 - 77 | 971.7 | 53.6 | 2139.5 | 80.6 | 1410.7 | 90.9 | 45 | 3.01195474 | 0.194119086 | 0.16269481 | 0.008977756 |
| TP19-49 - 65 | 934.6 | 30.0 | 2124.2 | 38.0 | 1374.4 | 58.4 | 44 | 2.871121815 | 0.122000446 | 0.156014418 | 0.0050089 |
| TP19-49 - 111 | 986.7 | 26.0 | 2326.0 | 38.9 | 1506.7 | 59.9 | 42 | 3.410004528 | 0.13564233 | 0.16539785 | 0.004366446 |
| TP19-49 - 19 | 847.6 | 37.3 | 2094.7 | 41.0 | 1283.6 | 58.7 | 40 | 2.539978989 | 0.116076573 | 0.140520153 | 0.006183794 |
| TP19-49 - 70 | 894.2 | 27.4 | 2218.4 | 47.1 | 1375.2 | 61.3 | 40 | 2.874432063 | 0.128201089 | 0.148790517 | 0.004554491 |
| TP19-49 - 37 | 830.8 | 53.6 | 2142.8 | 54.7 | 1288.3 | 79.3 | 39 | 2.556520013 | 0.157448635 | 0.137548567 | 0.008867916 |
| TP19-49 - 116 | 865.6 | 22.8 | 2234.3 | 41.7 | 1359.2 | 51.6 | 39 | 2.813791804 | 0.106822841 | 0.143714944 | 0.003791757 |
| TP19-49 - 10 | 849.1 | 18.7 | 2262.9 | 49.1 | 1351.1 | 50.1 | 38 | 2.783594527 | 0.103302326 | 0.140788246 | 0.003098534 |
| TP19-49 - 57 | 819.5 | 17.2 | 2235.9 | 37.5 | 1316.9 | 47.2 | 37 | 2.658167082 | 0.095249106 | 0.135566091 | 0.002837476 |
| TP19-49 - 150 | 843.0 | 18.9 | 2364.2 | 38.9 | 1394.6 | 47.6 | 36 | 2.948900183 | 0.100675106 | 0.139711633 | 0.003137878 |
| TP19-49 - 49 | 778.4 | 19.7 | 2225.2 | 67.6 | 1270.7 | 51.5 | 35 | 2.495524204 | 0.101168335 | 0.128344136 | 0.003245195 |
| TP19-49 - 62 | 774.2 | 23.3 | 2269.8 | 52.4 | 1285.8 | 55.9 | 34 | 2.54785983 | 0.110794918 | 0.127614648 | 0.003847645 |
| TP19-49 - 8 | 781.5 | 28.1 | 2327.4 | 48.4 | 1317.8 | 58.9 | 34 | 2.66134568 | 0.118864205 | 0.128883317 | 0.00464033 |
| TP19-49 - 74 | 757.6 | 24.0 | 2313.2 | 67.2 | 1288.5 | 57.6 | 33 | 2.55725473 | 0.114412286 | 0.124711623 | 0.003954962 |
| TP19-49 - 61 | 776.2 | 15.3 | 2433.6 | 52.1 | 1359.9 | 51.9 | 32 | 2.816428302 | 0.107558287 | 0.127965562 | 0.002515086 |
| TP19-49 - 54 | 738.2 | 24.9 | 2320.0 | 48.3 | 1271.0 | 49.4 | 32 | 2.49633395 | 0.096942145 | 0.121328059 | 0.004096935 |
| TP19-49 - 26 | 765.8 | 19.9 | 2468.0 | 45.1 | 1363.6 | 51.1 | 31 | 2.830461161 | 0.106128357 | 0.126133175 | 0.003280065 |
| TP19-49 - 22 | 697.0 | 16.9 | 2409.8 | 42.9 | 1264.9 | 49.0 | 29 | 2.475484172 | 0.09594615 | 0.114178967 | 0.00277258 |
| TP19-49 - 66 | 740.6 | 44.2 | 2662.0 | 59.8 | 1415.8 | 90.8 | 28 | 3.032390759 | 0.194380251 | 0.12174217 | 0.00726875 |
| TP19-49 - 138 | 690.7 | 25.1 | 2500.3 | 56.7 | 1297.7 | 64.2 | 28 | 2.589758317 | 0.128045596 | 0.11309534 | 0.004104614 |
| TP19-49 - 149 | 637.9 | 32.5 | 2314.5 | 39.9 | 1160.2 | 65.8 | 28 | 2.134963164 | 0.121150401 | 0.104020076 | 0.0052939 |
| TP19-49 - 87 | 656.5 | 22.7 | 2422.0 | 59.6 | 1224.2 | 53.6 | 27 | 2.339032332 | 0.102473103 | 0.107207052 | 0.003704527 |
| TP19-49 - 100 | 646.6 | 15.4 | 2426.3 | 54.0 | 1215.7 | 49.3 | 27 | 2.311143633 | 0.093728189 | 0.105508765 | 0.002513713 |
| TP19-49 - 123 | 624.4 | 15.7 | 2406.1 | 42.2 | 1180.2 | 43.2 | 26 | 2.19746586 | 0.080386085 | 0.101699356 | 0.00255248 |
| TP19-49 - 118 | 589.9 | 40.3 | 2308.6 | 63.2 | 1101.3 | 78.7 | 26 | 1.958328873 | 0.139923652 | 0.095824251 | 0.006546257 |
| TP19-49 - 56 | 686.1 | 18.7 | 2714.4 | 44.5 | 1387.4 | 53.5 | 25 | 2.921149887 | 0.11256503 | 0.112308089 | 0.003058663 |
| TP19-49 - 94 | 669.0 | 19.5 | 2733.3 | 43.2 | 1375.6 | 55.2 | 24 | 2.875699035 | 0.115502347 | 0.109352695 | 0.003187274 |
| TP19-49 - 122 | 622.9 | 20.7 | 2564.7 | 46.7 | 1245.0 | 51.0 | 24 | 2.408058387 | 0.098722167 | 0.101441816 | 0.00337209 |
| TP19-49 - 88 | 610.3 | 32.3 | 2518.4 | 77.9 | 1211.3 | 63.3 | 24 | 2.296763258 | 0.11994177 | 0.099302931 | 0.00526211 |
| TP19-49 - 103 | 618.4 | 15.6 | 2553.0 | 56.7 | 1234.9 | 44.9 | 24 | 2.374187513 | 0.086240444 | 0.100688767 | 0.002534267 |
| TP19-49 - 41 | 529.2 | 11.7 | 2300.2 | 33.4 | 1023.1 | 37.1 | 23 | 1.739042081 | 0.062997278 | 0.085556556 | 0.001888658 |
| TP19-49 - 141 | 565.1 | 13.0 | 2478.1 | 44.1 | 1137.7 | 44.9 | 23 | 2.066342816 | 0.081532001 | 0.091619711 | 0.002101983 |
| TP19-49 - 93 | 588.2 | 12.6 | 2659.7 | 38.5 | 1243.3 | 43.8 | 22 | 2.402420109 | 0.084700389 | 0.095543744 | 0.002048211 |
| TP19-49 - 63 | 563.3 | 22.0 | 2615.9 | 42.4 | 1191.6 | 55.8 | 22 | 2.233321455 | 0.104580091 | 0.091311808 | 0.003560531 |
| TP19-49 - 5 | 524.7 | 13.2 | 2561.3 | 46.7 | 1119.0 | 44.8 | 20 | 2.010425289 | 0.080466113 | 0.084792961 | 0.00212807 |
| TP19-49 - 45 | 516.0 | 17.8 | 2551.3 | 43.7 | 1102.9 | 49.0 | 20 | 1.962974989 | 0.087196955 | 0.083342846 | 0.002873918 |
| TP19-49 - 71 | 499.3 | 12.2 | 2563.5 | 47.3 | 1085.1 | 42.9 | 19 | 1.911460775 | 0.075544187 | 0.080532949 | 0.001969422 |
| TP19-49 - 13 | 490.1 | 11.9 | 2544.6 | 45.1 | 1066.2 | 42.0 | 19 | 1.857891834 | 0.073204906 | 0.07899465 | 0.001915731 |
| TP19-49 - 78 | 465.5 | 13.7 | 2465.9 | 71.9 | 999.9 | 43.7 | 19 | 1.677031133 | 0.073310403 | 0.074882606 | 0.002197232 |
| TP19-49 - 92 | 489.4 | 25.1 | 2602.1 | 56.0 | 1086.2 | 53.5 | 19 | 1.914731819 | 0.094294946 | 0.078870674 | 0.004050968 |
| TP19-49 - 46 | 477.7 | 11.5 | 2555.0 | 39.0 | 1051.9 | 40.3 | 19 | 1.817922192 | 0.069582635 | 0.076924413 | 0.001845784 |
| TP19-49 - 15 | 478.0 | 15.7 | 2628.5 | 50.9 | 1080.5 | 45.2 | 18 | 1.898363125 | 0.079327146 | 0.076967522 | 0.002531789 |
| TP19-49 - 125 | 484.3 | 11.0 | 2678.8 | 44.7 | 1110.8 | 40.0 | 18 | 1.986082661 | 0.071447233 | 0.078025398 | 0.001777764 |
| TP19-49 - 140 | 473.7 | 11.7 | 2628.7 | 46.9 | 1075.4 | 38.4 | 18 | 1.883868044 | 0.06728317 | 0.076255896 | 0.001881647 |
| TP19-49 - 68 | 468.4 | 31.2 | 2653.1 | 61.5 | 1077.8 | 64.4 | 18 | 1.890612625 | 0.112896635 | 0.075365679 | 0.005027679 |
| TP19-49 - 96 | 430.3 | 12.2 | 2574.7 | 52.5 | 988.9 | 38.0 | 17 | 1.648265969 | 0.063378839 | 0.0690245 | 0.001953914 |
| TP19-49 - 105 | 442.9 | 14.0 | 2652.0 | 57.0 | 1037.4 | 38.5 | 17 | 1.777809598 | 0.066000936 | 0.071126435 | 0.002241892 |

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| TP19-49 - 115 | 445.1 | 14.0 | 2763.7 | 58.5 | 1088.9 | 41.1 | 16 | 1.922481751 | 0.072507172 | 0.07147889 | 0.002251498 |
| TP19-49 - 35 | 425.5 | 10.3 | 2654.7 | 55.3 | 1012.2 | 36.9 | 16 | 1.709726833 | 0.062336045 | 0.068235127 | 0.001650829 |
| TP19-49 - 4 | 428.9 | 18.1 | 2728.9 | 63.7 | 1047.4 | 45.4 | 16 | 1.805282092 | 0.078177169 | 0.068791632 | 0.002902872 |
| TP19-49 - 81 | 397.8 | 10.9 | 2609.8 | 62.9 | 954.6 | 41.1 | 15 | 1.560430339 | 0.067193425 | 0.063657134 | 0.001749199 |
| TP19-49 - 102 | 344.9 | 9.6 | 2318.1 | 48.9 | 766.8 | 28.3 | 15 | 1.127925515 | 0.041689705 | 0.054967877 | 0.001526511 |
| TP19-49 - 134 | 414.4 | 8.9 | 2813.7 | 48.9 | 1057.7 | 39.3 | 15 | 1.833833311 | 0.06818194 | 0.066401129 | 0.001432531 |
| TP19-49 - 3 | 415.2 | 11.6 | 2862.0 | 63.0 | 1078.6 | 40.2 | 15 | 1.8929514 | 0.070475194 | 0.066523761 | 0.001860637 |
| TP19-49 - 85 | 388.0 | 12.8 | 2705.2 | 65.4 | 971.4 | 44.6 | 14 | 1.603096106 | 0.073525045 | 0.062030951 | 0.002041965 |
| TP19-49 - 117 | 389.1 | 11.8 | 2716.2 | 47.0 | 976.0 | 41.6 | 14 | 1.614934445 | 0.068902555 | 0.062209989 | 0.001884801 |
| TP19-49 - 108 | 367.7 | 8.3 | 2677.6 | 49.2 | 926.8 | 32.3 | 14 | 1.491066694 | 0.051895312 | 0.058699182 | 0.001331064 |
| TP19-49 - 131 | 507.5 | 14.7 | 3709.6 | 124.3 | 1633.6 | 99.5 | 14 | 3.997310484 | 0.243413198 | 0.081910518 | 0.002364873 |
| TP19-49 - 38 | 347.3 | 10.8 | 2777.6 | 45.8 | 929.1 | 40.1 | 13 | 1.496840379 | 0.064541701 | 0.055346532 | 0.001718399 |
| TP19-49 - 152 | 335.8 | 8.5 | 2768.2 | 51.7 | 904.1 | 36.3 | 12 | 1.436106185 | 0.057704319 | 0.053470194 | 0.001358135 |
| TP19-49 - 23 | 338.5 | 8.1 | 2874.3 | 49.1 | 948.2 | 34.4 | 12 | 1.544336189 | 0.056017344 | 0.053913556 | 0.00128549 |
| TP19-49 - 73 | 300.8 | 10.1 | 2856.5 | 88.4 | 870.1 | 43.5 | 11 | 1.355961401 | 0.067817187 | 0.047760933 | 0.001600547 |
| TP19-49 - 110 | 293.4 | 11.7 | 2787.8 | 62.6 | 830.3 | 32.7 | 11 | 1.265430344 | 0.049867224 | 0.046567804 | 0.001852724 |
| TP19-49 - 48 | 304.7 | 6.4 | 2973.1 | 59.1 | 919.8 | 34.0 | 10 | 1.474072947 | 0.054429337 | 0.048397271 | 0.001012523 |
| TP19-49 - 17 | 303.5 | 9.0 | 3073.6 | 58.5 | 956.6 | 34.0 | 10 | 1.565279425 | 0.055609583 | 0.048209209 | 0.001434368 |
| TP19-49 - 126 | 315.3 | 9.1 | 3210.5 | 72.2 | 1035.4 | 38.6 | 10 | 1.772375074 | 0.066016766 | 0.050131565 | 0.001440587 |
| TP19-49 - 121 | 285.2 | 9.0 | 3248.9 | 60.6 | 988.5 | 40.2 | 9 | 1.647215714 | 0.066998429 | 0.045235375 | 0.00142302 |
| TP19-49 - 107 | 267.8 | 11.1 | 3249.2 | 70.2 | 944.8 | 37.7 | 8 | 1.535836964 | 0.061353998 | 0.042422406 | 0.001754232 |
| TP19-49 - 106 | 240.9 | 5.0 | 3427.4 | 57.4 | 949.7 | 37.8 | 7 | 1.547975939 | 0.061634314 | 0.038078549 | 0.000796143 |
| TP19-49 - 135 | 264.0 | 8.0 | 3818.6 | 132.9 | 1176.7 | 75.9 | 7 | 2.186346897 | 0.140948734 | 0.04181042 | 0.001261981 |
| TP19-49 - 20 | 163.1 | 4.4 | 3415.0 | 69.6 | 720.4 | 27.0 | 5 | 1.032891073 | 0.038719291 | 0.025620081 | 0.000690005 |
| TP19-49 - 27 | 169.7 | 4.6 | 3708.2 | 73.3 | 845.6 | 30.5 | 5 | 1.299718473 | 0.046866137 | 0.026680018 | 0.000720211 |
| TP19-49 - 24 | 139.3 | 3.6 | 4031.0 | 81.0 | 854.4 | 30.0 | 3 | 1.319688768 | 0.046344754 | 0.021844363 | 0.000556913 |
| TP19-49 - 79 | 94.2 | 2.8 | 4998.1 | 145.6 | 1018.7 | 41.2 | 2 | 1.727284493 | 0.069898171 | 0.014716488 | 0.000437572 |
| TP19-50 - 115 | 1839.7 | 37.8 | 1733.3 | 41.5 | 1798.4 | 68.7 | 106 | 4.877575583 | 0.186458498 | 0.330264454 | 0.00678205 |
| TP19-50 - 10 | 1773.1 | 34.7 | 1719.9 | 43.8 | 1756.7 | 70.1 | 103 | 4.641121215 | 0.185188162 | 0.316607518 | 0.006200017 |
| TP19-50 - 86 | 1783.4 | 34.7 | 1736.6 | 32.6 | 1769.8 | 62.5 | 103 | 4.714221478 | 0.166544372 | 0.318710206 | 0.006205839 |
| TP19-50 - 34 | 1813.5 | 34.6 | 1770.9 | 32.7 | 1802.0 | 64.5 | 102 | 4.898398316 | 0.175358114 | 0.324886818 | 0.006200986 |
| TP19-50 - 70 | 1756.5 | 33.0 | 1718.6 | 31.9 | 1747.6 | 61.8 | 102 | 4.591045698 | 0.162448667 | 0.31321924 | 0.005889591 |
| TP19-50 - 17 | 1767.5 | 33.9 | 1736.0 | 31.7 | 1761.2 | 61.5 | 102 | 4.666375205 | 0.162917955 | 0.315447362 | 0.006049092 |
| TP19-50 - 74 | 1759.2 | 34.8 | 1728.2 | 35.2 | 1753.1 | 63.1 | 102 | 4.621070632 | 0.16638 | 0.313761419 | 0.006201936 |
| TP19-50 - 44 | 1749.9 | 32.5 | 1720.5 | 34.1 | 1744.6 | 63.5 | 102 | 4.574166574 | 0.16654208 | 0.311880031 | 0.00580023 |
| TP19-50 - 50 | 1788.7 | 34.3 | 1761.8 | 36.1 | 1784.6 | 66.5 | 102 | 4.798126572 | 0.178827326 | 0.319791518 | 0.006134269 |
| TP19-50 - 69 | 2009.7 | 44.0 | 2017.8 | 55.4 | 2023.6 | 81.6 | 100 | 6.336745369 | 0.255421502 | 0.365815482 | 0.008018192 |
| TP19-50 - 22 | 1799.8 | 34.9 | 1808.7 | 36.8 | 1812.3 | 66.5 | 100 | 4.958600051 | 0.181847851 | 0.322068868 | 0.006251981 |
| TP19-50 - 155 | 1846.8 | 39.9 | 1856.5 | 51.2 | 1858.7 | 75.1 | 99 | 5.237325186 | 0.21152438 | 0.331732635 | 0.007172046 |
| TP19-50 - 103 | 1777.2 | 41.0 | 1790.3 | 35.5 | 1791.4 | 65.7 | 99 | 4.83752673 | 0.177505587 | 0.31744209 | 0.007320551 |
| TP19-50 - 92 | 1764.8 | 33.5 | 1783.9 | 31.4 | 1781.7 | 62.2 | 99 | 4.781615693 | 0.166991231 | 0.314913125 | 0.005978104 |
| TP19-50 - 20 | 1835.5 | 37.4 | 1868.5 | 41.3 | 1859.0 | 72.0 | 98 | 5.239224476 | 0.203033632 | 0.329412742 | 0.00671699 |
| TP19-50 - 62 | 1741.4 | 32.4 | 1773.8 | 30.6 | 1764.3 | 63.1 | 98 | 4.683464223 | 0.167540697 | 0.310137847 | 0.005765234 |
| TP19-50 - 150 | 1762.5 | 34.0 | 1796.1 | 35.3 | 1786.2 | 64.1 | 98 | 4.807536932 | 0.172513854 | 0.314436401 | 0.006069157 |
| TP19-50 - 105 | 1709.4 | 32.9 | 1748.9 | 36.0 | 1735.7 | 63.1 | 98 | 4.525613221 | 0.164596288 | 0.303657627 | 0.005838014 |
| TP19-50 - 5 | 1749.0 | 34.0 | 1802.8 | 38.1 | 1782.0 | 64.2 | 97 | 4.783568166 | 0.172431295 | 0.311678369 | 0.006056094 |
| TP19-50 - 18 | 1736.3 | 32.7 | 1800.5 | 27.2 | 1773.8 | 61.0 | 96 | 4.736965042 | 0.16283729 | 0.309115916 | 0.005813668 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-50 - 97 | 1656.2 | 34.7 | 1733.7 | 31.1 | 1698.3 | 59.6 | 96 | 4.325606339 | 0.151722275 | 0.292946215 | 0.006143265 |
| TP19-50 - 21 | 1727.8 | 34.1 | 1809.8 | 32.5 | 1773.2 | 64.6 | 95 | 4.733562177 | 0.172453487 | 0.307389552 | 0.006071769 |
| TP19-50 - 113 | 1684.8 | 40.4 | 1768.2 | 35.0 | 1730.4 | 66.6 | 95 | 4.496856978 | 0.17306562 | 0.29869289 | 0.007162493 |
| TP19-50 - 116 | 1710.7 | 33.0 | 1807.9 | 43.3 | 1762.2 | 65.4 | 95 | 4.671713879 | 0.173471149 | 0.30391786 | 0.005859649 |
| TP19-50 - 77 | 1678.1 | 34.9 | 1785.8 | 37.6 | 1734.3 | 64.1 | 94 | 4.518023317 | 0.16695852 | 0.297347792 | 0.006191833 |
| TP19-50 - 143 | 1692.4 | 35.6 | 1818.3 | 40.9 | 1756.6 | 66.4 | 93 | 4.640751435 | 0.175460887 | 0.300217851 | 0.006316894 |
| TP19-50 - 135 | 1648.2 | 32.4 | 1777.3 | 33.8 | 1714.3 | 63.1 | 93 | 4.410265637 | 0.162411513 | 0.291336925 | 0.005721252 |
| TP19-50 - 142 | 1647.5 | 33.9 | 1792.3 | 36.1 | 1720.8 | 62.8 | 92 | 4.445082041 | 0.16212824 | 0.291200055 | 0.005988537 |
| TP19-50 - 47 | 1630.6 | 34.2 | 1778.5 | 35.3 | 1704.4 | 64.9 | 92 | 4.357885439 | 0.165982654 | 0.287809866 | 0.006028019 |
| TP19-50 - 85 | 1662.5 | 47.6 | 1826.1 | 33.5 | 1743.8 | 67.0 | 91 | 4.570127526 | 0.175547257 | 0.294195084 | 0.008423993 |
| TP19-50 - 25 | 1813.9 | 36.1 | 2003.0 | 60.7 | 1911.7 | 87.7 | 91 | 5.571662649 | 0.255508052 | 0.324969091 | 0.00647101 |
| TP19-50 - 99 | 1631.1 | 38.8 | 1804.3 | 43.3 | 1716.5 | 65.6 | 90 | 4.422180373 | 0.168993552 | 0.287913671 | 0.006849736 |
| TP19-50 - 16 | 1635.7 | 32.7 | 1825.0 | 38.8 | 1727.6 | 62.4 | 90 | 4.481964203 | 0.161837976 | 0.288840419 | 0.005781064 |
| TP19-50 - 54 | 1623.3 | 32.6 | 1817.0 | 41.6 | 1716.8 | 65.2 | 89 | 4.42354001 | 0.167902068 | 0.286352508 | 0.005747312 |
| TP19-50 - 146 | 1615.5 | 31.2 | 1826.1 | 41.3 | 1718.0 | 63.8 | 88 | 4.430243535 | 0.164411683 | 0.284802334 | 0.005500858 |
| TP19-50 - 123 | 1559.2 | 57.3 | 1839.1 | 41.5 | 1695.0 | 69.3 | 85 | 4.308559027 | 0.176254638 | 0.273629734 | 0.01005988 |
| TP19-50 - 121 | 1597.4 | 47.6 | 1889.1 | 48.2 | 1735.4 | 70.9 | 85 | 4.523913097 | 0.184749007 | 0.281204041 | 0.008372365 |
| TP19-50 - 126 | 1558.8 | 38.1 | 1897.5 | 41.0 | 1716.7 | 63.1 | 82 | 4.423233121 | 0.162558638 | 0.27356124 | 0.006681552 |
| TP19-50 - 109 | 1506.8 | 37.9 | 1858.1 | 30.7 | 1667.2 | 64.2 | 81 | 4.165219466 | 0.160492339 | 0.263327944 | 0.006614663 |
| TP19-50 - 145 | 1900.0 | 69.8 | 2373.4 | 260.3 | 2143.6 | 341.2 | 80 | 7.257315904 | 1.155297024 | 0.342769249 | 0.01259255 |
| TP19-50 - 57 | 1530.9 | 47.6 | 1928.1 | 49.8 | 1714.5 | 66.0 | 79 | 4.411409198 | 0.169766846 | 0.268059695 | 0.008334688 |
| TP19-50 - 151 | 1462.4 | 54.0 | 1846.3 | 70.7 | 1634.1 | 63.0 | 79 | 3.999744349 | 0.154257244 | 0.254657475 | 0.009395898 |
| TP19-50 - 87 | 1540.5 | 45.4 | 1960.2 | 37.2 | 1736.3 | 65.8 | 79 | 4.529069936 | 0.171723111 | 0.269942019 | 0.007953309 |
| TP19-50 - 102 | 1571.5 | 41.3 | 2015.5 | 45.4 | 1778.4 | 69.2 | 78 | 4.763152897 | 0.18525028 | 0.276069277 | 0.007248268 |
| TP19-50 - 139 | 1537.9 | 33.1 | 1982.3 | 47.8 | 1743.1 | 62.3 | 78 | 4.566085246 | 0.16322784 | 0.269430613 | 0.005803087 |
| TP19-50 - 147 | 1441.1 | 34.2 | 1919.4 | 51.3 | 1653.6 | 63.2 | 75 | 4.09646813 | 0.156603099 | 0.250513641 | 0.005939094 |
| TP19-50 - 73 | 1437.3 | 52.5 | 1918.7 | 45.7 | 1651.8 | 64.3 | 75 | 4.087654997 | 0.159227962 | 0.249780309 | 0.009124468 |
| TP19-50 - 31 | 1469.3 | 40.5 | 1973.6 | 49.4 | 1696.4 | 62.5 | 74 | 4.316087948 | 0.158989029 | 0.25599234 | 0.00705624 |
| TP19-50 - 136 | 1422.2 | 44.8 | 1922.9 | 48.2 | 1639.2 | 68.2 | 74 | 4.024878948 | 0.167519575 | 0.246853772 | 0.00776826 |
| TP19-50 - 33 | 1437.6 | 41.9 | 1973.3 | 34.9 | 1675.4 | 65.4 | 73 | 4.207029052 | 0.164167656 | 0.249822693 | 0.007282779 |
| TP19-50 - 78 | 1334.2 | 43.0 | 1854.8 | 44.0 | 1550.4 | 67.7 | 72 | 3.603868476 | 0.157460117 | 0.22993817 | 0.007416007 |
| TP19-50 - 26 | 1396.3 | 36.6 | 1964.5 | 35.2 | 1646.0 | 62.7 | 71 | 4.058595745 | 0.154538014 | 0.2418587 | 0.006342463 |
| TP19-50 - 104 | 1371.8 | 65.9 | 1979.4 | 48.6 | 1639.7 | 71.8 | 69 | 4.027370678 | 0.176369664 | 0.237139187 | 0.01138538 |
| TP19-50 - 149 | 1329.9 | 35.3 | 1935.6 | 36.1 | 1588.2 | 63.5 | 69 | 3.778478838 | 0.151125296 | 0.229126435 | 0.006079365 |
| TP19-50 - 58 | 1284.1 | 72.0 | 1889.7 | 45.6 | 1537.1 | 85.7 | 68 | 3.543853132 | 0.197635994 | 0.220416311 | 0.012363586 |
| TP19-50 - 68 | 1327.5 | 30.3 | 2019.9 | 38.9 | 1626.0 | 57.1 | 66 | 3.959881038 | 0.13905883 | 0.228669998 | 0.005216504 |
| TP19-50 - 111 | 1291.7 | 31.9 | 1977.1 | 41.8 | 1581.8 | 59.7 | 65 | 3.748718864 | 0.141471536 | 0.221869271 | 0.005487258 |
| TP19-50 - 23 | 1211.3 | 76.9 | 1907.3 | 46.0 | 1496.6 | 99.2 | 64 | 3.366200295 | 0.223038391 | 0.206716814 | 0.013123925 |
| TP19-50 - 36 | 1211.8 | 41.6 | 1927.7 | 46.0 | 1503.2 | 66.6 | 63 | 3.395025217 | 0.150429637 | 0.206805237 | 0.007100762 |
| TP19-50 - 1 | 1311.1 | 64.1 | 2160.8 | 81.6 | 1685.0 | 60.3 | 61 | 4.256698018 | 0.152370247 | 0.225547493 | 0.011019593 |
| TP19-50 - 24 | 1240.3 | 55.9 | 2088.8 | 47.5 | 1595.5 | 73.5 | 59 | 3.813257474 | 0.175667665 | 0.212152264 | 0.009557891 |
| TP19-50 - 55 | 1196.3 | 46.1 | 2063.9 | 65.9 | 1551.7 | 61.2 | 58 | 3.609886787 | 0.142275598 | 0.203904607 | 0.007857144 |
| TP19-50 - 49 | 1333.9 | 29.5 | 2312.8 | 32.5 | 1768.4 | 62.4 | 58 | 4.706341668 | 0.165957288 | 0.22987804 | 0.005086645 |
| TP19-50 - 30 | 1161.1 | 48.3 | 2016.6 | 49.0 | 1507.4 | 61.9 | 58 | 3.41285649 | 0.1400448 | 0.197361259 | 0.008208293 |
| TP19-50 - 19 | 1157.5 | 23.6 | 2011.1 | 54.6 | 1501.4 | 58.5 | 58 | 3.38688484 | 0.132056441 | 0.196689797 | 0.004004118 |
| TP19-50 - 110 | 1165.7 | 28.4 | 2031.8 | 41.0 | 1517.3 | 54.7 | 57 | 3.456379387 | 0.12457097 | 0.198202676 | 0.004829202 |
| TP19-50 - 152 | 1152.1 | 22.4 | 2024.9 | 39.7 | 1503.7 | 55.0 | 57 | 3.396817757 | 0.124143767 | 0.195677283 | 0.003801069 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-50 - 154 | 1437.7 | 61.3 | 2539.6 | 50.9 | 1954.6 | 84.9 | 57 | 5.855100371 | 0.254381311 | 0.249852952 | 0.010661068 |
| TP19-50 - 14 | 1193.6 | 28.6 | 2169.5 | 48.3 | 1599.7 | 67.4 | 55 | 3.832927398 | 0.161377494 | 0.203413476 | 0.004874995 |
| TP19-50 - 61 | 1090.7 | 52.8 | 1989.0 | 61.4 | 1438.4 | 63.6 | 55 | 3.123068034 | 0.138062839 | 0.184355207 | 0.008927346 |
| TP19-50 - 67 | 1096.1 | 65.6 | 2016.0 | 64.0 | 1457.9 | 73.8 | 54 | 3.202898461 | 0.16224174 | 0.185338698 | 0.011099087 |
| TP19-50 - 106 | 1208.4 | 29.3 | 2290.6 | 46.2 | 1669.8 | 61.5 | 53 | 4.178347397 | 0.153926098 | 0.206182465 | 0.004996515 |
| TP19-50 - 63 | 1168.6 | 30.0 | 2251.8 | 62.7 | 1619.6 | 62.0 | 52 | 3.928632675 | 0.150441458 | 0.198743654 | 0.005105335 |
| TP19-50 - 71 | 1094.8 | 29.7 | 2158.4 | 32.1 | 1521.0 | 58.9 | 51 | 3.472701007 | 0.134502853 | 0.185097293 | 0.005024523 |
| TP19-50 - 81 | 1096.7 | 57.6 | 2189.7 | 43.0 | 1535.3 | 86.2 | 50 | 3.536024282 | 0.198562253 | 0.185459167 | 0.00974103 |
| TP19-50 - 64 | 1115.3 | 37.1 | 2253.3 | 63.6 | 1580.0 | 61.1 | 49 | 3.739917966 | 0.144604507 | 0.188881628 | 0.006278442 |
| TP19-50 - 130 | 1058.1 | 64.7 | 2161.1 | 49.7 | 1491.2 | 87.8 | 49 | 3.343248623 | 0.196768924 | 0.178370297 | 0.010906475 |
| TP19-50 - 41 | 1103.6 | 52.5 | 2291.6 | 70.9 | 1587.7 | 77.2 | 48 | 3.776040785 | 0.183549226 | 0.186731036 | 0.00887745 |
| TP19-50 - 7 | 1231.2 | 40.3 | 2564.1 | 60.2 | 1818.6 | 71.4 | 48 | 4.996012084 | 0.196108694 | 0.210444515 | 0.006886732 |
| TP19-50 - 80 | 1037.9 | 23.2 | 2162.1 | 45.7 | 1475.4 | 54.5 | 48 | 3.276113604 | 0.12102239 | 0.174691089 | 0.003909295 |
| TP19-50 - 11 | 1157.5 | 41.0 | 2446.5 | 100.3 | 1704.2 | 67.7 | 47 | 4.356652948 | 0.172949947 | 0.196688785 | 0.006960187 |
| TP19-50 - 134 | 997.5 | 31.3 | 2122.0 | 58.0 | 1424.9 | 64.7 | 47 | 3.068833941 | 0.13939683 | 0.167344345 | 0.005257737 |
| TP19-50 - 108 | 995.6 | 42.4 | 2266.5 | 84.1 | 1487.7 | 51.5 | 44 | 3.328147447 | 0.115131927 | 0.167002981 | 0.007111004 |
| TP19-50 - 9 | 964.0 | 72.5 | 2214.1 | 87.6 | 1437.3 | 74.9 | 44 | 3.11858257 | 0.162602152 | 0.161302104 | 0.012131372 |
| TP19-50 - 13 | 999.0 | 31.3 | 2295.2 | 44.7 | 1503.1 | 55.8 | 44 | 3.394322813 | 0.125977139 | 0.167625949 | 0.005249954 |
| TP19-50 - 118 | 935.1 | 67.8 | 2183.3 | 45.6 | 1398.7 | 98.7 | 43 | 2.964819761 | 0.209172664 | 0.15611535 | 0.011314175 |
| TP19-50 - 82 | 974.8 | 90.7 | 2282.4 | 168.7 | 1473.8 | 81.3 | 43 | 3.269533148 | 0.180373069 | 0.163246327 | 0.015185245 |
| TP19-50 - 35 | 908.2 | 33.2 | 2156.9 | 59.7 | 1364.4 | 49.7 | 42 | 2.833346037 | 0.103277854 | 0.151291132 | 0.005538037 |
| TP19-50 - 76 | 970.8 | 34.2 | 2397.1 | 66.0 | 1525.9 | 62.6 | 40 | 3.494082155 | 0.143307769 | 0.162528142 | 0.005722978 |
| TP19-50 - 144 | 961.9 | 18.4 | 2416.8 | 37.9 | 1528.0 | 52.9 | 40 | 3.503457394 | 0.121271244 | 0.160930279 | 0.003070329 |
| TP19-50 - 53 | 914.1 | 21.2 | 2367.6 | 57.7 | 1462.3 | 52.5 | 39 | 3.221114173 | 0.115743934 | 0.152339322 | 0.003528534 |
| TP19-50 - 84 | 840.6 | 19.2 | 2206.2 | 47.6 | 1323.5 | 52.4 | 38 | 2.682110604 | 0.106131168 | 0.139274933 | 0.003188767 |
| TP19-50 - 140 | 1009.0 | 25.0 | 2650.4 | 51.7 | 1681.7 | 61.0 | 38 | 4.239452454 | 0.153711707 | 0.169433777 | 0.004195377 |
| TP19-50 - 100 | 879.8 | 35.6 | 2388.9 | 60.6 | 1439.2 | 55.3 | 37 | 3.126217768 | 0.120189766 | 0.146225084 | 0.005919653 |
| TP19-50 - 32 | 854.8 | 18.1 | 2365.8 | 39.7 | 1406.6 | 51.0 | 36 | 2.996085554 | 0.108538306 | 0.141788465 | 0.003004591 |
| TP19-50 - 141 | 873.0 | 40.2 | 2434.1 | 68.9 | 1453.9 | 55.7 | 36 | 3.186678871 | 0.122105747 | 0.145027764 | 0.006683181 |
| TP19-50 - 43 | 890.7 | 18.6 | 2524.0 | 42.8 | 1512.6 | 56.7 | 35 | 3.435677347 | 0.12884928 | 0.148166355 | 0.003089283 |
| TP19-50 - 48 | 899.3 | 22.2 | 2581.5 | 44.0 | 1548.1 | 54.9 | 35 | 3.59368161 | 0.127360171 | 0.149701705 | 0.003695207 |
| TP19-50 - 83 | 853.0 | 18.7 | 2481.8 | 38.9 | 1456.9 | 52.7 | 34 | 3.198797809 | 0.115648397 | 0.141476251 | 0.003107877 |
| TP19-50 - 153 | 860.8 | 23.1 | 2568.0 | 90.0 | 1505.3 | 69.1 | 34 | 3.404105059 | 0.156244831 | 0.14286162 | 0.003840185 |
| TP19-50 - 39 | 842.4 | 38.0 | 2597.5 | 108.6 | 1499.2 | 55.1 | 32 | 3.377692932 | 0.124121262 | 0.139594075 | 0.006292848 |
| TP19-50 - 117 | 789.7 | 22.0 | 2518.4 | 41.6 | 1410.3 | 58.1 | 31 | 3.010595497 | 0.1239256 | 0.130324459 | 0.003630366 |
| TP19-50 - 46 | 747.9 | 31.3 | 2490.8 | 68.3 | 1355.5 | 57.3 | 30 | 2.799772543 | 0.118324729 | 0.123017408 | 0.005152419 |
| TP19-50 - 37 | 702.7 | 15.9 | 2353.3 | 53.1 | 1247.5 | 47.3 | 30 | 2.416277698 | 0.091678586 | 0.115163937 | 0.002600049 |
| TP19-50 - 79 | 757.4 | 34.4 | 2540.5 | 62.9 | 1387.2 | 59.9 | 30 | 2.920246259 | 0.126170963 | 0.124672814 | 0.00566302 |
| TP19-50 - 101 | 744.4 | 16.8 | 2553.8 | 66.8 | 1378.4 | 51.4 | 29 | 2.886557197 | 0.107559013 | 0.122399051 | 0.002765129 |
| TP19-50 - 128 | 850.5 | 24.7 | 2952.1 | 50.6 | 1681.5 | 68.0 | 29 | 4.238233685 | 0.171280516 | 0.1410385 | 0.004102059 |
| TP19-50 - 98 | 788.3 | 21.4 | 2839.0 | 73.6 | 1562.7 | 54.9 | 28 | 3.659912279 | 0.128527575 | 0.130075053 | 0.003532134 |
| TP19-50 - 148 | 711.2 | 23.0 | 2566.2 | 92.8 | 1348.7 | 50.3 | 28 | 2.774652724 | 0.103578403 | 0.116646706 | 0.003779871 |
| TP19-50 - 127 | 814.3 | 25.6 | 2964.7 | 112.9 | 1650.6 | 64.7 | 27 | 4.081209244 | 0.159960273 | 0.134635946 | 0.004231315 |
| TP19-50 - 94 | 1149.1 | 119.4 | 4318.0 | 340.8 | 2771.3 | 459.6 | 27 | 14.3229138 | 2.375536135 | 0.195123963 | 0.020271656 |
| TP19-50 - 90 | 650.6 | 20.6 | 2460.1 | 95.2 | 1230.4 | 55.7 | 26 | 2.359343316 | 0.106798836 | 0.106195762 | 0.003368375 |
| TP19-50 - 129 | 730.1 | 14.8 | 2791.3 | 41.2 | 1473.5 | 52.5 | 26 | 3.268136328 | 0.11635076 | 0.119917055 | 0.002429601 |
| TP19-50 - 65 | 735.9 | 17.2 | 2929.4 | 70.8 | 1546.9 | 58.6 | 25 | 3.588223052 | 0.135917787 | 0.120934812 | 0.002829676 |

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| TP19-50 - 137 | 706.1 | 15.4 | 2927.6 | 59.2 | 1511.2 | 51.8 | 24 | 3.429788271 | 0.11750051 | 0.115755537 | 0.002529071 |
| TP19-50 - 120 | 669.7 | 17.6 | 2831.1 | 53.8 | 1421.9 | 63.0 | 24 | 3.05674188 | 0.135367971 | 0.109481064 | 0.002876106 |
| TP19-50 - 29 | 651.5 | 26.0 | 2838.2 | 78.3 | 1402.5 | 54.2 | 23 | 2.980055491 | 0.115077692 | 0.10634116 | 0.004239883 |
| TP19-50 - 6 | 652.7 | 14.6 | 2913.5 | 44.4 | 1439.3 | 50.7 | 22 | 3.126948285 | 0.110161068 | 0.106546156 | 0.00238434 |
| TP19-50 - 28 | 641.0 | 17.7 | 2879.0 | 45.4 | 1408.7 | 54.0 | 22 | 3.004432577 | 0.115240256 | 0.104551069 | 0.002888644 |
| TP19-50 - 38 | 645.5 | 13.6 | 2990.8 | 58.7 | 1465.0 | 49.9 | 22 | 3.232646518 | 0.110001539 | 0.10531829 | 0.00222098 |
| TP19-50 - 89 | 565.4 | 14.2 | 2748.8 | 58.4 | 1253.2 | 43.2 | 21 | 2.435544335 | 0.084046299 | 0.091677019 | 0.002294531 |
| TP19-50 - 91 | 544.8 | 53.7 | 2689.5 | 125.3 | 1200.3 | 79.3 | 20 | 2.261225289 | 0.14934922 | 0.088181664 | 0.008692051 |
| TP19-50 - 45 | 624.3 | 21.7 | 3107.3 | 82.4 | 1496.4 | 86.2 | 20 | 3.365412454 | 0.193958087 | 0.101687555 | 0.003530366 |
| TP19-50 - 122 | 545.9 | 14.2 | 2940.7 | 42.0 | 1311.9 | 53.4 | 19 | 2.640180002 | 0.107413328 | 0.088374154 | 0.002302578 |
| TP19-50 - 132 | 606.5 | 13.9 | 3327.1 | 46.8 | 1582.8 | 56.8 | 18 | 3.753019148 | 0.134793008 | 0.098647819 | 0.002266818 |
| TP19-50 - 72 | 537.1 | 11.5 | 2987.0 | 46.1 | 1320.7 | 46.1 | 18 | 2.671983524 | 0.093215593 | 0.08689067 | 0.001859252 |
| TP19-50 - 119 | 531.8 | 18.9 | 2976.1 | 91.3 | 1308.3 | 55.4 | 18 | 2.627229428 | 0.111278558 | 0.085986353 | 0.003063411 |
| TP19-50 - 15 | 545.1 | 18.9 | 3206.5 | 80.2 | 1436.0 | 56.5 | 17 | 3.113430119 | 0.122560345 | 0.088229039 | 0.003057251 |
| TP19-50 - 4 | 495.0 | 12.1 | 3078.6 | 56.5 | 1299.8 | 52.2 | 16 | 2.597029736 | 0.104389759 | 0.079818153 | 0.001946916 |
| TP19-50 - 59 | 431.1 | 28.3 | 2780.9 | 152.5 | 1071.8 | 48.0 | 16 | 1.873652823 | 0.083975635 | 0.069153117 | 0.004546432 |
| TP19-50 - 8 | 483.1 | 17.3 | 3214.2 | 65.0 | 1343.6 | 75.0 | 15 | 2.755543092 | 0.153851466 | 0.077825489 | 0.002792113 |
| TP19-50 - 107 | 481.0 | 13.9 | 3293.9 | 44.1 | 1378.6 | 50.5 | 15 | 2.887413571 | 0.105727001 | 0.07746556 | 0.002233814 |
| TP19-50 - 131 | 461.0 | 10.7 | 3213.0 | 63.2 | 1308.0 | 50.1 | 14 | 2.626018564 | 0.100512173 | 0.074132951 | 0.001724163 |
| TP19-50 - 66 | 478.4 | 12.4 | 3350.6 | 43.8 | 1402.2 | 52.3 | 14 | 2.978660924 | 0.111152486 | 0.077042738 | 0.001989356 |
| TP19-50 - 133 | 423.7 | 27.2 | 3092.3 | 148.0 | 1189.9 | 76.4 | 14 | 2.228160507 | 0.143084452 | 0.067936108 | 0.00435762 |
| TP19-50 - 42 | 382.0 | 21.3 | 2872.1 | 125.3 | 1024.1 | 49.0 | 13 | 1.741698283 | 0.083318893 | 0.061041645 | 0.003401181 |
| TP19-50 - 112 | 442.3 | 16.0 | 3361.0 | 75.9 | 1347.8 | 51.0 | 13 | 2.771282473 | 0.104901982 | 0.071017382 | 0.002562842 |
| TP19-50 - 52 | 397.6 | 10.7 | 3331.8 | 53.1 | 1251.0 | 48.2 | 12 | 2.42837265 | 0.093557859 | 0.063623453 | 0.001718014 |
| TP19-50 - 60 | 362.4 | 17.0 | 3122.1 | 62.4 | 1095.7 | 63.2 | 12 | 1.941979675 | 0.112086071 | 0.057829626 | 0.002713838 |
| TP19-50 - 88 | 356.1 | 19.6 | 3123.0 | 89.7 | 1081.3 | 47.7 | 11 | 1.900688466 | 0.083867034 | 0.056797492 | 0.003133679 |
| TP19-50 - 27 | 336.0 | 6.7 | 3349.8 | 40.9 | 1138.0 | 39.1 | 10 | 2.067156182 | 0.070942934 | 0.053507074 | 0.001060119 |
| TP19-50 - 93 | 314.1 | 9.3 | 3167.6 | 55.5 | 1016.1 | 41.3 | 10 | 1.720303485 | 0.069899034 | 0.049928574 | 0.001484609 |
| TP19-50 - 56 | 296.1 | 8.5 | 3124.5 | 78.8 | 960.5 | 45.9 | 9 | 1.575251598 | 0.075310892 | 0.047005632 | 0.001356207 |
| TP19-50 - 3 | 308.3 | 16.6 | 3441.1 | 72.1 | 1117.4 | 64.3 | 9 | 2.005530288 | 0.115401876 | 0.048992681 | 0.002633345 |
| TP19-50 - 12 | 290.2 | 14.4 | 3476.9 | 118.7 | 1092.8 | 41.9 | 8 | 1.933545711 | 0.074089259 | 0.046052385 | 0.002286254 |
| TP19-50 - 51 | 274.4 | 10.0 | 3447.6 | 66.8 | 1041.7 | 52.9 | 8 | 1.789715769 | 0.090921468 | 0.043481602 | 0.001587962 |
| TP19-50 - 114 | 261.4 | 11.9 | 3371.3 | 79.4 | 977.7 | 41.0 | 8 | 1.619199528 | 0.067950038 | 0.04138804 | 0.001879287 |
| TP19-50 - 125 | 246.6 | 10.0 | 3325.9 | 56.4 | 923.8 | 41.2 | 7 | 1.483814048 | 0.066146064 | 0.038996667 | 0.001576292 |
| TP19-50 - 2 | 237.6 | 5.2 | 3612.5 | 77.7 | 1015.7 | 42.1 | 7 | 1.719091249 | 0.071217241 | 0.037539745 | 0.000826765 |
| TP19-50 - 40 | 219.9 | 8.0 | 3462.6 | 92.5 | 906.0 | 43.5 | 6 | 1.440694085 | 0.0692384 | 0.034701971 | 0.001265917 |
| TP19-50 - 124 | 192.3 | 7.6 | 3235.0 | 71.5 | 746.9 | 29.4 | 6 | 1.086745439 | 0.042797124 | 0.030275751 | 0.001201947 |
| TP19-50 - 95 | 177.8 | 4.6 | 3597.5 | 52.5 | 831.9 | 32.7 | 5 | 1.268930532 | 0.049846033 | 0.0279727 | 0.000728659 |
| TP19-50 - 96 | 146.3 | 4.1 | 3603.9 | 58.7 | 725.9 | 27.0 | 4 | 1.044055781 | 0.038794155 | 0.022961217 | 0.000645269 |
| TP19-50 - 138 | 98.1 | 4.9 | 3656.1 | 80.1 | 550.0 | 31.3 | 3 | 0.718938482 | 0.040904739 | 0.015330839 | 0.000765205 |
| TP19-50 - 75 | 55.4 | 1.9 | 4384.9 | 84.6 | 516.1 | 20.4 | 1 | 0.662428596 | 0.026145094 | 0.00863555 | 0.000291042 |
| TP19-51 - 147 | 5356.5 | 237.9 | 4380.5 | 113.6 | 4678.7 | 298.9 | 122 | 99.26175591 | 6.341212053 | 1.295454103 | 0.057535028 |
| TP19-51 - 64 | 1834.5 | 38.4 | 1740.1 | 48.6 | 1798.3 | 74.2 | 105 | 4.876954907 | 0.201139524 | 0.329204969 | 0.00689847 |
| TP19-51 - 63 | 1889.5 | 35.8 | 1827.4 | 31.9 | 1868.0 | 66.0 | 103 | 5.294948976 | 0.187024024 | 0.340585659 | 0.006454268 |
| TP19-51 - 74 | 1798.0 | 35.2 | 1759.2 | 41.7 | 1788.4 | 67.9 | 102 | 4.819960229 | 0.183026107 | 0.321690606 | 0.006298876 |
| TP19-51 - 86 | 1823.4 | 34.7 | 1788.3 | 31.3 | 1814.7 | 63.5 | 102 | 4.972914246 | 0.17392412 | 0.326914504 | 0.006219344 |
| TP19-51 - 145 | 1996.4 | 39.9 | 1959.9 | 33.4 | 1988.6 | 70.4 | 102 | 6.088534023 | 0.215400149 | 0.363013339 | 0.007255867 |

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| TP19-51 - 103 | 1846.3 | 38.6 | 1829.7 | 40.4 | 1847.2 | 68.6 | 101 | 5.167156228 | 0.192005435 | 0.331645017 | 0.006936074 |
| TP19-51 - 44 | 1836.9 | 34.7 | 1820.8 | 37.2 | 1838.2 | 66.7 | 101 | 5.112437448 | 0.185549093 | 0.329692582 | 0.006222563 |
| TP19-51 - 142 | 1781.8 | 34.5 | 1778.9 | 38.4 | 1788.9 | 67.8 | 100 | 4.822833493 | 0.182673121 | 0.318383067 | 0.006168628 |
| TP19-51 - 81 | 1819.1 | 34.4 | 1818.9 | 26.2 | 1826.9 | 61.3 | 100 | 5.045104195 | 0.169291596 | 0.32602644 | 0.006158766 |
| TP19-51 - 131 | 2564.4 | 71.4 | 2565.2 | 86.8 | 2572.8 | 114.9 | 100 | 11.60114182 | 0.517889088 | 0.488551861 | 0.013610606 |
| TP19-51 - 39 | 1799.2 | 36.4 | 1807.8 | 45.4 | 1811.5 | 71.8 | 100 | 4.954055242 | 0.196411198 | 0.321942467 | 0.006510413 |
| TP19-51 - 4 | 1791.6 | 32.9 | 1806.9 | 31.1 | 1807.3 | 63.7 | 99 | 4.929398761 | 0.17376517 | 0.320394473 | 0.005882521 |
| TP19-51 - 72 | 1822.9 | 35.3 | 1844.8 | 36.0 | 1841.3 | 67.6 | 99 | 5.13102047 | 0.188377447 | 0.326817596 | 0.006334978 |
| TP19-51 - 8 | 1791.4 | 37.1 | 1834.2 | 28.6 | 1819.5 | 65.0 | 98 | 5.000817632 | 0.178539542 | 0.320336712 | 0.006626978 |
| TP19-51 - 62 | 1791.1 | 36.2 | 1837.9 | 40.0 | 1821.1 | 70.1 | 97 | 5.010560191 | 0.192745455 | 0.320288942 | 0.006464998 |
| TP19-51 - 98 | 1736.3 | 32.1 | 1786.9 | 36.4 | 1767.7 | 63.1 | 97 | 4.702838818 | 0.16795045 | 0.309114081 | 0.00571236 |
| TP19-51 - 28 | 2446.5 | 53.9 | 2520.4 | 54.7 | 2496.8 | 97.3 | 97 | 10.69227872 | 0.416720903 | 0.461564431 | 0.010164427 |
| TP19-51 - 106 | 1718.3 | 32.4 | 1774.1 | 31.9 | 1751.5 | 61.7 | 97 | 4.612247108 | 0.162580943 | 0.305459151 | 0.005751846 |
| TP19-51 - 10 | 1744.9 | 39.0 | 1812.4 | 41.3 | 1784.5 | 65.9 | 96 | 4.797692221 | 0.17719138 | 0.31085576 | 0.006943022 |
| TP19-51 - 113 | 1763.7 | 35.2 | 1833.5 | 34.4 | 1803.9 | 63.3 | 96 | 4.909412026 | 0.172168586 | 0.314691253 | 0.006277443 |
| TP19-51 - 140 | 1791.4 | 32.4 | 1873.5 | 33.1 | 1837.3 | 64.4 | 96 | 5.10690395 | 0.179080193 | 0.320349862 | 0.005798332 |
| TP19-51 - 65 | 1739.9 | 33.7 | 1876.2 | 34.6 | 1810.5 | 62.3 | 93 | 4.947930684 | 0.17013245 | 0.30983592 | 0.005998855 |
| TP19-51 - 40 | 1713.8 | 34.6 | 1854.2 | 34.3 | 1785.4 | 63.8 | 92 | 4.803030964 | 0.171607928 | 0.304537222 | 0.006148252 |
| TP19-51 - 7 | 1668.1 | 38.0 | 1824.6 | 36.5 | 1746.7 | 63.7 | 91 | 4.585610508 | 0.167162905 | 0.295326549 | 0.006724615 |
| TP19-51 - 70 | 1702.9 | 44.8 | 1867.0 | 42.8 | 1785.7 | 66.2 | 91 | 4.804487755 | 0.178001297 | 0.302338558 | 0.007956829 |
| TP19-51 - 129 | 1682.2 | 36.4 | 1850.2 | 32.1 | 1766.0 | 62.7 | 91 | 4.692914401 | 0.166554228 | 0.298166646 | 0.006449404 |
| TP19-51 - 136 | 1626.7 | 52.1 | 1791.9 | 55.1 | 1706.5 | 70.7 | 91 | 4.368803106 | 0.181086279 | 0.287042743 | 0.009195647 |
| TP19-51 - 79 | 1606.1 | 32.6 | 1794.2 | 29.0 | 1694.9 | 58.1 | 90 | 4.307984088 | 0.147600285 | 0.282928085 | 0.005747057 |
| TP19-51 - 3 | 1642.8 | 44.8 | 1851.7 | 36.8 | 1743.6 | 66.8 | 89 | 4.568694935 | 0.17490617 | 0.29025479 | 0.007920432 |
| TP19-51 - 144 | 1635.3 | 34.1 | 1867.1 | 34.9 | 1748.0 | 61.9 | 88 | 4.593217573 | 0.16258438 | 0.28876484 | 0.00602808 |
| TP19-51 - 118 | 1603.1 | 63.2 | 1848.6 | 47.7 | 1720.7 | 87.5 | 87 | 4.444620592 | 0.225944605 | 0.282340184 | 0.011135513 |
| TP19-51 - 15 | 1621.0 | 51.2 | 1886.3 | 41.9 | 1747.9 | 76.8 | 86 | 4.592394979 | 0.20179953 | 0.285901318 | 0.009035607 |
| TP19-51 - 139 | 1648.3 | 36.0 | 1953.4 | 43.0 | 1794.7 | 65.5 | 84 | 4.856446133 | 0.177155197 | 0.29135922 | 0.006354725 |
| TP19-51 - 143 | 1613.2 | 35.5 | 1936.2 | 39.2 | 1766.0 | 65.0 | 83 | 4.69311393 | 0.172730255 | 0.28435123 | 0.006261797 |
| TP19-51 - 154 | 1517.7 | 52.3 | 1850.3 | 44.1 | 1670.3 | 66.0 | 82 | 4.181200283 | 0.165322523 | 0.265454391 | 0.009139952 |
| TP19-51 - 138 | 1614.6 | 35.1 | 1987.9 | 34.7 | 1791.1 | 61.7 | 81 | 4.835633138 | 0.166466119 | 0.28462709 | 0.006185731 |
| TP19-51 - 37 | 1538.3 | 41.5 | 1968.7 | 46.9 | 1737.6 | 73.0 | 78 | 4.535927653 | 0.190490539 | 0.269517556 | 0.007268205 |
| TP19-51 - 108 | 1445.0 | 29.5 | 1879.6 | 31.1 | 1638.4 | 57.7 | 77 | 4.02092079 | 0.141707371 | 0.251263457 | 0.005126309 |
| TP19-51 - 137 | 1436.2 | 33.1 | 1883.8 | 35.7 | 1632.3 | 59.1 | 76 | 3.990632674 | 0.144497691 | 0.249562407 | 0.005755178 |
| TP19-51 - 120 | 1453.4 | 69.7 | 1917.9 | 76.3 | 1659.5 | 68.0 | 76 | 4.12599151 | 0.168990078 | 0.252905563 | 0.01212795 |
| TP19-51 - 47 | 1435.6 | 37.3 | 1944.6 | 63.6 | 1662.5 | 58.5 | 74 | 4.141250788 | 0.145782466 | 0.249438403 | 0.006476841 |
| TP19-51 - 141 | 1460.2 | 41.1 | 1993.4 | 44.7 | 1699.9 | 67.2 | 73 | 4.334234077 | 0.171426432 | 0.254212054 | 0.007156867 |
| TP19-51 - 155 | 1573.8 | 46.6 | 2185.1 | 43.3 | 1861.1 | 72.4 | 72 | 5.252242574 | 0.204244056 | 0.276516057 | 0.008180614 |
| TP19-51 - 135 | 1409.4 | 41.9 | 1973.6 | 43.0 | 1659.5 | 71.2 | 71 | 4.126040473 | 0.177073295 | 0.244382671 | 0.007262918 |
| TP19-51 - 133 | 1417.2 | 35.6 | 2002.1 | 44.4 | 1676.3 | 68.4 | 71 | 4.211514176 | 0.171854398 | 0.245887656 | 0.006174396 |
| TP19-51 - 126 | 1342.3 | 34.7 | 1941.6 | 44.6 | 1600.7 | 60.1 | 69 | 3.837514614 | 0.14408478 | 0.231494636 | 0.005985045 |
| TP19-51 - 24 | 1367.5 | 62.7 | 1983.5 | 48.6 | 1635.9 | 70.7 | 69 | 4.008400189 | 0.173289655 | 0.236319579 | 0.010843149 |
| TP19-51 - 110 | 1356.1 | 85.7 | 1971.6 | 88.1 | 1621.0 | 84.9 | 69 | 3.935624862 | 0.206171931 | 0.23413664 | 0.014801328 |
| TP19-51 - 38 | 1319.9 | 26.4 | 1928.2 | 36.7 | 1579.6 | 57.1 | 68 | 3.738066401 | 0.135161247 | 0.22722098 | 0.00453888 |
| TP19-51 - 80 | 1356.5 | 33.4 | 1985.4 | 30.9 | 1629.6 | 60.4 | 68 | 3.977362921 | 0.1473129 | 0.234201859 | 0.00575851 |
| TP19-51 - 121 | 1391.0 | 110.1 | 2071.8 | 88.7 | 1689.0 | 101.5 | 67 | 4.277304217 | 0.256952856 | 0.240825093 | 0.019058838 |
| TP19-51 - 29 | 1333.9 | 43.7 | 2033.9 | 43.9 | 1637.1 | 65.7 | 66 | 4.014147591 | 0.161046668 | 0.229885528 | 0.007535765 |

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| TP19-51 - 48 | 1316.2 | 48.4 | 2019.0 | 48.8 | 1618.2 | 69.5 | 65 | 3.921779032 | 0.16850336 | 0.226510553 | 0.00832646 |
| TP19-51 - 11 | 1431.4 | 36.1 | 2204.4 | 128.5 | 1782.0 | 113.5 | 65 | 4.783710925 | 0.304584792 | 0.248625274 | 0.00626974 |
| TP19-51 - 95 | 1323.7 | 32.4 | 2052.0 | 41.2 | 1635.0 | 60.2 | 65 | 4.004051319 | 0.147510011 | 0.22794483 | 0.005586228 |
| TP19-51 - 117 | 1331.8 | 33.5 | 2104.4 | 41.3 | 1667.8 | 60.4 | 63 | 4.168002721 | 0.151067961 | 0.229494459 | 0.005772767 |
| TP19-51 - 18 | 1296.2 | 26.8 | 2069.4 | 35.0 | 1627.2 | 58.4 | 63 | 3.965828283 | 0.142288146 | 0.222722308 | 0.004610388 |
| TP19-51 - 123 | 1297.8 | 38.2 | 2114.4 | 54.3 | 1648.9 | 66.7 | 61 | 4.072964925 | 0.164751437 | 0.223023643 | 0.006561184 |
| TP19-51 - 50 | 1277.1 | 29.7 | 2117.8 | 37.5 | 1636.0 | 61.2 | 60 | 4.008952302 | 0.149988686 | 0.2190942 | 0.00509155 |
| TP19-51 - 104 | 1229.4 | 26.0 | 2063.5 | 38.2 | 1577.2 | 57.8 | 60 | 3.727200609 | 0.136680125 | 0.210112881 | 0.004438707 |
| TP19-51 - 54 | 1527.8 | 35.2 | 2573.5 | 36.0 | 2031.1 | 71.2 | 59 | 6.391259825 | 0.223893847 | 0.26744716 | 0.006157378 |
| TP19-51 - 22 | 1253.4 | 30.9 | 2143.0 | 75.5 | 1631.7 | 72.4 | 58 | 3.987495908 | 0.176976114 | 0.214631366 | 0.005297114 |
| TP19-51 - 91 | 1196.0 | 27.0 | 2079.1 | 50.0 | 1560.0 | 62.7 | 58 | 3.647663711 | 0.146577674 | 0.203861626 | 0.004596847 |
| TP19-51 - 153 | 1231.6 | 67.0 | 2141.6 | 65.3 | 1616.9 | 69.6 | 58 | 3.915735388 | 0.168617782 | 0.210524699 | 0.011459306 |
| TP19-51 - 92 | 1247.2 | 26.4 | 2228.8 | 34.6 | 1667.0 | 57.9 | 56 | 4.164177091 | 0.144697737 | 0.213463185 | 0.004524308 |
| TP19-51 - 58 | 1160.8 | 55.4 | 2083.6 | 44.8 | 1535.9 | 63.1 | 56 | 3.538488662 | 0.145461496 | 0.197291829 | 0.009412147 |
| TP19-51 - 114 | 1174.9 | 73.1 | 2122.5 | 67.9 | 1567.8 | 76.7 | 55 | 3.683658726 | 0.180197896 | 0.19992087 | 0.012436338 |
| TP19-51 - 36 | 1203.2 | 25.0 | 2209.0 | 43.6 | 1625.5 | 55.1 | 54 | 3.957451101 | 0.134215212 | 0.205200573 | 0.004255179 |
| TP19-51 - 56 | 1519.8 | 60.0 | 2795.2 | 197.8 | 2147.0 | 214.4 | 54 | 7.285065818 | 0.727493754 | 0.265877029 | 0.010494329 |
| TP19-51 - 109 | 1402.2 | 56.6 | 2601.5 | 48.2 | 1962.2 | 88.2 | 54 | 5.906697632 | 0.26541023 | 0.242991851 | 0.009809904 |
| TP19-51 - 89 | 1239.9 | 38.7 | 2308.8 | 41.0 | 1699.8 | 63.4 | 54 | 4.33380212 | 0.161687253 | 0.212081062 | 0.006619814 |
| TP19-51 - 32 | 1105.5 | 28.4 | 2128.1 | 35.2 | 1514.5 | 55.6 | 52 | 3.4439066 | 0.126443203 | 0.187077186 | 0.004808826 |
| TP19-51 - 88 | 1036.9 | 42.7 | 2012.7 | 54.5 | 1409.6 | 61.5 | 52 | 3.007919542 | 0.13124003 | 0.174506453 | 0.007192157 |
| TP19-51 - 151 | 1162.8 | 25.0 | 2308.8 | 60.6 | 1641.4 | 63.3 | 50 | 4.035749966 | 0.155596788 | 0.197680787 | 0.00425108 |
| TP19-51 - 43 | 1062.3 | 26.7 | 2166.1 | 51.3 | 1496.7 | 54.6 | 49 | 3.366687305 | 0.122731375 | 0.17914199 | 0.004503131 |
| TP19-51 - 116 | 1031.8 | 23.2 | 2119.6 | 37.6 | 1451.9 | 54.0 | 49 | 3.178376131 | 0.118207586 | 0.173588515 | 0.00390873 |
| TP19-51 - 41 | 1041.7 | 74.2 | 2170.9 | 119.9 | 1483.4 | 71.7 | 48 | 3.310054999 | 0.160076341 | 0.175383563 | 0.012488937 |
| TP19-51 - 73 | 1004.7 | 39.8 | 2102.3 | 34.2 | 1422.9 | 67.8 | 48 | 3.060785879 | 0.145939919 | 0.16866504 | 0.006680129 |
| TP19-51 - 14 | 1080.2 | 29.3 | 2309.6 | 41.7 | 1571.9 | 58.2 | 47 | 3.702567397 | 0.136982065 | 0.18243303 | 0.004954481 |
| TP19-51 - 87 | 1041.9 | 27.1 | 2228.6 | 48.0 | 1509.1 | 58.4 | 47 | 3.420285096 | 0.132446699 | 0.175418736 | 0.004560053 |
| TP19-51 - 60 | 1112.3 | 22.2 | 2381.6 | 56.0 | 1637.5 | 64.6 | 47 | 4.01635247 | 0.158410217 | 0.18833212 | 0.003753905 |
| TP19-51 - 19 | 1047.5 | 25.9 | 2297.9 | 37.7 | 1546.1 | 55.0 | 46 | 3.584632949 | 0.12744025 | 0.176438916 | 0.004361181 |
| TP19-51 - 94 | 971.6 | 60.3 | 2255.9 | 63.6 | 1463.0 | 80.6 | 43 | 3.224419469 | 0.177525091 | 0.162665195 | 0.010088393 |
| TP19-51 - 122 | 959.3 | 35.8 | 2260.1 | 56.6 | 1460.3 | 56.6 | 42 | 3.213005287 | 0.124533492 | 0.160452237 | 0.005994016 |
| TP19-51 - 66 | 963.3 | 24.8 | 2275.3 | 31.7 | 1465.9 | 57.1 | 42 | 3.236170577 | 0.125989011 | 0.161167333 | 0.004154834 |
| TP19-51 - 93 | 919.0 | 22.8 | 2180.2 | 57.4 | 1382.4 | 50.9 | 42 | 2.901806416 | 0.106783836 | 0.153218433 | 0.003807859 |
| TP19-51 - 84 | 1036.9 | 59.7 | 2483.0 | 72.6 | 1622.8 | 76.5 | 42 | 3.9442855 | 0.185980153 | 0.174503943 | 0.010041366 |
| TP19-51 - 90 | 991.5 | 26.6 | 2382.5 | 41.6 | 1537.4 | 56.2 | 42 | 3.545149994 | 0.129643147 | 0.166273483 | 0.00446738 |
| TP19-51 - 115 | 963.7 | 22.2 | 2350.1 | 55.2 | 1495.7 | 56.9 | 41 | 3.362263319 | 0.12796667 | 0.16124456 | 0.003717492 |
| TP19-51 - 1 | 921.4 | 25.5 | 2324.7 | 46.6 | 1449.8 | 56.0 | 40 | 3.169492409 | 0.122373132 | 0.15366057 | 0.004254569 |
| TP19-51 - 134 | 943.2 | 43.7 | 2442.4 | 69.2 | 1523.7 | 58.7 | 39 | 3.484411139 | 0.134143135 | 0.15756259 | 0.007304295 |
| TP19-51 - 52 | 807.1 | 20.1 | 2415.8 | 37.7 | 1381.6 | 53.0 | 33 | 2.898693471 | 0.111109692 | 0.133375947 | 0.003316324 |
| TP19-51 - 21 | 770.1 | 41.4 | 2324.0 | 52.2 | 1304.5 | 72.3 | 33 | 2.613808917 | 0.144777245 | 0.126896301 | 0.006816591 |
| TP19-51 - 6 | 837.7 | 17.0 | 2598.0 | 58.4 | 1495.2 | 56.3 | 32 | 3.360400141 | 0.12653945 | 0.138768597 | 0.002813515 |
| TP19-51 - 2 | 756.5 | 48.9 | 2351.4 | 87.2 | 1302.6 | 60.5 | 32 | 2.607057438 | 0.121046159 | 0.124522633 | 0.008043294 |
| TP19-51 - 25 | 734.7 | 28.3 | 2294.6 | 46.7 | 1256.5 | 52.3 | 32 | 2.446967106 | 0.101814365 | 0.120717716 | 0.004643167 |
| TP19-51 - 23 | 821.5 | 27.4 | 2585.0 | 71.9 | 1471.5 | 75.4 | 32 | 3.259528256 | 0.167083216 | 0.135909937 | 0.004537118 |
| TP19-51 - 59 | 759.8 | 25.0 | 2446.8 | 61.9 | 1346.9 | 48.3 | 31 | 2.767843928 | 0.099196127 | 0.125085094 | 0.004121651 |
| TP19-51 - 127 | 999.7 | 25.5 | 3310.5 | 243.1 | 2021.8 | 170.6 | 30 | 6.324149403 | 0.533592643 | 0.167747741 | 0.004271353 |

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| TP19-51 - 76 | 874.0 | 19.8 | 3058.6 | 38.8 | 1763.3 | 66.4 | 29 | 4.677889645 | 0.176162495 | 0.145206734 | 0.003284847 |
| TP19-51 - 69 | 702.3 | 45.3 | 2561.6 | 117.7 | 1336.4 | 52.1 | 27 | 2.728931983 | 0.106326978 | 0.115092937 | 0.007431848 |
| TP19-51 - 97 | 727.4 | 58.0 | 2662.3 | 138.2 | 1411.8 | 68.6 | 27 | 3.016458995 | 0.146493982 | 0.119451354 | 0.009523123 |
| TP19-51 - 61 | 786.0 | 52.7 | 2879.4 | 56.8 | 1576.1 | 94.4 | 27 | 3.721786098 | 0.222874115 | 0.129679424 | 0.008690316 |
| TP19-51 - 124 | 725.2 | 15.1 | 2688.4 | 51.3 | 1419.3 | 51.6 | 27 | 3.046204029 | 0.110809852 | 0.119066629 | 0.002481323 |
| TP19-51 - 55 | 749.2 | 20.9 | 2803.6 | 42.5 | 1499.4 | 60.6 | 27 | 3.378316826 | 0.13643002 | 0.123237302 | 0.003433648 |
| TP19-51 - 53 | 683.4 | 15.5 | 2600.4 | 44.6 | 1332.7 | 47.4 | 26 | 2.715505512 | 0.096575466 | 0.111844495 | 0.002534711 |
| TP19-51 - 46 | 756.0 | 17.2 | 2940.2 | 54.6 | 1573.7 | 61.2 | 26 | 3.710714909 | 0.144292693 | 0.124422027 | 0.002831435 |
| TP19-51 - 9 | 702.1 | 17.9 | 2744.4 | 41.2 | 1420.4 | 52.3 | 26 | 3.050491795 | 0.112307442 | 0.115058944 | 0.002939819 |
| TP19-51 - 150 | 718.3 | 21.8 | 2892.5 | 44.8 | 1506.5 | 55.7 | 25 | 3.409024972 | 0.125978431 | 0.11787988 | 0.00357952 |
| TP19-51 - 125 | 712.8 | 23.8 | 3096.1 | 54.6 | 1601.6 | 79.0 | 23 | 3.842091408 | 0.189488162 | 0.116909964 | 0.003904319 |
| TP19-51 - 13 | 687.1 | 15.0 | 3040.2 | 43.3 | 1542.9 | 56.8 | 23 | 3.569894143 | 0.131529763 | 0.112476268 | 0.002454155 |
| TP19-51 - 49 | 603.3 | 21.4 | 2758.6 | 43.8 | 1305.1 | 56.5 | 22 | 2.615891332 | 0.113278201 | 0.098112396 | 0.003486865 |
| TP19-51 - 67 | 597.1 | 15.4 | 2734.9 | 56.6 | 1287.7 | 44.2 | 22 | 2.554458519 | 0.087608509 | 0.09704576 | 0.002498377 |
| TP19-51 - 78 | 671.6 | 18.7 | 3094.7 | 36.3 | 1550.7 | 62.5 | 22 | 3.60518768 | 0.14528383 | 0.109803587 | 0.003054328 |
| TP19-51 - 146 | 592.7 | 21.0 | 2763.1 | 68.4 | 1294.8 | 48.9 | 21 | 2.579186319 | 0.097431193 | 0.096299003 | 0.003406977 |
| TP19-51 - 112 | 654.5 | 21.7 | 3074.9 | 59.6 | 1519.8 | 82.5 | 21 | 3.467247044 | 0.188314555 | 0.106865121 | 0.003549981 |
| TP19-51 - 101 | 559.0 | 13.0 | 2656.7 | 54.4 | 1202.7 | 43.0 | 21 | 2.268946583 | 0.081049201 | 0.090593762 | 0.002114049 |
| TP19-51 - 33 | 581.5 | 13.2 | 2861.8 | 48.0 | 1323.0 | 50.1 | 20 | 2.680158163 | 0.1014801 | 0.094402651 | 0.002136613 |
| TP19-51 - 105 | 544.4 | 18.4 | 2855.3 | 54.1 | 1270.6 | 54.3 | 19 | 2.495069194 | 0.106611953 | 0.088118115 | 0.002973811 |
| TP19-51 - 45 | 557.7 | 12.3 | 3049.8 | 48.3 | 1379.2 | 49.2 | 18 | 2.889782284 | 0.103089279 | 0.090362099 | 0.001995772 |
| TP19-51 - 77 | 530.2 | 13.8 | 2909.7 | 73.0 | 1275.3 | 50.5 | 18 | 2.511125804 | 0.099359922 | 0.085720991 | 0.002228563 |
| TP19-51 - 16 | 550.4 | 14.5 | 3034.7 | 41.8 | 1361.2 | 53.2 | 18 | 2.821427821 | 0.110222984 | 0.089133008 | 0.002346005 |
| TP19-51 - 148 | 460.4 | 19.0 | 2634.6 | 72.7 | 1058.1 | 39.6 | 17 | 1.835061161 | 0.068599326 | 0.074031597 | 0.003053754 |
| TP19-51 - 34 | 515.8 | 13.0 | 3002.1 | 40.4 | 1298.2 | 51.9 | 17 | 2.591298919 | 0.103548555 | 0.083307836 | 0.00210494 |
| TP19-51 - 130 | 504.1 | 20.9 | 2956.2 | 60.1 | 1257.1 | 74.3 | 17 | 2.448857886 | 0.144691657 | 0.081331768 | 0.003367126 |
| TP19-51 - 31 | 493.4 | 15.5 | 2909.9 | 49.1 | 1224.0 | 53.1 | 17 | 2.338236668 | 0.101445005 | 0.079545844 | 0.002493602 |
| TP19-51 - 96 | 489.8 | 13.3 | 2968.8 | 52.6 | 1240.3 | 46.5 | 16 | 2.392274229 | 0.089744063 | 0.078940533 | 0.002148715 |
| TP19-51 - 119 | 479.4 | 12.3 | 2935.0 | 63.0 | 1211.4 | 48.8 | 16 | 2.297173386 | 0.092456285 | 0.077207583 | 0.001973122 |
| TP19-51 - 42 | 516.0 | 17.8 | 3173.1 | 178.2 | 1376.4 | 64.8 | 16 | 2.879041315 | 0.135463845 | 0.083339818 | 0.002870485 |
| TP19-51 - 71 | 516.8 | 12.7 | 3273.4 | 34.5 | 1425.3 | 50.9 | 16 | 3.070383946 | 0.109655674 | 0.083462947 | 0.002049415 |
| TP19-51 - 27 | 512.3 | 11.4 | 3348.0 | 45.9 | 1456.3 | 50.4 | 15 | 3.196557028 | 0.110701966 | 0.082705563 | 0.00183998 |
| TP19-51 - 85 | 444.4 | 10.5 | 2976.9 | 43.4 | 1175.2 | 43.0 | 15 | 2.181669335 | 0.079826077 | 0.071368436 | 0.001692133 |
| TP19-51 - 26 | 414.3 | 9.1 | 2982.3 | 40.8 | 1127.4 | 41.1 | 14 | 2.035386078 | 0.074114046 | 0.066386315 | 0.001458229 |
| TP19-51 - 111 | 404.4 | 20.9 | 2916.6 | 113.2 | 1082.7 | 42.5 | 14 | 1.904722096 | 0.074829606 | 0.064748128 | 0.003351646 |
| TP19-51 - 83 | 399.5 | 9.5 | 3001.4 | 114.0 | 1109.3 | 50.9 | 13 | 1.981800233 | 0.090919508 | 0.063928615 | 0.001519804 |
| TP19-51 - 51 | 378.0 | 14.4 | 2975.6 | 86.3 | 1059.0 | 42.3 | 13 | 1.837558581 | 0.073411264 | 0.060384189 | 0.002298461 |
| TP19-51 - 82 | 381.9 | 11.3 | 3141.6 | 61.5 | 1136.5 | 45.5 | 12 | 2.062789961 | 0.082560085 | 0.061034023 | 0.001802541 |
| TP19-51 - 100 | 359.5 | 10.1 | 3018.7 | 71.9 | 1046.9 | 37.1 | 12 | 1.803844492 | 0.063884134 | 0.057356037 | 0.00161827 |
| TP19-51 - 149 | 350.9 | 10.3 | 3204.9 | 46.1 | 1104.9 | 43.9 | 11 | 1.96878241 | 0.078174848 | 0.055941904 | 0.00164298 |
| TP19-51 - 75 | 319.1 | 7.7 | 3048.6 | 53.0 | 978.0 | 36.8 | 10 | 1.620006434 | 0.060897931 | 0.05074865 | 0.001223379 |
| TP19-51 - 57 | 346.9 | 12.0 | 3351.1 | 60.5 | 1160.7 | 42.7 | 10 | 2.136619419 | 0.07853269 | 0.055286734 | 0.001920112 |
| TP19-51 - 5 | 332.3 | 14.9 | 3256.5 | 47.1 | 1089.2 | 57.9 | 10 | 1.923218619 | 0.102202152 | 0.052895315 | 0.00236749 |
| TP19-51 - 30 | 281.1 | 6.2 | 3407.2 | 43.4 | 1041.0 | 36.2 | 8 | 1.787726317 | 0.062209951 | 0.044577183 | 0.000985321 |
| TP19-51 - 132 | 272.6 | 8.8 | 3349.6 | 55.9 | 995.7 | 42.3 | 8 | 1.666134551 | 0.070822716 | 0.043189699 | 0.001387203 |
| TP19-51 - 35 | 273.9 | 7.9 | 3382.1 | 84.2 | 1012.7 | 41.0 | 8 | 1.711033062 | 0.069355346 | 0.043402685 | 0.001258775 |
| TP19-51 - 68 | 265.4 | 8.8 | 3310.2 | 55.7 | 962.2 | 42.4 | 8 | 1.57967286 | 0.069530779 | 0.042024951 | 0.001396043 |

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| TP19-51 - 102 | 261.4 | 7.3 | 3266.1 | 48.3 | 936.5 | 36.1 | 8 | 1.515091934 | 0.058417651 | 0.041383221 | 0.001153222 |
| TP19-51 - 128 | 251.1 | 10.6 | 3308.1 | 90.4 | 928.2 | 38.5 | 8 | 1.494713536 | 0.061952271 | 0.039712697 | 0.001683682 |
| TP19-51 - 107 | 242.0 | 10.5 | 3452.8 | 115.2 | 962.9 | 66.3 | 7 | 1.581448009 | 0.108873508 | 0.038260438 | 0.001655218 |
| TP19-51 - 152 | 199.2 | 4.8 | 3328.5 | 46.3 | 798.8 | 27.2 | 6 | 1.196048143 | 0.040783816 | 0.031386216 | 0.000760662 |
| TP19-51 - 20 | 180.1 | 7.2 | 3324.9 | 60.8 | 743.0 | 30.4 | 5 | 1.078730384 | 0.044135908 | 0.028328685 | 0.0011402 |
| TP19-51 - 17 | 144.3 | 3.9 | 3376.8 | 59.8 | 646.2 | 26.3 | 4 | 0.889695437 | 0.036217901 | 0.022636786 | 0.00060947 |
| TP19-51 - 12 | 113.1 | 2.9 | 3674.1 | 60.7 | 621.3 | 23.0 | 3 | 0.843817285 | 0.031299724 | 0.017691785 | 0.00045288 |
| TP19-51 - 99 | 81.1 | 2.3 | 3514.7 | 78.6 | 440.8 | 17.1 | 2 | 0.543590584 | 0.021068851 | 0.01266512 | 0.000361073 |
| TP19-52 - 79 | 1839.9 | 39.8 | 1714.4 | 50.2 | 1787.7 | 75.8 | 107 | 4.816285391 | 0.204100406 | 0.330316972 | 0.007140529 |
| TP19-52 - 10 | 1821.1 | 35.5 | 1721.1 | 39.7 | 1782.4 | 66.7 | 106 | 4.78573087 | 0.178986598 | 0.326445356 | 0.006358554 |
| TP19-52 - 112 | 1835.5 | 41.5 | 1759.4 | 45.9 | 1807.0 | 74.9 | 104 | 4.927383252 | 0.204373011 | 0.32940508 | 0.007439129 |
| TP19-52 - 151 | 1782.8 | 32.8 | 1723.6 | 34.9 | 1761.6 | 64.0 | 103 | 4.668228831 | 0.169511237 | 0.318582694 | 0.005859124 |
| TP19-52 - 18 | 1791.0 | 34.6 | 1742.3 | 35.2 | 1776.9 | 64.3 | 103 | 4.754647978 | 0.172070005 | 0.320254045 | 0.006195573 |
| TP19-52 - 43 | 1887.1 | 36.9 | 1836.4 | 34.5 | 1870.7 | 66.6 | 103 | 5.31137736 | 0.189175667 | 0.340093219 | 0.006649448 |
| TP19-52 - 42 | 1787.3 | 32.4 | 1739.4 | 28.5 | 1772.5 | 62.2 | 103 | 4.729450939 | 0.165866323 | 0.319511732 | 0.005800788 |
| TP19-52 - 8 | 1779.5 | 32.5 | 1732.0 | 27.8 | 1765.9 | 60.5 | 103 | 4.692398707 | 0.160707935 | 0.317905313 | 0.005800058 |
| TP19-52 - 97 | 1774.7 | 32.7 | 1728.3 | 37.5 | 1760.5 | 65.3 | 103 | 4.662155089 | 0.173000343 | 0.31692003 | 0.005836823 |
| TP19-52 - 20 | 1773.5 | 33.8 | 1728.5 | 30.6 | 1760.3 | 61.6 | 103 | 4.661317393 | 0.163060797 | 0.316685534 | 0.006038599 |
| TP19-52 - 113 | 1819.9 | 34.9 | 1775.5 | 40.0 | 1805.7 | 67.7 | 103 | 4.920135457 | 0.18452763 | 0.326201866 | 0.006262986 |
| TP19-52 - 53 | 1801.5 | 33.8 | 1759.5 | 37.1 | 1789.4 | 65.7 | 102 | 4.825953618 | 0.177141668 | 0.322409591 | 0.006049752 |
| TP19-52 - 23 | 1789.6 | 33.2 | 1749.5 | 37.1 | 1778.5 | 64.6 | 102 | 4.76329264 | 0.172948155 | 0.31997245 | 0.005942832 |
| TP19-52 - 9 | 1796.4 | 33.8 | 1760.7 | 36.1 | 1787.8 | 65.7 | 102 | 4.816368583 | 0.177132078 | 0.321376213 | 0.006046315 |
| TP19-52 - 44 | 1828.0 | 38.3 | 1799.6 | 56.8 | 1821.0 | 76.6 | 102 | 5.010191047 | 0.210740714 | 0.327863967 | 0.006862799 |
| TP19-52 - 88 | 1780.1 | 33.2 | 1757.4 | 27.6 | 1777.1 | 60.9 | 101 | 4.755673721 | 0.162871514 | 0.318032528 | 0.005930763 |
| TP19-52 - 66 | 1774.6 | 32.7 | 1752.5 | 33.0 | 1771.0 | 63.7 | 101 | 4.72129807 | 0.169767557 | 0.316897624 | 0.005838933 |
| TP19-52 - 77 | 1791.3 | 34.7 | 1769.3 | 36.3 | 1789.0 | 66.0 | 101 | 4.823246776 | 0.17798837 | 0.320327718 | 0.006205596 |
| TP19-52 - 29 | 1780.4 | 33.2 | 1759.8 | 29.0 | 1778.5 | 61.2 | 101 | 4.763288294 | 0.16398275 | 0.318082632 | 0.005925215 |
| TP19-52 - 32 | 1776.4 | 32.1 | 1759.6 | 28.9 | 1776.1 | 61.5 | 101 | 4.749783424 | 0.164426721 | 0.317274016 | 0.005724392 |
| TP19-52 - 89 | 1779.9 | 34.2 | 1763.0 | 36.6 | 1779.5 | 63.9 | 101 | 4.769400189 | 0.17130866 | 0.317980171 | 0.006106133 |
| TP19-52 - 6 | 1774.3 | 33.6 | 1760.8 | 33.2 | 1775.7 | 63.6 | 101 | 4.747773603 | 0.17002782 | 0.316851489 | 0.005995431 |
| TP19-52 - 142 | 1727.8 | 35.2 | 1716.9 | 49.3 | 1728.1 | 75.5 | 101 | 4.484662889 | 0.196010699 | 0.307376228 | 0.006256693 |
| TP19-52 - 84 | 1777.4 | 33.7 | 1766.7 | 36.1 | 1779.4 | 66.4 | 101 | 4.768796763 | 0.1780045 | 0.317469755 | 0.006023147 |
| TP19-52 - 122 | 1742.0 | 34.4 | 1734.6 | 31.6 | 1745.3 | 61.3 | 100 | 4.578092018 | 0.160711834 | 0.310273417 | 0.006123726 |
| TP19-52 - 82 | 1786.7 | 36.7 | 1782.4 | 42.0 | 1790.8 | 68.1 | 100 | 4.83390684 | 0.183689109 | 0.31938451 | 0.006560016 |
| TP19-52 - 14 | 1793.1 | 38.9 | 1789.2 | 38.1 | 1799.5 | 71.1 | 100 | 4.88404357 | 0.192886126 | 0.320694719 | 0.006962152 |
| TP19-52 - 27 | 1738.3 | 35.1 | 1736.4 | 46.2 | 1745.4 | 67.5 | 100 | 4.578745058 | 0.176998177 | 0.309520845 | 0.006257724 |
| TP19-52 - 83 | 1786.3 | 33.7 | 1787.1 | 32.9 | 1792.0 | 63.3 | 100 | 4.840790812 | 0.170925089 | 0.319308484 | 0.006017443 |
| TP19-52 - 96 | 1754.5 | 31.8 | 1766.8 | 28.1 | 1766.7 | 60.7 | 99 | 4.6967825 | 0.161467087 | 0.312800983 | 0.005668857 |
| TP19-52 - 24 | 1766.5 | 33.2 | 1780.0 | 32.1 | 1781.4 | 62.9 | 99 | 4.779907013 | 0.168861046 | 0.315257074 | 0.005932692 |
| TP19-52 - 156 | 1759.8 | 35.8 | 1776.4 | 35.5 | 1773.3 | 64.5 | 99 | 4.734320467 | 0.172191802 | 0.313894786 | 0.006382799 |
| TP19-52 - 33 | 1766.5 | 34.6 | 1784.1 | 41.8 | 1782.8 | 66.2 | 99 | 4.788169937 | 0.177888411 | 0.315254136 | 0.006170906 |
| TP19-52 - 131 | 1756.2 | 34.0 | 1774.2 | 43.8 | 1771.2 | 68.1 | 99 | 4.722268301 | 0.181696876 | 0.31316255 | 0.006065918 |
| TP19-52 - 160 | 1783.4 | 42.0 | 1803.7 | 51.4 | 1798.2 | 73.9 | 99 | 4.876256404 | 0.200364026 | 0.31870415 | 0.007509669 |
| TP19-52 - 81 | 1745.5 | 33.2 | 1766.7 | 30.4 | 1762.0 | 62.1 | 99 | 4.67039336 | 0.164549863 | 0.31098537 | 0.005910608 |
| TP19-52 - 150 | 1630.5 | 37.0 | 1652.5 | 125.8 | 1646.6 | 152.5 | 99 | 4.06136614 | 0.376179992 | 0.287798088 | 0.006534338 |
| TP19-52 - 118 | 2462.7 | 45.3 | 2502.9 | 38.2 | 2491.6 | 87.1 | 98 | 10.63338792 | 0.371806276 | 0.465245999 | 0.008566097 |
| TP19-52 - 30 | 1742.4 | 42.6 | 1773.0 | 61.7 | 1765.1 | 83.3 | 98 | 4.688084312 | 0.221178725 | 0.310335901 | 0.007583737 |

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| TP19-52 - 137 | 1708.6 | 35.8 | 1741.4 | 38.7 | 1728.8 | 64.3 | 98 | 4.488030325 | 0.166840384 | 0.303490875 | 0.006354744 |
| TP19-52 - 146 | 1733.9 | 46.6 | 1767.3 | 34.9 | 1755.0 | 65.9 | 98 | 4.631958205 | 0.173941411 | 0.308617593 | 0.008290927 |
| TP19-52 - 11 | 1977.2 | 59.8 | 2020.9 | 58.3 | 2007.0 | 82.5 | 98 | 6.21777938 | 0.255604639 | 0.35894645 | 0.010848681 |
| TP19-52 - 21 | 1754.7 | 34.2 | 1796.9 | 40.2 | 1781.6 | 66.4 | 98 | 4.781185101 | 0.178314842 | 0.312842331 | 0.00609478 |
| TP19-52 - 138 | 1729.5 | 37.6 | 1774.6 | 29.5 | 1755.6 | 62.0 | 97 | 4.635169456 | 0.16367407 | 0.307719153 | 0.006681539 |
| TP19-52 - 31 | 1725.6 | 34.3 | 1779.6 | 36.4 | 1758.5 | 64.5 | 97 | 4.651298014 | 0.170671883 | 0.306932416 | 0.00610186 |
| TP19-52 - 22 | 1734.0 | 33.9 | 1789.3 | 44.2 | 1766.7 | 67.7 | 97 | 4.696789188 | 0.180093324 | 0.30863379 | 0.006031999 |
| TP19-52 - 41 | 1718.6 | 45.1 | 1775.2 | 39.4 | 1754.5 | 62.8 | 97 | 4.62868043 | 0.165671283 | 0.305523632 | 0.008008945 |
| TP19-52 - 126 | 1685.5 | 32.5 | 1747.2 | 33.8 | 1719.3 | 61.9 | 96 | 4.437051007 | 0.159652069 | 0.298824504 | 0.005763453 |
| TP19-52 - 134 | 1748.6 | 48.1 | 1818.6 | 41.5 | 1786.2 | 72.1 | 96 | 4.807541757 | 0.194055785 | 0.311597135 | 0.008574692 |
| TP19-52 - 4 | 1718.0 | 45.6 | 1788.2 | 36.9 | 1757.2 | 64.9 | 96 | 4.644148505 | 0.171490598 | 0.305389783 | 0.008098806 |
| TP19-52 - 158 | 1704.0 | 56.6 | 1774.7 | 42.5 | 1741.2 | 77.9 | 96 | 4.55555123 | 0.203851474 | 0.302560462 | 0.010049496 |
| TP19-52 - 101 | 1705.5 | 33.8 | 1779.9 | 37.9 | 1745.7 | 65.3 | 96 | 4.58020422 | 0.171365125 | 0.302870611 | 0.006003897 |
| TP19-52 - 65 | 1673.7 | 32.8 | 1755.9 | 33.8 | 1717.6 | 61.3 | 95 | 4.427851453 | 0.158043003 | 0.296447591 | 0.005807404 |
| TP19-52 - 99 | 1887.8 | 38.2 | 1985.4 | 80.2 | 1940.8 | 99.0 | 95 | 5.76270609 | 0.29409603 | 0.340243285 | 0.006883518 |
| TP19-52 - 105 | 1679.2 | 33.1 | 1766.7 | 49.4 | 1724.4 | 70.3 | 95 | 4.464325672 | 0.182049313 | 0.297561356 | 0.005857231 |
| TP19-52 - 5 | 1665.7 | 35.0 | 1755.5 | 32.9 | 1712.0 | 63.4 | 95 | 4.398018212 | 0.162946466 | 0.294856814 | 0.006188193 |
| TP19-52 - 25 | 1673.2 | 37.4 | 1766.2 | 35.6 | 1722.6 | 63.0 | 95 | 4.454931276 | 0.162951831 | 0.296356273 | 0.006617568 |
| TP19-52 - 95 | 1682.8 | 33.5 | 1782.0 | 42.3 | 1734.2 | 66.4 | 94 | 4.517699837 | 0.172906491 | 0.298295953 | 0.005939398 |
| TP19-52 - 13 | 1677.0 | 45.1 | 1776.8 | 35.0 | 1729.5 | 64.2 | 94 | 4.492024935 | 0.166867319 | 0.297119098 | 0.007998412 |
| TP19-52 - 71 | 1695.2 | 37.2 | 1801.1 | 49.3 | 1749.1 | 71.4 | 94 | 4.598957806 | 0.187640746 | 0.300782635 | 0.006604292 |
| TP19-52 - 127 | 1682.5 | 34.7 | 1791.3 | 40.9 | 1736.8 | 65.3 | 94 | 4.531726641 | 0.170439297 | 0.298235081 | 0.006145468 |
| TP19-52 - 153 | 1769.4 | 38.1 | 1885.8 | 43.8 | 1828.4 | 73.4 | 94 | 5.054129808 | 0.202832978 | 0.315855056 | 0.006797079 |
| TP19-52 - 114 | 1685.1 | 41.8 | 1798.3 | 34.9 | 1742.8 | 65.8 | 94 | 4.564310909 | 0.172324013 | 0.298753719 | 0.007418063 |
| TP19-52 - 68 | 1738.0 | 39.0 | 1860.4 | 151.0 | 1801.4 | 165.9 | 93 | 4.895304606 | 0.450813343 | 0.309453444 | 0.006950067 |
| TP19-52 - 87 | 1658.6 | 32.5 | 1777.4 | 35.4 | 1718.7 | 63.0 | 93 | 4.433728532 | 0.162583467 | 0.293430059 | 0.00574358 |
| TP19-52 - 76 | 1668.0 | 35.0 | 1794.4 | 40.9 | 1731.7 | 65.0 | 93 | 4.50404994 | 0.168999007 | 0.295304277 | 0.006197408 |
| TP19-52 - 7 | 1652.7 | 35.3 | 1781.1 | 47.2 | 1717.8 | 68.5 | 93 | 4.428879105 | 0.176670877 | 0.292229437 | 0.006241071 |
| TP19-52 - 2 | 1666.4 | 32.4 | 1796.5 | 31.5 | 1732.4 | 61.1 | 93 | 4.507582315 | 0.159055006 | 0.294988091 | 0.005731482 |
| TP19-52 - 34 | 1655.8 | 32.5 | 1787.9 | 38.1 | 1722.9 | 63.8 | 93 | 4.456418654 | 0.165031096 | 0.292856471 | 0.005753315 |
| TP19-52 - 16 | 1625.1 | 36.6 | 1768.0 | 37.7 | 1695.3 | 62.9 | 92 | 4.310036506 | 0.159957628 | 0.286708163 | 0.006457783 |
| TP19-52 - 159 | 1632.9 | 48.7 | 1777.8 | 43.7 | 1702.8 | 71.4 | 92 | 4.349612841 | 0.182401247 | 0.288276415 | 0.008589234 |
| TP19-52 - 107 | 1596.1 | 32.2 | 1740.2 | 30.4 | 1666.0 | 57.7 | 92 | 4.159076052 | 0.144043301 | 0.280938514 | 0.005664139 |
| TP19-52 - 119 | 1616.4 | 37.7 | 1777.9 | 55.6 | 1693.9 | 72.2 | 91 | 4.302991712 | 0.183287118 | 0.28497669 | 0.006653376 |
| TP19-52 - 100 | 1596.5 | 33.8 | 1783.5 | 37.2 | 1684.6 | 65.8 | 90 | 4.254369034 | 0.166095106 | 0.281026816 | 0.005941597 |
| TP19-52 - 157 | 1576.3 | 34.1 | 1777.3 | 42.4 | 1668.9 | 66.4 | 89 | 4.173620588 | 0.166047491 | 0.277006115 | 0.005994506 |
| TP19-52 - 46 | 1608.7 | 38.9 | 1816.7 | 46.2 | 1708.1 | 68.9 | 89 | 4.37744272 | 0.176456765 | 0.283447571 | 0.006856562 |
| TP19-52 - 124 | 1576.6 | 36.1 | 1814.6 | 38.5 | 1687.8 | 69.6 | 87 | 4.271119421 | 0.176020618 | 0.277070758 | 0.006337558 |
| TP19-52 - 130 | 1548.9 | 33.8 | 1799.1 | 51.5 | 1663.4 | 68.4 | 86 | 4.145811733 | 0.170519901 | 0.271591818 | 0.00592647 |
| TP19-52 - 145 | 1546.9 | 77.4 | 1801.7 | 41.4 | 1664.9 | 94.7 | 86 | 4.153670566 | 0.236133913 | 0.271199169 | 0.013575069 |
| TP19-52 - 121 | 1500.1 | 29.7 | 1771.2 | 38.7 | 1624.3 | 60.0 | 85 | 3.951607411 | 0.146044382 | 0.262000686 | 0.005189696 |
| TP19-52 - 52 | 1525.2 | 39.1 | 1804.1 | 34.8 | 1652.3 | 66.3 | 85 | 4.090012541 | 0.164185403 | 0.266934798 | 0.00685147 |
| TP19-52 - 35 | 1480.5 | 32.2 | 1769.1 | 34.8 | 1611.0 | 61.3 | 84 | 3.887278284 | 0.14779266 | 0.258180056 | 0.00562098 |
| TP19-52 - 37 | 1521.6 | 34.1 | 1819.7 | 38.4 | 1657.4 | 63.2 | 84 | 4.115505434 | 0.156877881 | 0.266225959 | 0.005962375 |
| TP19-52 - 123 | 1536.7 | 106.0 | 1837.8 | 48.7 | 1672.6 | 119.8 | 84 | 4.192777368 | 0.300309373 | 0.269198076 | 0.018564921 |
| TP19-52 - 48 | 1588.6 | 63.2 | 1907.1 | 79.5 | 1736.0 | 94.8 | 83 | 4.527114094 | 0.247246177 | 0.279450094 | 0.011118009 |
| TP19-52 - 70 | 1490.4 | 74.4 | 1793.5 | 37.1 | 1626.0 | 92.4 | 83 | 3.959822487 | 0.224901718 | 0.260114604 | 0.012978308 |

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| TP19-52 - 80 | 1467.1 | 64.5 | 1791.8 | 40.7 | 1616.0 | 80.9 | 82 | 3.911208732 | 0.195726071 | 0.25557258 | 0.011234153 |
| TP19-52 - 86 | 1653.8 | 33.9 | 2020.1 | 125.4 | 1827.7 | 131.2 | 82 | 5.049680115 | 0.362420801 | 0.292454149 | 0.005995527 |
| TP19-52 - 15 | 1456.8 | 33.1 | 1800.4 | 33.3 | 1609.3 | 57.6 | 81 | 3.878869668 | 0.138760052 | 0.253560309 | 0.005769603 |
| TP19-52 - 17 | 1489.5 | 34.5 | 1841.5 | 36.6 | 1647.6 | 61.6 | 81 | 4.066651271 | 0.152108574 | 0.25993716 | 0.006013657 |
| TP19-52 - 64 | 1498.6 | 36.8 | 1862.4 | 36.4 | 1662.2 | 62.7 | 80 | 4.139911298 | 0.156280279 | 0.261705895 | 0.006425022 |
| TP19-52 - 62 | 1549.2 | 36.7 | 1963.2 | 62.5 | 1740.5 | 68.1 | 79 | 4.551838264 | 0.178180747 | 0.271653825 | 0.00644368 |
| TP19-52 - 104 | 1588.2 | 50.8 | 2073.4 | 40.0 | 1815.9 | 77.0 | 77 | 4.979723644 | 0.211286446 | 0.279366197 | 0.008931106 |
| TP19-52 - 110 | 1400.0 | 36.7 | 1831.1 | 33.0 | 1587.7 | 59.7 | 76 | 3.776167077 | 0.142093757 | 0.2425572 | 0.006359088 |
| TP19-52 - 40 | 1440.9 | 35.1 | 1899.4 | 49.5 | 1644.4 | 68.8 | 76 | 4.050700151 | 0.169462249 | 0.250466406 | 0.006108265 |
| TP19-52 - 140 | 1401.0 | 35.0 | 1849.4 | 29.0 | 1595.2 | 57.8 | 76 | 3.8116386 | 0.138054075 | 0.242761243 | 0.006064093 |
| TP19-52 - 60 | 1407.7 | 38.4 | 1871.4 | 40.9 | 1609.8 | 60.6 | 75 | 3.881115348 | 0.146164092 | 0.244038501 | 0.006663559 |
| TP19-52 - 108 | 1412.7 | 35.6 | 1883.2 | 36.7 | 1618.3 | 60.6 | 75 | 3.922139226 | 0.146837606 | 0.245006229 | 0.006177387 |
| TP19-52 - 133 | 1330.7 | 49.4 | 1776.1 | 47.2 | 1517.6 | 72.0 | 75 | 3.457439415 | 0.164051284 | 0.229270156 | 0.008512158 |
| TP19-52 - 69 | 1457.5 | 36.8 | 1954.7 | 43.5 | 1681.1 | 66.8 | 75 | 4.236181213 | 0.168292005 | 0.253688367 | 0.006414098 |
| TP19-52 - 74 | 1326.8 | 27.7 | 1855.2 | 38.4 | 1551.2 | 57.1 | 72 | 3.607596029 | 0.132796242 | 0.228542095 | 0.004763409 |
| TP19-52 - 67 | 1323.2 | 30.4 | 1889.2 | 41.5 | 1561.4 | 60.1 | 70 | 3.653876638 | 0.14059979 | 0.22784917 | 0.005231407 |
| TP19-52 - 38 | 1269.7 | 26.8 | 1818.9 | 35.2 | 1496.8 | 53.0 | 70 | 3.367388295 | 0.119307954 | 0.217693252 | 0.004587363 |
| TP19-52 - 73 | 1267.9 | 26.5 | 1844.5 | 31.3 | 1506.4 | 52.0 | 69 | 3.408758487 | 0.117775294 | 0.217356994 | 0.004543523 |
| TP19-52 - 120 | 1293.3 | 27.7 | 1889.0 | 53.4 | 1542.2 | 63.1 | 68 | 3.566847256 | 0.146025393 | 0.222173909 | 0.004760187 |
| TP19-52 - 155 | 1277.0 | 41.8 | 1895.5 | 39.0 | 1534.0 | 59.2 | 67 | 3.530053063 | 0.13612655 | 0.219069973 | 0.007168937 |
| TP19-52 - 58 | 1252.7 | 24.2 | 1880.6 | 35.4 | 1511.8 | 54.5 | 67 | 3.432160703 | 0.123707395 | 0.214484508 | 0.004144058 |
| TP19-52 - 109 | 1280.4 | 35.2 | 1925.7 | 46.5 | 1550.6 | 62.3 | 66 | 3.605023584 | 0.14481834 | 0.219729721 | 0.006045747 |
| TP19-52 - 139 | 1241.6 | 31.3 | 1880.1 | 30.9 | 1501.8 | 55.4 | 66 | 3.388669831 | 0.124933962 | 0.212399085 | 0.005359488 |
| TP19-52 - 49 | 1188.6 | 55.0 | 1886.0 | 38.2 | 1464.3 | 75.4 | 63 | 3.229493722 | 0.166385984 | 0.202481196 | 0.009376521 |
| TP19-52 - 93 | 1188.3 | 130.8 | 1918.4 | 69.2 | 1478.9 | 132.2 | 62 | 3.290695869 | 0.294243597 | 0.202414358 | 0.022277539 |
| TP19-52 - 1 | 1114.6 | 27.0 | 1874.7 | 44.4 | 1408.0 | 57.4 | 59 | 3.00147152 | 0.122272007 | 0.188746819 | 0.004580672 |
| TP19-52 - 56 | 1263.9 | 37.3 | 2147.8 | 50.1 | 1641.1 | 69.3 | 59 | 4.03390314 | 0.170416196 | 0.21660355 | 0.006397739 |
| TP19-52 - 12 | 1073.8 | 36.3 | 1896.0 | 39.8 | 1389.1 | 65.2 | 57 | 2.927836156 | 0.137376854 | 0.181257098 | 0.006124795 |
| TP19-52 - 90 | 1088.5 | 72.8 | 1958.3 | 49.8 | 1427.3 | 85.6 | 56 | 3.078481675 | 0.184714894 | 0.183953565 | 0.012308748 |
| TP19-52 - 152 | 1160.2 | 78.7 | 2152.6 | 110.2 | 1562.4 | 77.7 | 54 | 3.658689156 | 0.181933774 | 0.197185925 | 0.013368055 |
| TP19-52 - 85 | 1033.2 | 53.3 | 1928.0 | 55.6 | 1369.8 | 79.6 | 54 | 2.853913897 | 0.165931102 | 0.173843137 | 0.008962809 |
| TP19-52 - 147 | 1051.1 | 28.3 | 1982.3 | 42.5 | 1405.2 | 56.2 | 53 | 2.990600028 | 0.119564065 | 0.177098629 | 0.004762126 |
| TP19-52 - 19 | 946.1 | 52.6 | 1976.6 | 37.8 | 1321.2 | 70.3 | 48 | 2.673811205 | 0.142348942 | 0.158082015 | 0.008786576 |
| TP19-52 - 91 | 969.5 | 49.3 | 2060.7 | 45.3 | 1374.7 | 68.7 | 47 | 2.872525766 | 0.143477077 | 0.162289937 | 0.008254979 |
| TP19-52 - 72 | 901.2 | 30.9 | 1925.4 | 35.2 | 1261.3 | 59.4 | 47 | 2.463061566 | 0.115986342 | 0.150050006 | 0.00514696 |
| TP19-52 - 132 | 902.4 | 30.7 | 1966.0 | 47.0 | 1276.2 | 52.0 | 46 | 2.51443232 | 0.102524915 | 0.150257275 | 0.005111113 |
| TP19-52 - 36 | 900.8 | 24.0 | 1966.3 | 35.8 | 1277.4 | 54.2 | 46 | 2.518382649 | 0.106813662 | 0.149978186 | 0.003989785 |
| TP19-52 - 75 | 865.3 | 18.4 | 1964.5 | 37.3 | 1245.7 | 45.4 | 44 | 2.410228769 | 0.087882213 | 0.143651198 | 0.003059794 |
| TP19-52 - 148 | 841.6 | 37.3 | 2031.8 | 40.6 | 1250.0 | 55.4 | 41 | 2.424896393 | 0.107418715 | 0.139464075 | 0.006172647 |
| TP19-52 - 78 | 748.2 | 22.9 | 1917.2 | 54.1 | 1117.7 | 49.4 | 39 | 2.006487242 | 0.088671118 | 0.123075408 | 0.003758743 |
| TP19-52 - 92 | 794.4 | 15.9 | 2063.7 | 32.1 | 1219.6 | 44.0 | 38 | 2.323914277 | 0.083796025 | 0.131138538 | 0.002617847 |
| TP19-52 - 47 | 798.0 | 91.8 | 2118.6 | 64.5 | 1250.7 | 110.0 | 38 | 2.42731744 | 0.213486486 | 0.131775288 | 0.015162495 |
| TP19-52 - 149 | 768.7 | 61.2 | 2064.1 | 72.3 | 1192.0 | 87.3 | 37 | 2.23476293 | 0.163590468 | 0.12663728 | 0.010085492 |
| TP19-52 - 57 | 777.5 | 17.3 | 2185.2 | 39.7 | 1253.4 | 46.5 | 36 | 2.436299019 | 0.090359785 | 0.128186014 | 0.002855195 |
| TP19-52 - 39 | 914.8 | 29.3 | 2664.5 | 40.8 | 1606.0 | 65.9 | 34 | 3.863002039 | 0.158437058 | 0.152468858 | 0.004878955 |
| TP19-52 - 59 | 716.5 | 20.1 | 2240.3 | 36.8 | 1214.6 | 45.3 | 32 | 2.307496172 | 0.086007233 | 0.117561888 | 0.003291683 |
| TP19-52 - 128 | 716.2 | 19.7 | 2269.1 | 40.3 | 1225.1 | 46.2 | 32 | 2.341937527 | 0.088411201 | 0.117504267 | 0.00323632 |

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| TP19-52 - 125 | 684.9 | 21.0 | 2203.3 | 51.6 | 1165.2 | 42.2 | 31 | 2.150602582 | 0.077908999 | 0.112093288 | 0.003430948 |
| TP19-52 - 144 | 663.2 | 15.8 | 2277.8 | 35.5 | 1172.6 | 41.1 | 29 | 2.17336741 | 0.076098021 | 0.108363478 | 0.002584663 |
| TP19-52 - 45 | 609.0 | 22.0 | 2253.8 | 34.3 | 1102.0 | 47.5 | 27 | 1.960233377 | 0.084525462 | 0.099083816 | 0.00358447 |
| TP19-52 - 136 | 578.2 | 15.6 | 2146.4 | 45.0 | 1023.3 | 40.1 | 27 | 1.739582172 | 0.068128626 | 0.093846344 | 0.002525125 |
| TP19-52 - 51 | 564.8 | 20.9 | 2204.5 | 46.7 | 1030.8 | 44.0 | 26 | 1.759750493 | 0.075051972 | 0.091567754 | 0.003386184 |
| TP19-52 - 135 | 566.0 | 17.9 | 2284.3 | 35.6 | 1060.4 | 40.3 | 25 | 1.841407604 | 0.069963575 | 0.09176954 | 0.002908205 |
| TP19-52 - 94 | 523.5 | 30.3 | 2265.0 | 54.9 | 1000.7 | 56.5 | 23 | 1.679341768 | 0.094750388 | 0.084593496 | 0.004898747 |
| TP19-52 - 117 | 533.8 | 11.3 | 2325.7 | 40.9 | 1036.8 | 37.4 | 23 | 1.776128601 | 0.06415241 | 0.086338735 | 0.001825257 |
| TP19-52 - 129 | 500.0 | 28.6 | 2219.5 | 56.5 | 955.2 | 47.9 | 23 | 1.561950799 | 0.078316629 | 0.080656661 | 0.004613486 |
| TP19-52 - 50 | 457.0 | 22.8 | 2369.5 | 54.8 | 951.1 | 41.3 | 19 | 1.551499837 | 0.067416433 | 0.073459063 | 0.003669508 |
| TP19-52 - 111 | 467.0 | 15.6 | 2520.3 | 59.4 | 1021.2 | 41.8 | 19 | 1.733938105 | 0.07095631 | 0.075126743 | 0.002512395 |
| TP19-52 - 28 | 399.7 | 10.4 | 2422.8 | 42.1 | 887.3 | 33.6 | 16 | 1.396168191 | 0.052847644 | 0.063965546 | 0.001666996 |
| TP19-52 - 61 | 356.4 | 8.6 | 2399.6 | 52.9 | 810.9 | 31.0 | 15 | 1.222406595 | 0.046667453 | 0.056836084 | 0.001379277 |
| TP19-52 - 103 | 312.3 | 15.3 | 2290.3 | 68.5 | 704.0 | 35.3 | 14 | 1.000464035 | 0.050155725 | 0.049631899 | 0.002437928 |
| TP19-52 - 63 | 282.7 | 10.7 | 2584.7 | 53.7 | 742.4 | 30.2 | 11 | 1.077506888 | 0.043809349 | 0.044836198 | 0.00169378 |
| TP19-52 - 55 | 361.4 | 7.3 | 3345.0 | 114.3 | 1186.9 | 59.6 | 11 | 2.218596289 | 0.111352595 | 0.057660276 | 0.001160771 |
| TP19-52 - 98 | 295.1 | 5.8 | 2906.6 | 60.1 | 876.2 | 33.2 | 10 | 1.370162042 | 0.05189001 | 0.046844949 | 0.000924483 |
| TP19-52 - 102 | 226.7 | 9.5 | 2542.5 | 65.9 | 617.2 | 29.5 | 9 | 0.836564632 | 0.03991794 | 0.035784668 | 0.001498536 |
| TP19-52 - 115 | 269.7 | 12.4 | 3296.4 | 68.5 | 966.4 | 43.0 | 8 | 1.590366378 | 0.070798737 | 0.042728505 | 0.001959968 |
| TP19-52 - 3 | 189.9 | 10.6 | 2749.9 | 71.5 | 593.4 | 30.1 | 7 | 0.793857807 | 0.040313613 | 0.029901857 | 0.001669857 |
| TP19-52 - 143 | 212.5 | 6.8 | 3698.0 | 177.8 | 976.9 | 69.4 | 6 | 1.617199546 | 0.114914864 | 0.033516898 | 0.001066419 |
| TP19-52 - 141 | 197.7 | 5.6 | 3464.8 | 66.7 | 842.4 | 30.2 | 6 | 1.29254455 | 0.046351169 | 0.031147801 | 0.000878665 |
| TP19-52 - 154 | 160.5 | 6.5 | 2985.1 | 81.8 | 580.7 | 24.8 | 5 | 0.771626074 | 0.033009858 | 0.02520548 | 0.001018893 |
| TP19-52 - 26 | 144.1 | 7.2 | 3554.1 | 66.4 | 700.8 | 35.0 | 4 | 0.994009665 | 0.04965876 | 0.022602979 | 0.001123816 |
| TP19-52 - 116 | 99.9 | 2.6 | 3286.7 | 72.8 | 463.2 | 17.0 | 3 | 0.578073132 | 0.021207205 | 0.015622093 | 0.000413427 |
| TP19-52 - 54 | 53.7 | 1.4 | 3336.0 | 80.5 | 281.7 | 10.4 | 2 | 0.319797824 | 0.011810567 | 0.008357742 | 0.000223274 |
| TP19-53 - 71 | 26777.9 | 19483.4 | 5200.2 | 621.7 | 9161.4 | 6657.9 | 292 | 8287.721402 | 6022.938393 | 62.68365465 | 45.60812204 |
| TP19-53 - 132 | 2754.1 | 67.3 | 2640.0 | 83.9 | 2693.4 | 159.2 | 102 | 13.19090997 | 0.779785934 | 0.533007693 | 0.013025772 |
| TP19-53 - 110 | 1904.9 | 43.6 | 1854.6 | 52.4 | 1885.6 | 110.6 | 101 | 5.404444695 | 0.317093867 | 0.343803668 | 0.007871238 |
| TP19-53 - 113 | 1860.7 | 54.2 | 1812.3 | 78.1 | 1842.8 | 122.2 | 101 | 5.140164254 | 0.340967362 | 0.334618761 | 0.00973826 |
| TP19-53 - 104 | 1851.8 | 69.2 | 1824.7 | 79.5 | 1838.1 | 136.0 | 101 | 5.11169703 | 0.378250279 | 0.332770185 | 0.012438265 |
| TP19-53 - 57 | 1766.9 | 41.1 | 1725.6 | 73.0 | 1754.3 | 115.2 | 101 | 4.627938379 | 0.303820546 | 0.315336664 | 0.007341805 |
| TP19-53 - 2 | 1848.0 | 47.9 | 1800.1 | 53.5 | 1835.3 | 113.8 | 101 | 5.095173979 | 0.315840918 | 0.331985474 | 0.008611253 |
| TP19-53 - 97 | 1860.5 | 39.3 | 1826.4 | 48.1 | 1848.4 | 106.9 | 101 | 5.174127073 | 0.299312567 | 0.33457771 | 0.007072214 |
| TP19-53 - 139 | 1803.4 | 56.8 | 1769.8 | 67.2 | 1792.6 | 119.4 | 101 | 4.844034759 | 0.32268186 | 0.322808161 | 0.010171832 |
| TP19-53 - 55 | 1859.6 | 40.0 | 1825.4 | 52.1 | 1849.5 | 108.6 | 101 | 5.181186668 | 0.304150063 | 0.334391577 | 0.00718623 |
| TP19-53 - 163 | 1754.1 | 42.7 | 1733.3 | 69.1 | 1746.6 | 109.1 | 100 | 4.585355803 | 0.286546667 | 0.312716987 | 0.007605018 |
| TP19-53 - 49 | 1796.7 | 48.8 | 1770.6 | 74.0 | 1791.7 | 117.7 | 100 | 4.838708974 | 0.317807282 | 0.321438467 | 0.008732761 |
| TP19-53 - 54 | 2808.2 | 99.0 | 2786.2 | 142.0 | 2803.1 | 193.6 | 100 | 14.80918045 | 1.022770109 | 0.545931954 | 0.019238861 |
| TP19-53 - 120 | 1794.7 | 43.4 | 1785.1 | 57.2 | 1793.4 | 108.4 | 100 | 4.848583866 | 0.292952693 | 0.321012614 | 0.007764003 |
| TP19-53 - 141 | 2427.5 | 65.0 | 2420.7 | 74.7 | 2430.2 | 151.1 | 100 | 9.950845709 | 0.618496627 | 0.4572813 | 0.012248948 |
| TP19-53 - 92 | 2567.5 | 60.7 | 2580.7 | 76.2 | 2581.0 | 152.6 | 99 | 11.70428163 | 0.691904775 | 0.489267868 | 0.011576372 |
| TP19-53 - 16 | 1775.9 | 43.2 | 1780.0 | 63.4 | 1786.7 | 112.5 | 99 | 4.810510124 | 0.302980018 | 0.317165596 | 0.007712955 |
| TP19-53 - 166 | 1843.1 | 48.9 | 1871.2 | 56.5 | 1859.8 | 111.4 | 99 | 5.244221248 | 0.314032193 | 0.330977775 | 0.008784049 |
| TP19-53 - 127 | 2077.3 | 74.8 | 2115.9 | 69.8 | 2098.5 | 142.5 | 99 | 6.899063557 | 0.468570334 | 0.380210745 | 0.013699146 |
| TP19-53 - 27 | 1834.0 | 41.5 | 1861.7 | 60.7 | 1856.2 | 111.7 | 99 | 5.22201882 | 0.314217014 | 0.329102065 | 0.007455293 |
| TP19-53 - 36 | 1662.6 | 43.0 | 1694.6 | 66.8 | 1683.5 | 104.1 | 99 | 4.248973687 | 0.262823749 | 0.294234351 | 0.007614193 |

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| TP19-53 - 39 | 1717.0 | 43.4 | 1751.7 | 71.6 | 1740.1 | 122.2 | 99 | 4.549594321 | 0.319395031 | 0.305185493 | 0.007719975 |
| TP19-53 - 24 | 1821.0 | 44.5 | 1867.2 | 69.9 | 1850.8 | 131.1 | 98 | 5.188862495 | 0.367647256 | 0.32641136 | 0.007985075 |
| TP19-53 - 61 | 1691.2 | 60.7 | 1745.0 | 120.5 | 1721.5 | 144.3 | 98 | 4.449128083 | 0.372955765 | 0.299983378 | 0.010758778 |
| TP19-53 - 138 | 1900.2 | 72.5 | 1968.1 | 154.8 | 1936.7 | 180.9 | 98 | 5.735362521 | 0.535646058 | 0.342810374 | 0.013087688 |
| TP19-53 - 106 | 1821.0 | 41.6 | 1888.8 | 61.2 | 1857.1 | 114.5 | 98 | 5.227657205 | 0.322353381 | 0.326417522 | 0.007464016 |
| TP19-53 - 131 | 1914.6 | 61.9 | 1999.9 | 78.2 | 1954.8 | 129.3 | 98 | 5.856628209 | 0.387328587 | 0.345828249 | 0.011187714 |
| TP19-53 - 158 | 1803.2 | 47.0 | 1886.4 | 70.6 | 1845.5 | 118.4 | 98 | 5.156962345 | 0.330974079 | 0.322772266 | 0.008421306 |
| TP19-53 - 82 | 1805.0 | 57.0 | 1886.1 | 89.1 | 1847.4 | 127.1 | 98 | 5.168079959 | 0.355603942 | 0.323122921 | 0.010206877 |
| TP19-53 - 85 | 1791.4 | 51.0 | 1876.5 | 66.6 | 1834.4 | 114.0 | 98 | 5.089734477 | 0.316408035 | 0.320341043 | 0.009124762 |
| TP19-53 - 60 | 1475.5 | 40.1 | 1554.9 | 76.7 | 1515.1 | 108.5 | 97 | 3.446720252 | 0.246928105 | 0.257197053 | 0.006987202 |
| TP19-53 - 87 | 1793.5 | 40.0 | 1890.6 | 58.4 | 1844.0 | 109.9 | 97 | 5.147530312 | 0.306768813 | 0.320778923 | 0.007154001 |
| TP19-53 - 124 | 1796.6 | 56.2 | 1901.3 | 72.5 | 1850.2 | 123.3 | 97 | 5.185313399 | 0.345484212 | 0.321412704 | 0.01006059 |
| TP19-53 - 56 | 1736.7 | 65.0 | 1834.4 | 60.5 | 1789.1 | 119.6 | 97 | 4.823784057 | 0.322358353 | 0.309178781 | 0.01156659 |
| TP19-53 - 91 | 1801.7 | 58.0 | 1928.1 | 77.2 | 1867.1 | 122.0 | 97 | 5.288794093 | 0.345552498 | 0.322458346 | 0.010386528 |
| TP19-53 - 162 | 1736.2 | 39.8 | 1884.8 | 59.4 | 1806.6 | 109.4 | 96 | 4.925048725 | 0.298250879 | 0.309094924 | 0.007090294 |
| TP19-53 - 51 | 1811.8 | 45.2 | 1956.4 | 61.9 | 1886.3 | 114.9 | 96 | 5.409137408 | 0.329407984 | 0.324530203 | 0.008098259 |
| TP19-53 - 99 | 1772.6 | 51.0 | 1930.9 | 58.2 | 1850.4 | 113.4 | 96 | 5.186421338 | 0.317877201 | 0.316501419 | 0.009102077 |
| TP19-53 - 33 | 1647.5 | 45.6 | 1788.5 | 62.3 | 1720.0 | 108.4 | 96 | 4.440779042 | 0.279878967 | 0.291194445 | 0.008060334 |
| TP19-53 - 41 | 1729.8 | 51.2 | 1873.2 | 61.0 | 1806.0 | 109.5 | 96 | 4.921750948 | 0.298547907 | 0.307778854 | 0.009117943 |
| TP19-53 - 76 | 1662.2 | 48.1 | 1827.2 | 52.6 | 1742.6 | 106.6 | 95 | 4.563401679 | 0.279285749 | 0.294138835 | 0.0085173 |
| TP19-53 - 80 | 1686.0 | 39.5 | 1862.1 | 57.7 | 1770.8 | 109.1 | 95 | 4.720264161 | 0.290812618 | 0.29892364 | 0.006996509 |
| TP19-53 - 43 | 1660.9 | 43.1 | 1832.5 | 48.3 | 1748.5 | 102.4 | 95 | 4.595828176 | 0.269034534 | 0.293873497 | 0.007631212 |
| TP19-53 - 83 | 1707.4 | 44.1 | 1900.0 | 70.2 | 1801.5 | 115.6 | 95 | 4.895356754 | 0.314130532 | 0.303252278 | 0.007834237 |
| TP19-53 - 75 | 1668.3 | 42.1 | 1896.2 | 58.2 | 1779.0 | 106.3 | 94 | 4.766312699 | 0.28472476 | 0.295367227 | 0.007455984 |
| TP19-53 - 77 | 1684.4 | 42.8 | 1928.4 | 60.8 | 1802.7 | 112.4 | 93 | 4.902837919 | 0.30572324 | 0.29861235 | 0.007585515 |
| TP19-53 - 170 | 1594.6 | 57.8 | 1840.8 | 53.8 | 1706.6 | 115.0 | 93 | 4.369694049 | 0.294395115 | 0.280643734 | 0.010178866 |
| TP19-53 - 23 | 1618.7 | 108.5 | 1876.9 | 80.0 | 1738.0 | 145.6 | 93 | 4.53806451 | 0.380137247 | 0.285437379 | 0.019126883 |
| TP19-53 - 18 | 1636.4 | 46.1 | 1912.7 | 60.1 | 1767.1 | 106.0 | 93 | 4.699212419 | 0.281915894 | 0.288969185 | 0.008148219 |
| TP19-53 - 17 | 1755.8 | 72.7 | 2052.7 | 68.9 | 1907.0 | 139.8 | 92 | 5.540910287 | 0.406292911 | 0.313076909 | 0.012965765 |
| TP19-53 - 66 | 1632.2 | 50.6 | 1967.5 | 78.6 | 1788.1 | 115.0 | 91 | 4.81829828 | 0.309932067 | 0.288127694 | 0.008935408 |
| TP19-53 - 135 | 1558.7 | 82.8 | 1914.2 | 84.5 | 1720.9 | 128.6 | 91 | 4.445805346 | 0.332245506 | 0.273529255 | 0.014535793 |
| TP19-53 - 3 | 1548.9 | 35.3 | 1893.6 | 56.6 | 1710.3 | 100.7 | 91 | 4.388975161 | 0.258506864 | 0.271589439 | 0.006183864 |
| TP19-53 - 59 | 1451.3 | 32.9 | 1875.8 | 56.5 | 1640.2 | 98.1 | 88 | 4.029853128 | 0.24106384 | 0.252492292 | 0.00572182 |
| TP19-53 - 101 | 1327.0 | 41.2 | 1788.7 | 74.8 | 1520.6 | 103.3 | 87 | 3.470594005 | 0.235874641 | 0.228568115 | 0.007089504 |
| TP19-53 - 150 | 1355.0 | 51.5 | 1836.6 | 52.4 | 1555.5 | 97.9 | 87 | 3.626924704 | 0.228268086 | 0.233915594 | 0.008882714 |
| TP19-53 - 32 | 1444.0 | 41.7 | 1978.4 | 72.9 | 1676.4 | 108.1 | 86 | 4.21229579 | 0.271500819 | 0.251073353 | 0.007243476 |
| TP19-53 - 95 | 1362.5 | 38.4 | 1888.0 | 64.3 | 1585.4 | 98.8 | 86 | 3.765258347 | 0.234532284 | 0.235346221 | 0.006629002 |
| TP19-53 - 116 | 1416.4 | 64.3 | 1986.0 | 45.8 | 1664.5 | 104.8 | 85 | 4.151451202 | 0.261472325 | 0.245731435 | 0.011156443 |
| TP19-53 - 38 | 1329.2 | 28.6 | 1901.6 | 50.2 | 1572.6 | 90.8 | 85 | 3.705601402 | 0.213924055 | 0.228987521 | 0.004926821 |
| TP19-53 - 103 | 1383.6 | 39.6 | 1977.4 | 53.2 | 1639.3 | 99.5 | 84 | 4.025143946 | 0.244343272 | 0.239411737 | 0.006847183 |
| TP19-53 - 4 | 1290.4 | 84.6 | 1860.0 | 88.4 | 1532.3 | 127.8 | 84 | 3.522795814 | 0.29386154 | 0.221607066 | 0.014525519 |
| TP19-53 - 29 | 1368.4 | 38.9 | 1977.2 | 59.2 | 1633.1 | 100.1 | 84 | 3.994613399 | 0.244831423 | 0.236492043 | 0.006722653 |
| TP19-53 - 7 | 1338.6 | 33.7 | 1959.4 | 56.2 | 1605.8 | 94.2 | 83 | 3.861995062 | 0.226564853 | 0.230783916 | 0.005809381 |
| TP19-53 - 31 | 1347.0 | 72.4 | 1999.3 | 97.7 | 1631.3 | 141.0 | 83 | 3.985739483 | 0.344423371 | 0.23238118 | 0.012484123 |
| TP19-53 - 100 | 1297.2 | 39.6 | 1962.1 | 65.5 | 1577.0 | 97.6 | 82 | 3.726204091 | 0.230714452 | 0.22290581 | 0.006806782 |
| TP19-53 - 84 | 1270.1 | 40.3 | 1957.6 | 70.0 | 1552.9 | 102.7 | 82 | 3.615342905 | 0.239074431 | 0.217773387 | 0.006906753 |
| TP19-53 - 108 | 1249.1 | 37.9 | 1939.6 | 48.4 | 1532.1 | 95.4 | 82 | 3.521848603 | 0.219363271 | 0.213813993 | 0.006481176 |

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| TP19-53 - 21 | 1256.0 | 88.4 | 2078.3 | 82.0 | 1604.2 | 138.0 | 78 | 3.854348252 | 0.331614468 | 0.215105108 | 0.015139316 |
| TP19-53 - 109 | 1149.9 | 48.1 | 2019.1 | 92.8 | 1497.3 | 104.2 | 77 | 3.369158945 | 0.234439731 | 0.195273666 | 0.008176096 |
| TP19-53 - 40 | 1113.0 | 64.2 | 1965.3 | 71.6 | 1449.5 | 115.6 | 77 | 3.16852143 | 0.252773542 | 0.188457972 | 0.010871699 |
| TP19-53 - 5 | 1092.8 | 34.0 | 1997.5 | 59.0 | 1449.8 | 94.0 | 75 | 3.169701331 | 0.205541063 | 0.184732509 | 0.005753513 |
| TP19-53 - 126 | 1123.4 | 39.4 | 2074.3 | 93.0 | 1498.5 | 100.0 | 75 | 3.374386883 | 0.225265733 | 0.190371465 | 0.006671934 |
| TP19-53 - 74 | 1128.6 | 33.4 | 2083.7 | 61.3 | 1509.8 | 91.6 | 75 | 3.423384784 | 0.207688689 | 0.191331061 | 0.005663515 |
| TP19-53 - 136 | 1093.9 | 64.8 | 2062.7 | 88.0 | 1471.6 | 114.2 | 74 | 3.260265147 | 0.253100309 | 0.184931227 | 0.010957907 |
| TP19-53 - 63 | 1071.0 | 37.0 | 2071.0 | 62.3 | 1460.9 | 90.6 | 73 | 3.21548205 | 0.199308993 | 0.18073294 | 0.006249759 |
| TP19-53 - 34 | 1054.5 | 37.1 | 2104.0 | 56.7 | 1462.0 | 89.7 | 72 | 3.220093941 | 0.197479529 | 0.177711654 | 0.006251984 |
| TP19-53 - 114 | 889.6 | 35.6 | 1921.3 | 62.2 | 1242.8 | 83.9 | 72 | 2.400517587 | 0.161995879 | 0.147977244 | 0.005922316 |
| TP19-53 - 13 | 1024.5 | 87.3 | 2092.2 | 79.3 | 1434.9 | 127.1 | 71 | 3.108808684 | 0.275411132 | 0.17225768 | 0.014685814 |
| TP19-53 - 133 | 1035.3 | 36.2 | 2122.1 | 70.7 | 1450.9 | 90.1 | 71 | 3.174009989 | 0.197089007 | 0.174222547 | 0.006091742 |
| TP19-53 - 168 | 986.0 | 75.9 | 2102.2 | 70.0 | 1393.0 | 125.6 | 71 | 2.942861209 | 0.265372384 | 0.165278477 | 0.012720258 |
| TP19-53 - 155 | 968.6 | 48.5 | 2083.8 | 68.6 | 1378.5 | 89.2 | 70 | 2.886963759 | 0.186752324 | 0.162131438 | 0.008112634 |
| TP19-53 - 72 | 1028.9 | 34.1 | 2163.5 | 70.4 | 1469.1 | 92.4 | 70 | 3.249548434 | 0.204409307 | 0.17305862 | 0.005740971 |
| TP19-53 - 52 | 901.9 | 29.9 | 1993.7 | 85.2 | 1290.5 | 84.3 | 70 | 2.564136983 | 0.167542782 | 0.150164078 | 0.004982746 |
| TP19-53 - 81 | 960.2 | 82.2 | 2082.9 | 80.0 | 1381.9 | 121.0 | 69 | 2.900133477 | 0.254032587 | 0.160612524 | 0.013750734 |
| TP19-53 - 96 | 951.6 | 28.3 | 2183.3 | 87.8 | 1408.8 | 94.4 | 68 | 3.004808018 | 0.201392099 | 0.159066783 | 0.004738522 |
| TP19-53 - 22 | 881.3 | 23.4 | 2082.8 | 57.9 | 1309.1 | 76.7 | 67 | 2.630165234 | 0.154099017 | 0.146504863 | 0.003893267 |
| TP19-53 - 156 | 821.5 | 38.6 | 2036.6 | 90.8 | 1231.8 | 89.2 | 67 | 2.363960583 | 0.171242718 | 0.135913648 | 0.006377847 |
| TP19-53 - 26 | 890.9 | 61.4 | 2150.8 | 98.2 | 1344.9 | 103.8 | 66 | 2.760399711 | 0.21312522 | 0.148203423 | 0.010206266 |
| TP19-53 - 151 | 904.1 | 42.4 | 2230.1 | 88.3 | 1388.1 | 108.6 | 65 | 2.923885499 | 0.228648847 | 0.150563348 | 0.007054205 |
| TP19-53 - 10 | 792.5 | 31.7 | 2093.6 | 65.0 | 1229.1 | 86.1 | 64 | 2.355157713 | 0.164948381 | 0.130815636 | 0.005230166 |
| TP19-53 - 37 | 804.9 | 36.8 | 2114.9 | 54.6 | 1250.5 | 84.3 | 64 | 2.426516827 | 0.163629591 | 0.132998795 | 0.006083288 |
| TP19-53 - 144 | 808.7 | 21.9 | 2130.1 | 57.9 | 1256.8 | 76.3 | 64 | 2.447740672 | 0.148621948 | 0.133663548 | 0.003620694 |
| TP19-53 - 35 | 829.5 | 46.0 | 2193.9 | 59.2 | 1305.7 | 96.4 | 64 | 2.617968779 | 0.193282197 | 0.137320857 | 0.007613149 |
| TP19-53 - 70 | 834.6 | 60.2 | 2202.8 | 95.9 | 1315.8 | 121.1 | 63 | 2.653990725 | 0.244333718 | 0.138222848 | 0.00997076 |
| TP19-53 - 58 | 786.4 | 27.5 | 2183.4 | 64.9 | 1261.3 | 81.4 | 62 | 2.46321667 | 0.158933464 | 0.12975016 | 0.004531036 |
| TP19-53 - 122 | 831.8 | 53.5 | 2261.4 | 87.4 | 1341.4 | 99.2 | 62 | 2.747581806 | 0.203156782 | 0.137729259 | 0.008854921 |
| TP19-53 - 62 | 821.6 | 41.2 | 2265.3 | 67.6 | 1331.9 | 88.1 | 62 | 2.712466439 | 0.179430503 | 0.135923318 | 0.006817847 |
| TP19-53 - 44 | 726.8 | 39.4 | 2214.5 | 58.3 | 1210.8 | 95.9 | 60 | 2.295048938 | 0.181724228 | 0.119346285 | 0.006463798 |
| TP19-53 - 143 | 762.2 | 25.5 | 2334.5 | 65.8 | 1297.6 | 78.8 | 59 | 2.589072642 | 0.157239689 | 0.125508796 | 0.004203932 |
| TP19-53 - 134 | 798.7 | 26.5 | 2394.2 | 57.7 | 1360.5 | 81.6 | 59 | 2.818708655 | 0.169142481 | 0.131899794 | 0.004382574 |
| TP19-53 - 94 | 918.6 | 53.9 | 2671.7 | 78.4 | 1616.7 | 118.9 | 57 | 3.914659916 | 0.287913489 | 0.153147742 | 0.008987513 |
| TP19-53 - 15 | 674.8 | 25.3 | 2293.3 | 61.4 | 1191.3 | 73.1 | 57 | 2.232438241 | 0.136989968 | 0.1103559 | 0.004144509 |
| TP19-53 - 79 | 621.9 | 19.1 | 2286.4 | 81.1 | 1128.0 | 71.7 | 55 | 2.037033782 | 0.129394892 | 0.101279959 | 0.003105491 |
| TP19-53 - 105 | 572.5 | 31.1 | 2208.3 | 75.4 | 1039.5 | 74.0 | 55 | 1.78352225 | 0.12699799 | 0.092867972 | 0.005053176 |
| TP19-53 - 115 | 629.0 | 19.2 | 2303.3 | 78.5 | 1143.3 | 71.5 | 55 | 2.083114383 | 0.130269587 | 0.102489576 | 0.003130766 |
| TP19-53 - 19 | 578.4 | 39.9 | 2219.7 | 91.5 | 1054.3 | 78.6 | 55 | 1.824379893 | 0.135968601 | 0.093875528 | 0.006480152 |
| TP19-53 - 148 | 553.9 | 35.7 | 2207.9 | 64.6 | 1014.5 | 76.2 | 55 | 1.715968722 | 0.128946396 | 0.089726545 | 0.005789194 |
| TP19-53 - 117 | 674.4 | 38.6 | 2414.2 | 82.4 | 1236.4 | 89.9 | 55 | 2.379176861 | 0.173060537 | 0.110283894 | 0.006311483 |
| TP19-53 - 121 | 632.8 | 25.1 | 2355.0 | 78.0 | 1169.6 | 77.7 | 54 | 2.16414597 | 0.143828954 | 0.103141144 | 0.004097601 |
| TP19-53 - 157 | 595.1 | 32.1 | 2353.8 | 84.1 | 1117.2 | 72.3 | 53 | 2.004855035 | 0.129785051 | 0.096714154 | 0.005213408 |
| TP19-53 - 167 | 566.7 | 18.5 | 2335.2 | 69.3 | 1079.6 | 66.8 | 52 | 1.895642315 | 0.117340963 | 0.091881045 | 0.003005868 |
| TP19-53 - 64 | 567.3 | 40.2 | 2323.9 | 61.4 | 1081.6 | 81.9 | 52 | 1.901401196 | 0.143905495 | 0.091988597 | 0.006522188 |
| TP19-53 - 159 | 519.0 | 17.3 | 2268.8 | 75.4 | 995.0 | 62.4 | 52 | 1.664233512 | 0.10441625 | 0.083844944 | 0.002791069 |
| TP19-53 - 145 | 519.2 | 18.8 | 2309.4 | 56.5 | 1009.0 | 62.7 | 51 | 1.701307 | 0.105715748 | 0.08387589 | 0.003035095 |

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| TP19-53 - 161 | 536.8 | 20.0 | 2333.8 | 83.7 | 1045.1 | 63.9 | 51 | 1.798925758 | 0.110034494 | 0.086837115 | 0.003228723 |
| TP19-53 - 111 | 632.1 | 19.8 | 2519.3 | 53.1 | 1233.5 | 74.0 | 51 | 2.369629227 | 0.142166734 | 0.103022047 | 0.003219823 |
| TP19-53 - 89 | 530.9 | 23.5 | 2345.2 | 69.0 | 1041.7 | 63.4 | 51 | 1.789723011 | 0.108851974 | 0.085848957 | 0.003805136 |
| TP19-53 - 123 | 549.2 | 16.4 | 2382.7 | 79.4 | 1077.9 | 65.4 | 51 | 1.890934995 | 0.114715071 | 0.088931954 | 0.002651343 |
| TP19-53 - 160 | 438.2 | 35.2 | 2237.8 | 80.2 | 879.6 | 69.7 | 50 | 1.378099605 | 0.109124156 | 0.070334067 | 0.005654235 |
| TP19-53 - 142 | 495.5 | 21.6 | 2347.1 | 65.6 | 995.1 | 69.0 | 50 | 1.664443065 | 0.115339005 | 0.079890467 | 0.003479833 |
| TP19-53 - 47 | 442.1 | 17.3 | 2279.5 | 57.1 | 899.0 | 54.7 | 49 | 1.423844072 | 0.086651364 | 0.070992992 | 0.002782676 |
| TP19-53 - 107 | 567.0 | 18.4 | 2536.7 | 72.5 | 1158.7 | 74.9 | 49 | 2.130390187 | 0.137646518 | 0.09193315 | 0.002980043 |
| TP19-53 - 118 | 633.0 | 26.6 | 2669.9 | 63.3 | 1298.9 | 82.2 | 49 | 2.593906344 | 0.164187396 | 0.103184961 | 0.004338651 |
| TP19-53 - 45 | 641.7 | 18.2 | 2695.3 | 52.0 | 1324.5 | 76.7 | 48 | 2.685604913 | 0.155520043 | 0.104672814 | 0.002970846 |
| TP19-53 - 12 | 483.0 | 35.5 | 2416.0 | 81.0 | 1007.9 | 84.9 | 48 | 1.698365366 | 0.143129716 | 0.077809655 | 0.005722317 |
| TP19-53 - 20 | 487.1 | 17.8 | 2432.1 | 80.1 | 1018.7 | 67.5 | 48 | 1.727215023 | 0.114502113 | 0.078491241 | 0.002864903 |
| TP19-53 - 130 | 465.8 | 15.2 | 2404.3 | 80.0 | 974.8 | 60.9 | 48 | 1.611859355 | 0.100742235 | 0.074928843 | 0.002447922 |
| TP19-53 - 90 | 495.8 | 15.1 | 2535.0 | 90.8 | 1066.1 | 70.6 | 47 | 1.857442288 | 0.12305917 | 0.07995174 | 0.002433157 |
| TP19-53 - 1 | 415.8 | 16.9 | 2370.6 | 72.7 | 895.0 | 59.9 | 46 | 1.414425454 | 0.094645863 | 0.066628784 | 0.002715525 |
| TP19-53 - 169 | 580.6 | 26.3 | 2713.7 | 58.8 | 1255.9 | 80.7 | 46 | 2.444991716 | 0.157178141 | 0.094242064 | 0.004272604 |
| TP19-53 - 86 | 456.3 | 29.3 | 2476.5 | 110.4 | 991.7 | 62.8 | 46 | 1.655634526 | 0.104812857 | 0.073342566 | 0.00470194 |
| TP19-53 - 78 | 440.2 | 12.8 | 2461.9 | 59.4 | 961.1 | 58.2 | 46 | 1.576752074 | 0.095543919 | 0.070677665 | 0.002060717 |
| TP19-53 - 69 | 417.4 | 10.1 | 2424.4 | 72.0 | 914.2 | 54.3 | 46 | 1.460582716 | 0.086697809 | 0.066892525 | 0.001623783 |
| TP19-53 - 28 | 475.1 | 24.8 | 2546.8 | 66.4 | 1046.6 | 67.3 | 45 | 1.803124591 | 0.115930112 | 0.07648222 | 0.003989063 |
| TP19-53 - 25 | 439.5 | 12.3 | 2511.5 | 70.2 | 980.5 | 63.2 | 45 | 1.626520471 | 0.104906846 | 0.070561598 | 0.001981989 |
| TP19-53 - 68 | 493.7 | 35.7 | 2653.1 | 84.3 | 1110.5 | 79.2 | 44 | 1.985276869 | 0.141567662 | 0.079600848 | 0.005756647 |
| TP19-53 - 48 | 370.7 | 28.7 | 2439.4 | 88.0 | 846.8 | 68.7 | 44 | 1.302438879 | 0.105670721 | 0.059196684 | 0.004584217 |
| TP19-53 - 149 | 414.8 | 11.5 | 2575.6 | 73.9 | 963.6 | 58.4 | 43 | 1.583142486 | 0.095874252 | 0.066460447 | 0.001839871 |
| TP19-53 - 98 | 414.4 | 32.5 | 2634.1 | 103.0 | 986.5 | 86.6 | 42 | 1.642163573 | 0.1441841 | 0.066387484 | 0.005207646 |
| TP19-53 - 147 | 399.3 | 11.7 | 2618.4 | 75.3 | 954.5 | 56.2 | 42 | 1.560053877 | 0.091798291 | 0.063907449 | 0.001879527 |
| TP19-53 - 6 | 435.9 | 15.8 | 2734.2 | 74.6 | 1062.1 | 66.4 | 41 | 1.846145982 | 0.1153506 | 0.069950045 | 0.002543185 |
| TP19-53 - 67 | 407.9 | 13.5 | 2682.2 | 85.0 | 995.2 | 62.0 | 41 | 1.664885482 | 0.103656671 | 0.06532028 | 0.002159453 |
| TP19-53 - 73 | 343.1 | 18.0 | 2565.8 | 117.5 | 845.4 | 61.9 | 41 | 1.299291732 | 0.095197829 | 0.054663782 | 0.002863745 |
| TP19-53 - 65 | 397.2 | 9.6 | 2739.3 | 61.7 | 998.5 | 57.6 | 40 | 1.673454756 | 0.096610853 | 0.063551115 | 0.001537561 |
| TP19-53 - 164 | 315.0 | 14.9 | 2574.0 | 65.9 | 794.8 | 50.6 | 40 | 1.187561019 | 0.075603601 | 0.050080091 | 0.002374002 |
| TP19-53 - 140 | 310.4 | 11.8 | 2592.0 | 68.4 | 792.6 | 46.7 | 39 | 1.182697771 | 0.069742256 | 0.049335618 | 0.00187344 |
| TP19-53 - 128 | 357.9 | 17.8 | 2733.3 | 109.7 | 928.1 | 65.1 | 39 | 1.494315273 | 0.104742513 | 0.057093411 | 0.002842324 |
| TP19-53 - 93 | 333.5 | 12.3 | 2723.0 | 78.8 | 880.6 | 52.3 | 38 | 1.380420142 | 0.081921823 | 0.053091223 | 0.00195494 |
| TP19-53 - 53 | 323.4 | 17.7 | 2714.8 | 74.0 | 861.4 | 57.4 | 38 | 1.33574906 | 0.089015746 | 0.051445552 | 0.002817203 |
| TP19-53 - 119 | 317.5 | 15.2 | 2718.5 | 78.7 | 849.6 | 57.4 | 37 | 1.30878989 | 0.088437885 | 0.050480923 | 0.002421939 |
| TP19-53 - 46 | 215.3 | 13.0 | 2526.2 | 77.7 | 590.6 | 42.7 | 36 | 0.788988662 | 0.057051042 | 0.03396449 | 0.00205181 |
| TP19-53 - 88 | 377.3 | 15.6 | 2937.4 | 70.7 | 1038.1 | 68.3 | 36 | 1.779713621 | 0.11713608 | 0.06028176 | 0.002488621 |
| TP19-53 - 30 | 373.3 | 13.7 | 2929.2 | 111.1 | 1033.2 | 57.5 | 36 | 1.766373155 | 0.098285109 | 0.059620079 | 0.002180985 |
| TP19-53 - 11 | 288.3 | 18.0 | 2728.8 | 95.9 | 799.5 | 53.6 | 36 | 1.197562061 | 0.080275886 | 0.045740858 | 0.00285765 |
| TP19-53 - 50 | 292.9 | 11.9 | 2747.0 | 81.4 | 815.9 | 52.5 | 36 | 1.233328067 | 0.079303786 | 0.046484768 | 0.001883108 |
| TP19-53 - 165 | 282.2 | 12.6 | 2726.2 | 67.5 | 786.6 | 51.6 | 36 | 1.169898523 | 0.076709034 | 0.044755328 | 0.001994134 |
| TP19-53 - 146 | 264.3 | 8.3 | 2728.0 | 95.6 | 749.3 | 45.1 | 35 | 1.091725381 | 0.065756494 | 0.041844338 | 0.001311262 |
| TP19-53 - 137 | 232.3 | 11.6 | 2788.7 | 66.2 | 699.9 | 46.8 | 33 | 0.992350204 | 0.066401114 | 0.036697373 | 0.001833699 |
| TP19-53 - 102 | 262.9 | 17.9 | 2941.6 | 97.5 | 819.8 | 63.4 | 32 | 1.241951177 | 0.095976926 | 0.041631533 | 0.002831714 |
| TP19-53 - 112 | 215.4 | 13.0 | 2967.6 | 90.3 | 717.0 | 55.3 | 30 | 1.026079338 | 0.079074206 | 0.033971483 | 0.002047714 |
| TP19-53 - 125 | 234.2 | 6.5 | 3025.0 | 87.6 | 781.6 | 48.4 | 30 | 1.159293282 | 0.071753705 | 0.036995012 | 0.001019219 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-53 - 152 | 185.3 | 16.1 | 2956.1 | 126.6 | 638.5 | 47.2 | 29 | 0.875479574 | 0.064753967 | 0.029166799 | 0.002534967 |
| TP19-53 - 42 | 170.7 | 6.1 | 3005.3 | 72.5 | 614.6 | 37.1 | 28 | 0.831709866 | 0.050262295 | 0.026827974 | 0.000959271 |
| TP19-53 - 9 | 171.1 | 7.6 | 3126.1 | 104.3 | 654.2 | 40.5 | 26 | 0.904648371 | 0.056019935 | 0.026903384 | 0.00119543 |
| TP19-53 - 8 | 153.0 | 7.0 | 3087.3 | 98.0 | 589.3 | 34.8 | 26 | 0.786703641 | 0.04639232 | 0.024020356 | 0.001096982 |
| TP19-53 - 129 | 163.0 | 8.3 | 3188.5 | 99.1 | 647.0 | 39.2 | 25 | 0.891245702 | 0.054033782 | 0.025612434 | 0.001305721 |
| TP19-53 - 14 | 144.7 | 4.9 | 3317.8 | 96.1 | 629.3 | 35.3 | 23 | 0.858419756 | 0.048205857 | 0.022702675 | 0.000761953 |
| TP19-53 - 153 | 106.6 | 4.0 | 3409.6 | 114.6 | 517.5 | 29.9 | 21 | 0.664679344 | 0.038431094 | 0.016666347 | 0.000624864 |
| TP19-53 - 154 | 74.4 | 3.4 | 3707.2 | 115.8 | 452.4 | 31.2 | 16 | 0.561390294 | 0.03875506 | 0.011605207 | 0.000537579 |
| TP19-54 - 137 | 1942.7 | 38.3 | 1828.4 | 41.5 | 1891.9 | 70.7 | 106 | 5.444692785 | 0.203479757 | 0.351701356 | 0.006942192 |
| TP19-54 - 17 | 1875.0 | 36.4 | 1784.1 | 41.6 | 1837.0 | 71.0 | 105 | 5.105527063 | 0.197394253 | 0.337574045 | 0.0065461 |
| TP19-54 - 15 | 1960.0 | 39.1 | 1899.1 | 41.8 | 1937.3 | 71.9 | 103 | 5.739242128 | 0.213149601 | 0.355324706 | 0.007096879 |
| TP19-54 - 32 | 1777.5 | 33.5 | 1734.7 | 36.3 | 1763.8 | 65.0 | 102 | 4.680955271 | 0.172621417 | 0.317498142 | 0.005987302 |
| TP19-54 - 1 | 1801.3 | 34.0 | 1764.2 | 35.3 | 1789.8 | 64.3 | 102 | 4.828246844 | 0.173414313 | 0.322373269 | 0.006090807 |
| TP19-54 - 62 | 1792.4 | 45.7 | 1761.1 | 48.5 | 1783.7 | 80.7 | 102 | 4.793145599 | 0.216907165 | 0.320551917 | 0.008165476 |
| TP19-54 - 109 | 2230.4 | 40.8 | 2194.4 | 35.8 | 2215.8 | 75.9 | 102 | 7.866186498 | 0.269614387 | 0.413383841 | 0.00756511 |
| TP19-54 - 87 | 2028.2 | 39.1 | 1996.2 | 39.6 | 2017.8 | 72.8 | 102 | 6.295636345 | 0.227062739 | 0.369745327 | 0.007128217 |
| TP19-54 - 6 | 1890.0 | 38.0 | 1861.6 | 39.2 | 1882.0 | 69.9 | 102 | 5.382153317 | 0.199979433 | 0.340689438 | 0.006848966 |
| TP19-54 - 66 | 1789.4 | 32.9 | 1763.8 | 29.8 | 1782.4 | 62.4 | 101 | 4.786022072 | 0.167428013 | 0.319932308 | 0.005879229 |
| TP19-54 - 143 | 1775.4 | 33.6 | 1750.4 | 35.2 | 1767.3 | 62.6 | 101 | 4.700556622 | 0.166534886 | 0.317074269 | 0.006005997 |
| TP19-54 - 50 | 1796.1 | 33.1 | 1774.5 | 32.2 | 1791.2 | 63.2 | 101 | 4.836075767 | 0.17050985 | 0.321304289 | 0.005917518 |
| TP19-54 - 115 | 1811.3 | 36.1 | 1792.4 | 44.5 | 1807.2 | 69.9 | 101 | 4.929032161 | 0.190727578 | 0.324430247 | 0.006468555 |
| TP19-54 - 121 | 1805.4 | 35.1 | 1788.4 | 42.0 | 1801.5 | 68.3 | 101 | 4.895512772 | 0.185602032 | 0.323215367 | 0.006290706 |
| TP19-54 - 106 | 1770.3 | 33.8 | 1755.4 | 34.9 | 1767.7 | 63.9 | 101 | 4.702314875 | 0.170029291 | 0.316034407 | 0.006032388 |
| TP19-54 - 79 | 2109.1 | 40.4 | 2093.5 | 42.4 | 2106.2 | 77.2 | 101 | 6.95870534 | 0.255153465 | 0.387038344 | 0.007406317 |
| TP19-54 - 126 | 1813.9 | 33.0 | 1802.6 | 34.3 | 1812.5 | 63.2 | 101 | 4.959670867 | 0.172981458 | 0.324962807 | 0.005907551 |
| TP19-54 - 35 | 3531.6 | 66.9 | 3526.8 | 40.9 | 3535.5 | 115.6 | 100 | 31.52108446 | 1.030309861 | 0.729505086 | 0.013809292 |
| TP19-54 - 73 | 1780.2 | 34.2 | 1778.0 | 37.4 | 1784.1 | 66.9 | 100 | 4.795387158 | 0.179799477 | 0.318053601 | 0.006102225 |
| TP19-54 - 11 | 1766.0 | 33.7 | 1766.8 | 31.4 | 1771.9 | 62.7 | 100 | 4.726225079 | 0.167312419 | 0.315149718 | 0.006019162 |
| TP19-54 - 80 | 1741.2 | 34.8 | 1746.1 | 45.4 | 1749.2 | 68.6 | 100 | 4.599537316 | 0.180281501 | 0.310109123 | 0.006203354 |
| TP19-54 - 19 | 1738.0 | 41.2 | 1747.8 | 48.8 | 1746.5 | 70.9 | 99 | 4.584863916 | 0.18619519 | 0.309456955 | 0.007335868 |
| TP19-54 - 24 | 1775.1 | 35.8 | 1788.4 | 56.1 | 1785.9 | 75.2 | 99 | 4.805860607 | 0.202285093 | 0.317003571 | 0.006389223 |
| TP19-54 - 123 | 1814.0 | 35.9 | 1829.9 | 38.4 | 1825.5 | 66.8 | 99 | 5.036372417 | 0.184360699 | 0.324976805 | 0.006437282 |
| TP19-54 - 5 | 2393.3 | 45.2 | 2422.0 | 41.2 | 2414.9 | 83.7 | 99 | 9.786430913 | 0.339146294 | 0.449558953 | 0.008489008 |
| TP19-54 - 97 | 1748.5 | 34.2 | 1775.3 | 46.4 | 1764.5 | 67.8 | 98 | 4.684758126 | 0.179987783 | 0.311590014 | 0.006093331 |
| TP19-54 - 36 | 1718.0 | 35.5 | 1746.1 | 48.5 | 1737.2 | 68.7 | 98 | 4.533841714 | 0.179190763 | 0.305397767 | 0.006312385 |
| TP19-54 - 118 | 1746.8 | 33.7 | 1779.0 | 36.1 | 1765.4 | 65.1 | 98 | 4.68983481 | 0.173065104 | 0.311230074 | 0.005999849 |
| TP19-54 - 139 | 1750.8 | 34.3 | 1788.9 | 38.9 | 1771.8 | 66.8 | 98 | 4.725679448 | 0.178136915 | 0.312061317 | 0.006113212 |
| TP19-54 - 27 | 1762.8 | 36.1 | 1803.9 | 37.2 | 1787.5 | 65.5 | 98 | 4.81514591 | 0.176554694 | 0.314489731 | 0.006437067 |
| TP19-54 - 20 | 1745.3 | 32.7 | 1789.2 | 34.5 | 1771.2 | 63.2 | 98 | 4.722484763 | 0.168534648 | 0.310931446 | 0.005824307 |
| TP19-54 - 103 | 1753.3 | 41.2 | 1803.8 | 45.8 | 1780.6 | 71.0 | 97 | 4.775581248 | 0.190322455 | 0.312560993 | 0.007349469 |
| TP19-54 - 18 | 1909.8 | 46.8 | 1968.1 | 74.1 | 1943.9 | 92.2 | 97 | 5.782907582 | 0.274337449 | 0.344815139 | 0.008456751 |
| TP19-54 - 128 | 1786.7 | 39.3 | 1841.4 | 38.3 | 1815.9 | 69.0 | 97 | 4.979585152 | 0.189261645 | 0.319380819 | 0.007026385 |
| TP19-54 - 28 | 1735.6 | 38.4 | 1796.2 | 38.9 | 1769.7 | 68.6 | 97 | 4.714030388 | 0.182727726 | 0.308958556 | 0.006834084 |
| TP19-54 - 155 | 1736.8 | 38.0 | 1799.4 | 39.8 | 1770.2 | 65.4 | 97 | 4.716915647 | 0.174310934 | 0.309216683 | 0.006762069 |
| TP19-54 - 81 | 1732.7 | 37.4 | 1797.1 | 26.9 | 1768.6 | 59.7 | 96 | 4.707650622 | 0.159014144 | 0.308365501 | 0.00666492 |
| TP19-54 - 117 | 2594.7 | 52.5 | 2694.5 | 46.5 | 2655.7 | 92.5 | 96 | 12.67368887 | 0.44134951 | 0.495562396 | 0.010030279 |
| TP19-54 - 127 | 1738.7 | 33.4 | 1807.7 | 36.0 | 1773.6 | 63.9 | 96 | 4.735704776 | 0.170565383 | 0.309586563 | 0.005939415 |

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| TP19-54 - 25 | 1852.7 | 37.3 | 1935.8 | 72.0 | 1898.4 | 99.4 | 96 | 5.485944595 | 0.287328375 | 0.332949981 | 0.006709606 |
| TP19-54 - 38 | 1720.8 | 32.3 | 1807.9 | 36.1 | 1766.0 | 66.0 | 95 | 4.692826341 | 0.175484497 | 0.305968757 | 0.00574995 |
| TP19-54 - 136 | 1695.5 | 35.0 | 1791.7 | 39.5 | 1742.5 | 64.1 | 95 | 4.562608617 | 0.167929469 | 0.300849978 | 0.006207761 |
| TP19-54 - 60 | 1706.7 | 34.9 | 1806.2 | 30.4 | 1756.9 | 60.7 | 94 | 4.642140475 | 0.160484599 | 0.303113374 | 0.006192016 |
| TP19-54 - 89 | 1711.6 | 34.8 | 1814.9 | 41.9 | 1763.8 | 64.8 | 94 | 4.680562763 | 0.171863599 | 0.304104089 | 0.006180202 |
| TP19-54 - 59 | 1682.5 | 32.2 | 1787.1 | 27.3 | 1734.1 | 58.8 | 94 | 4.516884545 | 0.153100949 | 0.298220136 | 0.005713753 |
| TP19-54 - 23 | 1685.3 | 31.2 | 1791.8 | 32.9 | 1739.3 | 62.0 | 94 | 4.54533357 | 0.161954539 | 0.29878612 | 0.005533864 |
| TP19-54 - 91 | 1683.3 | 33.6 | 1812.3 | 32.4 | 1745.5 | 63.0 | 93 | 4.579033721 | 0.165166002 | 0.298384913 | 0.005952328 |
| TP19-54 - 111 | 1676.9 | 35.3 | 1811.1 | 40.9 | 1741.5 | 67.3 | 93 | 4.557592459 | 0.176058381 | 0.297104166 | 0.006247438 |
| TP19-54 - 72 | 2632.1 | 52.3 | 2845.1 | 31.3 | 2759.7 | 91.5 | 93 | 14.14797799 | 0.469103168 | 0.504257967 | 0.010029155 |
| TP19-54 - 41 | 1684.3 | 37.7 | 1826.1 | 46.4 | 1753.7 | 66.7 | 92 | 4.624721921 | 0.175800372 | 0.298586766 | 0.006691431 |
| TP19-54 - 130 | 2116.4 | 50.2 | 2302.0 | 65.6 | 2216.3 | 90.7 | 92 | 7.870055176 | 0.322084101 | 0.388625248 | 0.009226731 |
| TP19-54 - 26 | 1740.4 | 37.7 | 1893.9 | 57.8 | 1817.3 | 76.7 | 92 | 4.988321478 | 0.210463814 | 0.309947963 | 0.006720809 |
| TP19-54 - 37 | 1734.2 | 64.3 | 1894.2 | 45.6 | 1806.8 | 92.7 | 92 | 4.926516467 | 0.252824601 | 0.308671669 | 0.011447771 |
| TP19-54 - 145 | 1674.8 | 34.3 | 1836.6 | 43.0 | 1751.1 | 69.3 | 91 | 4.610382756 | 0.182581923 | 0.296673117 | 0.006069555 |
| TP19-54 - 4 | 1677.4 | 38.1 | 1845.3 | 47.1 | 1760.2 | 81.8 | 91 | 4.660536526 | 0.21647721 | 0.297198612 | 0.00674866 |
| TP19-54 - 12 | 1685.2 | 72.1 | 1882.8 | 103.0 | 1779.8 | 94.0 | 90 | 4.770783692 | 0.252002294 | 0.298773038 | 0.012789286 |
| TP19-54 - 7 | 1591.3 | 31.2 | 1795.2 | 34.2 | 1685.4 | 60.0 | 89 | 4.258425399 | 0.151531172 | 0.27999521 | 0.005496666 |
| TP19-54 - 108 | 1662.2 | 33.4 | 1890.4 | 36.9 | 1769.7 | 64.2 | 88 | 4.71361785 | 0.171029291 | 0.294147166 | 0.005917839 |
| TP19-54 - 150 | 1604.7 | 33.7 | 1852.1 | 37.4 | 1718.2 | 60.2 | 87 | 4.431269632 | 0.155292093 | 0.28264421 | 0.005937845 |
| TP19-54 - 67 | 1616.0 | 33.0 | 1882.1 | 38.1 | 1739.9 | 62.8 | 86 | 4.548762095 | 0.164302645 | 0.284897261 | 0.005825752 |
| TP19-54 - 16 | 1540.7 | 33.2 | 1851.4 | 41.3 | 1681.7 | 62.0 | 83 | 4.239452936 | 0.156261929 | 0.269982326 | 0.005821879 |
| TP19-54 - 77 | 1568.2 | 34.7 | 1888.0 | 48.2 | 1715.9 | 66.4 | 83 | 4.419020993 | 0.171085796 | 0.275408023 | 0.006094447 |
| TP19-54 - 134 | 1626.5 | 35.7 | 1966.0 | 38.4 | 1783.6 | 65.0 | 83 | 4.792803932 | 0.174579348 | 0.287000184 | 0.006305642 |
| TP19-54 - 10 | 1585.6 | 54.8 | 1923.6 | 38.7 | 1742.6 | 71.1 | 82 | 4.563534493 | 0.186278548 | 0.278861188 | 0.009630932 |
| TP19-54 - 90 | 1554.3 | 73.8 | 1888.8 | 49.4 | 1704.3 | 98.1 | 82 | 4.35726806 | 0.250924316 | 0.272661775 | 0.012952968 |
| TP19-54 - 120 | 1526.2 | 30.6 | 1859.8 | 38.3 | 1675.6 | 60.8 | 82 | 4.207931991 | 0.152701351 | 0.267119652 | 0.005358879 |
| TP19-54 - 148 | 1480.4 | 59.4 | 1867.7 | 46.9 | 1651.4 | 79.9 | 79 | 4.085357739 | 0.197637178 | 0.258161961 | 0.010358272 |
| TP19-54 - 133 | 1505.0 | 35.2 | 1921.2 | 34.4 | 1690.9 | 61.9 | 78 | 4.28706834 | 0.157048408 | 0.262970555 | 0.006146912 |
| TP19-54 - 116 | 1466.7 | 34.5 | 1888.8 | 34.8 | 1651.9 | 57.6 | 78 | 4.087988632 | 0.142492642 | 0.255487532 | 0.006008349 |
| TP19-54 - 70 | 1487.6 | 31.7 | 1921.4 | 39.8 | 1682.0 | 60.7 | 77 | 4.241021885 | 0.153141215 | 0.259562791 | 0.005539661 |
| TP19-54 - 84 | 1502.5 | 32.8 | 1962.9 | 42.0 | 1709.2 | 66.2 | 77 | 4.383213548 | 0.169876914 | 0.262486038 | 0.005731624 |
| TP19-54 - 93 | 1957.2 | 59.4 | 2569.7 | 39.7 | 2277.1 | 88.4 | 76 | 8.417476781 | 0.326936282 | 0.354743561 | 0.010759543 |
| TP19-54 - 96 | 1349.9 | 49.0 | 1824.1 | 39.0 | 1549.6 | 68.3 | 74 | 3.600199208 | 0.158619868 | 0.232933948 | 0.008455145 |
| TP19-54 - 100 | 1400.4 | 54.8 | 1931.0 | 35.2 | 1630.8 | 74.7 | 73 | 3.983198758 | 0.182390771 | 0.242639467 | 0.009489445 |
| TP19-54 - 30 | 1427.3 | 34.5 | 1994.9 | 39.6 | 1679.8 | 57.5 | 72 | 4.229535634 | 0.144759776 | 0.247830726 | 0.005989052 |
| TP19-54 - 110 | 1559.8 | 100.9 | 2243.8 | 75.2 | 1876.8 | 91.5 | 70 | 5.349399888 | 0.260702472 | 0.273744858 | 0.017710652 |
| TP19-54 - 102 | 1535.5 | 50.7 | 2248.6 | 46.2 | 1865.6 | 65.9 | 68 | 5.279835089 | 0.186407229 | 0.268960725 | 0.008883927 |
| TP19-54 - 140 | 1411.9 | 31.3 | 2073.3 | 89.5 | 1702.9 | 85.3 | 68 | 4.350162711 | 0.217798924 | 0.244858986 | 0.005428123 |
| TP19-54 - 53 | 1330.4 | 31.2 | 1959.4 | 44.3 | 1597.6 | 58.2 | 68 | 3.82297323 | 0.139342392 | 0.229221104 | 0.005370399 |
| TP19-54 - 39 | 1362.2 | 27.9 | 2024.0 | 36.5 | 1648.1 | 58.9 | 67 | 4.069079906 | 0.145378967 | 0.235296406 | 0.004825483 |
| TP19-54 - 52 | 1233.6 | 56.2 | 1847.8 | 51.3 | 1482.3 | 74.9 | 67 | 3.305203674 | 0.167072117 | 0.2108974 | 0.009614487 |
| TP19-54 - 152 | 1394.4 | 43.2 | 2130.0 | 65.5 | 1717.6 | 67.1 | 65 | 4.427804359 | 0.173078259 | 0.241483909 | 0.007474271 |
| TP19-54 - 78 | 1252.4 | 53.2 | 1913.5 | 57.2 | 1521.7 | 65.8 | 65 | 3.475541222 | 0.150210316 | 0.214428332 | 0.009101647 |
| TP19-54 - 151 | 1530.4 | 54.5 | 2426.3 | 32.9 | 1951.1 | 79.4 | 63 | 5.831654211 | 0.237430308 | 0.267948599 | 0.009536719 |
| TP19-54 - 63 | 1289.9 | 54.5 | 2129.9 | 109.0 | 1653.9 | 78.8 | 61 | 4.097774161 | 0.195310713 | 0.221518594 | 0.00936147 |
| TP19-54 - 54 | 1268.0 | 58.0 | 2101.4 | 69.2 | 1617.5 | 73.9 | 60 | 3.918626778 | 0.179039425 | 0.217383874 | 0.009948147 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-54 - 51 | 1270.1 | 25.3 | 2293.2 | 32.2 | 1711.0 | 58.3 | 55 | 4.392652557 | 0.149691053 | 0.217772714 | 0.004333576 |
| TP19-54 - 95 | 1983.0 | 94.4 | 3766.4 | 228.8 | 2992.6 | 301.4 | 53 | 18.05454055 | 1.818386451 | 0.360167621 | 0.017147888 |
| TP19-54 - 144 | 1097.5 | 33.5 | 2110.9 | 39.1 | 1495.2 | 55.4 | 52 | 3.360298366 | 0.124536359 | 0.185605795 | 0.005664367 |
| TP19-54 - 92 | 1126.0 | 25.6 | 2288.1 | 38.5 | 1600.9 | 56.4 | 49 | 3.838646937 | 0.135315413 | 0.190863617 | 0.004337075 |
| TP19-54 - 98 | 1129.8 | 32.6 | 2340.8 | 57.8 | 1627.4 | 61.2 | 48 | 3.966439145 | 0.149086651 | 0.191549255 | 0.005522975 |
| TP19-54 - 119 | 1095.9 | 27.0 | 2277.4 | 48.3 | 1571.3 | 56.4 | 48 | 3.699564566 | 0.132696282 | 0.185305921 | 0.004561952 |
| TP19-54 - 142 | 1113.0 | 28.2 | 2324.3 | 61.1 | 1606.9 | 63.4 | 48 | 3.86723517 | 0.152481686 | 0.188454313 | 0.004781957 |
| TP19-54 - 21 | 1138.8 | 31.2 | 2395.5 | 40.9 | 1663.1 | 68.3 | 48 | 4.144157209 | 0.170213584 | 0.193222659 | 0.005300755 |
| TP19-54 - 71 | 1037.8 | 45.4 | 2186.2 | 53.8 | 1483.3 | 67.5 | 47 | 3.309698134 | 0.150577239 | 0.174665897 | 0.007637769 |
| TP19-54 - 132 | 1771.6 | 76.3 | 3811.7 | 207.9 | 2904.2 | 276.7 | 46 | 16.46491994 | 1.568783504 | 0.316287134 | 0.013614222 |
| TP19-54 - 122 | 1052.5 | 26.5 | 2283.1 | 48.5 | 1538.4 | 58.1 | 46 | 3.549861995 | 0.13398742 | 0.177359251 | 0.00446884 |
| TP19-54 - 64 | 1026.4 | 59.0 | 2251.1 | 56.9 | 1503.8 | 78.6 | 46 | 3.397278242 | 0.177467866 | 0.172588884 | 0.009924859 |
| TP19-54 - 9 | 1056.6 | 34.2 | 2370.7 | 62.8 | 1585.8 | 78.9 | 45 | 3.76725067 | 0.187461159 | 0.178106509 | 0.005762744 |
| TP19-54 - 65 | 1004.2 | 51.8 | 2261.0 | 89.6 | 1489.1 | 63.2 | 44 | 3.334002125 | 0.141487622 | 0.168569149 | 0.008696208 |
| TP19-54 - 76 | 986.7 | 21.5 | 2233.8 | 52.4 | 1461.8 | 57.9 | 44 | 3.219029735 | 0.12754736 | 0.16539838 | 0.0035995 |
| TP19-54 - 124 | 1054.6 | 26.8 | 2450.7 | 58.6 | 1619.2 | 57.3 | 43 | 3.926658188 | 0.139040873 | 0.177738281 | 0.004517008 |
| TP19-54 - 49 | 999.3 | 23.0 | 2337.6 | 40.8 | 1520.5 | 54.8 | 43 | 3.470542419 | 0.125161526 | 0.167679899 | 0.003851865 |
| TP19-54 - 135 | 1026.8 | 56.7 | 2519.6 | 85.9 | 1628.8 | 79.3 | 41 | 3.973730037 | 0.19347281 | 0.172677627 | 0.009530328 |
| TP19-54 - 131 | 914.5 | 22.5 | 2256.8 | 47.7 | 1408.7 | 53.0 | 41 | 3.004311238 | 0.113133287 | 0.15241463 | 0.003749349 |
| TP19-54 - 125 | 885.4 | 22.0 | 2313.0 | 37.2 | 1408.0 | 48.6 | 38 | 3.001645396 | 0.103654865 | 0.147228497 | 0.003656914 |
| TP19-54 - 2 | 938.2 | 23.9 | 2460.0 | 86.2 | 1524.4 | 81.0 | 38 | 3.487331836 | 0.185242889 | 0.156667353 | 0.003987781 |
| TP19-54 - 149 | 868.4 | 35.9 | 2488.1 | 71.7 | 1470.7 | 55.1 | 35 | 3.256235375 | 0.121976666 | 0.144204282 | 0.00595752 |
| TP19-54 - 34 | 828.8 | 19.2 | 2395.8 | 47.5 | 1392.6 | 51.2 | 35 | 2.941422105 | 0.108220447 | 0.13720565 | 0.00317683 |
| TP19-54 - 114 | 844.3 | 81.2 | 2456.6 | 119.4 | 1432.0 | 85.3 | 34 | 3.097036328 | 0.184590455 | 0.139943826 | 0.013461275 |
| TP19-54 - 48 | 873.4 | 37.2 | 2638.1 | 71.6 | 1550.2 | 63.3 | 33 | 3.602818735 | 0.147017196 | 0.145096224 | 0.006186377 |
| TP19-54 - 85 | 811.1 | 26.2 | 2458.9 | 80.2 | 1401.8 | 59.4 | 33 | 2.97714341 | 0.126082639 | 0.134083811 | 0.004336964 |
| TP19-54 - 57 | 833.0 | 23.2 | 2649.2 | 51.5 | 1512.3 | 54.1 | 31 | 3.434370481 | 0.122862804 | 0.137934546 | 0.003846797 |
| TP19-54 - 69 | 788.9 | 33.1 | 2549.9 | 82.7 | 1421.4 | 48.3 | 31 | 3.054669334 | 0.103824228 | 0.130179877 | 0.005460879 |
| TP19-54 - 141 | 863.5 | 62.6 | 2800.6 | 125.9 | 1613.3 | 78.5 | 31 | 3.898365541 | 0.18971709 | 0.143330166 | 0.010391241 |
| TP19-54 - 46 | 735.3 | 18.2 | 2476.4 | 44.2 | 1332.5 | 47.4 | 30 | 2.714891313 | 0.096485416 | 0.120822111 | 0.002985056 |
| TP19-54 - 31 | 769.9 | 59.5 | 2660.7 | 129.7 | 1451.4 | 59.1 | 29 | 3.176287211 | 0.129308702 | 0.126851019 | 0.009805005 |
| TP19-54 - 86 | 688.6 | 28.1 | 2507.0 | 42.1 | 1296.1 | 65.2 | 27 | 2.583801493 | 0.129983052 | 0.112729822 | 0.004592449 |
| TP19-54 - 55 | 783.9 | 18.7 | 2902.4 | 53.2 | 1583.4 | 59.6 | 27 | 3.756254059 | 0.141316131 | 0.129313322 | 0.00308621 |
| TP19-54 - 68 | 711.8 | 18.0 | 2638.2 | 55.6 | 1378.6 | 54.5 | 27 | 2.887232882 | 0.114115598 | 0.116745689 | 0.002953156 |
| TP19-54 - 113 | 683.4 | 17.4 | 2632.7 | 46.6 | 1343.0 | 54.6 | 26 | 2.753325736 | 0.111966259 | 0.111831788 | 0.002850428 |
| TP19-54 - 83 | 687.3 | 34.2 | 2685.4 | 66.7 | 1371.4 | 61.8 | 26 | 2.859789008 | 0.128912083 | 0.112505368 | 0.005596201 |
| TP19-54 - 29 | 690.1 | 18.0 | 2793.4 | 96.7 | 1426.9 | 56.9 | 25 | 3.076613142 | 0.122662963 | 0.112997538 | 0.002944188 |
| TP19-54 - 43 | 751.4 | 35.9 | 3043.3 | 51.4 | 1618.0 | 76.3 | 25 | 3.920743975 | 0.184796278 | 0.123625153 | 0.005906849 |
| TP19-54 - 8 | 649.3 | 19.4 | 2675.8 | 67.1 | 1323.9 | 50.0 | 24 | 2.683410801 | 0.101286878 | 0.105976939 | 0.003160144 |
| TP19-54 - 94 | 694.6 | 18.3 | 2880.8 | 60.5 | 1471.9 | 50.2 | 24 | 3.261501572 | 0.111226046 | 0.113774968 | 0.003004894 |
| TP19-54 - 45 | 682.0 | 19.5 | 2889.5 | 48.8 | 1461.6 | 53.6 | 24 | 3.218214079 | 0.118123212 | 0.111590633 | 0.003192317 |
| TP19-54 - 14 | 589.2 | 14.1 | 2620.5 | 49.2 | 1225.6 | 46.0 | 22 | 2.343673906 | 0.087951962 | 0.095705601 | 0.00228611 |
| TP19-54 - 42 | 633.3 | 18.3 | 2850.3 | 37.2 | 1383.8 | 54.3 | 22 | 2.907440335 | 0.114034044 | 0.103232744 | 0.002987896 |
| TP19-54 - 88 | 594.2 | 17.2 | 2733.6 | 52.2 | 1279.8 | 60.1 | 22 | 2.526960953 | 0.118586614 | 0.096560752 | 0.002796714 |
| TP19-54 - 101 | 653.1 | 17.7 | 3025.9 | 57.8 | 1491.2 | 56.4 | 22 | 3.343060876 | 0.126390563 | 0.106623047 | 0.002897657 |
| TP19-54 - 22 | 606.2 | 14.4 | 2812.4 | 65.2 | 1331.9 | 57.2 | 22 | 2.712405963 | 0.116455643 | 0.098599432 | 0.002342692 |
| TP19-54 - 154 | 607.6 | 24.2 | 2849.6 | 67.0 | 1349.4 | 57.3 | 21 | 2.777161659 | 0.118014757 | 0.098845892 | 0.003936315 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-54 - 58 | 559.4 | 47.5 | 2640.3 | 138.3 | 1196.4 | 69.3 | 21 | 2.248612753 | 0.130236285 | 0.090645507 | 0.007694733 |
| TP19-54 - 61 | 555.9 | 14.4 | 2866.0 | 62.3 | 1286.7 | 49.0 | 19 | 2.550844486 | 0.097180688 | 0.090064532 | 0.002329295 |
| TP19-54 - 75 | 473.7 | 15.7 | 2868.3 | 94.4 | 1169.6 | 48.1 | 17 | 2.164180088 | 0.089090737 | 0.076245582 | 0.002527691 |
| TP19-54 - 153 | 440.6 | 12.9 | 3003.9 | 58.6 | 1175.7 | 43.1 | 15 | 2.183253916 | 0.079993321 | 0.070730434 | 0.00207822 |
| TP19-54 - 40 | 433.0 | 8.9 | 3102.5 | 54.3 | 1208.4 | 40.8 | 14 | 2.287305529 | 0.07720248 | 0.0694738 | 0.001431786 |
| TP19-54 - 147 | 424.0 | 9.8 | 3087.7 | 54.7 | 1186.1 | 43.3 | 14 | 2.21582927 | 0.080835815 | 0.067989847 | 0.001577876 |
| TP19-54 - 47 | 413.7 | 17.4 | 3100.5 | 60.9 | 1177.2 | 51.6 | 13 | 2.187956886 | 0.095962021 | 0.066283559 | 0.002784202 |
| TP19-54 - 33 | 401.7 | 10.3 | 3140.5 | 58.0 | 1170.6 | 48.6 | 13 | 2.167188007 | 0.09005633 | 0.064297563 | 0.001655015 |
| TP19-54 - 112 | 363.0 | 17.6 | 3116.5 | 90.8 | 1088.5 | 46.1 | 12 | 1.921275516 | 0.081287675 | 0.057928691 | 0.00281471 |
| TP19-54 - 146 | 363.7 | 17.7 | 3256.4 | 84.4 | 1148.8 | 50.6 | 11 | 2.099851594 | 0.092557297 | 0.058042401 | 0.002821558 |
| TP19-54 - 104 | 334.9 | 8.4 | 3169.9 | 51.1 | 1055.6 | 42.3 | 11 | 1.828147867 | 0.07324348 | 0.053329715 | 0.00133055 |
| TP19-54 - 74 | 354.7 | 10.4 | 3371.4 | 64.5 | 1183.3 | 44.8 | 11 | 2.207072849 | 0.083501979 | 0.05655898 | 0.001657437 |
| TP19-54 - 107 | 332.4 | 25.8 | 3363.6 | 144.7 | 1131.8 | 57.4 | 10 | 2.04850621 | 0.103936937 | 0.052910477 | 0.004111288 |
| TP19-54 - 13 | 314.9 | 7.7 | 3205.9 | 63.6 | 1029.9 | 35.7 | 10 | 1.757445754 | 0.060840158 | 0.050054243 | 0.001229866 |
| TP19-54 - 138 | 341.6 | 12.8 | 3510.4 | 118.2 | 1218.2 | 42.6 | 10 | 2.319298799 | 0.081105897 | 0.054420031 | 0.002038664 |
| TP19-54 - 129 | 336.1 | 8.7 | 3507.2 | 58.1 | 1204.9 | 44.7 | 10 | 2.275952951 | 0.08446009 | 0.053521101 | 0.001387349 |
| TP19-54 - 82 | 213.0 | 10.7 | 3693.6 | 100.5 | 973.5 | 41.7 | 6 | 1.608322481 | 0.068825597 | 0.03359267 | 0.001692344 |
| TP19-54 - 44 | 206.3 | 10.5 | 3599.6 | 80.3 | 919.0 | 43.4 | 6 | 1.47220417 | 0.069485273 | 0.03251653 | 0.001660535 |
| TP19-54 - 56 | 113.2 | 3.1 | 3572.5 | 72.4 | 589.7 | 24.0 | 3 | 0.787373997 | 0.031990122 | 0.017714218 | 0.000485032 |
| TP19-54 - 3 | 106.2 | 4.7 | 4522.7 | 108.4 | 888.6 | 43.1 | 2 | 1.399262021 | 0.067897013 | 0.016604152 | 0.000729456 |
| TP19-54 - 105 | 76.4 | 2.7 | 4557.9 | 62.7 | 718.0 | 30.7 | 2 | 1.028123741 | 0.044008813 | 0.011918631 | 0.000418181 |
| TP19-54 - 99 | 71.1 | 1.9 | 4409.2 | 93.5 | 631.0 | 21.6 | 2 | 0.861517231 | 0.029481098 | 0.011095439 | 0.000291677 |

## Appendix B: Supplementary Tables: REEs in detrital Zircons within 10% concordance

| *Source Filename* | CeN | PrN | LaN | Ce* (CeN/0.5*(la+pr) | EuN | Sm | Gd | Eu* | Lu | Slope LU/Gd REE | Yb | Yb/U | U/Yb | La | Slope Sm/La |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-45 - 10* | 46.2676 | 20.8043 | 6.0473 | 4.1250 | 53.9973 | 80.7044 | 135.3654 | 0.5166 | 748.7313 | 5.5312 | 628.5950 | 3.1984 | 0.3127 | 6.0473 | 13.3456 |
| *TP19-45 - 101* | 17.5205 | 9.3246 | 2.5456 | 3.5961 | 27.8972 | 44.5172 | 124.1192 | 0.3753 | 4566.1980 | 36.7888 | 3577.5717 | 16.4584 | 0.0608 | 2.5456 | 17.4881 |
| *TP19-45 - 105* | 11.1219 | 1.9461 | 0.0567 | 33.4826 | 7.5021 | 40.6686 | 164.1586 | 0.0918 | 2045.6691 | 12.4615 | 1700.8349 | 7.0636 | 0.1416 | 0.0567 | 717.3234 |
| *TP19-45 - 112* | 19.8380 | 3.3591 | 0.6214 | 13.7308 | 8.0132 | 20.3865 | 51.8696 | 0.2464 | 875.1605 | 16.8723 | 673.4827 | 3.7281 | 0.2682 | 0.6214 | 32.8068 |
| *TP19-45 - 116* | 19.5319 | 7.5325 | 9.7578 | 2.2782 | 3.3221 | 27.1455 | 79.1918 | 0.0717 | 928.8950 | 11.7297 | 730.0947 | 11.3428 | 0.0882 | 9.7578 | 2.7819 |
| *TP19-45 - 122* | 26.7056 | 7.5529 | 1.6491 | 7.5670 | 23.5344 | 35.6691 | 71.6066 | 0.4657 | 978.4577 | 13.6644 | 738.6265 | 4.3101 | 0.2320 | 1.6491 | 21.6296 |
| *TP19-45 - 131* | 30.8864 | 5.8916 | 0.9701 | 12.9195 | 21.3219 | 39.1457 | 108.7395 | 0.3268 | 1229.3473 | 11.3054 | 1006.6791 | 8.6136 | 0.1161 | 0.9701 | 40.3530 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-45 - 135* | 6.9631 | 0.2648 | 0.0045 | 202.3565 | 1.2628 | 11.1507 | 46.2487 | 0.0556 | 1350.9883 | 29.2114 | 1001.3730 | 6.0222 | 0.1661 | 0.0045 | 2494.0214 |
| *TP19-45 - 136* | 34.8817 | 8.8229 | 1.5366 | 9.4734 | 26.4064 | 39.4701 | 70.7986 | 0.4995 | 762.5196 | 10.7703 | 591.6358 | 3.7475 | 0.2668 | 1.5366 | 25.6862 |
| *TP19-45 - 138* | 21.6743 | 3.7146 | 0.5614 | 15.0084 | 15.5802 | 23.5011 | 57.9484 | 0.4222 | 701.1383 | 12.0994 | 540.9621 | 4.6406 | 0.2155 | 0.5614 | 41.8582 |
| *TP19-45 - 142* | 6.4422 | 1.0249 | 0.2015 | 14.1768 | 5.1322 | 10.7109 | 38.3314 | 0.2533 | 1032.9848 | 26.9488 | 793.9395 | 7.2108 | 0.1387 | 0.2015 | 53.1635 |
| *TP19-45 - 143* | 36.6625 | 12.3006 | 2.1802 | 7.0796 | 33.6897 | 69.2101 | 163.1116 | 0.3171 | 1327.1958 | 8.1367 | 1104.5596 | 9.8760 | 0.1013 | 2.1802 | 31.7444 |
| *TP19-45 - 144* | 19.6406 | 5.9657 | 6.0233 | 3.2765 | 3.1667 | 14.9039 | 56.9723 | 0.1087 | 1448.7079 | 25.4283 | 1099.3428 | 6.6139 | 0.1512 | 6.0233 | 2.4744 |
| *TP19-45 - 145* | 13.7967 | 4.9085 | 0.8722 | 6.6682 | 11.0180 | 38.6477 | 121.8318 | 0.1606 | 1338.2505 | 10.9844 | 1108.8144 | 6.1730 | 0.1620 | 0.8722 | 44.3128 |
| *TP19-45 - 147* | 43.6890 | 2.5472 | 0.3124 | 48.9750 | 16.5456 | 23.8791 | 62.1235 | 0.4296 | 728.3677 | 11.7245 | 558.8576 | 5.4664 | 0.1829 | 0.3124 | 76.4348 |
| *TP19-45 - 150* | 14.1828 | 0.9140 | 0.0948 | 48.1782 | 3.4343 | 13.2707 | 54.2803 | 0.1280 | 1229.5499 | 22.6518 | 964.3265 | 4.4097 | 0.2268 | 0.0948 | 139.9683 |
| *TP19-45 - 155* | 27.2224 | 2.5364 | 0.1476 | 44.4908 | 24.1706 | 24.1000 | 65.3579 | 0.6090 | 685.7389 | 10.4921 | 531.8149 | 19.1502 | 0.0522 | 0.1476 | 163.2753 |
| *TP19-45 - 2* | 30.6415 | 8.5680 | 1.5746 | 8.3422 | 31.7924 | 56.9481 | 163.6730 | 0.3293 | 2057.2803 | 12.5695 | 1660.3393 | 5.9593 | 0.1678 | 1.5746 | 36.1657 |
| *TP19-45 - 23* | 12.2725 | 0.6488 | 0.0154 | 122.6428 | 1.0482 | 14.1633 | 61.5283 | 0.0355 | 1032.5703 | 16.7820 | 862.3582 | 10.0120 | 0.0999 | 0.0154 | 917.7455 |
| *TP19-45 - 24* | 9.7831 | 3.8545 | 0.8456 | 5.4189 | 9.7747 | 21.7254 | 49.1563 | 0.2991 | 551.8033 | 11.2255 | 414.4398 | 2.1383 | 0.4677 | 0.8456 | 25.6922 |
| *TP19-45 - 27* | 4.5789 | 0.6659 | 0.0329 | 30.9298 | 2.4956 | 13.7740 | 64.4601 | 0.0838 | 1485.8042 | 23.0500 | 1151.3059 | 7.0787 | 0.1413 | 0.0329 | 418.5073 |
| *TP19-45 - 28* | 67.0710 | 5.8990 | 0.5467 | 37.3485 | 38.4899 | 49.0603 | 119.9390 | 0.5018 | 1305.4276 | 10.8841 | 1014.8066 | 20.4264 | 0.0490 | 0.5467 | 89.7395 |
| *TP19-45 - 30* | 13.2520 | 0.6799 | 0.0226 | 106.9219 | 1.2719 | 15.6156 | 67.0695 | 0.0393 | 1042.3480 | 15.5413 | 852.9467 | 5.2746 | 0.1896 | 0.0226 | 691.2046 |
| *TP19-45 - 34* | 18.2711 | 0.4975 | #VALUE! | #VALUE! | 7.1607 | 11.4254 | 35.5296 | 0.3554 | 560.1788 | 15.7665 | 435.5321 | 3.5123 | 0.2847 | #VALUE! | #VALUE! |
| *TP19-45 - 43* | 20.6211 | 9.6711 | 1.7582 | 5.0008 | 20.7878 | 40.9258 | 106.7238 | 0.3145 | 1955.1873 | 18.3201 | 1556.4019 | 8.7149 | 0.1147 | 1.7582 | 23.2768 |
| *TP19-45 - 44* | 7.9482 | 0.5865 | 0.1262 | 29.2198 | 2.7478 | 6.8522 | 23.9579 | 0.2145 | 400.0228 | 16.6969 | 324.1594 | 2.7855 | 0.3590 | 0.1262 | 54.3133 |
| *TP19-45 - 47* | 4.1862 | 0.3453 | 0.0160 | 56.3657 | 3.5908 | 8.5133 | 43.0905 | 0.1875 | 967.1961 | 22.4457 | 750.7111 | 5.5795 | 0.1792 | 0.0160 | 533.0253 |
| *TP19-45 - 51* | 19.3092 | 2.7310 | 1.2007 | 10.6632 | 8.7035 | 21.4341 | 55.2069 | 0.2530 | 949.0369 | 17.1906 | 746.4667 | 3.2140 | 0.3111 | 1.2007 | 17.8515 |
| *TP19-45 - 52* | 33.2706 | 11.4539 | 2.3874 | 6.3623 | 32.9593 | 44.9802 | 102.1216 | 0.4863 | 1295.2751 | 12.6836 | 1058.3493 | 5.3837 | 0.1857 | 2.3874 | 18.8404 |
| *TP19-45 - 55* | 8.2857 | 1.4509 | 0.1247 | 19.4794 | 4.5175 | 15.6212 | 50.5624 | 0.1607 | 1002.0675 | 19.8184 | 767.5600 | 6.0215 | 0.1661 | 0.1247 | 125.2680 |
| *TP19-45 - 58* | 26.1746 | 11.0139 | 2.0950 | 5.4489 | 33.7493 | 51.9144 | 131.2645 | 0.4088 | 2277.5552 | 17.3509 | 1665.0211 | 8.0600 | 0.1241 | 2.0950 | 24.7796 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-45 - 64* | 52.9828 | 5.6005 | 0.8258 | 24.6372 | 20.7094 | 39.1272 | 75.2766 | 0.3816 | 760.1068 | 10.0975 | 599.5225 | 5.7589 | 0.1736 | 0.8258 | 47.3822 |
| *TP19-45 - 67* | 31.4922 | 7.3334 | 1.2704 | 10.3178 | 24.0472 | 46.3509 | 129.9457 | 0.3099 | 1234.7795 | 9.5023 | 944.0620 | 6.7570 | 0.1480 | 1.2704 | 36.4867 |
| *TP19-45 - 68* | 15.7389 | 7.4217 | 0.9543 | 5.9139 | 19.2356 | 42.6212 | 97.1156 | 0.2990 | 945.9331 | 9.7403 | 760.9526 | 4.6844 | 0.2135 | 0.9543 | 44.6600 |
| *TP19-45 - 7* | 16.8617 | 6.8750 | 2.7975 | 3.8448 | 17.6781 | 30.7871 | 77.4804 | 0.3620 | 1502.7460 | 19.3952 | 1117.5673 | 6.1573 | 0.1624 | 2.7975 | 11.0051 |
| *TP19-45 - 77* | 22.6716 | 9.1769 | 2.2357 | 5.0052 | 21.3781 | 30.4058 | 45.3690 | 0.5756 | 658.5016 | 14.5144 | 416.6128 | 2.9811 | 0.3354 | 2.2357 | 13.6000 |
| *TP19-45 - 80* | 48.1222 | 0.2440 | #VALUE! | #VALUE! | 7.7872 | 9.8690 | 37.6736 | 0.4039 | 591.7647 | 15.7077 | 440.6574 | 4.9549 | 0.2018 | #VALUE! | #VALUE! |
| *TP19-45 - 81* | 47.1438 | 13.3004 | 3.2355 | 7.1866 | 42.1701 | 55.2406 | 103.2283 | 0.5584 | 1272.5194 | 12.3272 | 966.0136 | 5.8141 | 0.1720 | 3.2355 | 17.0735 |
| *TP19-45 - 85* | 6.0174 | 0.1916 | 0.0242 | 88.4468 | 2.8721 | 5.1528 | 27.8282 | 0.2398 | 810.8524 | 29.1378 | 615.5705 | 6.4720 | 0.1545 | 0.0242 | 213.3043 |
| *TP19-45 - 89* | 5.7625 | 1.6114 | 0.4845 | 6.5219 | 5.4784 | 17.5838 | 68.4990 | 0.1579 | 1712.7992 | 25.0047 | 1301.8205 | 9.4932 | 0.1053 | 0.4845 | 36.2935 |
| *TP19-45 - 92* | 7.4370 | 0.1672 | #VALUE! | #VALUE! | 2.6886 | 6.4631 | 33.8838 | 0.1817 | 790.2063 | 23.3211 | 610.0649 | 4.9138 | 0.2035 | #VALUE! | #VALUE! |
| *TP19-45 - 99* | 25.8745 | 12.8543 | 3.2171 | 4.0236 | 28.3264 | 46.4676 | 81.5787 | 0.4601 | 575.4906 | 7.0544 | 464.6150 | 3.0887 | 0.3238 | 3.2171 | 14.4438 |
| *TP19-46 - 102* | 18.2723 | 8.9534 | 3.0476 | 3.4980 | 15.6224 | 48.5120 | 130.6718 | 0.1962 | 1674.4947 | 12.8145 | 1299.8276 | 7.3849 | 0.1354 | 3.0476 | 15.9180 |
| *TP19-46 - 107* | 42.0823 | 17.7073 | 4.4206 | 4.7565 | 46.7854 | 76.1650 | 177.6722 | 0.4022 | 1604.8328 | 9.0325 | 1297.3202 | 5.7236 | 0.1747 | 4.4206 | 17.2297 |
| *TP19-46 - 116* | 16.2442 | 7.5664 | 2.2282 | 3.9562 | 18.0496 | 33.0307 | 121.9719 | 0.2844 | 2829.4079 | 23.1972 | 2254.6790 | 13.2154 | 0.0757 | 2.2282 | 14.8238 |
| *TP19-46 - 117* | 18.4200 | 0.5986 | 0.0105 | 231.9669 | 6.9079 | 10.7405 | 43.1223 | 0.3210 | 972.1245 | 22.5434 | 698.2997 | 6.5595 | 0.1525 | 0.0105 | 1019.5543 |
| *TP19-46 - 119* | 31.6890 | 0.8701 | 0.0687 | 129.5996 | 5.9992 | 12.4337 | 43.4426 | 0.2581 | 694.5055 | 15.9867 | 527.8580 | 4.3616 | 0.2293 | 0.0687 | 180.9536 |
| *TP19-46 - 12* | 18.4165 | 8.3591 | 2.4538 | 4.0664 | 21.3260 | 39.1496 | 120.3816 | 0.3106 | 2889.4627 | 24.0025 | 2299.7765 | 11.6042 | 0.0862 | 2.4538 | 15.9546 |
| *TP19-46 - 123* | 23.6313 | 4.4445 | 0.5992 | 14.4801 | 15.5077 | 30.3995 | 77.7752 | 0.3189 | 880.0313 | 11.3151 | 685.5967 | 4.7474 | 0.2106 | 0.5992 | 50.7294 |
| *TP19-46 - 124* | 3.4386 | 0.4576 | 0.0292 | 29.7380 | 2.1667 | 16.4810 | 92.3599 | 0.0555 | 2757.9100 | 29.8605 | 2135.9638 | 10.5224 | 0.0950 | 0.0292 | 564.0602 |
| *TP19-46 - 125* | 23.7250 | 4.2120 | 0.2248 | 24.3810 | 17.9394 | 40.1352 | 102.0479 | 0.2803 | 1094.1478 | 10.7219 | 857.2621 | 7.2569 | 0.1378 | 0.2248 | 178.5290 |
| *TP19-46 - 127* | 63.1000 | 30.9301 | 14.3328 | 2.9969 | 58.9902 | 79.1708 | 148.9589 | 0.5432 | 1307.6474 | 8.7786 | 1074.5026 | 4.2461 | 0.2355 | 14.3328 | 5.5238 |
| *TP19-46 - 132* | 15.0292 | 3.3154 | 1.0249 | 8.1532 | 11.9249 | 18.3633 | 54.2808 | 0.3777 | 1046.7525 | 19.2840 | 810.2119 | 6.0165 | 0.1662 | 1.0249 | 17.9173 |
| *TP19-46 - 140* | 7.7259 | 0.3393 | 0.0629 | 52.8928 | 2.5203 | 7.3665 | 37.2480 | 0.1522 | 870.5602 | 23.3720 | 672.4694 | 6.0258 | 0.1660 | 0.0629 | 117.1337 |
| *TP19-46 - 143* | 3.8167 | 0.6157 | 0.1394 | 13.0275 | 2.8661 | 4.0954 | 9.2246 | 0.4663 | 347.6993 | 37.6925 | 216.7326 | 4.1470 | 0.2411 | 0.1394 | 29.3795 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-46 - 145* | 12.4616 | 3.5480 | 0.7860 | 7.4620 | 9.8788 | 22.0170 | 75.6628 | 0.2420 | 2309.4983 | 30.5235 | 1827.4670 | 9.8808 | 0.1012 | 0.7860 | 28.0104 |
| *TP19-46 - 150* | 31.3258 | 11.2947 | 3.5324 | 4.9594 | 23.3194 | 41.0617 | 90.5269 | 0.3825 | 1255.4168 | 13.8679 | 1007.2280 | 5.5022 | 0.1817 | 3.5324 | 11.6244 |
| *TP19-46 - 151* | 5.1646 | 0.6202 | 0.0195 | 47.0188 | 5.0479 | 12.6343 | 57.5899 | 0.1871 | 1022.1363 | 17.7485 | 792.8688 | 10.1599 | 0.0984 | 0.0195 | 649.4446 |
| *TP19-46 - 154* | 9.6794 | 2.3300 | 0.2414 | 12.9054 | 8.6684 | 22.9237 | 67.9437 | 0.2196 | 782.5660 | 11.5179 | 615.2263 | 6.6759 | 0.1498 | 0.2414 | 94.9478 |
| *TP19-46 - 19* | 3.6073 | 0.2510 | #VALUE! | #VALUE! | 3.7320 | 8.4868 | 35.5991 | 0.2147 | 860.8772 | 24.1826 | 620.9891 | 6.5470 | 0.1527 | #VALUE! | #VALUE! |
| *TP19-46 - 2* | 6.7659 | 0.3147 | 0.0208 | 83.7005 | 2.3531 | 6.7320 | 25.4236 | 0.1799 | 559.4440 | 22.0049 | 437.6359 | 2.9222 | 0.3422 | 0.0208 | 324.1979 |
| *TP19-46 - 24* | 3.5289 | 0.7025 | 0.0754 | 15.3318 | 3.5141 | 12.4085 | 57.8874 | 0.1311 | 1252.9915 | 21.6453 | 942.3572 | 8.0321 | 0.1245 | 0.0754 | 164.5480 |
| *TP19-46 - 26* | 9.2310 | 2.0276 | 0.2089 | 14.1853 | 8.5667 | 23.2213 | 69.8383 | 0.2127 | 919.1194 | 13.1607 | 708.8603 | 6.2152 | 0.1609 | 0.2089 | 111.1850 |
| *TP19-46 - 27* | 8.1178 | 1.0656 | 0.0721 | 29.2899 | 2.3169 | 20.9640 | 86.0651 | 0.0545 | 1535.0374 | 17.8358 | 1209.5443 | 5.2586 | 0.1902 | 0.0721 | 290.8175 |
| *TP19-46 - 29* | 15.3889 | 4.8358 | 0.8561 | 7.5633 | 22.5193 | 52.3485 | 165.8991 | 0.2416 | 1749.2869 | 10.5443 | 1399.9330 | 11.6216 | 0.0860 | 0.8561 | 61.1473 |
| *TP19-46 - 3* | 18.5652 | 1.9693 | 0.2516 | 26.3732 | 13.0768 | 21.0378 | 59.5570 | 0.3694 | 977.5549 | 16.4138 | 749.8434 | 8.4445 | 0.1184 | 0.2516 | 83.6055 |
| *TP19-46 - 32* | 4.9677 | 0.2337 | 0.0179 | 76.8214 | 2.6783 | 5.4644 | 29.8783 | 0.2096 | 783.1532 | 26.2115 | 597.5124 | 7.9569 | 0.1257 | 0.0179 | 305.3243 |
| *TP19-46 - 33* | 4.4546 | 0.1202 | 0.0103 | 126.6610 | 2.1109 | 4.4163 | 22.6332 | 0.2111 | 630.1124 | 27.8401 | 490.4350 | 7.4692 | 0.1339 | 0.0103 | 429.2640 |
| *TP19-46 - 35* | 33.6917 | 8.9363 | 1.8765 | 8.2274 | 23.1496 | 35.5895 | 84.5490 | 0.4220 | 915.0847 | 10.8231 | 732.6713 | 3.7296 | 0.2681 | 1.8765 | 18.9656 |
| *TP19-46 - 43* | 15.3794 | 4.7608 | 0.9874 | 7.0935 | 11.7032 | 29.0996 | 63.6085 | 0.2720 | 679.9420 | 10.6895 | 518.6824 | 6.5734 | 0.1521 | 0.9874 | 29.4718 |
| *TP19-46 - 45* | 7.0875 | 0.3317 | 0.0122 | 111.5269 | 2.2755 | 10.3719 | 42.7206 | 0.1081 | 728.9528 | 17.0633 | 589.7960 | 6.2436 | 0.1602 | 0.0122 | 851.7813 |
| *TP19-46 - 48* | 5.6176 | 0.7836 | 0.1791 | 14.9960 | 3.9092 | 5.1035 | 15.3395 | 0.4418 | 582.6649 | 37.9847 | 391.7457 | 6.3719 | 0.1569 | 0.1791 | 28.4984 |
| *TP19-46 - 52* | 2.9620 | 0.5314 | 0.0185 | 29.8816 | 2.9709 | 13.9724 | 64.8809 | 0.0987 | 1533.3384 | 23.6331 | 1191.5871 | 9.4093 | 0.1063 | 0.0185 | 755.6157 |
| *TP19-46 - 53* | 16.6844 | 5.2444 | 1.1353 | 6.8377 | 20.0753 | 39.3550 | 113.8114 | 0.3000 | 1326.3887 | 11.6543 | 1055.2659 | 10.4701 | 0.0955 | 1.1353 | 34.6653 |
| *TP19-46 - 54* | 7.2987 | 1.5041 | 0.3689 | 9.7983 | 5.1153 | 15.2221 | 61.8548 | 0.1667 | 1611.6657 | 26.0556 | 1239.2854 | 6.3798 | 0.1567 | 0.3689 | 41.2620 |
| *TP19-46 - 55* | 19.5580 | 5.8656 | 1.2241 | 7.2988 | 18.1485 | 32.9632 | 88.0969 | 0.3368 | 1009.5656 | 11.4597 | 828.7316 | 4.8331 | 0.2069 | 1.2241 | 26.9278 |
| *TP19-46 - 63* | 15.8453 | 4.6831 | 4.3073 | 3.5280 | 10.9822 | 17.4409 | 56.1514 | 0.3509 | 1072.2902 | 19.0964 | 849.0199 | 6.1137 | 0.1636 | 4.3073 | 4.0492 |
| *TP19-46 - 66* | 42.5194 | 17.0154 | 8.3144 | 3.5748 | 36.5422 | 49.8931 | 95.2072 | 0.5302 | 1651.8604 | 17.3502 | 1151.1761 | 6.8292 | 0.1464 | 8.3144 | 6.0008 |
| *TP19-46 - 67* | 3.8859 | 0.3360 | 0.0143 | 56.0891 | 1.1585 | 6.5899 | 27.4803 | 0.0861 | 537.4969 | 19.5594 | 420.7420 | 6.9604 | 0.1437 | 0.0143 | 461.2384 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-46 - 68* | 6.8653 | 0.9334 | 0.0457 | 33.2428 | 7.5510 | 20.6939 | 84.8912 | 0.1802 | 1116.4485 | 13.1515 | 899.7337 | 4.0726 | 0.2455 | 0.0457 | 452.9017 |
| *TP19-46 - 69* | 24.7359 | 8.5647 | 1.2213 | 7.6483 | 30.1535 | 60.9248 | 176.7021 | 0.2906 | 1699.6155 | 9.6185 | 1392.9913 | 7.2829 | 0.1373 | 1.2213 | 49.8860 |
| *TP19-46 - 70* | 19.4870 | 0.5876 | 0.0623 | 101.8124 | 6.8959 | 10.4217 | 41.8824 | 0.3301 | 841.0104 | 20.0803 | 627.4701 | 4.5731 | 0.2187 | 0.0623 | 167.1675 |
| *TP19-46 - 71* | 12.9077 | 5.6079 | 1.0804 | 5.2439 | 16.2839 | 28.7380 | 66.6755 | 0.3720 | 660.4915 | 9.9061 | 499.8868 | 1.9696 | 0.5077 | 1.0804 | 26.5988 |
| *TP19-46 - 82* | 14.2121 | 0.6805 | 0.1351 | 46.8681 | 1.7209 | 10.4594 | 40.4243 | 0.0837 | 761.2510 | 18.8315 | 600.1283 | 3.9702 | 0.2519 | 0.1351 | 77.4069 |
| *TP19-46 - 93* | 21.4533 | 6.5500 | 2.7099 | 5.0921 | 16.0236 | 31.3265 | 98.4232 | 0.2886 | 1325.9502 | 13.4719 | 1086.0287 | 6.2485 | 0.1600 | 2.7099 | 11.5601 |
| *TP19-46 - 99* | 49.4227 | 26.6810 | 8.1365 | 3.3543 | 49.4270 | 75.3354 | 136.7944 | 0.4869 | 1709.5544 | 12.4973 | 1316.2679 | 5.2835 | 0.1893 | 8.1365 | 9.2589 |
| *TP19-47 - 10* | 9.4095 | 3.8542 | 0.6149 | 6.1122 | 6.4414 | 17.9172 | 58.7436 | 0.1985 | 807.7672 | 13.7507 | 626.5795 | 4.8840 | 0.2048 | 0.6149 | 29.1388 |
| *TP19-47 - 100* | 60.6597 | 37.9282 | 23.8554 | 2.0166 | 36.5722 | 65.1029 | 92.0432 | 0.4724 | 697.8559 | 7.5818 | 541.7509 | 4.4239 | 0.2260 | 23.8554 | 2.7291 |
| *TP19-47 - 103* | 11.0975 | 5.7004 | 5.7542 | 1.9377 | 6.4917 | 22.5411 | 65.7386 | 0.1686 | 739.2289 | 11.2450 | 570.6258 | 10.3722 | 0.0964 | 5.7542 | 3.9173 |
| *TP19-47 - 105* | 4.4990 | 0.3909 | 0.0138 | 61.3506 | 6.0625 | 12.3386 | 61.8110 | 0.2195 | 1969.1248 | 31.8572 | 1445.4698 | 10.0538 | 0.0995 | 0.0138 | 896.8024 |
| *TP19-47 - 107* | 33.0294 | 17.4542 | 3.1732 | 4.4381 | 42.0893 | 73.2109 | 181.9685 | 0.3647 | 1937.4794 | 10.6473 | 1587.5837 | 7.7804 | 0.1285 | 3.1732 | 23.0714 |
| *TP19-47 - 108* | 19.2060 | 2.5874 | 0.3947 | 19.0050 | 8.5859 | 18.0205 | 55.1702 | 0.2723 | 815.5393 | 14.7822 | 632.9991 | 5.8614 | 0.1706 | 0.3947 | 45.6545 |
| *TP19-47 - 109* | 9.0915 | 0.6355 | 0.0541 | 49.0214 | 3.1924 | 10.9781 | 49.1464 | 0.1374 | 1057.2571 | 21.5124 | 841.5369 | 6.1184 | 0.1634 | 0.0541 | 202.8182 |
| *TP19-47 - 11* | 4.2934 | 2.6442 | 0.2461 | 5.3222 | 5.5132 | 13.1907 | 57.1900 | 0.2007 | 1680.3276 | 29.3815 | 1286.1547 | 6.8752 | 0.1454 | 0.2461 | 53.5969 |
| *TP19-47 - 111* | 24.9151 | 18.2821 | 3.6710 | 3.0413 | 35.4828 | 71.9114 | 200.0102 | 0.2959 | 252.1556 | 1.2607 | 305.2415 | 1.3688 | 0.7306 | 3.6710 | 19.5889 |
| *TP19-47 - 114* | 14.0625 | 2.3078 | 0.1970 | 20.8580 | 6.3541 | 12.9175 | 43.8573 | 0.2670 | 861.1749 | 19.6358 | 676.9144 | 8.0172 | 0.1247 | 0.1970 | 65.5836 |
| *TP19-47 - 123* | 21.1051 | 9.9648 | 1.8536 | 4.9108 | 22.9736 | 39.0348 | 97.4455 | 0.3725 | 1613.3498 | 16.5564 | 1251.1921 | 6.9247 | 0.1444 | 1.8536 | 21.0594 |
| *TP19-47 - 126* | 21.3482 | 6.7359 | 1.4393 | 6.8564 | 14.3528 | 26.7189 | 75.3928 | 0.3198 | 1383.3545 | 18.3486 | 1042.2281 | 7.7329 | 0.1293 | 1.4393 | 18.5643 |
| *TP19-47 - 127* | 9.1978 | 4.0398 | 0.9009 | 4.8215 | 9.1823 | 26.3903 | 90.1004 | 0.1883 | 1550.2333 | 17.2056 | 1218.4089 | 8.4564 | 0.1183 | 0.9009 | 29.2948 |
| *TP19-47 - 139* | 15.9340 | 4.7952 | 0.6689 | 8.8970 | 14.2049 | 22.6951 | 65.0916 | 0.3696 | 845.9925 | 12.9970 | 650.3831 | 6.0200 | 0.1661 | 0.6689 | 33.9294 |
| *TP19-47 - 144* | 51.6423 | 1.5073 | 0.0368 | 219.2250 | 4.8573 | 23.0835 | 69.2714 | 0.1215 | 894.0250 | 12.9061 | 702.3382 | 6.0264 | 0.1659 | 0.0368 | 627.0143 |
| *TP19-47 - 146* | 8.6864 | 4.2527 | 0.7758 | 4.7821 | 7.4263 | 19.4824 | 72.9955 | 0.1969 | 1789.7842 | 24.5191 | 1404.0287 | 8.5397 | 0.1171 | 0.7758 | 25.1116 |
| *TP19-47 - 149* | 24.8056 | 13.8675 | 3.2189 | 3.7128 | 22.6340 | 37.1634 | 73.6615 | 0.4326 | 1124.7552 | 15.2692 | 889.1986 | 5.0545 | 0.1978 | 3.2189 | 11.5453 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-47 - 150* | 7.6792 | 1.1738 | 0.1200 | 20.4625 | 9.0209 | 15.3876 | 65.6546 | 0.2838 | 1493.1519 | 22.7425 | 1160.5682 | 11.3881 | 0.0878 | 0.1200 | 128.2523 |
| *TP19-47 - 155* | 13.0012 | 4.1547 | 0.8155 | 7.0633 | 9.9386 | 20.3707 | 74.0736 | 0.2559 | 1623.7827 | 21.9212 | 1254.6201 | 12.1239 | 0.0825 | 0.8155 | 24.9804 |
| *TP19-47 - 157* | 5.4960 | 0.5689 | 0.1056 | 22.4206 | 2.5256 | 11.0736 | 59.1220 | 0.0987 | 1613.2761 | 27.2872 | 1242.1115 | 12.5200 | 0.0799 | 0.1056 | 104.8424 |
| *TP19-47 - 159* | 13.3808 | 0.5102 | 0.0355 | 99.4876 | 2.3576 | 7.6365 | 36.6361 | 0.1410 | 981.7037 | 26.7960 | 741.7119 | 5.1422 | 0.1945 | 0.0355 | 215.3621 |
| *TP19-47 - 16* | 21.4783 | 1.6597 | 0.2146 | 35.9881 | 4.3940 | 9.8995 | 27.6208 | 0.2657 | 740.2185 | 26.7993 | 534.1325 | 4.3913 | 0.2277 | 0.2146 | 46.1275 |
| *TP19-47 - 17* | 12.1004 | 6.7136 | 0.8734 | 4.9970 | 18.7882 | 28.2279 | 80.7898 | 0.3934 | 1197.6032 | 14.8237 | 926.0825 | 8.9545 | 0.1117 | 0.8734 | 32.3186 |
| *TP19-47 - 25* | 46.1453 | 6.3673 | 0.5321 | 25.0704 | 48.8586 | 56.8694 | 173.9440 | 0.4912 | 1472.7714 | 8.4669 | 1208.3595 | 23.3325 | 0.0429 | 0.5321 | 106.8806 |
| *TP19-47 - 4* | 20.5642 | 0.9581 | 0.0760 | 76.1972 | 7.5038 | 9.4397 | 36.5628 | 0.4039 | 598.5805 | 16.3713 | 430.5439 | 3.2503 | 0.3077 | 0.0760 | 124.1764 |
| *TP19-47 - 41* | 9.5736 | 0.4098 | 0.0105 | 145.8085 | 3.2642 | 10.1803 | 50.2689 | 0.1443 | 1116.8299 | 22.2171 | 877.5822 | 6.1185 | 0.1634 | 0.0105 | 967.7832 |
| *TP19-47 - 42* | 21.1528 | 13.6938 | 2.3415 | 3.7356 | 29.7816 | 56.8760 | 141.2382 | 0.3323 | 1211.1290 | 8.5751 | 1004.6545 | 7.7300 | 0.1294 | 2.3415 | 24.2906 |
| *TP19-47 - 56* | 4.4136 | 1.8445 | 0.6205 | 4.1254 | 3.1993 | 19.8260 | 83.3817 | 0.0787 | 1579.1642 | 18.9390 | 1225.3161 | 5.6155 | 0.1781 | 0.6205 | 31.9497 |
| *TP19-47 - 6* | 9.5949 | 6.2143 | 2.3166 | 2.5288 | 11.5154 | 22.3267 | 74.3655 | 0.2826 | 1580.2785 | 21.2502 | 1224.2880 | 7.6673 | 0.1304 | 2.3166 | 9.6379 |
| *TP19-47 - 70* | 9.8174 | 0.9879 | 0.0400 | 49.4093 | 6.5406 | 17.4528 | 60.4134 | 0.2014 | 1019.3824 | 16.8734 | 791.0322 | 6.3513 | 0.1574 | 0.0400 | 436.7006 |
| *TP19-47 - 72* | 8.9655 | 0.2638 | #VALUE! | #VALUE! | 1.6777 | 5.3532 | 26.4547 | 0.1410 | 683.8638 | 25.8504 | 521.5218 | 5.4916 | 0.1821 | #VALUE! | #VALUE! |
| *TP19-47 - 73* | 31.9621 | 24.4319 | 4.2505 | 3.1364 | 52.8267 | 76.6308 | 170.1781 | 0.4626 | 1060.6599 | 6.2326 | 900.0275 | 4.3348 | 0.2307 | 4.2505 | 18.0285 |
| *TP19-47 - 77* | 12.4088 | 1.1082 | 0.1176 | 34.3746 | 2.6989 | 12.8313 | 45.2367 | 0.1120 | 879.0552 | 19.4323 | 698.7369 | 14.0204 | 0.0713 | 0.1176 | 109.1195 |
| *TP19-47 - 8* | 6.9620 | 4.3671 | 1.0951 | 3.1835 | 8.6280 | 18.5733 | 62.0820 | 0.2541 | 1141.1144 | 18.3808 | 907.0236 | 5.8857 | 0.1699 | 1.0951 | 16.9601 |
| *TP19-47 - 86* | 37.1793 | 19.6792 | 4.0997 | 4.1393 | 40.0140 | 58.7321 | 88.4124 | 0.5553 | 689.4228 | 7.7978 | 547.0042 | 2.9423 | 0.3399 | 4.0997 | 14.3261 |
| *TP19-47 - 88* | 21.1512 | 13.1771 | 2.2479 | 3.8863 | 30.2803 | 42.0830 | 85.0380 | 0.5062 | 858.1034 | 10.0908 | 700.8592 | 6.3140 | 0.1584 | 2.2479 | 18.7213 |
| *TP19-47 - 89* | 4.4730 | 2.8817 | 0.5322 | 3.6119 | 4.4213 | 29.2434 | 118.4404 | 0.0751 | 1903.4032 | 16.0706 | 1548.3342 | 15.1730 | 0.0659 | 0.5322 | 54.9462 |
| *TP19-47 - 9* | 13.8000 | 2.5587 | 0.4558 | 12.7779 | 12.7950 | 17.9469 | 69.0824 | 0.3634 | 1071.0574 | 15.5041 | 872.2694 | 9.1677 | 0.1091 | 0.4558 | 39.3703 |
| *TP19-47 - 90* | 18.8447 | 9.9762 | 2.1288 | 4.0892 | 20.3448 | 33.0531 | 78.5044 | 0.3994 | 890.9556 | 11.3491 | 688.7545 | 4.4614 | 0.2241 | 2.1288 | 15.5264 |
| *TP19-47 - 91* | 12.0973 | 0.4103 | 0.0763 | 68.3853 | 3.7375 | 3.5924 | 11.1693 | 0.5900 | 554.2117 | 49.6193 | 350.7566 | 3.0057 | 0.3327 | 0.0763 | 47.1002 |
| *TP19-47 - 93* | 40.1463 | 7.3112 | 1.0666 | 14.3768 | 26.5514 | 48.6703 | 133.0476 | 0.3300 | 1385.1569 | 10.4110 | 1120.5571 | 13.1319 | 0.0762 | 1.0666 | 45.6334 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-47 - 96* | 8.9356 | 3.8123 | 1.0298 | 4.5098 | 8.0577 | 14.7469 | 40.3181 | 0.3305 | 843.8827 | 20.9306 | 647.6893 | 7.2022 | 0.1388 | 1.0298 | 14.3206 |
| *TP19-49 - 1* | 10.2160 | 3.6093 | 0.3125 | 9.6198 | 11.8421 | 25.1675 | 75.5839 | 0.2715 | 2136.4138 | 28.2655 | 1666.8283 | 10.3723 | 0.0964 | 0.3125 | 80.5435 |
| *TP19-49 - 120* | 40.8141 | 26.7316 | 2.2478 | 5.2652 | 46.1073 | 96.9922 | 142.2381 | 0.3925 | 1801.5095 | 12.6654 | 1363.0393 | 8.8715 | 0.1127 | 2.2478 | 43.1499 |
| *TP19-49 - 124* | 23.8642 | 6.2080 | 0.5819 | 12.5557 | 19.5299 | 33.7492 | 58.8760 | 0.4381 | 742.6879 | 12.6144 | 582.5785 | 6.0146 | 0.1663 | 0.5819 | 57.9969 |
| *TP19-49 - 130* | 73.3226 | 40.8643 | 3.4800 | 6.1486 | 86.7389 | 142.9910 | 129.4834 | 0.6375 | 487.0888 | 3.7618 | 316.8559 | 1.6597 | 0.6025 | 3.4800 | 41.0891 |
| *TP19-49 - 132* | 9.6019 | 0.9265 | 0.2777 | 18.9301 | 7.7864 | 18.6726 | 70.2904 | 0.2149 | 1313.5845 | 18.6880 | 983.6101 | 8.1299 | 0.1230 | 0.2777 | 67.2443 |
| *TP19-49 - 14* | 7.7151 | 1.2367 | 0.4219 | 10.6808 | 2.7512 | 18.0490 | 70.8303 | 0.0769 | 741.3586 | 10.4667 | 600.2781 | 5.8695 | 0.1704 | 0.4219 | 42.7815 |
| *TP19-49 - 142* | 61.0534 | 31.5580 | 3.3591 | 5.9298 | 61.6016 | 101.0084 | 118.1841 | 0.5638 | 1067.4009 | 9.0317 | 844.7391 | 4.1156 | 0.2430 | 3.3591 | 30.0697 |
| *TP19-49 - 144* | 23.6316 | 2.0013 | 0.0999 | 52.8388 | 21.0193 | 19.2281 | 61.0018 | 0.6137 | 1375.0457 | 22.5411 | 1031.1625 | 13.0142 | 0.0768 | 0.0999 | 192.3818 |
| *TP19-49 - 146* | 9.2993 | 1.0220 | 0.0360 | 48.4711 | 7.2872 | 23.3562 | 85.3101 | 0.1633 | 1013.5619 | 11.8809 | 822.9133 | 9.0503 | 0.1105 | 0.0360 | 648.5433 |
| *TP19-49 - 147* | 130.7207 | 67.5704 | 5.8991 | 6.5475 | 135.4641 | 232.2315 | 270.5212 | 0.5405 | 1483.3602 | 5.4833 | 1172.5616 | 6.1120 | 0.1636 | 5.8991 | 39.3674 |
| *TP19-49 - 148* | 7.6053 | 0.3988 | 0.0426 | 58.3195 | 2.4204 | 7.8754 | 39.5783 | 0.1371 | 1030.3836 | 26.0341 | 799.4480 | 6.2594 | 0.1598 | 0.0426 | 184.6653 |
| *TP19-49 - 151* | 134.2971 | 80.6393 | 6.6230 | 5.8112 | 168.9399 | 297.3460 | 285.7275 | 0.5796 | 1550.1176 | 5.4252 | 1253.8595 | 6.3812 | 0.1567 | 6.6230 | 44.8957 |
| *TP19-49 - 153* | 3.8473 | 0.4262 | 0.0371 | 30.6136 | 3.1820 | 7.0492 | 27.2752 | 0.2295 | 590.4713 | 21.6487 | 438.9606 | 10.3652 | 0.0965 | 0.0371 | 190.2291 |
| *TP19-49 - 154* | 71.7497 | 26.4248 | 2.1629 | 9.4906 | 69.3471 | 101.9842 | 145.1230 | 0.5700 | 1321.7889 | 9.1081 | 1050.2304 | 8.2633 | 0.1210 | 2.1629 | 47.1510 |
| *TP19-49 - 155* | 43.7790 | 2.0530 | 0.4848 | 43.8813 | 13.3250 | 21.2006 | 70.2679 | 0.3452 | 1092.6359 | 15.5496 | 847.5997 | 4.3479 | 0.2300 | 0.4848 | 43.7288 |
| *TP19-49 - 156* | 31.5634 | 16.5678 | 1.4465 | 6.4475 | 33.3519 | 69.8657 | 124.7890 | 0.3572 | 1657.4597 | 13.2821 | 1285.1999 | 8.2773 | 0.1208 | 1.4465 | 48.3004 |
| *TP19-49 - 158* | 45.2486 | 1.1399 | 0.0401 | 211.7663 | 25.5303 | 36.0619 | 148.4362 | 0.3489 | 2618.4867 | 17.6405 | 2053.8898 | 14.0597 | 0.0711 | 0.0401 | 900.3662 |
| *TP19-49 - 16* | 15.6411 | 4.0126 | 0.1699 | 18.9436 | 37.6924 | 40.0375 | 131.7091 | 0.5191 | 1184.9535 | 8.9967 | 947.9705 | 21.0157 | 0.0476 | 0.1699 | 235.6605 |
| *TP19-49 - 160* | 35.6018 | 18.2095 | 2.0605 | 5.8122 | 36.6653 | 65.9892 | 94.3155 | 0.4648 | 1327.2229 | 14.0722 | 1058.0335 | 6.7701 | 0.1477 | 2.0605 | 32.0259 |
| *TP19-49 - 25* | 80.8358 | 42.8652 | 3.8669 | 6.2787 | 87.1248 | 138.8204 | 159.7719 | 0.5850 | 1058.2661 | 6.6236 | 849.1206 | 4.6718 | 0.2141 | 3.8669 | 35.8999 |
| *TP19-49 - 30* | 25.9461 | 8.5524 | 0.3790 | 14.4116 | 41.2416 | 56.2149 | 114.1410 | 0.5149 | 805.3048 | 7.0553 | 629.1105 | 13.7295 | 0.0728 | 0.3790 | 148.3283 |
| *TP19-49 - 36* | 12.7855 | 1.8626 | 0.1230 | 26.7091 | 7.6199 | 14.5741 | 44.6131 | 0.2988 | 822.7670 | 18.4423 | 623.5012 | 3.7077 | 0.2697 | 0.1230 | 118.4662 |
| *TP19-49 - 39* | 2.3779 | 2.3862 | 0.0895 | 5.1452 | 19.9071 | 25.1917 | 84.4043 | 0.4317 | 1023.7170 | 12.1287 | 793.6681 | 20.6513 | 0.0484 | 0.0895 | 281.4431 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-49 - 40* | 13.0148 | 2.3238 | 0.1128 | 25.4257 | 10.9673 | 39.3087 | 118.7437 | 0.1605 | 1413.9283 | 11.9074 | 1138.1906 | 11.7735 | 0.0849 | 0.1128 | 348.6206 |
| *TP19-49 - 42* | 19.3397 | 8.1107 | 1.3125 | 5.9276 | 18.4508 | 40.1469 | 87.0999 | 0.3120 | 1411.5853 | 16.2065 | 1114.4392 | 9.4624 | 0.1057 | 1.3125 | 30.5890 |
| *TP19-49 - 43* | 10.9736 | 1.2415 | 0.1023 | 30.7886 | 3.2666 | 10.2054 | 44.7154 | 0.1529 | 1054.8398 | 23.5901 | 822.9227 | 4.6257 | 0.2162 | 0.1023 | 99.7333 |
| *TP19-49 - 50* | 26.3570 | 5.3639 | 0.4624 | 16.7350 | 21.5918 | 38.4137 | 93.3462 | 0.3606 | 1647.5131 | 17.6495 | 1248.9051 | 9.5217 | 0.1050 | 0.4624 | 83.0659 |
| *TP19-49 - 52* | 18.2565 | 0.6011 | 0.0126 | 210.1729 | 1.6993 | 16.6371 | 60.9570 | 0.0534 | 991.2072 | 16.2607 | 795.5083 | 6.5059 | 0.1537 | 0.0126 | 1325.4352 |
| *TP19-49 - 53* | 22.4209 | 0.3648 | #VALUE! | #VALUE! | 9.6674 | 10.8540 | 48.4743 | 0.4215 | 868.4380 | 17.9154 | 665.1651 | 8.8120 | 0.1135 | #VALUE! | #VALUE! |
| *TP19-49 - 55* | 76.2807 | 49.7155 | 6.0045 | 4.4150 | 84.9399 | 139.1427 | 148.1019 | 0.5917 | 459.7405 | 3.1042 | 396.1680 | 2.1447 | 0.4663 | 6.0045 | 23.1732 |
| *TP19-49 - 58* | 84.3890 | 43.7216 | 4.3224 | 6.1387 | 94.8672 | 162.0749 | 210.1308 | 0.5141 | 2206.3720 | 10.5000 | 1794.5917 | 9.3963 | 0.1064 | 4.3224 | 37.4962 |
| *TP19-49 - 6* | 10.4288 | 2.6358 | 0.1136 | 19.0607 | 9.9228 | 26.3885 | 89.3373 | 0.2044 | 1059.6653 | 11.8614 | 865.3773 | 9.4892 | 0.1054 | 0.1136 | 232.3456 |
| *TP19-49 - 7* | 18.3320 | 7.9167 | 0.6955 | 7.8127 | 19.5997 | 34.4774 | 57.8405 | 0.4389 | 928.9167 | 16.0600 | 721.9629 | 10.1126 | 0.0989 | 0.6955 | 49.5745 |
| *TP19-49 - 76* | 47.5796 | 21.9422 | 1.4196 | 8.5251 | 53.1383 | 89.5195 | 112.6529 | 0.5291 | 1114.1445 | 9.8901 | 833.9557 | 7.7095 | 0.1297 | 1.4196 | 63.0600 |
| *TP19-49 - 80* | 24.0742 | 10.4147 | 0.7887 | 8.3997 | 20.4666 | 36.0634 | 58.5855 | 0.4453 | 693.8087 | 11.8427 | 559.6266 | 3.5536 | 0.2814 | 0.7887 | 45.7231 |
| *TP19-49 - 82* | 156.1026 | 98.0089 | 8.0430 | 5.5599 | 169.2516 | 285.7032 | 278.5092 | 0.6000 | 1204.2412 | 4.3239 | 1011.8879 | 4.5887 | 0.2179 | 8.0430 | 35.5220 |
| *TP19-49 - 83* | 31.0238 | 18.9829 | 1.1991 | 6.5025 | 51.6697 | 109.2764 | 229.0289 | 0.3266 | 1466.9601 | 6.4051 | 1281.2280 | 8.5885 | 0.1164 | 1.1991 | 91.1298 |
| *TP19-49 - 84* | 12.2466 | 0.3809 | 0.0573 | 82.8636 | 3.0850 | 7.9579 | 29.8937 | 0.2000 | 418.6254 | 14.0038 | 327.1073 | 4.2503 | 0.2353 | 0.0573 | 138.7791 |
| *TP19-49 - 89* | 133.1884 | 59.0218 | 4.6020 | 8.0814 | 118.0708 | 192.0504 | 218.1356 | 0.5769 | 2242.3133 | 10.2794 | 1761.4918 | 10.5503 | 0.0948 | 4.6020 | 41.7321 |
| *TP19-49 - 9* | 67.9754 | 41.3322 | 2.7023 | 6.4319 | 96.1462 | 154.7062 | 195.6464 | 0.5526 | 2312.3936 | 11.8192 | 1863.9960 | 10.0337 | 0.0997 | 2.7023 | 57.2490 |
| *TP19-49 - 90* | 99.9464 | 62.6033 | 6.4579 | 4.9708 | 123.7494 | 209.8646 | 257.1445 | 0.5327 | 1091.1597 | 4.2434 | 934.6004 | 4.4702 | 0.2237 | 6.4579 | 32.4976 |
| *TP19-49 - 91* | 33.3720 | 19.7455 | 1.2906 | 6.6107 | 44.0470 | 78.9971 | 109.4926 | 0.4736 | 770.6230 | 7.0381 | 597.2906 | 7.3636 | 0.1358 | 1.2906 | 61.2076 |
| *TP19-49 - 97* | 11.5446 | 1.0356 | 0.5388 | 15.4553 | 7.1620 | 11.5060 | 50.2859 | 0.2977 | 1458.8373 | 29.0109 | 1081.5902 | 15.5692 | 0.0642 | 0.5388 | 21.3567 |
| *TP19-49 - 99* | 5.4609 | 1.3613 | 0.2361 | 9.6321 | 9.7803 | 17.2877 | 63.1330 | 0.2960 | 946.1387 | 14.9864 | 738.9320 | 10.8129 | 0.0925 | 0.2361 | 73.2141 |
| *TP19-50 - 10* | 6.9431 | 0.4978 | #VALUE! | #VALUE! | 2.7352 | 10.6620 | 43.7847 | 0.1266 | 1161.5398 | 26.5284 | 898.9270 | 6.6663 | 0.1500 | #VALUE! | #VALUE! |
| *TP19-50 - 103* | 12.9518 | 5.3450 | 0.3235 | 9.8491 | 21.6656 | 37.8353 | 72.3749 | 0.4140 | 1059.4985 | 14.6390 | 826.6651 | 5.6990 | 0.1755 | 0.3235 | 116.9446 |
| *TP19-50 - 105* | 15.7739 | 3.9025 | 0.2867 | 14.9114 | 17.6089 | 32.0558 | 80.1383 | 0.3474 | 935.8958 | 11.6785 | 748.6934 | 5.2641 | 0.1900 | 0.2867 | 111.7902 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-50 - 113* | 15.7485 | 9.3489 | 0.3449 | 8.7700 | 40.6117 | 68.5011 | 130.6132 | 0.4293 | 1261.9321 | 9.6616 | 1005.7376 | 5.7349 | 0.1744 | 0.3449 | 198.5983 |
| *TP19-50 - 115* | 15.5920 | 3.0216 | 0.0671 | 34.6356 | 17.0935 | 34.1115 | 102.3919 | 0.2892 | 1095.4295 | 10.6984 | 881.8462 | 10.6836 | 0.0936 | 0.0671 | 508.6045 |
| *TP19-50 - 116* | 23.1677 | 7.4816 | 0.2101 | 18.4783 | 39.0502 | 63.2182 | 131.5654 | 0.4282 | 1282.6264 | 9.7490 | 987.5182 | 6.1847 | 0.1617 | 0.2101 | 300.8812 |
| *TP19-50 - 135* | 17.6773 | 7.5304 | 0.7099 | 7.6457 | 27.9227 | 64.2668 | 177.4973 | 0.2614 | 1706.5964 | 9.6148 | 1406.7735 | 8.5294 | 0.1172 | 0.7099 | 90.5330 |
| *TP19-50 - 142* | 17.5311 | 7.2823 | 0.4942 | 9.2412 | 34.0874 | 52.9929 | 114.3757 | 0.4378 | 1847.6473 | 16.1542 | 1418.0732 | 8.6349 | 0.1158 | 0.4942 | 107.2318 |
| *TP19-50 - 143* | 16.8094 | 14.3427 | 1.1394 | 4.1581 | 33.3095 | 63.9593 | 120.4214 | 0.3795 | 1486.3774 | 12.3431 | 1138.5840 | 6.5118 | 0.1536 | 1.1394 | 56.1329 |
| *TP19-50 - 150* | 17.8176 | 2.1068 | 0.0958 | 39.6506 | 8.5856 | 18.0385 | 44.7277 | 0.3023 | 764.7852 | 17.0987 | 588.3444 | 4.1701 | 0.2398 | 0.0958 | 188.2009 |
| *TP19-50 - 155* | 4.7108 | 1.4277 | 0.0435 | 18.8999 | 7.5202 | 19.8297 | 85.1512 | 0.1830 | 1168.4269 | 13.7218 | 869.2786 | 9.3011 | 0.1075 | 0.0435 | 455.7135 |
| *TP19-50 - 16* | 19.5616 | 10.2050 | 0.6946 | 7.3474 | 42.8558 | 68.4436 | 120.9274 | 0.4711 | 1037.7863 | 8.5819 | 824.2483 | 4.5968 | 0.2175 | 0.6946 | 98.5377 |
| *TP19-50 - 17* | 15.6584 | 2.9999 | 0.1329 | 24.7984 | 14.7006 | 25.5073 | 58.8498 | 0.3794 | 1158.9304 | 19.6930 | 880.4198 | 4.2303 | 0.2364 | 0.1329 | 191.9216 |
| *TP19-50 - 18* | 16.0286 | 4.5556 | 0.2452 | 15.1661 | 24.1841 | 37.3449 | 92.3560 | 0.4118 | 1388.1085 | 15.0300 | 1092.8654 | 4.7236 | 0.2117 | 0.2452 | 152.3121 |
| *TP19-50 - 20* | 5.9398 | 0.8534 | 0.0318 | 36.0617 | 5.8534 | 20.6979 | 92.8280 | 0.1335 | 1283.7453 | 13.8293 | 1025.5592 | 8.6111 | 0.1161 | 0.0318 | 651.1060 |
| *TP19-50 - 21* | 18.1558 | 4.9551 | 0.2553 | 16.1410 | 24.8905 | 38.4527 | 82.2328 | 0.4426 | 1107.9383 | 13.4732 | 864.3884 | 5.2004 | 0.1923 | 0.2553 | 150.5948 |
| *TP19-50 - 22* | 154.9132 | 122.4405 | 148.0602 | 1.1506 | 16.5191 | 68.8626 | 69.7088 | 0.2384 | 1055.1191 | 15.1361 | 756.6551 | 5.9275 | 0.1687 | 148.0602 | 0.4651 |
| *TP19-50 - 25* | 19.9773 | 2.3670 | 0.9459 | 13.3510 | 10.5727 | 22.4352 | 70.1663 | 0.2665 | 1014.1510 | 14.4535 | 800.5364 | 6.2231 | 0.1607 | 0.9459 | 23.7182 |
| *TP19-50 - 34* | 14.5093 | 4.0662 | 0.0731 | 26.6128 | 8.7322 | 25.3451 | 52.8218 | 0.2387 | 1083.1284 | 20.5053 | 845.6955 | 4.6731 | 0.2140 | 0.0731 | 346.7159 |
| *TP19-50 - 44* | 11.8383 | 3.6776 | 0.2168 | 13.2591 | 20.2378 | 36.5562 | 109.8965 | 0.3193 | 1632.3997 | 14.8540 | 1295.3813 | 9.5142 | 0.1051 | 0.2168 | 168.6478 |
| *TP19-50 - 47* | 16.8096 | 15.0077 | 0.4856 | 6.2269 | 53.0931 | 95.9185 | 146.4941 | 0.4479 | 1219.7457 | 8.3262 | 954.1490 | 4.5015 | 0.2221 | 0.4856 | 197.5331 |
| *TP19-50 - 5* | 18.5400 | 7.1260 | 0.4881 | 9.9407 | 27.4441 | 53.1638 | 96.7483 | 0.3827 | 1222.6793 | 12.6377 | 959.9234 | 5.4470 | 0.1836 | 0.4881 | 108.9123 |
| *TP19-50 - 50* | 6.1525 | 0.2809 | 0.0060 | 149.8840 | 1.8878 | 6.5012 | 33.8490 | 0.1273 | 926.1348 | 27.3608 | 721.2495 | 6.0621 | 0.1650 | 0.0060 | 1083.7783 |
| *TP19-50 - 62* | 12.4894 | 6.2655 | 0.5667 | 6.6278 | 20.4753 | 38.7397 | 97.6363 | 0.3329 | 1492.2269 | 15.2835 | 1163.4822 | 6.7669 | 0.1478 | 0.5667 | 68.3554 |
| *TP19-50 - 69* | 6.6126 | 1.1133 | 0.0503 | 27.9367 | 4.7758 | 23.5080 | 89.3931 | 0.1042 | 1015.7981 | 11.3633 | 810.4086 | 14.6271 | 0.0684 | 0.0503 | 467.1137 |
| *TP19-50 - 70* | 13.1067 | 1.0748 | 0.0884 | 42.5272 | 6.7664 | 17.5674 | 69.9156 | 0.1931 | 1285.0056 | 18.3794 | 1007.5428 | 6.0480 | 0.1653 | 0.0884 | 198.7797 |
| *TP19-50 - 74* | 8.7920 | 0.6132 | 0.0193 | 80.7707 | 3.6429 | 11.0379 | 52.5767 | 0.1512 | 1242.6417 | 23.6348 | 964.4889 | 6.3674 | 0.1571 | 0.0193 | 571.2355 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-50 - 77* | 16.0672 | 9.4891 | 0.6226 | 6.6106 | 37.0677 | 61.9672 | 126.2744 | 0.4190 | 1399.3128 | 11.0815 | 1125.2940 | 7.8145 | 0.1280 | 0.6226 | 99.5372 |
| *TP19-50 - 85* | 63.6219 | 21.3602 | 2.1991 | 9.2829 | 58.5484 | 90.1416 | 163.9189 | 0.4817 | 1694.6893 | 10.3386 | 1342.4635 | 7.1228 | 0.1404 | 2.1991 | 40.9903 |
| *TP19-50 - 86* | 7.3266 | 0.5888 | 0.0384 | 48.7009 | 2.1016 | 10.8057 | 53.7681 | 0.0872 | 1338.0088 | 24.8848 | 1023.3511 | 6.4955 | 0.1540 | 0.0384 | 281.1190 |
| *TP19-50 - 92* | 7.3852 | 0.2776 | #VALUE! | #VALUE! | 1.4222 | 7.9693 | 41.6302 | 0.0781 | 1296.3622 | 31.1399 | 976.1487 | 5.5581 | 0.1799 | #VALUE! | #VALUE! |
| *TP19-50 - 97* | 31.1548 | 26.7465 | 2.0852 | 4.1718 | 66.0167 | 113.0855 | 157.4631 | 0.4947 | 836.5916 | 5.3129 | 683.7845 | 2.5900 | 0.3861 | 2.0852 | 54.2331 |
| *TP19-50 - 99* | 16.6365 | 11.5031 | 0.4513 | 7.3013 | 50.1985 | 88.1841 | 165.9257 | 0.4150 | 1963.4352 | 11.8332 | 1506.5433 | 9.4783 | 0.1055 | 0.4513 | 195.3815 |
| *TP19-51 - 10* | 22.8155 | 13.7960 | 1.5677 | 4.9059 | 26.6748 | 46.2212 | 99.0566 | 0.3942 | 1331.1520 | 13.4383 | 1052.1533 | 6.5213 | 0.1533 | 1.5677 | 29.4827 |
| *TP19-51 - 103* | 5.9178 | 1.4644 | 0.0285 | 28.9470 | 9.8432 | 25.0674 | 91.3920 | 0.2056 | 1206.1512 | 13.1976 | 966.8587 | 8.6603 | 0.1155 | 0.0285 | 878.3355 |
| *TP19-51 - 106* | 23.7183 | 7.1542 | 0.5366 | 12.1060 | 17.4442 | 35.3011 | 79.6660 | 0.3289 | 1259.9003 | 15.8148 | 1009.2208 | 5.0819 | 0.1968 | 0.5366 | 65.7925 |
| *TP19-51 - 113* | 7.7820 | 5.3943 | 0.1392 | 8.9814 | 7.6036 | 23.2344 | 88.1119 | 0.1680 | 1866.1541 | 21.1794 | 1449.3153 | 7.1385 | 0.1401 | 0.1392 | 166.9400 |
| *TP19-51 - 129* | 41.2560 | 29.7089 | 4.6015 | 3.5285 | 52.4768 | 89.3384 | 157.0262 | 0.4431 | 2672.6299 | 17.0203 | 2070.6113 | 10.6191 | 0.0942 | 4.6015 | 19.4149 |
| *TP19-51 - 131* | 1.9324 | 0.1531 | #VALUE! | #VALUE! | 2.4821 | 5.7445 | 33.8086 | 0.1781 | 1100.2618 | 32.5439 | 810.5565 | 37.0077 | 0.0270 | #VALUE! | #VALUE! |
| *TP19-51 - 136* | 38.4514 | 22.7744 | 2.1354 | 5.5138 | 50.3481 | 94.7792 | 173.8970 | 0.3922 | 1535.3412 | 8.8290 | 1274.8971 | 5.6744 | 0.1762 | 2.1354 | 44.3855 |
| *TP19-51 - 140* | 23.1408 | 10.4830 | 1.5115 | 5.8134 | 25.3611 | 48.8597 | 105.5628 | 0.3531 | 1305.0097 | 12.3624 | 1013.0206 | 4.9146 | 0.2035 | 1.5115 | 32.3252 |
| *TP19-51 - 142* | 23.7346 | 0.5948 | 0.0922 | 101.3754 | 3.1455 | 5.5599 | 26.0211 | 0.2615 | 709.8088 | 27.2782 | 523.9258 | 4.3595 | 0.2294 | 0.0922 | 60.3312 |
| *TP19-51 - 145* | 2.8090 | 0.7409 | 0.0233 | 21.3720 | 2.3860 | 8.1845 | 33.1956 | 0.1448 | 833.5124 | 25.1091 | 655.1729 | 4.4054 | 0.2270 | 0.0233 | 351.0365 |
| *TP19-51 - 28* | 30.9334 | 0.6810 | 0.0517 | 164.9112 | 11.9772 | 14.1305 | 48.7978 | 0.4561 | 864.4509 | 17.7149 | 643.7730 | 9.3218 | 0.1073 | 0.0517 | 273.5115 |
| *TP19-51 - 39* | 7.0214 | 1.2910 | 0.0448 | 29.2011 | 6.0969 | 24.0214 | 90.9330 | 0.1305 | 1548.8575 | 17.0330 | 1207.5668 | 10.0145 | 0.0999 | 0.0448 | 536.3960 |
| *TP19-51 - 4* | 8.3012 | 1.9951 | 0.0661 | 22.8654 | 10.0486 | 34.4420 | 143.7678 | 0.1428 | 2120.8896 | 14.7522 | 1671.5184 | 9.2463 | 0.1082 | 0.0661 | 521.3612 |
| *TP19-51 - 40* | 10.7120 | 4.8800 | 0.3784 | 7.8832 | 15.1516 | 37.2380 | 116.6977 | 0.2298 | 1732.2092 | 14.8436 | 1390.4427 | 8.4027 | 0.1190 | 0.3784 | 98.4164 |
| *TP19-51 - 44* | 111.2487 | 98.7448 | 111.8857 | 1.0584 | 9.9443 | 61.1546 | 77.5705 | 0.1444 | 994.1004 | 12.8155 | 759.0505 | 5.7660 | 0.1734 | 111.8857 | 0.5466 |
| *TP19-51 - 62* | 8.2463 | 2.5544 | 0.1928 | 11.7511 | 11.2915 | 21.3872 | 61.0488 | 0.3125 | 898.5227 | 14.7181 | 695.9953 | 6.7247 | 0.1487 | 0.1928 | 110.9372 |
| *TP19-51 - 63* | 5.2931 | 1.4830 | 0.0909 | 14.4199 | 4.2652 | 8.5619 | 29.0377 | 0.2705 | 998.7227 | 34.3940 | 744.4266 | 4.9717 | 0.2011 | 0.0909 | 94.2342 |
| *TP19-51 - 64* | 7.7691 | 0.8010 | 0.0495 | 39.0244 | 2.4853 | 9.2749 | 41.9223 | 0.1260 | 933.9965 | 22.2792 | 723.2347 | 7.1407 | 0.1400 | 0.0495 | 187.4448 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-51 - 65* | 17.9700 | 9.1569 | 0.7072 | 7.0616 | 33.9211 | 64.7707 | 155.8297 | 0.3376 | 1448.4730 | 9.2952 | 1159.5553 | 7.0708 | 0.1414 | 0.7072 | 91.5877 |
| *TP19-51 - 7* | 35.6192 | 18.7025 | 1.2251 | 7.4413 | 32.9663 | 63.8733 | 128.4626 | 0.3639 | 1100.5905 | 8.5674 | 838.5395 | 4.6998 | 0.2128 | 1.2251 | 52.1372 |
| *TP19-51 - 70* | 16.3921 | 15.1255 | 1.2456 | 3.7766 | 36.7886 | 65.5329 | 110.9521 | 0.4314 | 332.8734 | 3.0002 | 311.9289 | 1.2467 | 0.8021 | 1.2456 | 52.6127 |
| *TP19-51 - 72* | 7.8224 | 2.9485 | 0.2322 | 9.4538 | 11.6591 | 25.0149 | 96.0138 | 0.2379 | 1471.5960 | 15.3269 | 1139.9748 | 8.6035 | 0.1162 | 0.2322 | 107.7328 |
| *TP19-51 - 74* | 6.6212 | 0.4638 | #VALUE! | #VALUE! | 2.3130 | 9.3227 | 38.4317 | 0.1222 | 917.5241 | 23.8742 | 706.6455 | 7.1940 | 0.1390 | #VALUE! | #VALUE! |
| *TP19-51 - 79* | 24.1080 | 24.8459 | 1.3602 | 4.1470 | 43.1132 | 75.6757 | 114.0941 | 0.4640 | 1014.9782 | 8.8960 | 796.0576 | 3.1497 | 0.3175 | 1.3602 | 55.6355 |
| *TP19-51 - 8* | 33.1386 | 23.8972 | 3.8277 | 3.4649 | 38.3148 | 74.5730 | 129.6114 | 0.3897 | 2169.0979 | 16.7354 | 1681.8359 | 6.3883 | 0.1565 | 3.8277 | 19.4825 |
| *TP19-51 - 81* | 11.1748 | 2.5217 | 0.1207 | 20.2580 | 10.9740 | 36.9470 | 129.6276 | 0.1586 | 1597.0716 | 12.3205 | 1305.5421 | 6.3184 | 0.1583 | 0.1207 | 306.1822 |
| *TP19-51 - 86* | 9.7390 | 1.5367 | 0.1429 | 20.7819 | 6.9732 | 12.9797 | 46.3674 | 0.2842 | 1093.9710 | 23.5935 | 844.2375 | 5.9605 | 0.1678 | 0.1429 | 90.8223 |
| *TP19-51 - 98* | 15.3102 | 4.8709 | 0.3351 | 11.9831 | 15.7914 | 29.6280 | 89.1821 | 0.3072 | 1480.0532 | 16.5959 | 1152.0931 | 6.7269 | 0.1487 | 0.3351 | 88.4076 |
| *TP19-52 - 10* | 9.2700 | 0.3321 | 0.0173 | 122.4555 | 2.1029 | 10.0376 | 44.0182 | 0.1000 | 1036.3383 | 23.5434 | 817.0049 | 5.9274 | 0.1687 | 0.0173 | 581.7721 |
| *TP19-52 - 100* | 50.5258 | 68.5635 | 1.2764 | 5.4010 | 22.6408 | 64.4708 | 96.3544 | 0.2873 | 1645.9969 | 17.0827 | 1287.8580 | 4.2754 | 0.2339 | 1.2764 | 50.5094 |
| *TP19-52 - 101* | 18.2441 | 5.8010 | 0.3298 | 13.1908 | 28.8165 | 43.8283 | 103.4088 | 0.4280 | 1753.3507 | 16.9555 | 1328.6417 | 12.4329 | 0.0804 | 0.3298 | 132.9112 |
| *TP19-52 - 105* | 17.1944 | 6.3278 | 0.1903 | 15.6695 | 20.5366 | 38.7717 | 79.0042 | 0.3711 | 1122.0369 | 14.2022 | 883.3560 | 5.9829 | 0.1671 | 0.1903 | 203.7503 |
| *TP19-52 - 107* | 51.2757 | 37.4706 | 1.7758 | 6.2859 | 47.5003 | 87.1670 | 104.3957 | 0.4979 | 1725.7197 | 16.5306 | 1337.8131 | 5.3605 | 0.1865 | 1.7758 | 49.0864 |
| *TP19-52 - 11* | 8.6626 | 7.9716 | 0.3640 | 5.0855 | 14.7288 | 40.3725 | 93.7451 | 0.2394 | 1819.7605 | 19.4118 | 1448.4939 | 10.3789 | 0.0963 | 0.3640 | 110.9190 |
| *TP19-52 - 112* | 7.1993 | 1.6296 | 0.0606 | 22.9044 | 6.7981 | 14.4188 | 47.6286 | 0.2594 | 959.3223 | 20.1417 | 744.8487 | 7.4390 | 0.1344 | 0.0606 | 237.8251 |
| *TP19-52 - 113* | 12.0868 | 2.8032 | 0.2264 | 15.1711 | 5.5419 | 13.5527 | 36.1312 | 0.2504 | 660.3937 | 18.2777 | 528.3630 | 4.9003 | 0.2041 | 0.2264 | 59.8526 |
| *TP19-52 - 114* | 20.0690 | 13.5775 | 0.5814 | 7.1428 | 23.7098 | 49.7454 | 92.3448 | 0.3498 | 1584.7972 | 17.1617 | 1239.9569 | 5.7736 | 0.1732 | 0.5814 | 85.5566 |
| *TP19-52 - 118* | 18.1264 | 0.5189 | 0.0089 | 266.3039 | 2.2044 | 9.0049 | 32.7159 | 0.1284 | 467.2367 | 14.2817 | 364.3619 | 3.5355 | 0.2828 | 0.0089 | 1008.5013 |
| *TP19-52 - 119* | 29.4999 | 16.3451 | 0.7226 | 8.5840 | 37.9755 | 76.3256 | 120.8931 | 0.3953 | 886.0943 | 7.3296 | 750.6316 | 5.4974 | 0.1819 | 0.7226 | 105.6327 |
| *TP19-52 - 122* | 8.5848 | 0.2182 | 0.0103 | 181.4170 | 1.0066 | 3.4381 | 19.7219 | 0.1222 | 802.1349 | 40.6722 | 608.1312 | 3.1794 | 0.3145 | 0.0103 | 334.9546 |
| *TP19-52 - 126* | 14.0054 | 5.2087 | 0.2266 | 12.8915 | 12.6413 | 28.2678 | 62.1421 | 0.3016 | 1067.1608 | 17.1729 | 839.8219 | 6.1011 | 0.1639 | 0.2266 | 124.7490 |
| *TP19-52 - 127* | 19.0058 | 8.8083 | 0.4558 | 9.4852 | 22.0158 | 43.4351 | 87.8137 | 0.3565 | 1373.2027 | 15.6377 | 1085.9645 | 6.5721 | 0.1522 | 0.4558 | 95.2913 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-52 - 13* | 19.5063 | 14.7580 | 0.3610 | 8.4505 | 27.0382 | 57.9823 | 128.6125 | 0.3131 | 1716.1414 | 13.3435 | 1378.2349 | 7.9808 | 0.1253 | 0.3610 | 160.5962 |
| *TP19-52 - 131* | 13.9085 | 5.6458 | 0.1765 | 13.9314 | 6.7213 | 17.7139 | 57.9873 | 0.2097 | 1328.5166 | 22.9105 | 1047.2430 | 6.6865 | 0.1496 | 0.1765 | 100.3393 |
| *TP19-52 - 134* | 36.0042 | 28.4167 | 1.0653 | 6.5439 | 44.2492 | 90.8675 | 178.8830 | 0.3471 | 1946.8234 | 10.8832 | 1569.6509 | 6.1943 | 0.1614 | 1.0653 | 85.3008 |
| *TP19-52 - 137* | 30.6076 | 23.7082 | 1.1371 | 5.8950 | 40.9807 | 77.0914 | 115.9080 | 0.4335 | 1382.6750 | 11.9291 | 1085.7558 | 5.2713 | 0.1897 | 1.1371 | 67.7968 |
| *TP19-52 - 138* | 13.1892 | 4.6433 | 0.1287 | 17.0595 | 13.3333 | 34.1044 | 94.5306 | 0.2348 | 1758.5428 | 18.6029 | 1396.5991 | 8.5225 | 0.1173 | 0.1287 | 264.9332 |
| *TP19-52 - 14* | 39.5977 | 8.0615 | 5.2876 | 6.0650 | 11.4460 | 27.1101 | 67.3743 | 0.2678 | 967.1587 | 14.3550 | 753.8315 | 4.9280 | 0.2029 | 5.2876 | 5.1271 |
| *TP19-52 - 142* | 15.3138 | 3.6785 | 0.0899 | 26.6265 | 11.4550 | 29.7643 | 98.9696 | 0.2111 | 1505.8915 | 15.2157 | 1175.1135 | 8.7812 | 0.1139 | 0.0899 | 331.0010 |
| *TP19-52 - 146* | 18.1863 | 17.4767 | 0.6520 | 5.3877 | 8.8690 | 29.1101 | 62.4999 | 0.2079 | 1273.8992 | 20.3824 | 1015.7568 | 5.4644 | 0.1830 | 0.6520 | 44.6495 |
| *TP19-52 - 150* | 34.0453 | 3.2344 | 3.7341 | 9.7965 | 6.7638 | 14.9489 | 47.8316 | 0.2529 | 1455.0474 | 30.4202 | 1104.2154 | 11.4047 | 0.0877 | 3.7341 | 4.0033 |
| *TP19-52 - 151* | 7.3042 | 0.3422 | 0.0201 | 88.1277 | 1.4095 | 10.4500 | 47.6150 | 0.0632 | 1222.5621 | 25.6760 | 942.4099 | 6.5985 | 0.1515 | 0.0201 | 520.6222 |
| *TP19-52 - 153* | 25.3843 | 22.3442 | 1.1374 | 5.0353 | 39.1981 | 74.5764 | 147.7517 | 0.3734 | 2763.1574 | 18.7014 | 2183.0201 | 10.9999 | 0.0909 | 1.1374 | 65.5668 |
| *TP19-52 - 156* | 11.3938 | 0.3513 | 0.0397 | 96.4762 | 2.5143 | 8.3678 | 39.9703 | 0.1375 | 849.1219 | 21.2438 | 657.0065 | 5.3871 | 0.1856 | 0.0397 | 210.7812 |
| *TP19-52 - 158* | 17.8114 | 13.1406 | 0.4231 | 7.5541 | 15.6553 | 36.9145 | 74.5977 | 0.2983 | 1450.8364 | 19.4488 | 1126.9741 | 4.9635 | 0.2015 | 0.4231 | 87.2523 |
| *TP19-52 - 159* | 34.6889 | 8.0618 | 0.2012 | 27.2362 | 36.1033 | 63.0465 | 136.1790 | 0.3896 | 1297.5878 | 9.5285 | 1059.6590 | 7.4354 | 0.1345 | 0.2012 | 313.3300 |
| *TP19-52 - 16* | 26.1530 | 25.8209 | 0.3262 | 9.0116 | 7.3182 | 27.3677 | 71.0143 | 0.1660 | 1415.9347 | 19.9387 | 1116.6958 | 5.2012 | 0.1923 | 0.3262 | 83.9012 |
| *TP19-52 - 160* | 27.1551 | 8.3966 | 2.3480 | 6.1157 | 20.9334 | 37.0461 | 64.1929 | 0.4293 | 729.6328 | 11.3663 | 559.8494 | 4.8347 | 0.2068 | 2.3480 | 15.7774 |
| *TP19-52 - 18* | 9.4124 | 1.1707 | 0.0696 | 32.9677 | 2.2548 | 14.3205 | 58.7155 | 0.0778 | 1486.1192 | 25.3105 | 1130.1580 | 6.2806 | 0.1592 | 0.0696 | 205.6762 |
| *TP19-52 - 2* | 28.9679 | 19.8063 | 1.3869 | 5.5270 | 30.8790 | 57.4511 | 68.5580 | 0.4920 | 645.4651 | 9.4149 | 512.1798 | 2.7106 | 0.3689 | 1.3869 | 41.4238 |
| *TP19-52 - 20* | 7.1015 | 0.3736 | #VALUE! | #VALUE! | 1.8878 | 9.8426 | 41.4542 | 0.0935 | 1206.9879 | 29.1162 | 919.2583 | 6.0671 | 0.1648 | #VALUE! | #VALUE! |
| *TP19-52 - 21* | 8.1966 | 0.3322 | 0.0098 | 143.9787 | 1.4145 | 6.8581 | 28.9639 | 0.1004 | 693.6504 | 23.9488 | 543.0416 | 5.1148 | 0.1955 | 0.0098 | 702.9025 |
| *TP19-52 - 22* | 11.6195 | 2.5713 | 0.1399 | 19.3725 | 11.9914 | 28.1835 | 100.2352 | 0.2256 | 1255.0881 | 12.5214 | 1018.1564 | 8.8979 | 0.1124 | 0.1399 | 201.4420 |
| *TP19-52 - 23* | 7.4222 | 0.3553 | #VALUE! | #VALUE! | 2.0979 | 9.4506 | 51.6312 | 0.0950 | 1279.9035 | 24.7893 | 982.8096 | 6.6849 | 0.1496 | #VALUE! | #VALUE! |
| *TP19-52 - 24* | 5.0101 | 0.1637 | 0.0119 | 113.4351 | 0.8680 | 4.5619 | 29.1015 | 0.0753 | 1076.7270 | 36.9991 | 807.7958 | 4.3688 | 0.2289 | 0.0119 | 382.7991 |
| *TP19-52 - 25* | 23.3645 | 18.7990 | 0.7643 | 6.1639 | 27.9946 | 59.5226 | 90.2047 | 0.3820 | 1332.8919 | 14.7763 | 1040.6543 | 4.9397 | 0.2024 | 0.7643 | 77.8778 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-52 - 27* | 6.1284 | 0.6557 | 0.0297 | 43.9416 | 3.2005 | 11.9921 | 54.8888 | 0.1247 | 1083.4661 | 19.7393 | 832.3980 | 6.9113 | 0.1447 | 0.0297 | 404.2356 |
| *TP19-52 - 29* | 21.4301 | 2.6966 | 0.0750 | 47.6609 | 7.0626 | 21.5798 | 60.2071 | 0.1959 | 1103.9066 | 18.3351 | 854.1380 | 4.8878 | 0.2046 | 0.0750 | 287.8338 |
| *TP19-52 - 30* | 5.3762 | 2.2514 | 0.0591 | 14.7408 | 12.8767 | 32.1878 | 102.6348 | 0.2240 | 1046.3124 | 10.1945 | 833.4279 | 20.0099 | 0.0500 | 0.0591 | 544.7999 |
| *TP19-52 - 31* | 13.9854 | 3.1464 | 0.1501 | 20.3485 | 11.6201 | 30.9273 | 109.6450 | 0.1995 | 1485.3450 | 13.5469 | 1195.5006 | 7.8774 | 0.1269 | 0.1501 | 206.0061 |
| *TP19-52 - 32* | 24.9623 | 2.7654 | 0.0661 | 58.3809 | 28.6680 | 41.6764 | 109.0461 | 0.4253 | 1013.9142 | 9.2980 | 808.9161 | 4.1357 | 0.2418 | 0.0661 | 630.4009 |
| *TP19-52 - 33* | 9.1823 | 0.3759 | 0.0118 | 137.7095 | 2.2309 | 5.6873 | 34.6456 | 0.1589 | 860.0444 | 24.8241 | 665.8540 | 5.7845 | 0.1729 | 0.0118 | 480.8223 |
| *TP19-52 - 34* | 21.4969 | 8.5154 | 0.3075 | 13.2844 | 27.5974 | 49.2098 | 97.3651 | 0.3987 | 1181.7000 | 12.1368 | 927.3989 | 6.1849 | 0.1617 | 0.3075 | 160.0254 |
| *TP19-52 - 4* | 18.2243 | 8.2259 | 0.2033 | 14.0940 | 14.7529 | 36.4887 | 73.6633 | 0.2846 | 1197.0069 | 16.2497 | 923.7788 | 5.1386 | 0.1946 | 0.2033 | 179.5186 |
| *TP19-52 - 41* | 13.1229 | 1.7636 | 0.0632 | 39.3142 | 7.8687 | 18.6398 | 43.9686 | 0.2749 | 964.3763 | 21.9333 | 726.4853 | 4.5270 | 0.2209 | 0.0632 | 295.0435 |
| *TP19-52 - 42* | 6.0796 | 1.9110 | 0.0634 | 17.4638 | 2.1481 | 11.4721 | 41.4295 | 0.0985 | 1182.2181 | 28.5357 | 916.3017 | 5.3207 | 0.1879 | 0.0634 | 180.8974 |
| *TP19-52 - 43* | 11.8387 | 1.3433 | 0.0605 | 41.5341 | 6.6187 | 20.2588 | 78.9510 | 0.1655 | 1398.5763 | 17.7145 | 1092.4314 | 6.8517 | 0.1460 | 0.0605 | 334.9667 |
| *TP19-52 - 44* | 17.1306 | 10.0518 | 0.9274 | 5.6106 | 11.7763 | 28.9582 | 87.1631 | 0.2344 | 1586.2319 | 18.1984 | 1246.8353 | 6.8813 | 0.1453 | 0.9274 | 31.2241 |
| *TP19-52 - 5* | 26.9586 | 18.6855 | 0.5594 | 8.3386 | 34.8165 | 70.2398 | 124.7991 | 0.3719 | 1503.1801 | 12.0448 | 1173.9004 | 6.2933 | 0.1589 | 0.5594 | 125.5681 |
| *TP19-52 - 53* | 9.6575 | 0.2415 | #VALUE! | #VALUE! | 2.2755 | 7.5842 | 34.8153 | 0.1400 | 922.4086 | 26.4944 | 696.9209 | 5.5175 | 0.1812 | #VALUE! | #VALUE! |
| *TP19-52 - 6* | 11.2547 | 2.0504 | 0.0662 | 30.5456 | 9.7580 | 23.9746 | 84.6377 | 0.2166 | 1422.8592 | 16.8112 | 1119.9869 | 8.3090 | 0.1204 | 0.0662 | 362.1008 |
| *TP19-52 - 65* | 17.9503 | 8.3280 | 0.3867 | 10.0029 | 15.1411 | 33.0016 | 55.0774 | 0.3551 | 1001.4200 | 18.1821 | 789.9837 | 4.1733 | 0.2396 | 0.3867 | 85.3455 |
| *TP19-52 - 66* | 8.0327 | 1.5868 | 0.0810 | 22.4021 | 3.9651 | 14.7014 | 52.3357 | 0.1429 | 1402.1919 | 26.7923 | 1061.3334 | 6.8002 | 0.1471 | 0.0810 | 181.4400 |
| *TP19-52 - 68* | 18.3368 | 4.1073 | 3.9799 | 4.5353 | 11.6710 | 22.9051 | 52.5329 | 0.3365 | 867.0405 | 16.5047 | 663.5134 | 4.5021 | 0.2221 | 3.9799 | 5.7551 |
| *TP19-52 - 7* | 14.3986 | 8.5938 | 0.4740 | 7.1338 | 17.4305 | 35.7209 | 82.6673 | 0.3208 | 1018.0089 | 12.3145 | 806.4836 | 7.2521 | 0.1379 | 0.4740 | 75.3551 |
| *TP19-52 - 71* | 18.1175 | 12.1589 | 1.1220 | 4.9051 | 16.7722 | 45.1338 | 106.8703 | 0.2415 | 1509.8487 | 14.1279 | 1205.8226 | 8.1102 | 0.1233 | 1.1220 | 40.2246 |
| *TP19-52 - 76* | 17.8265 | 6.8368 | 0.1616 | 16.9611 | 20.2421 | 42.5573 | 98.9691 | 0.3119 | 1035.7085 | 10.4650 | 855.2891 | 7.8155 | 0.1280 | 0.1616 | 263.3912 |
| *TP19-52 - 77* | 5.0340 | 0.1716 | #VALUE! | #VALUE! | 0.7727 | 5.6203 | 28.9410 | 0.0606 | 1008.8020 | 34.8572 | 775.4180 | 5.0859 | 0.1966 | #VALUE! | #VALUE! |
| *TP19-52 - 79* | 17.3495 | 0.6165 | 0.2523 | 43.9896 | 3.2635 | 9.3793 | 39.1134 | 0.1704 | 695.8449 | 17.7905 | 551.4901 | 4.9810 | 0.2008 | 0.2523 | 37.1742 |
| *TP19-52 - 8* | 7.8844 | 0.3694 | 0.0088 | 138.4181 | 2.5326 | 10.9503 | 49.4392 | 0.1088 | 1402.7562 | 28.3733 | 1091.9175 | 6.2064 | 0.1611 | 0.0088 | 1246.6977 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-52 - 81* | 11.2124 | 3.1072 | 0.1044 | 19.6876 | 9.0670 | 18.3288 | 47.4880 | 0.3073 | 1062.4083 | 22.3721 | 803.5816 | 5.0505 | 0.1980 | 0.1044 | 175.5860 |
| *TP19-52 - 82* | 14.9336 | 1.6813 | 0.0736 | 42.4669 | 5.5943 | 8.9099 | 25.5532 | 0.3708 | 729.2909 | 28.5401 | 544.1301 | 4.1817 | 0.2391 | 0.0736 | 121.1386 |
| *TP19-52 - 83* | 8.3871 | 1.0137 | 0.0112 | 78.6703 | 2.4386 | 11.5129 | 42.1856 | 0.1107 | 892.8276 | 21.1643 | 708.0214 | 5.2080 | 0.1920 | 0.0112 | 1026.8469 |
| *TP19-52 - 84* | 5.8860 | 0.3724 | 0.0106 | 93.4895 | 1.1230 | 6.7413 | 34.5819 | 0.0735 | 1080.0702 | 31.2323 | 827.0230 | 5.4359 | 0.1840 | 0.0106 | 633.3454 |
| *TP19-52 - 87* | 31.9702 | 8.0522 | 0.2418 | 22.9131 | 23.4334 | 41.4830 | 74.4440 | 0.4217 | 776.4927 | 10.4306 | 604.6603 | 4.6743 | 0.2139 | 0.2418 | 171.5782 |
| *TP19-52 - 88* | 13.1849 | 6.9839 | 0.2841 | 9.3606 | 12.1963 | 32.5863 | 84.0795 | 0.2330 | 1721.4483 | 20.4740 | 1328.8784 | 7.4760 | 0.1338 | 0.2841 | 114.7070 |
| *TP19-52 - 89* | 5.8320 | 0.1999 | 0.0154 | 105.0331 | 1.0623 | 6.7229 | 34.3304 | 0.0699 | 1141.2352 | 33.2427 | 865.1190 | 5.5205 | 0.1811 | 0.0154 | 435.8944 |
| *TP19-52 - 9* | 7.2631 | 0.6622 | 0.0504 | 39.7545 | 2.8977 | 9.0500 | 37.3556 | 0.1576 | 940.6666 | 25.1814 | 718.2402 | 6.2668 | 0.1596 | 0.0504 | 179.5340 |
| *TP19-52 - 95* | 30.1950 | 18.3834 | 0.7885 | 7.9309 | 30.0676 | 58.8117 | 87.3473 | 0.4195 | 889.1952 | 10.1800 | 691.3387 | 5.0622 | 0.1975 | 0.7885 | 74.5862 |
| *TP19-52 - 96* | 6.6285 | 0.4579 | 0.0141 | 82.3686 | 2.4715 | 9.5868 | 50.3624 | 0.1125 | 1325.8485 | 26.3261 | 1038.1221 | 6.2860 | 0.1591 | 0.0141 | 677.9080 |
| *TP19-52 - 97* | 10.6207 | 0.9683 | 0.0209 | 74.5948 | 6.5036 | 17.8948 | 67.4651 | 0.1872 | 1199.5827 | 17.7808 | 959.9870 | 6.4618 | 0.1548 | 0.0209 | 854.7993 |
| *TP19-52 - 99* | 14.9946 | 2.5377 | 0.4520 | 14.0010 | 12.0238 | 22.8229 | 87.2651 | 0.2694 | 1585.1643 | 18.1649 | 1237.3276 | 9.6264 | 0.1039 | 0.4520 | 50.4970 |
| *TP19-53 - 104* | 18.8013 | 17.1350 | 1.3608 | 3.8936 | 62.8712 | 86.9974 | 111.0527 | 0.6396 | 765.8073 | 6.8959 | 591.4787 | 4.8691 | 0.2054 | 1.3608 | 63.9311 |
| *TP19-53 - 106* | 3.1358 | 0.4473 | #VALUE! | #VALUE! | 2.1586 | 13.8122 | 68.1569 | 0.0704 | 1872.2488 | 27.4697 | 1455.5390 | 11.4688 | 0.0872 | #VALUE! | #VALUE! |
| *TP19-53 - 110* | 5.6631 | 0.3424 | 0.0165 | 75.2557 | 1.9126 | 9.6787 | 49.3293 | 0.0875 | 911.3703 | 18.4752 | 709.5524 | 5.8979 | 0.1696 | 0.0165 | 585.2367 |
| *TP19-53 - 113* | 2.7324 | 1.9408 | 0.1167 | 5.7410 | 16.2476 | 27.9999 | 118.0743 | 0.2826 | 1814.8341 | 15.3703 | 1411.2861 | 17.0434 | 0.0587 | 0.1167 | 239.9041 |
| *TP19-53 - 120* | 7.6758 | 0.5846 | 0.0226 | 66.7961 | 2.1942 | 9.6005 | 40.0292 | 0.1119 | 941.6363 | 23.5238 | 713.8770 | 6.1436 | 0.1628 | 0.0226 | 425.0441 |
| *TP19-53 - 124* | 23.3523 | 22.0665 | 1.9812 | 3.5319 | 80.6681 | 115.9784 | 172.5232 | 0.5703 | 1492.6273 | 8.6517 | 1142.1846 | 6.5371 | 0.1530 | 1.9812 | 58.5408 |
| *TP19-53 - 127* | 14.1736 | 6.4509 | 0.6554 | 6.8931 | 25.6777 | 35.0353 | 49.0039 | 0.6197 | 941.5248 | 19.2133 | 622.6613 | 6.8490 | 0.1460 | 0.6554 | 53.4562 |
| *TP19-53 - 131* | 15.8423 | 11.4828 | 1.0469 | 4.5693 | 48.5042 | 75.8181 | 115.8242 | 0.5176 | 937.9018 | 8.0976 | 679.7837 | 5.0147 | 0.1994 | 1.0469 | 72.4228 |
| *TP19-53 - 132* | 13.4148 | 0.2254 | #VALUE! | #VALUE! | 0.4765 | 4.9180 | 18.8217 | 0.0495 | 418.2429 | 22.2213 | 335.3953 | 4.2155 | 0.2372 | #VALUE! | #VALUE! |
| *TP19-53 - 135* | 50.2669 | 44.0969 | 3.3312 | 4.1474 | 176.7369 | 273.5328 | 350.3117 | 0.5709 | 1765.2774 | 5.0392 | 1482.1130 | 10.7285 | 0.0932 | 3.3312 | 82.1129 |
| *TP19-53 - 138* | 12.7250 | 1.5663 | 0.0936 | 33.2296 | 7.8750 | 17.7572 | 42.2113 | 0.2876 | 410.8225 | 9.7325 | 331.7505 | 10.1617 | 0.0984 | 0.0936 | 189.6581 |
| *TP19-53 - 139* | 30.3301 | 11.5665 | 0.8939 | 9.4325 | 36.9134 | 57.4756 | 88.4341 | 0.5178 | 908.6589 | 10.2750 | 697.6430 | 3.5769 | 0.2796 | 0.8939 | 64.2966 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-53 - 141* | 8.3723 | 1.0891 | 0.0916 | 26.5031 | 5.5415 | 8.5654 | 49.1680 | 0.2700 | 1364.9251 | 27.7604 | 1004.3848 | 12.9364 | 0.0773 | 0.0916 | 93.4773 |
| *TP19-53 - 158* | 18.1729 | 18.0014 | 2.1311 | 2.9341 | 39.8553 | 73.3717 | 155.1306 | 0.3736 | 2492.7282 | 16.0686 | 1915.6958 | 15.9472 | 0.0627 | 2.1311 | 34.4294 |
| *TP19-53 - 16* | 6.6856 | 0.5243 | #VALUE! | #VALUE! | 3.4310 | 10.5581 | 42.9240 | 0.1612 | 840.6154 | 19.5838 | 645.1216 | 7.1990 | 0.1389 | #VALUE! | #VALUE! |
| *TP19-53 - 162* | 26.5285 | 19.7808 | 2.0108 | 4.2064 | 87.7354 | 134.0239 | 174.6636 | 0.5734 | 1458.9353 | 8.3528 | 1194.4520 | 9.1671 | 0.1091 | 2.0108 | 66.6518 |
| *TP19-53 - 163* | 10.1867 | 0.3040 | #VALUE! | #VALUE! | 2.7087 | 8.2934 | 29.5322 | 0.1731 | 744.5014 | 25.2099 | 563.3702 | 5.1904 | 0.1927 | #VALUE! | #VALUE! |
| *TP19-53 - 166* | 7.5224 | 9.1448 | 0.7097 | 2.9528 | 26.4743 | 53.0046 | 111.6915 | 0.3441 | 1657.7102 | 14.8419 | 1320.4974 | 7.4719 | 0.1338 | 0.7097 | 74.6873 |
| *TP19-53 - 17* | 43.3093 | 48.3684 | 2.5949 | 3.8658 | 159.1083 | 246.8662 | 277.9814 | 0.6074 | 394.9205 | 1.4207 | 330.1057 | 2.0808 | 0.4806 | 2.5949 | 95.1348 |
| *TP19-53 - 170* | 41.2194 | 42.6137 | 3.1807 | 3.5405 | 144.1392 | 227.7104 | 272.1886 | 0.5790 | 1271.4455 | 4.6712 | 1059.2550 | 5.7275 | 0.1746 | 3.1807 | 71.5920 |
| *TP19-53 - 18* | 39.3068 | 52.8881 | 5.1593 | 2.3795 | 162.7526 | 263.4536 | 380.9249 | 0.5138 | 1880.1258 | 4.9357 | 1535.9204 | 6.8684 | 0.1456 | 5.1593 | 51.0635 |
| *TP19-53 - 2* | 4.6569 | 0.7811 | 0.0144 | 43.8894 | 5.2285 | 21.7667 | 77.2231 | 0.1275 | 1414.5390 | 18.3176 | 1125.7954 | 8.9094 | 0.1122 | 0.0144 | 1510.0778 |
| *TP19-53 - 23* | 28.1640 | 30.7648 | 2.2050 | 3.4195 | 94.9688 | 152.0339 | 218.2216 | 0.5214 | 1221.1672 | 5.5960 | 1040.3229 | 8.9731 | 0.1114 | 2.2050 | 68.9495 |
| *TP19-53 - 24* | 11.3022 | 4.1999 | 0.3237 | 9.6929 | 14.4373 | 21.7253 | 62.6057 | 0.3915 | 1171.4839 | 18.7121 | 911.1641 | 5.1324 | 0.1948 | 0.3237 | 67.1099 |
| *TP19-53 - 27* | 10.1188 | 5.3770 | 1.1526 | 4.0647 | 11.5006 | 18.7558 | 58.2602 | 0.3479 | 1088.7881 | 18.6884 | 888.8555 | 5.5112 | 0.1814 | 1.1526 | 16.2731 |
| *TP19-53 - 3* | 47.0071 | 55.4249 | 4.2589 | 3.0596 | 189.6377 | 298.5115 | 325.0195 | 0.6088 | 1233.4017 | 3.7949 | 1013.3953 | 6.4706 | 0.1545 | 4.2589 | 70.0914 |
| *TP19-53 - 33* | 9.7287 | 9.2082 | 0.6613 | 3.9425 | 37.2671 | 64.0294 | 108.8090 | 0.4465 | 1257.4594 | 11.5566 | 1000.0851 | 10.1825 | 0.0982 | 0.6613 | 96.8267 |
| *TP19-53 - 36* | 22.8610 | 4.1242 | 0.4233 | 17.3029 | 22.5922 | 33.2377 | 61.1673 | 0.5011 | 1107.4383 | 18.1051 | 782.4768 | 6.3838 | 0.1566 | 0.4233 | 78.5263 |
| *TP19-53 - 39* | 13.5418 | 2.4197 | 0.0914 | 28.7990 | 14.7017 | 21.3965 | 70.2873 | 0.3791 | 1288.8554 | 18.3370 | 1003.7503 | 12.6894 | 0.0788 | 0.0914 | 234.1551 |
| *TP19-53 - 41* | 28.9906 | 33.2615 | 2.8293 | 2.9885 | 119.4111 | 212.1798 | 267.3159 | 0.5014 | 2430.2265 | 9.0912 | 1783.1855 | 9.8201 | 0.1018 | 2.8293 | 74.9948 |
| *TP19-53 - 43* | 19.4207 | 20.0037 | 1.0789 | 4.1803 | 51.8188 | 92.6642 | 132.2174 | 0.4682 | 1386.1562 | 10.4839 | 1101.2254 | 5.8468 | 0.1710 | 1.0789 | 85.8838 |
| *TP19-53 - 49* | 9.1317 | 0.2135 | #VALUE! | #VALUE! | 3.3800 | 6.8734 | 39.3412 | 0.2055 | 816.6370 | 20.7578 | 618.8733 | 6.9855 | 0.1432 | #VALUE! | #VALUE! |
| *TP19-53 - 51* | 8.8691 | 3.4083 | 0.2829 | 9.0328 | 14.9697 | 29.7176 | 86.0835 | 0.2960 | 1902.3487 | 22.0989 | 1456.5216 | 11.8698 | 0.0842 | 0.2829 | 105.0597 |
| *TP19-53 - 54* | 9.0955 | 0.2901 | 0.0106 | 164.2763 | 7.3066 | 5.1849 | 18.8646 | 0.7388 | 565.4004 | 29.9715 | 384.0861 | 16.8613 | 0.0593 | 0.0106 | 490.6067 |
| *TP19-53 - 55* | 2.9993 | 0.6888 | #VALUE! | #VALUE! | 1.7076 | 6.1792 | 33.0000 | 0.1196 | 1318.0641 | 39.9413 | 959.9970 | 5.7224 | 0.1748 | #VALUE! | #VALUE! |
| *TP19-53 - 56* | 24.4677 | 23.2397 | 1.8854 | 3.6964 | 88.7408 | 140.2117 | 201.5669 | 0.5279 | 1882.7781 | 9.3407 | 1467.7732 | 11.2296 | 0.0891 | 1.8854 | 74.3683 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-53 - 57* | 8.0810 | 0.2713 | 0.0139 | 131.4665 | 2.4749 | 5.5655 | 35.4710 | 0.1761 | 928.2318 | 26.1688 | 691.1090 | 5.9253 | 0.1688 | 0.0139 | 399.5531 |
| *TP19-53 - 60* | 100.5845 | 5.3794 | 0.3141 | 77.3748 | 88.6465 | 62.9755 | 231.1496 | 0.7347 | 3923.1470 | 16.9723 | 3024.2068 | 29.8230 | 0.0335 | 0.3141 | 200.4663 |
| *TP19-53 - 61* | 29.1533 | 2.8928 | 0.1047 | 52.9629 | 30.2179 | 36.6341 | 121.2604 | 0.4534 | 1320.2910 | 10.8881 | 1075.6464 | 40.6444 | 0.0246 | 0.1047 | 349.7580 |
| *TP19-53 - 66* | 33.8564 | 45.0623 | 3.3607 | 2.7512 | 155.1410 | 231.7425 | 264.3158 | 0.6268 | 1234.1025 | 4.6690 | 961.1845 | 6.7917 | 0.1472 | 3.3607 | 68.9574 |
| *TP19-53 - 75* | 37.4208 | 45.5784 | 4.7135 | 2.5531 | 149.5494 | 240.0136 | 336.6724 | 0.5261 | 1890.3109 | 5.6147 | 1545.2995 | 8.8876 | 0.1125 | 4.7135 | 50.9203 |
| *TP19-53 - 76* | 37.7013 | 38.3175 | 3.3746 | 3.3155 | 125.7532 | 198.3066 | 224.8157 | 0.5956 | 804.7985 | 3.5798 | 643.1514 | 3.1942 | 0.3131 | 3.3746 | 58.7650 |
| *TP19-53 - 77* | 24.6365 | 30.2437 | 2.1856 | 3.0302 | 115.5536 | 179.6332 | 242.2077 | 0.5540 | 1939.2934 | 8.0067 | 1527.9540 | 8.8715 | 0.1127 | 2.1856 | 82.1880 |
| *TP19-53 - 80* | 17.1604 | 12.3413 | 1.0061 | 4.8700 | 48.8826 | 72.4891 | 101.7269 | 0.5692 | 1039.8403 | 10.2219 | 797.6701 | 6.1998 | 0.1613 | 1.0061 | 72.0493 |
| *TP19-53 - 82* | 6.3733 | 5.2393 | 0.3280 | 4.8620 | 27.3515 | 41.8968 | 83.6197 | 0.4621 | 960.3506 | 11.4847 | 747.6698 | 11.8237 | 0.0846 | 0.3280 | 127.7486 |
| *TP19-53 - 83* | 15.8142 | 12.6255 | 1.4938 | 3.6415 | 51.0541 | 84.9298 | 127.7409 | 0.4902 | 1241.7575 | 9.7209 | 970.8164 | 8.0239 | 0.1246 | 1.4938 | 56.8549 |
| *TP19-53 - 85* | 19.0059 | 16.8413 | 1.4890 | 3.7954 | 61.2360 | 102.9528 | 179.1794 | 0.4509 | 1723.9462 | 9.6213 | 1364.4477 | 7.4075 | 0.1350 | 1.4890 | 69.1439 |
| *TP19-53 - 87* | 61.1178 | 40.9759 | 47.2904 | 1.3884 | 14.0225 | 30.1620 | 49.4946 | 0.3629 | 792.2837 | 16.0075 | 643.1287 | 5.1163 | 0.1955 | 47.2904 | 0.6378 |
| *TP19-53 - 91* | 16.0533 | 11.8402 | 1.1748 | 4.3043 | 44.3163 | 87.9270 | 136.8804 | 0.4040 | 1802.3926 | 13.1676 | 1322.1591 | 9.8528 | 0.1015 | 1.1748 | 74.8452 |
| *TP19-53 - 92* | 18.2915 | 1.9297 | 0.1435 | 34.7586 | 7.2562 | 24.3823 | 74.4237 | 0.1703 | 978.5891 | 13.1489 | 745.5554 | 5.8670 | 0.1704 | 0.1435 | 169.8959 |
| *TP19-53 - 97* | 4.7902 | 0.9664 | 0.1394 | 13.0529 | 3.3990 | 16.2670 | 72.8419 | 0.0987 | 2005.3570 | 27.5303 | 1533.0104 | 8.6470 | 0.1156 | 0.1394 | 116.7305 |
| *TP19-53 - 99* | 20.7060 | 21.8499 | 2.9426 | 2.5823 | 73.9030 | 115.7217 | 150.2437 | 0.5605 | 962.8446 | 6.4086 | 760.3942 | 4.5838 | 0.2182 | 2.9426 | 39.3266 |
| *TP19-54 - 1* | 5.0861 | 0.2552 | 0.0115 | 93.9044 | 1.7538 | 5.0840 | 31.1616 | 0.1393 | 915.9072 | 29.3921 | 707.9058 | 6.3710 | 0.1570 | 0.0115 | 442.3209 |
| *TP19-54 - 103* | 19.4676 | 4.9536 | 0.5162 | 12.1739 | 21.0646 | 25.7898 | 70.7725 | 0.4931 | 1252.6172 | 17.6992 | 927.8053 | 9.4731 | 0.1056 | 0.5162 | 49.9576 |
| *TP19-54 - 106* | 13.1174 | 2.6536 | 0.2544 | 15.9651 | 8.1732 | 15.6787 | 44.7137 | 0.3087 | 848.5221 | 18.9768 | 653.5315 | 5.2067 | 0.1921 | 0.2544 | 61.6302 |
| *TP19-54 - 109* | 13.5949 | 0.6627 | 0.0464 | 77.4908 | 1.2493 | 11.1580 | 49.2279 | 0.0533 | 801.7880 | 16.2873 | 649.6835 | 4.8285 | 0.2071 | 0.0464 | 240.2294 |
| *TP19-54 - 11* | 23.8895 | 8.1203 | 1.4282 | 7.0151 | 10.9523 | 24.3711 | 55.9976 | 0.2965 | 1165.3666 | 20.8110 | 906.4016 | 5.1586 | 0.1939 | 1.4282 | 17.0647 |
| *TP19-54 - 111* | 22.7091 | 11.2669 | 1.4721 | 5.5760 | 20.8202 | 35.4285 | 86.7359 | 0.3756 | 1607.6219 | 18.5347 | 1269.4455 | 7.5215 | 0.1330 | 1.4721 | 24.0659 |
| *TP19-54 - 115* | 2.1447 | 1.9841 | 0.0687 | 5.8087 | 10.1955 | 29.1943 | 108.6037 | 0.1811 | 1540.2271 | 14.1821 | 1210.4675 | 12.4724 | 0.0802 | 0.0687 | 424.9116 |
| *TP19-54 - 117* | 10.8473 | 2.9399 | 0.4076 | 9.9092 | 15.5072 | 24.6258 | 68.1018 | 0.3787 | 975.1719 | 14.3193 | 732.1138 | 9.9098 | 0.1009 | 0.4076 | 60.4176 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TP19-54 - 118* | 9.5423 | 4.4153 | 0.1949 | 10.2861 | 9.8714 | 24.1222 | 71.1159 | 0.2383 | 1335.3107 | 18.7765 | 1035.2659 | 7.1533 | 0.1398 | 0.1949 | 123.7572 |
| *TP19-54 - 12* | 8.8777 | 3.3148 | 0.6010 | 6.2898 | 10.6904 | 16.8078 | 45.2422 | 0.3877 | 664.5327 | 14.6884 | 511.9377 | 11.9821 | 0.0835 | 0.6010 | 27.9663 |
| *TP19-54 - 121* | 13.9661 | 2.5179 | 0.2968 | 16.1569 | 7.4490 | 14.9490 | 47.7133 | 0.2789 | 1033.2102 | 21.6546 | 808.2747 | 5.9615 | 0.1677 | 0.2968 | 50.3741 |
| *TP19-54 - 123* | 7.4340 | 1.5293 | 0.1692 | 14.6162 | 4.6598 | 14.8527 | 56.5727 | 0.1608 | 961.4681 | 16.9953 | 754.7103 | 7.7093 | 0.1297 | 0.1692 | 87.8063 |
| *TP19-54 - 126* | 6.2580 | 2.0398 | 0.1234 | 12.4730 | 4.2344 | 11.2078 | 38.7872 | 0.2031 | 986.4275 | 25.4318 | 770.7062 | 4.3133 | 0.2318 | 0.1234 | 90.8168 |
| *TP19-54 - 127* | 20.4185 | 8.6565 | 0.8429 | 7.5588 | 11.8893 | 35.1775 | 99.0260 | 0.2014 | 1731.6152 | 17.4865 | 1373.6396 | 6.7985 | 0.1471 | 0.8429 | 41.7317 |
| *TP19-54 - 128* | 24.3678 | 5.5344 | 0.3713 | 16.9986 | 29.7068 | 42.3356 | 127.8485 | 0.4038 | 1548.2630 | 12.1101 | 1235.0292 | 11.6323 | 0.0860 | 0.3713 | 114.0172 |
| *TP19-54 - 130* | 13.8726 | 8.0804 | 1.0748 | 4.7075 | 15.9356 | 29.5314 | 75.3460 | 0.3378 | 1130.6865 | 15.0066 | 861.4783 | 16.7838 | 0.0596 | 1.0748 | 27.4775 |
| *TP19-54 - 136* | 19.7842 | 5.5144 | 0.6088 | 10.7979 | 14.0618 | 26.2840 | 60.2206 | 0.3534 | 801.0105 | 13.3013 | 632.9014 | 5.6404 | 0.1773 | 0.6088 | 43.1747 |
| *TP19-54 - 137* | 8.3959 | 0.7141 | 0.1426 | 26.3058 | 5.8672 | 9.8985 | 34.7396 | 0.3164 | 541.7272 | 15.5939 | 422.2583 | 5.8351 | 0.1714 | 0.1426 | 69.3934 |
| *TP19-54 - 139* | 11.0922 | 0.3524 | 0.0101 | 186.2095 | 1.7324 | 6.2294 | 29.5506 | 0.1277 | 697.3849 | 23.5997 | 534.3270 | 4.4447 | 0.2250 | 0.0101 | 618.6487 |
| *TP19-54 - 143* | 11.6545 | 0.3351 | 0.0107 | 194.7711 | 2.3316 | 6.9708 | 28.9409 | 0.1642 | 733.0953 | 25.3308 | 562.2522 | 4.6646 | 0.2144 | 0.0107 | 652.3450 |
| *TP19-54 - 145* | 32.4943 | 12.2661 | 1.3702 | 7.9262 | 26.9354 | 43.8831 | 93.3463 | 0.4208 | 1025.0243 | 10.9809 | 827.4549 | 6.1610 | 0.1623 | 1.3702 | 32.0272 |
| *TP19-54 - 15* | 11.3535 | 1.0780 | 0.0276 | 65.8343 | 8.6031 | 19.2816 | 60.6633 | 0.2515 | 833.2796 | 13.7361 | 652.4720 | 8.0979 | 0.1235 | 0.0276 | 698.8939 |
| *TP19-54 - 155* | 14.9374 | 8.4765 | 0.8982 | 5.4135 | 9.9018 | 20.6209 | 41.6043 | 0.3381 | 1063.2944 | 25.5573 | 803.6118 | 4.6627 | 0.2145 | 0.8982 | 22.9581 |
| *TP19-54 - 17* | 6.3946 | 0.5946 | 0.0379 | 42.6063 | 3.1986 | 14.2303 | 60.7538 | 0.1088 | 1065.1063 | 17.5315 | 813.8126 | 7.7236 | 0.1295 | 0.0379 | 375.6334 |
| *TP19-54 - 18* | 23.6301 | 0.7604 | 0.0210 | 187.1366 | 9.5857 | 17.2591 | 60.7243 | 0.2961 | 924.8775 | 15.2308 | 725.2634 | 24.6467 | 0.0406 | 0.0210 | 823.0399 |
| *TP19-54 - 19* | 18.8338 | 7.5116 | 1.5507 | 5.5183 | 14.2787 | 28.6688 | 64.5128 | 0.3320 | 998.5617 | 15.4785 | 783.3605 | 6.4184 | 0.1558 | 1.5507 | 18.4873 |
| *TP19-54 - 20* | 6.4039 | 0.2722 | 0.0234 | 80.2248 | 1.7584 | 9.1250 | 42.5889 | 0.0892 | 1052.3104 | 24.7085 | 823.1556 | 6.0454 | 0.1654 | 0.0234 | 389.8146 |
| *TP19-54 - 23* | 15.1455 | 9.1287 | 1.1477 | 4.6791 | 16.6183 | 33.8111 | 82.1740 | 0.3153 | 1430.3403 | 17.4062 | 1106.5279 | 5.9850 | 0.1671 | 1.1477 | 29.4592 |
| *TP19-54 - 24* | 14.4860 | 3.6713 | 0.4596 | 11.1513 | 9.4423 | 24.6014 | 88.4944 | 0.2024 | 1574.6675 | 17.7940 | 1210.0063 | 9.2005 | 0.1087 | 0.4596 | 53.5225 |
| *TP19-54 - 25* | 5.5182 | 0.5921 | 0.0658 | 27.9540 | 3.0298 | 12.0213 | 50.7096 | 0.1227 | 1259.4431 | 24.8364 | 980.5834 | 7.4455 | 0.1343 | 0.0658 | 182.6741 |
| *TP19-54 - 26* | 14.1771 | 5.8535 | 0.5586 | 7.8402 | 16.2061 | 38.2444 | 102.8381 | 0.2584 | 1029.9730 | 10.0155 | 801.7590 | 12.0295 | 0.0831 | 0.5586 | 68.4640 |
| *TP19-54 - 27* | 8.6253 | 1.2362 | 0.2032 | 17.2101 | 4.8932 | 13.8743 | 60.2312 | 0.1693 | 1077.9107 | 17.8962 | 859.5906 | 6.9095 | 0.1447 | 0.2032 | 68.2856 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-54 - 28 | 20.3297 | 11.5017 | 0.9900 | 6.0247 | 22.1930 | 42.1127 | 81.9349 | 0.3778 | 1207.6482 | 14.7391 | 937.0598 | 5.8267 | 0.1716 | 0.9900 | 42.5382 |
| TP19-54 - 32 | 6.0972 | 0.1981 | 0.0040 | 216.9538 | 1.5933 | 7.3460 | 35.3885 | 0.0988 | 1010.5856 | 28.5569 | 786.7752 | 6.1910 | 0.1615 | 0.0040 | 1842.5107 |
| TP19-54 - 35 | 7.5133 | 3.3441 | 1.1587 | 3.8168 | 8.5453 | 15.4543 | 65.7487 | 0.2681 | 1595.0133 | 24.2593 | 1228.7529 | 14.5994 | 0.0685 | 1.1587 | 13.3373 |
| TP19-54 - 36 | 25.2202 | 1.3121 | 0.1666 | 53.9471 | 6.2471 | 13.1437 | 48.6977 | 0.2469 | 914.1674 | 18.7723 | 713.6490 | 6.8973 | 0.1450 | 0.1666 | 78.9107 |
| TP19-54 - 37 | 14.5848 | 10.1345 | 0.8412 | 4.9951 | 18.3165 | 34.9982 | 79.5404 | 0.3472 | 1033.9718 | 12.9993 | 807.5293 | 5.9975 | 0.1667 | 0.8412 | 41.6047 |
| TP19-54 - 38 | 29.6169 | 11.0980 | 1.8693 | 6.5025 | 14.8475 | 32.1129 | 73.8178 | 0.3050 | 1350.7093 | 18.2979 | 1071.9483 | 5.9537 | 0.1680 | 1.8693 | 17.1793 |
| TP19-54 - 4 | 18.9706 | 12.2136 | 1.1825 | 4.9917 | 20.7992 | 41.6548 | 87.4485 | 0.3446 | 1452.1351 | 16.6056 | 1116.7024 | 6.5174 | 0.1534 | 1.1825 | 35.2251 |
| TP19-54 - 41 | 22.0455 | 6.5481 | 0.8068 | 9.5914 | 15.5890 | 24.0053 | 49.1549 | 0.4538 | 603.7853 | 12.2833 | 474.5649 | 5.0883 | 0.1965 | 0.8068 | 29.7543 |
| TP19-54 - 5 | 6.7536 | 0.3488 | 0.0354 | 60.7901 | 6.0075 | 5.9854 | 36.1102 | 0.4086 | 1433.9848 | 39.7113 | 926.5206 | 12.9771 | 0.0771 | 0.0354 | 169.1617 |
| TP19-54 - 50 | 9.5401 | 3.3562 | 0.4522 | 7.7438 | 7.3720 | 16.0957 | 54.3653 | 0.2492 | 1367.0317 | 25.1453 | 1024.1189 | 6.0239 | 0.1660 | 0.4522 | 35.5936 |
| TP19-54 - 59 | 49.2452 | 15.9975 | 3.2974 | 6.7803 | 21.6305 | 38.4017 | 63.7430 | 0.4372 | 1021.3352 | 16.0227 | 808.6550 | 4.5518 | 0.2197 | 3.2974 | 11.6459 |
| TP19-54 - 6 | 7.1766 | 2.0770 | 0.2292 | 10.4024 | 7.4792 | 15.0110 | 43.8104 | 0.2917 | 713.4198 | 16.2843 | 547.7310 | 4.9448 | 0.2022 | 0.2292 | 65.5046 |
| TP19-54 - 60 | 28.0304 | 11.1911 | 1.1575 | 7.7882 | 38.2704 | 59.9573 | 150.1092 | 0.4034 | 1513.3519 | 10.0817 | 1211.6239 | 7.6124 | 0.1314 | 1.1575 | 51.8004 |
| TP19-54 - 62 | 6.8498 | 0.8056 | 0.0485 | 34.6670 | 6.4017 | 16.0750 | 66.0561 | 0.1965 | 870.6288 | 13.1801 | 723.7371 | 10.4420 | 0.0958 | 0.0485 | 331.6934 |
| TP19-54 - 66 | 10.3879 | 0.8916 | 0.0882 | 37.0348 | 3.4722 | 12.1766 | 50.8176 | 0.1396 | 1107.6042 | 21.7957 | 875.7043 | 5.0127 | 0.1995 | 0.0882 | 137.9938 |
| TP19-54 - 72 | 27.4732 | 10.0355 | 1.3737 | 7.3994 | 26.1708 | 53.6304 | 127.2188 | 0.3168 | 1490.1728 | 11.7135 | 1191.6737 | 8.0859 | 0.1237 | 1.3737 | 39.0410 |
| TP19-54 - 73 | 29.8962 | 0.4602 | 0.0301 | 253.9834 | 4.6566 | 10.8897 | 35.8338 | 0.2357 | 783.3502 | 21.8606 | 588.0468 | 3.7706 | 0.2652 | 0.0301 | 361.7173 |
| TP19-54 - 79 | 17.1258 | 1.9813 | 0.1517 | 31.2336 | 11.8596 | 29.0865 | 87.9849 | 0.2344 | 1185.3987 | 13.4727 | 945.7503 | 7.9670 | 0.1255 | 0.1517 | 191.6835 |
| TP19-54 - 80 | 6.1468 | 1.8969 | 0.1654 | 10.9726 | 8.9078 | 18.5587 | 75.0373 | 0.2387 | 852.0998 | 11.3557 | 742.5223 | 7.7032 | 0.1298 | 0.1654 | 112.1807 |
| TP19-54 - 81 | 11.2414 | 5.1158 | 0.4289 | 7.5892 | 7.0736 | 16.8863 | 52.8982 | 0.2367 | 1397.9192 | 26.4266 | 1049.9026 | 5.0603 | 0.1976 | 0.4289 | 39.3729 |
| TP19-54 - 87 | 1.8966 | 0.5461 | 0.0113 | 24.1326 | 2.1864 | 14.0636 | 75.8880 | 0.0669 | 1663.1429 | 21.9158 | 1319.6620 | 10.9430 | 0.0914 | 0.0113 | 1243.4366 |
| TP19-54 - 89 | 20.2229 | 7.0126 | 0.7912 | 8.5857 | 14.7743 | 27.5588 | 58.2731 | 0.3687 | 743.7331 | 12.7629 | 591.4284 | 4.1219 | 0.2426 | 0.7912 | 34.8337 |
| TP19-54 - 91 | 44.2429 | 25.6679 | 4.3776 | 4.1738 | 36.9245 | 65.9674 | 110.9435 | 0.4316 | 1586.8695 | 14.3034 | 1237.4043 | 5.9980 | 0.1667 | 4.3776 | 15.0694 |
| TP19-54 - 97 | 15.9155 | 4.9328 | 0.6179 | 9.1163 | 12.5427 | 26.0310 | 61.8994 | 0.3125 | 1046.5301 | 16.9070 | 808.0340 | 7.0889 | 0.1411 | 0.6179 | 42.1292 |

## Appendix C: Supplementary Tables: Lu-Hf results for the Renner Group

| Sample N | Analysis N | Hf176/Hf177 | 2 S.E. | Lu176/Hf177 | U/Pb AGE | U/Pb AGEerror | Hf Chur (t) | Hf DM (t) | Hf NC(t) | $Hf_i$ | epsilon | 2s | T(DM) (crustal) | T(NC) (crustal) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-45-55 | TP1945 - 1 | 0.281674 | 0.000028 | 0.000842 | 1961.0 | 35.5 | 0.281533 | 0.281820 | 0.281750 | 0.281643 | 3.88 | 0.98 | 2.34 | 2.191271458 |
| TP19-45-52 | TP1945 - 2 | 0.281777 | 0.000048 | 0.00169 | 1827.0 | 42.3 | 0.281620 | 0.281919 | 0.281848 | 0.281718 | 3.48 | 1.68 | 2.26 | 2.106836249 |
| TP19-45-51 | TP1945 - 3 | 0.281535 | 0.000034 | 0.000504 | 1892.3 | 46.2 | 0.281578 | 0.281871 | 0.281800 | 0.281517 | -2.17 | 1.19 | 2.65 | 2.501805372 |
| TP19-45-58 | TP1945 - 4 | 0.281647 | 0.000047 | 0.001937 | 1860.6 | 31.6 | 0.281599 | 0.281894 | 0.281823 | 0.281579 | -0.71 | 1.64 | 2.54 | 2.387988166 |
| TP19-45-64 | TP1945 - 5 | 0.281465 | 0.000048 | 0.000715 | 1808.5 | 45.5 | 0.281632 | 0.281933 | 0.281861 | 0.281440 | -6.82 | 1.68 | 2.87 | 2.713770815 |
| TP19-45-67 | TP1945 - 6 | 0.281257 | 0.000045 | 0.000777 | 2501.0 | 46.7 | 0.281181 | 0.281416 | 0.281350 | 0.281220 | 1.40 | 1.57 | 2.92 | 2.783297344 |
| TP19-45-68 | TP1945 - 7 | 0.281586 | 0.000051 | 0.0024 | 1973.4 | 40.4 | 0.281525 | 0.281810 | 0.281739 | 0.281496 | -1.04 | 1.78 | 2.65 | 2.499383191 |
| TP19-45-47 | TP1945 - 8 | 0.281656 | 0.000041 | 0.000962 | 1798.4 | 33.9 | 0.281639 | 0.281940 | 0.281869 | 0.281623 | -0.56 | 1.43 | 2.48 | 2.328485769 |
| TP19-45-44 | TP1945 - 9 | 0.281586 | 0.000039 | 0.0002044 | 1910.5 | 50.3 | 0.281566 | 0.281857 | 0.281786 | 0.281579 | 0.44 | 1.36 | 2.51 | 2.359101033 |
| TP19-45-43 | TP1945 - 10 | 0.281653 | 0.000046 | 0.00119 | 1849.7 | 39.3 | 0.281606 | 0.281902 | 0.281831 | 0.281611 | 0.20 | 1.61 | 2.48 | 2.324315762 |
| TP19-45-77 | TP1945 - 11 | 0.281241 | 0.000042 | 0.00053 | 2556.0 | 41.2 | 0.281145 | 0.281375 | 0.281309 | 0.281215 | 2.51 | 1.47 | 2.89 | 2.762111745 |
| TP19-45-80 | TP1945 - 12 | 0.28105 | 0.00004 | 0.00187 | 2530.7 | 46.7 | 0.281161 | 0.281394 | 0.281328 | 0.280960 | -7.17 | 1.4 | 3.45 | 3.313751789 |
| TP19-45-81 | TP1945 - 13 | 0.281668 | 0.000041 | 0.00105 | 1648.0 | 51.6 | 0.281736 | 0.282051 | 0.281978 | 0.281635 | -3.59 | 1.43 | 2.55 | 2.390366867 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-45-34 | TP1945 - 14 | 0.281825 | 0.000045 | 0.00084 | 1773.9 | 39.1 | 0.281655 | 0.281958 | 0.28188 7 | 0.28179 7 | 5.04 | 1.57 5 | 2.12 | 1.96851597 4 |
| TP19-45-144 | TP1945 - 15 | 0.281613 | 0.000033 | 0.0008089 | 2025.7 | 47.6 | 0.281491 | 0.281771 | 0.28170 3 | 0.28158 2 | 3.22 | 1.15 5 | 2.43 | 2.28533555 6 |
| TP19-45-138 | TP1945 - 16 | 0.281232 | 0.000056 | 0.000539 | 2514.9 | 47.2 | 0.281172 | 0.281406 | 0.28134 3 | 0.28120 6 | 1.23 | 1.96 | 2.94 | 2.80451392 5 |
| TP19-45-85 | TP1945 - 17 | 0.281747 | 0.000057 | 0.000804 | 1808.6 | 47.7 | 0.281632 | 0.281933 | 0.28186 1 | 0.28171 9 | 3.09 | 1.99 5 | 2.27 | 2.11539285 3 |
| TP19-45-89 | TP1945 - 18 | 0.281651 | 0.000034 | 0.000927 | 1793.5 | 42.6 | 0.281642 | 0.281944 | 0.28187 2 | 0.28161 9 | -0.80 | 1.19 | 2.49 | 2.33932906 6 |
| TP19-45-135 | TP1945 - 19 | 0.281665 | 0.000057 | 0.001101 | 2308.8 | 53.5 | 0.281307 | 0.281560 | 0.28149 5 | 0.28161 7 | 11.02 | 1.99 5 | 2.19 | 2.04798004 1 |
| TP19-45-92 | TP1945 - 20 | 0.281669 | 0.000042 | 0.000686 | 1757.7 | 40.3 | 0.281665 | 0.281970 | 0.28189 8 | 0.28164 6 | -0.68 | 1.47 | 2.46 | 2.30286895 2 |
| TP19-45-27 | TP1945 - 21 | 0.281687 | 0.000042 | 0.00076 | 1822.6 | 41.7 | 0.281623 | 0.281922 | 0.28185 1 | 0.28166 1 | 1.33 | 1.47 | 2.39 | 2.23367057 9 |
| TP19-45-24 | TP1945 - 22 | 0.280962 | 0.000049 | 0.000556 | 2518.6 | 35.0 | 0.281169 | 0.281403 | 0.28134 0 | 0.28093 5 | -8.32 | 1.71 5 | 3.50 | 3.37161149 2 |
| TP19-45-23 | TP1945 - 23 | 0.28131 | 0.000046 | 0.00083 | 2479.0 | 56.9 | 0.281195 | 0.281433 | 0.28136 9 | 0.28127 1 | 2.69 | 1.61 | 2.82 | 2.68830397 9 |
| TP19-45-131 | TP1945 - 24 | 0.28045 | 0.000056 | 0.000976 | 3501.3 | 34.8 | 0.280518 | 0.280659 | 0.28060 7 | 0.28038 4 | -4.76 | 1.96 | 4.06 | 3.95972830 5 |
| TP19-45-99 | TP1945 - 25 | 0.281608 | 0.000048 | 0.00192 | 1916.1 | 52.6 | 0.281563 | 0.281853 | 0.28178 3 | 0.28153 8 | -0.87 | 1.68 | 2.59 | 2.44249621 1 |
| TP19-45-123 | TP1945 - 26 | 0.281361 | 0.000053 | 0.00174 | 2534.3 | 44.9 | 0.281159 | 0.281391 | 0.28132 8 | 0.28127 7 | 4.20 | 1.85 5 | 2.78 | 2.64395318 4 |
| TP19-45-105 | TP1945 - 27 | 0.281813 | 0.00006 | 0.001229 | 1600.6 | 41.9 | 0.281767 | 0.282086 | 0.28201 3 | 0.28177 6 | 0.32 | 2.1 | 2.27 | 2.11512321 2 |
| TP19-45-116 | TP1945 - 28 | 0.281524 | 0.000032 | 0.000702 | 1897.0 | 72.5 | 0.281575 | 0.281867 | 0.28179 7 | 0.28149 9 | -2.71 | 1.12 | 2.69 | 2.53794143 3 |
| TP19-45-07 | TP1945 - 29 | 0.281635 | 0.000042 | 0.000888 | 1813.6 | 35.0 | 0.281629 | 0.281929 | 0.28185 8 | 0.28160 4 | -0.87 | 1.47 | 2.51 | 2.35987749 7 |
| TP19-45-112 | TP1945 - 30 | 0.281674 | 0.00004 | 0.00096 | 1850.1 | 41.8 | 0.281605 | 0.281902 | 0.28183 1 | 0.28164 0 | 1.24 | 1.4 | 2.41 | 2.26162186 3 |
| TP19-46-71 | TP1946 - 1 | 0.281584 | 0.000042 | 0.000305 | 1930.0 | 27.5 | 0.281554 | 0.281843 | 0.28177 3 | 0.28157 3 | 0.69 | 1.47 | 2.51 | 2.36010557 6 |
| TP19-46-69 | TP1946 - 2 | 0.281729 | 0.000035 | 0.001024 | 1760.0 | 29.0 | 0.281664 | 0.281969 | 0.28189 7 | 0.28169 5 | 1.10 | 1.22 5 | 2.35 | 2.19670268 7 |
| TP19-46-68 | TP1946 - 3 | 0.281564 | 0.00003 | 0.000906 | 1827.1 | 23.1 | 0.281620 | 0.281919 | 0.28184 8 | 0.28153 3 | -3.12 | 1.05 | 2.66 | 2.50607916 4 |
| TP19-46-67 | TP1946 - 4 | 0.281574 | 0.000054 | 0.0003302 | 1883.4 | 42.2 | 0.281584 | 0.281877 | 0.28180 7 | 0.28156 2 | -0.77 | 1.89 | 2.56 | 2.40994578 3 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-46-66 | TP1946 - 5 | 0.28197 | 0.000054 | 0.00178 | 1624.3 | 35.6 | 0.281752 | 0.282069 | 0.28199 5 | 0.28191 5 | 5.81 | 1.89 | 1.96 | 1.79883753 |
| TP19-46-55 | TP1946 - 6 | 0.281616 | 0.000046 | 0.00055 | 1860.5 | 37.3 | 0.281599 | 0.281894 | 0.28182 3 | 0.28159 7 | -0.07 | 1.61 | 2.50 | 2.34947972 6 |
| TP19-46-54 | TP1946 - 7 | 0.281658 | 0.000042 | 0.00151 | 1832.7 | 33.0 | 0.281617 | 0.281915 | 0.28184 4 | 0.28160 5 | -0.40 | 1.47 | 2.50 | 2.34650291 6 |
| TP19-46-53 | TP1946 - 8 | 0.281769 | 0.000047 | 0.000696 | 1729.8 | 53.8 | 0.281683 | 0.281991 | 0.28191 9 | 0.28174 6 | 2.23 | 1.64 5 | 2.26 | 2.10352192 1 |
| TP19-46-52 | TP1946 - 9 | 0.28166 | 0.000038 | 0.000945 | 1784.8 | 42.6 | 0.281648 | 0.281950 | 0.28187 9 | 0.28162 8 | -0.70 | 1.33 | 2.48 | 2.32602628 8 |
| TP19-46-48 | TP1946 - 10 | 0.28138 | 0.00003 | 0.0002122 | 2628.3 | 48.8 | 0.281097 | 0.281321 | 0.28125 9 | 0.28136 9 | 9.69 | 1.05 | 2.53 | 2.39413055 1 |
| TP19-46-43 | TP1946 - 11 | 0.281508 | 0.000039 | 0.000551 | 1848.2 | 51.0 | 0.281607 | 0.281903 | 0.28183 2 | 0.28148 9 | -4.19 | 1.36 5 | 2.74 | 2.58771916 1 |
| TP19-46-101 | TP1946 - 12 | 0.281455 | 0.000046 | 0.0018 | 2072.6 | 40.4 | 0.281461 | 0.281737 | 0.28166 8 | 0.28138 4 | -2.73 | 1.61 | 2.83 | 2.68085197 7 |
| TP19-46-35 | TP1946 - 13 | 0.281624 | 0.000051 | 0.000697 | 1862.1 | 27.8 | 0.281598 | 0.281893 | 0.28182 2 | 0.28159 9 | 0.06 | 1.78 5 | 2.49 | 2.34258584 7 |
| TP19-46-33 | TP1946 - 14 | 0.281738 | 0.000047 | 0.000583 | 1778.7 | 40.6 | 0.281652 | 0.281955 | 0.28188 3 | 0.28171 8 | 2.37 | 1.64 5 | 2.29 | 2.13514538 3 |
| TP19-46-32 | TP1946 - 15 | 0.28173 | 0.000051 | 0.000565 | 1834.7 | 38.2 | 0.281615 | 0.281913 | 0.28184 2 | 0.28171 0 | 3.37 | 1.78 5 | 2.27 | 2.11976970 1 |
| TP19-46-29 | TP1946 - 16 | 0.281646 | 0.000047 | 0.000725 | 1811.2 | 36.6 | 0.281631 | 0.281931 | 0.28185 9 | 0.28162 1 | -0.34 | 1.64 5 | 2.48 | 2.32554704 7 |
| TP19-46-26 | TP1946 - 17 | 0.281588 | 0.000034 | 0.000619 | 1931.7 | 46.5 | 0.281552 | 0.281841 | 0.28177 1 | 0.28156 5 | 0.46 | 1.19 | 2.53 | 2.37526802 4 |
| TP19-46-25 | TP1946 - 18 | 0.281646 | 0.000048 | 0.001719 | 2315.2 | 35.6 | 0.281302 | 0.281556 | 0.28149 0 | 0.28157 0 | 9.52 | 1.68 | 2.28 | 2.14387388 5 |
| TP19-46-22 | TP1946 - 19 | 0.281956 | 0.00005 | 0.00366 | 1667.7 | 37.3 | 0.281724 | 0.282037 | 0.28196 4 | 0.28184 0 | 4.15 | 1.75 | 2.09 | 1.93600656 8 |
| TP19-46-23 | TP1946 - 20 | 0.281636 | 0.000042 | 0.000891 | 1892.7 | 39.5 | 0.281578 | 0.281870 | 0.28180 0 | 0.28160 4 | 0.93 | 1.47 | 2.47 | 2.31488217 6 |
| TP19-46-19 | TP1946 - 23 | 0.281515 | 0.000043 | 0.0005346 | 1865.1 | 45.1 | 0.281596 | 0.281891 | 0.28182 0 | 0.28149 6 | -3.54 | 1.50 5 | 2.71 | 2.56208487 4 |
| TP19-46-146 | TP1946 - 24 | 0.281644 | 0.000078 | 0.00364 | 2789.5 | 33.2 | 0.280991 | 0.281199 | 0.28113 9 | 0.28145 0 | 16.33 | 2.73 | 2.26 | 2.13198597 3 |
| TP19-46-145 | TP1946 - 25 | 0.28167 | 0.000038 | 0.001231 | 1828.2 | 31.3 | 0.281620 | 0.281918 | 0.28184 7 | 0.28162 7 | 0.27 | 1.33 | 2.46 | 2.30227048 9 |
| TP19-46-142 | TP1946 - 26 | 0.281579 | 0.00005 | 0.00192 | 2030.0 | 34.2 | 0.281489 | 0.281768 | 0.28169 9 | 0.28150 5 | 0.58 | 1.92 5 | 2.59 | 2.44763203 5 |
| TP19-46-132 | TP1946 - 29 | 0.281574 | 0.00004 | 0.00068 | 1833.7 | 33.0 | 0.281616 | 0.281914 | 0.28184 3 | 0.28155 0 | -2.33 | 1.4 | 2.62 | 2.46421429 8 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-47-72 | TP1947 - 1 | 0.281706 | 0.00004 | 0.000668 | 1626.5 | 37.5 | 0.281750 | 0.282067 | 0.28199 4 | 0.28168 5 | -2.30 | 1.4 | 2.45 | 2.29494494 4 |
| TP19-47-70 | TP1947 - 2 | 0.281579 | 0.00005 5 | 0.000768 | 2090.6 | 32.6 | 0.281449 | 0.281723 | 0.28165 5 | 0.28154 8 | 3.53 | 1.92 5 | 2.47 | 2.31942511 8 |
| TP19-47-77 | TP1947 - 3 | 0.281445 | 0.00003 5 | 0.0004728 | 2149.5 | 50.9 | 0.281411 | 0.281679 | 0.28161 2 | 0.28142 6 | 0.53 | 1.22 5 | 2.69 | 2.54791646 8 |
| TP19-47-58 | TP1947 - 4 | 0.281307 | 0.00004 4 | 0.001069 | 2333.3 | 41.4 | 0.281291 | 0.281542 | 0.28147 7 | 0.28125 9 | -1.11 | 1.54 | 2.93 | 2.79541297 8 |
| TP19-47-54 | TP1947 - 5 | 0.28165 | 0.00006 2 | 0.00335 | 2067.8 | 37.3 | 0.281464 | 0.281740 | 0.28167 2 | 0.28151 8 | 1.93 | 2.17 | 2.54 | 2.39720512 9 |
| TP19-47-32 | TP1947 - 8 | 0.280965 | 0.00003 8 | 0.000743 | 2843.1 | 44.1 | 0.280955 | 0.281159 | 0.28110 0 | 0.28092 5 | -1.10 | 1.33 | 3.33 | 3.21008644 8 |
| TP19-47-25 | TP1947 - 9 | 0.281288 | 0.00004 | 0.00148 | 2501.5 | 48.8 | 0.281180 | 0.281416 | 0.28135 3 | 0.28121 7 | 1.32 | 1.4 | 2.92 | 2.78845821 |
| TP19-47-114 | TP1947 - 10 | 0.281187 | 0.00003 5 | 0.000492 | 2185.4 | 42.3 | 0.281387 | 0.281653 | 0.28158 6 | 0.28116 7 | -7.84 | 1.22 5 | 3.22 | 3.07669399 4 |
| TP19-47-117 | TP1947 - 11 | 0.281677 | 0.00007 9 | 0.00257 | 2135.4 | 48.7 | 0.281420 | 0.281690 | 0.28162 2 | 0.28157 3 | 5.43 | 2.76 5 | 2.39 | 2.24194616 5 |
| TP19-47-157 | TP1947 - 12 | 0.281703 | 0.00003 6 | 0.0009177 | 1825.5 | 39.2 | 0.281621 | 0.281920 | 0.28184 9 | 0.28167 1 | 1.77 | 1.26 | 2.36 | 2.20940043 1 |
| TP19-47-17 | TP1947 - 13 | 0.281649 | 0.00004 | 0.000726 | 1824.7 | 40.8 | 0.281622 | 0.281921 | 0.28185 0 | 0.28162 4 | 0.07 | 1.4 | 2.46 | 2.31171317 5 |
| TP19-47-16 | TP1947 - 14 | 0.281541 | 0.00004 | 0.0004035 | 1932.4 | 37.1 | 0.281552 | 0.281841 | 0.28177 1 | 0.28152 6 | -0.92 | 1.4 | 2.61 | 2.45862905 1 |
| TP19-47-127 | TP1947 - 15 | 0.281626 | 0.00004 4 | 0.000597 | 1850.3 | 35.4 | 0.281605 | 0.281902 | 0.28183 1 | 0.28160 5 | -0.01 | 1.54 | 2.49 | 2.33727102 |
| TP19-47-10 | TP1947 - 16 | 0.281661 | 0.00004 1 | 0.00055 | 1873.9 | 33.6 | 0.281590 | 0.281884 | 0.28181 4 | 0.28164 1 | 1.83 | 1.43 5 | 2.40 | 2.24533291 1 |
| TP19-47-09 | TP1947 - 17 | 0.281672 | 0.00003 3 | 0.000585 | 1803.1 | 45.9 | 0.281636 | 0.281937 | 0.28186 5 | 0.28165 2 | 0.57 | 1.15 5 | 2.42 | 2.26381606 |
| TP19-47-08 | TP1947 - 18 | 0.281727 | 0.00005 2 | 0.00112 | 1629.0 | 35.1 | 0.281749 | 0.282065 | 0.28199 2 | 0.28169 2 | -1.99 | 1.82 | 2.44 | 2.27832183 8 |
| TP19-47-04 | TP1947 - 19 | 0.281525 | 0.00004 | 0.000504 | 2005.1 | 46.3 | 0.281505 | 0.281787 | 0.28171 8 | 0.28150 6 | 0.04 | 1.4 | 2.61 | 2.46015976 6 |
| TP19-47-139 | TP1947 - 20 | 0.281378 | 0.00004 9 | 0.000636 | 2322.3 | 56.2 | 0.281298 | 0.281550 | 0.28148 5 | 0.28135 0 | 1.85 | 1.71 5 | 2.75 | 2.60995976 4 |
| TP19-47-144 | TP1947 - 21 | 0.280923 | 0.00004 6 | 0.0005967 | 2738.9 | 35.5 | 0.281024 | 0.281238 | 0.28117 7 | 0.28089 2 | -4.71 | 1.61 | 3.46 | 3.33743666 9 |
| TP19-49-123 | TP1949 - 1 | 0.281573 | 0.00004 9 | 0.002173 | 2406.1 | 42.2 | 0.281243 | 0.281488 | 0.28142 3 | 0.28147 3 | 8.19 | 1.71 5 | 2.44 | 2.29916191 9 |
| TP19-49-128 | TP1949 - 2 | 0.281742 | 0.00004 7 | 0.000918 | 2047.5 | 38.5 | 0.281477 | 0.281755 | 0.28168 7 | 0.28170 6 | 8.14 | 1.64 5 | 2.15 | 2.00524964 4 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-49-134 | TP1949 - 3 | 0.281665 | 0.000043 | 0.002608 | 2813.7 | 48.9 | 0.280975 | 0.281181 | 0.28112 | 0.28152 | 19.56 | 1.50 | 2.09 | 1.95843686 |
| TP19-49-99 | TP1949 - 4 | 0.281776 | 0.000054 | 0.000621 | 1751.5 | 45.8 | 0.281669 | 0.281975 | 0.28190 | 0.28175 | 3.06 | 1.89 | 2.23 | 2.07100389 |
| TP19-49-91 | TP1949 - 5 | 0.281524 | 0.000038 | 0.00072 | 1862.7 | 50.8 | 0.281597 | 0.281893 | 0.28182 | 0.28149 | -3.50 | 1.33 | 2.71 | 2.55819028 |
| TP19-49-64 | TP1949 - 6 | 0.281291 | 0.000062 | 0.00091 | 1915.5 | 30.8 | 0.281563 | 0.281853 | 0.28178 | 0.28125 | -10.84 | 2.17 | 3.19 | 3.03957725 |
| TP19-49-156 | TP1949 - 7 | 0.281245 | 0.000045 | 0.00122 | 2540.0 | 34.0 | 0.281155 | 0.281387 | 0.28132 | 0.28118 | 1.10 | 1.57 | 2.97 | 2.83308404 |
| TP19-49-147 | TP1949 - 8 | 0.281638 | 0.000032 | 0.000815 | 1921.3 | 32.4 | 0.281559 | 0.281849 | 0.28177 | 0.28160 | 1.74 | 1.12 | 2.44 | 2.28909479 |
| TP19-49-150 | TP1949 - 9 | 0.281503 | 0.000048 | 0.000481 | 2364.2 | 38.9 | 0.281270 | 0.281519 | 0.28145 | 0.28148 | 7.50 | 1.68 | 2.44 | 2.30591851 |
| TP19-49-146 | TP1949 - 10 | 0.281131 | 0.000041 | 0.000601 | 2578.3 | 38.6 | 0.281130 | 0.281358 | 0.28129 | 0.28110 | -1.01 | 1.43 | 3.12 | 2.98923759 |
| TP19-49-158 | TP1949 - 11 | 0.281941 | 0.00005 | 0.001617 | 1633.2 | 35.6 | 0.281746 | 0.282062 | 0.28198 | 0.28189 | 5.15 | 1.75 | 2.01 | 1.84637026 |
| TP19-49-52 | TP1949 - 12 | 0.281445 | 0.000034 | 0.000617 | 1866.4 | 36.4 | 0.281595 | 0.281890 | 0.28181 | 0.28142 | -6.10 | 1.19 | 2.87 | 2.71704835 |
| TP19-49-160 | TP1949 - 13 | 0.281724 | 0.000036 | 0.000839 | 1772.6 | 37.0 | 0.281656 | 0.281959 | 0.28188 | 0.28169 | 1.43 | 1.26 | 2.34 | 2.18727157 |
| TP19-49-76 | TP1949 - 14 | 0.281332 | 0.000039 | 0.000623 | 2366.6 | 66.4 | 0.281269 | 0.281517 | 0.28145 | 0.28130 | 1.25 | 1.36 | 2.82 | 2.68219644 |
| TP19-49-60 | TP1949 - 15 | 0.282095 | 0.000036 | 0.002045 | 1635.9 | 39.3 | 0.281744 | 0.282060 | 0.28198 | 0.28203 | 10.21 | 1.26 | 1.70 | 1.53840694 |
| TP19-49-39 | TP1949 - 16 | 0.281668 | 0.000043 | 0.000694 | 1813.5 | 64.7 | 0.281629 | 0.281929 | 0.28185 | 0.28164 | 0.53 | 1.50 | 2.43 | 2.27467037 |
| TP19-49-40 | TP1949 - 17 | 0.281529 | 0.000048 | 0.00068 | 1762.2 | 40.0 | 0.281662 | 0.281967 | 0.28189 | 0.28150 | -5.54 | 1.68 | 2.75 | 2.60018554 |
| TP19-49-30 | TP1949 - 18 | 0.28148 | 0.000042 | 0.000765 | 1914.1 | 68.5 | 0.281564 | 0.281854 | 0.28178 | 0.28145 | -3.97 | 1.47 | 2.78 | 2.62736202 |
| TP19-49-29 | TP1949 - 19 | 0.281767 | 0.000044 | 0.000985 | 1921.1 | 51.2 | 0.281559 | 0.281849 | 0.28177 | 0.28173 | 6.10 | 1.54 | 2.18 | 2.02491200 |
| TP19-49-25 | TP1949 - 20 | 0.281744 | 0.000059 | 0.001468 | 1805.2 | 35.1 | 0.281635 | 0.281935 | 0.28186 | 0.28169 | 2.10 | 2.06 | 2.33 | 2.17273455 |
| TP19-49-16 | TP1949 - 21 | 0.281555 | 0.000045 | 0.000723 | 1731.3 | 55.7 | 0.281682 | 0.281990 | 0.28191 | 0.28153 | -5.37 | 1.57 | 2.72 | 2.56472849 |
| TP19-49-11 | TP1949 - 22 | 0.281624 | 0.000037 | 0.001579 | 2056.6 | 38.6 | 0.281471 | 0.281749 | 0.28168 | 0.28156 | 3.23 | 1.29 | 2.46 | 2.30953526 |
| TP19-49-09 | TP1949 - 23 | 0.281636 | 0.000052 | 0.001338 | 1891.4 | 46.1 | 0.281579 | 0.281871 | 0.28180 | 0.28158 | 0.33 | 1.82 | 2.50 | 2.35004178 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-49-01 | TP1949 - 24 | 0.281634 | 0.000036 | 0.001218 | 1847.5 | 36.6 | 0.281607 | 0.281904 | 0.281833 | 0.281591 | -0.56 | 1.26 | 2.52 | 2.368405463 |
| TP19-49-06 | TP1949 - 25 | 0.281489 | 0.000046 | 0.000845 | 1845.6 | 43.9 | 0.281608 | 0.281905 | 0.281834 | 0.281459 | -5.29 | 1.61 | 2.80 | 2.651746484 |
| TP19-50-70 | TP1950 - 1 | 0.281698 | 0.000037 | 0.0006147 | 1718.6 | 31.9 | 0.281691 | 0.281999 | 0.281927 | 0.281678 | -0.45 | 1.295 | 2.41 | 2.2571409 |
| TP19-50-69 | TP1950 - 2 | 0.281533 | 0.000039 | 0.000529 | 2017.8 | 55.4 | 0.281496 | 0.281777 | 0.281708 | 0.281513 | 0.58 | 1.365 | 2.59 | 2.437998099 |
| TP19-50-62 | TP1950 - 3 | 0.281649 | 0.000044 | 0.000744 | 1773.8 | 30.6 | 0.281655 | 0.281958 | 0.281887 | 0.281624 | -1.10 | 1.54 | 2.50 | 2.341089283 |
| TP19-50-86 | TP1950 - 4 | 0.281658 | 0.000041 | 0.000678 | 1736.6 | 32.6 | 0.281679 | 0.281986 | 0.281914 | 0.281631 | -1.54 | 1.435 | 2.49 | 2.337620793 |
| TP19-50-50 | TP1950 - 5 | 0.281678 | 0.000048 | 0.000512 | 1761.8 | 36.1 | 0.281663 | 0.281967 | 0.281895 | 0.281661 | -0.06 | 1.68 | 2.42 | 2.268711722 |
| TP19-50-92 | TP1950 - 6 | 0.281713 | 0.000039 | 0.001867 | 1783.9 | 31.4 | 0.281648 | 0.281951 | 0.281879 | 0.281650 | 0.05 | 1.365 | 2.43 | 2.279622786 |
| TP19-50-34 | TP1950 - 7 | 0.281748 | 0.000035 | 0.000641 | 1770.9 | 32.7 | 0.281657 | 0.281961 | 0.281889 | 0.281726 | 2.48 | 1.225 | 2.28 | 2.122099449 |
| TP19-50-103 | TP1950 - 8 | 0.281698 | 0.000043 | 0.001296 | 1790.3 | 35.5 | 0.281644 | 0.281946 | 0.281875 | 0.281654 | 0.35 | 1.505 | 2.42 | 2.266959655 |
| TP19-50-105 | TP1950 - 9 | 0.281658 | 0.000045 | 0.0009 | 1748.9 | 36.0 | 0.281671 | 0.281977 | 0.281905 | 0.281662 | -1.52 | 1.575 | 2.50 | 2.346629286 |
| TP19-50-25 | TP1950 - 10 | 0.281711 | 0.000046 | 0.000682 | 2003.0 | 60.7 | 0.281506 | 0.281788 | 0.281719 | 0.281685 | 6.36 | 1.61 | 2.23 | 2.076726206 |
| TP19-50-22 | TP1950 - 11 | 0.281805 | 0.000053 | 0.000923 | 1808.7 | 36.8 | 0.281632 | 0.281933 | 0.281861 | 0.281773 | 5.01 | 1.855 | 2.15 | 1.998891764 |
| TP19-50-20 | TP1950 - 12 | 0.281683 | 0.000038 | 0.000747 | 1868.5 | 41.3 | 0.281593 | 0.281888 | 0.281818 | 0.281657 | 2.24 | 1.33 | 2.37 | 2.216050352 |
| TP19-50-116 | TP1950 - 13 | 0.281733 | 0.000035 | 0.000694 | 1807.9 | 43.3 | 0.281633 | 0.281933 | 0.281862 | 0.281709 | 2.71 | 1.225 | 2.29 | 2.137806727 |
| TP19-50-16 | TP1950 - 14 | 0.281728 | 0.000044 | 0.00213 | 1825.0 | 38.8 | 0.281622 | 0.281921 | 0.281849 | 0.281654 | 1.16 | 1.54 | 2.40 | 2.246231048 |
| TP19-50-13 | TP1950 - 15 | 0.281658 | 0.000041 | 0.00172 | 2295.2 | 44.7 | 0.281316 | 0.281571 | 0.281505 | 0.281583 | 9.50 | 1.435 | 2.27 | 2.128293213 |
| TP19-50-155 | TP1950 - 16 | 0.28166 | 0.000036 | 0.000739 | 1856.5 | 51.2 | 0.281601 | 0.281897 | 0.281826 | 0.281634 | 1.16 | 1.26 | 2.42 | 2.271528231 |
| TP19-50-10 | TP1950 - 17 | 0.281657 | 0.00004 | 0.000667 | 1719.9 | 43.8 | 0.281690 | 0.281998 | 0.281926 | 0.281663 | -1.94 | 1.4 | 2.50 | 2.348316612 |
| TP19-50-139 | TP1950 - 18 | 0.281644 | 0.000041 | 0.00095 | 1982.3 | 47.8 | 0.281520 | 0.281804 | 0.281734 | 0.281600 | 3.15 | 1.435 | 2.40 | 2.253892675 |
| TP19-51-81 | TP1951 - 1 | 0.281708 | 0.00005 | 0.00139 | 1818.9 | 26.2 | 0.281626 | 0.281925 | 0.281854 | 0.281660 | 1.22 | 1.75 | 2.39 | 2.237291801 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-51-79 | TP1951 - 2 | 0.281647 | 0.000033 | 0.000781 | 1794.2 | 29.0 | 0.281642 | 0.281943 | 0.281872 | 0.281620 | -0.75 | 1.15 | 2.49 | 2.33687941 |
| TP19-51-86 | TP1951 - 3 | 0.28173 | 0.000035 | 0.000556 | 1788.3 | 31.3 | 0.281645 | 0.281948 | 0.281876 | 0.281711 | 2.33 | 1.22 | 2.30 | 2.14502703 |
| TP19-51-73 | TP1951 - 4 | 0.281658 | 0.000039 | 0.001048 | 2102.3 | 34.2 | 0.281441 | 0.281715 | 0.281647 | 0.281616 | 6.20 | 1.36 | 2.31 | 2.16766451 |
| TP19-51-98 | TP1951 - 5 | 0.281667 | 0.000041 | 0.000878 | 1786.9 | 36.4 | 0.281646 | 0.281949 | 0.281877 | 0.281637 | -0.32 | 1.43 | 2.46 | 2.30494590 |
| TP19-51-72 | TP1951 - 6 | 0.281695 | 0.000045 | 0.001226 | 1844.8 | 36.0 | 0.281609 | 0.281906 | 0.281835 | 0.281652 | 1.54 | 1.57 | 2.39 | 2.23935079 |
| TP19-51-67 | TP1951 - 7 | 0.281642 | 0.000053 | 0.002499 | 2734.9 | 56.6 | 0.281027 | 0.281241 | 0.281180 | 0.281511 | 17.24 | 1.85 | 2.16 | 2.03123584 |
| TP19-51-103 | TP1951 - 8 | 0.281666 | 0.000062 | 0.00124 | 1829.7 | 40.4 | 0.281619 | 0.281917 | 0.281846 | 0.281623 | 0.15 | 2.17 | 2.46 | 2.31078437 |
| TP19-51-106 | TP1951 - 9 | 0.28171 | 0.000049 | 0.00251 | 1774.1 | 31.9 | 0.281655 | 0.281958 | 0.281886 | 0.281626 | -1.03 | 1.71 | 2.49 | 2.33751748 |
| TP19-51-62 | TP1951 - 10 | 0.281672 | 0.000045 | 0.001009 | 1837.9 | 40.0 | 0.281613 | 0.281911 | 0.281840 | 0.281630 | 0.83 | 1.57 | 2.43 | 2.27621571 |
| TP19-51-61 | TP1951 - 11 | 0.281387 | 0.000048 | 0.00177 | 2879.4 | 56.8 | 0.280931 | 0.281131 | 0.281071 | 0.281289 | 12.75 | 1.68 | 2.55 | 2.42203235 |
| TP19-51-129 | TP1951 - 12 | 0.28167 | 0.000039 | 0.001469 | 1850.2 | 32.1 | 0.281605 | 0.281902 | 0.281831 | 0.281618 | 0.46 | 1.36 | 2.46 | 2.30858796 |
| TP19-51-132 | TP1951 - 13 | 0.281733 | 0.000059 | 0.00416 | 3349.6 | 55.9 | 0.280619 | 0.280775 | 0.280719 | 0.281461 | 30.14 | 2.06 | 1.90 | 1.78630589 |
| TP19-51-136 | TP1951 - 14 | 0.281696 | 0.000042 | 0.001179 | 1791.9 | 55.1 | 0.281643 | 0.281945 | 0.281873 | 0.281643 | 0.45 | 1.47 | 2.42 | 2.26188294 |
| TP19-51-135 | TP1951 - 15 | 0.28176 | 0.000031 | 0.000702 | 1973.6 | 43.0 | 0.281525 | 0.281810 | 0.281744 | 0.281617 | 7.41 | 1.08 | 2.14 | 1.98884627 |
| TP19-51-28 | TP1951 - 16 | 0.281381 | 0.000046 | 0.000546 | 2520.4 | 54.7 | 0.281168 | 0.281402 | 0.281339 | 0.281335 | 6.64 | 1.61 | 2.62 | 2.48651737 |
| TP19-51-142 | TP1951 - 17 | 0.281743 | 0.000041 | 0.00064 | 1778.9 | 38.4 | 0.281652 | 0.281955 | 0.281883 | 0.281671 | 2.48 | 1.43 | 2.28 | 2.12836947 |
| TP19-51-140 | TP1951 - 18 | 0.28162 | 0.000033 | 0.000804 | 1873.5 | 33.1 | 0.281590 | 0.281885 | 0.281814 | 0.281591 | 0.04 | 1.15 | 2.50 | 2.35306746 |
| TP19-51-145 | TP1951 - 19 | 0.281607 | 0.000043 | 0.000716 | 1959.9 | 33.4 | 0.281534 | 0.281820 | 0.281749 | 0.281580 | 1.64 | 1.50 | 2.48 | 2.32665794 |
| TP19-51-10 | TP1951 - 20 | 0.281703 | 0.000046 | 0.0006547 | 1812.4 | 41.3 | 0.281630 | 0.281930 | 0.281858 | 0.281680 | 1.80 | 1.61 | 2.35 | 2.19705731 |
| TP19-51-04 | TP1951 - 21 | 0.281676 | 0.000051 | 0.000922 | 1806.9 | 31.1 | 0.281633 | 0.281934 | 0.281862 | 0.281642 | 0.39 | 1.78 | 2.43 | 2.27791088 |
| TP19-52-77 | TP1952 - 1 | 0.281647 | 0.00004 | 0.000557 | 1769.3 | 36.3 | 0.281658 | 0.281962 | 0.281890 | 0.281680 | -1.05 | 1.4 | 2.49 | 2.33441107 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-52-71 | TP1952 - 2 | 0.281668 | 0.000048 | 0.000822 | 1801.1 | 49.3 | 0.281637 | 0.281938 | 0.28186 7 | 0.28164 0 | 0.10 | 1.68 | 2.44 | 2.29093957 5 |
| TP19-52-68 | TP1952 - 3 | 0.281655 | 0.00005 | 0.000492 | 1860.4 | 151.0 | 0.281599 | 0.281894 | 0.28182 3 | 0.28163 8 | 1.38 | 1.75 | 2.41 | 2.26138452 8 |
| TP19-52-100 | TP1952 - 4 | 0.281652 | 0.000036 | 0.000843 | 1783.5 | 37.2 | 0.281649 | 0.281951 | 0.28188 0 | 0.28162 3 | -0.89 | 1.26 | 2.49 | 2.33649642 8 |
| TP19-52-52 | TP1952 - 5 | 0.281647 | 0.00004 | 0.0004647 | 1804.1 | 34.8 | 0.281635 | 0.281936 | 0.28186 5 | 0.28163 1 | -0.15 | 1.4 | 2.46 | 2.30817916 5 |
| TP19-52-112 | TP1952 - 6 | 0.281661 | 0.000038 | 0.000983 | 1759.4 | 45.9 | 0.281664 | 0.281969 | 0.28189 7 | 0.28162 8 | -1.28 | 1.33 | 2.49 | 2.34039869 2 |
| TP19-52-114 | TP1952 - 7 | 0.281658 | 0.000039 | 0.000767 | 1798.3 | 34.9 | 0.281639 | 0.281940 | 0.28186 9 | 0.28163 2 | -0.26 | 1.365 | 2.46 | 2.30997275 |
| TP19-52-44 | TP1952 - 8 | 0.281709 | 0.000058 | 0.001031 | 1799.6 | 56.8 | 0.281638 | 0.281939 | 0.28186 8 | 0.28167 4 | 1.27 | 2.03 | 2.37 | 2.21890014 4 |
| TP19-52-43 | TP1952 - 9 | 0.281684 | 0.00004 | 0.000788 | 1836.4 | 34.5 | 0.281614 | 0.281912 | 0.28184 1 | 0.28165 7 | 1.50 | 1.54 | 2.39 | 2.23464279 2 |
| TP19-52-118 | TP1952 - 10 | 0.281081 | 0.000046 | 0.0002675 | 2502.9 | 38.2 | 0.281179 | 0.281415 | 0.28135 2 | 0.28106 8 | -3.95 | 1.61 | 3.23 | 3.10190664 |
| TP19-52-126 | TP1952 - 11 | 0.281654 | 0.000039 | 0.000594 | 1747.2 | 33.8 | 0.281672 | 0.281978 | 0.28190 6 | 0.28163 4 | -1.34 | 1.365 | 2.49 | 2.33436278 3 |
| TP19-52-34 | TP1952 - 12 | 0.281648 | 0.00004 | 0.000708 | 1787.9 | 38.1 | 0.281646 | 0.281948 | 0.28187 6 | 0.28162 4 | -0.77 | 1.4 | 2.49 | 2.33287731 4 |
| TP19-52-27 | TP1952 - 13 | 0.281736 | 0.000033 | 0.0005113 | 1736.4 | 46.2 | 0.281679 | 0.281986 | 0.28191 4 | 0.28171 9 | 1.42 | 1.155 | 2.31 | 2.15799722 9 |
| TP19-52-130 | TP1952 - 14 | 0.281674 | 0.00004 | 0.000729 | 1799.1 | 51.5 | 0.281638 | 0.281940 | 0.28186 8 | 0.28164 9 | 0.38 | 1.4 | 2.43 | 2.27229109 9 |
| TP19-52-22 | TP1952 - 15 | 0.281725 | 0.000056 | 0.000706 | 1789.3 | 44.2 | 0.281645 | 0.281947 | 0.28187 5 | 0.28170 1 | 2.00 | 1.96 | 2.32 | 2.16624177 8 |
| TP19-52-14 | TP1952 - 16 | 0.281581 | 0.000037 | 0.000787 | 1789.2 | 38.1 | 0.281645 | 0.281947 | 0.28187 5 | 0.28155 4 | -3.22 | 1.295 | 2.63 | 2.48163072 |
| TP19-52-10 | TP1952 - 17 | 0.281693 | 0.000039 | 0.000668 | 1721.1 | 39.7 | 0.281689 | 0.281997 | 0.28192 5 | 0.28167 1 | -0.63 | 1.365 | 2.43 | 2.27027365 5 |
| TP19-52-137 | TP1952 - 18 | 0.28163 | 0.000039 | 0.000688 | 1741.4 | 38.7 | 0.281676 | 0.281982 | 0.28191 0 | 0.28160 7 | -2.43 | 1.365 | 2.55 | 2.39586045 2 |
| TP19-52-138 | TP1952 - 19 | 0.281698 | 0.000037 | 0.000993 | 1774.6 | 29.5 | 0.281654 | 0.281958 | 0.28188 6 | 0.28166 5 | 0.36 | 1.295 | 2.41 | 2.25333780 9 |
| TP19-52-05 | TP1952 - 20 | 0.281691 | 0.00004 | 0.000864 | 1755.5 | 32.9 | 0.281667 | 0.281972 | 0.28190 0 | 0.28166 2 | -0.16 | 1.715 | 2.42 | 2.26949832 9 |
| TP19-52-150 | TP1952 - 21 | 0.281913 | 0.000039 | 0.0010123 | 1652.5 | 125.8 | 0.281733 | 0.282048 | 0.28197 5 | 0.28188 1 | 5.25 | 1.365 | 2.01 | 1.85605456 6 |
| TP19-52-151 | TP1952 - 22 | 0.281621 | 0.000034 | 0.0007815 | 1723.6 | 34.9 | 0.281687 | 0.281996 | 0.28192 3 | 0.28159 5 | -3.26 | 1.19 | 2.59 | 2.43163150 1 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-52-146 | TP1952 - 23 | 0.281648 | 0.000048 | 0.001416 | 1767.3 | 34.9 | 0.281659 | 0.281963 | 0.281891 | 0.281601 | -2.08 | 1.68 | 2.55 | 2.395219256 |
| TP19-53-01 | TP1953 - 1 | 0.281589 | 0.000055 | 0.00172 | 2370.6 | 72.7 | 0.281266 | 0.281514 | 0.281449 | 0.281511 | 8.71 | 1.92 | 2.38 | 2.238297711 |
| TP19-53-05 | TP1953 - 2 | 0.281614 | 0.000038 | 0.00105 | 1997.5 | 59.0 | 0.281510 | 0.281793 | 0.281723 | 0.281574 | 2.29 | 1.33 | 2.47 | 2.318202914 |
| TP19-53-07 | TP1953 - 3 | 0.281636 | 0.000054 | 0.001646 | 1959.4 | 56.2 | 0.281534 | 0.281821 | 0.281751 | 0.281575 | 1.43 | 1.89 | 2.49 | 2.339003699 |
| TP19-53-16 | TP1953 - 4 | 0.281666 | 0.000045 | 0.000681 | 1780.0 | 63.4 | 0.281651 | 0.281954 | 0.281882 | 0.281643 | -0.28 | 1.57 | 2.45 | 2.296573065 |
| TP19-54-70 | TP1954 - 1 | 0.281567 | 0.000042 | 0.000459 | 1921.4 | 39.8 | 0.281559 | 0.281849 | 0.281779 | 0.281550 | -0.32 | 1.47 | 2.56 | 2.413474266 |
| TP19-54-76 | TP1954 - 2 | 0.28169 | 0.000026 | 0.000976 | 2233.8 | 52.4 | 0.281356 | 0.281616 | 0.281550 | 0.281648 | 10.41 | 0.91 | 2.17 | 2.022376221 |
| TP19-54-80 | TP1954 - 3 | 0.281623 | 0.000036 | 0.00092 | 1746.1 | 45.4 | 0.281673 | 0.281979 | 0.281907 | 0.281593 | -2.85 | 1.26 | 2.58 | 2.424742899 |
| TP19-54-60 | TP1954 - 4 | 0.281639 | 0.000042 | 0.000723 | 1806.2 | 30.4 | 0.281634 | 0.281934 | 0.281863 | 0.281614 | -0.70 | 1.47 | 2.50 | 2.343203926 |
| TP19-54-86 | TP1954 - 5 | 0.281706 | 0.000059 | 0.00167 | 2507.0 | 42.1 | 0.281177 | 0.281412 | 0.281349 | 0.281626 | 15.98 | 2.06 | 2.05 | 1.914395986 |
| TP19-54-89 | TP1954 - 6 | 0.281688 | 0.000039 | 0.000755 | 1814.9 | 41.9 | 0.281628 | 0.281928 | 0.281857 | 0.281667 | 1.20 | 1.36 | 2.39 | 2.235381663 |
| TP19-54-91 | TP1954 - 7 | 0.281663 | 0.000055 | 0.001307 | 1812.3 | 32.4 | 0.281630 | 0.281930 | 0.281859 | 0.281618 | -0.42 | 1.92 | 2.48 | 2.331390234 |
| TP19-54-103 | TP1954 - 8 | 0.281688 | 0.00004 | 0.001121 | 1803.8 | 45.8 | 0.281635 | 0.281936 | 0.281865 | 0.281650 | 0.51 | 1.4 | 2.42 | 2.268441164 |
| TP19-54-36 | TP1954 - 9 | 0.281736 | 0.000032 | 0.0006214 | 1746.1 | 48.5 | 0.281673 | 0.281979 | 0.281907 | 0.281715 | 1.51 | 1.12 | 2.32 | 2.160374144 |
| TP19-54-32 | TP1954 - 10 | 0.281668 | 0.00004 | 0.00078 | 1734.7 | 36.3 | 0.281680 | 0.281987 | 0.281915 | 0.281642 | -1.34 | 1.4 | 2.48 | 2.324425348 |
| TP19-54-30 | TP1954 - 11 | 0.281645 | 0.000034 | 0.000754 | 1994.9 | 39.6 | 0.281511 | 0.281794 | 0.281724 | 0.281615 | 3.73 | 1.19 | 2.38 | 2.228972183 |
| TP19-54-111 | TP1954 - 12 | 0.28171 | 0.000043 | 0.001094 | 1811.1 | 40.9 | 0.281631 | 0.281931 | 0.281860 | 0.281672 | 1.48 | 1.50 | 2.37 | 2.215219017 |
| TP19-54-115 | TP1954 - 13 | 0.281589 | 0.000039 | 0.000739 | 1792.4 | 44.5 | 0.281643 | 0.281945 | 0.281874 | 0.281574 | -2.80 | 1.36 | 2.61 | 2.459241178 |
| TP19-54-24 | TP1954 - 14 | 0.281628 | 0.000038 | 0.000691 | 1788.4 | 56.1 | 0.281645 | 0.281948 | 0.281877 | 0.281665 | -1.45 | 1.33 | 2.53 | 2.374313822 |
| TP19-54-23 | TP1954 - 15 | 0.281654 | 0.000034 | 0.00085 | 1791.8 | 32.9 | 0.281643 | 0.281945 | 0.281874 | 0.281687 | -0.64 | 1.19 | 2.48 | 2.328188407 |
| TP19-54-19 | TP1954 - 16 | 0.281616 | 0.000039 | 0.000503 | 1747.8 | 48.8 | 0.281672 | 0.281978 | 0.281906 | 0.281659 | -2.57 | 1.36 | 2.56 | 2.409173577 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-54-120 | TP1954 - 17 | 0.281672 | 0.000035 | 0.000525 | 1859.8 | 38.3 | 0.281599 | 0.281895 | 0.28182 4 | 0.28165 3 | 1.93 | 1.22 5 | 2.38 | 2.22767528 1 |
| TP19-54-17 | TP1954 - 18 | 0.281652 | 0.000036 | 0.00064 | 1784.1 | 41.6 | 0.281648 | 0.281951 | 0.28187 9 | 0.28163 0 | -0.63 | 1.26 | 2.48 | 2.32140042 7 |
| TP19-54-15 | TP1954 - 19 | 0.281491 | 0.000046 | 0.001015 | 1899.1 | 41.8 | 0.281574 | 0.281866 | 0.28179 5 | 0.28145 4 | -4.23 | 1.61 | 2.78 | 2.63134261 |
| TP19-54-139 | TP1954 - 20 | 0.281641 | 0.000049 | 0.00065 | 1788.9 | 38.9 | 0.281645 | 0.281947 | 0.28187 6 | 0.28161 9 | -0.93 | 1.71 5 | 2.50 | 2.34311307 9 |
| TP19-54-144 | TP1954 - 21 | 0.281772 | 0.00005 | 0.001128 | 2110.9 | 39.1 | 0.281436 | 0.281708 | 0.28164 0 | 0.28172 7 | 10.33 | 1.75 | 2.07 | 1.92461122 1 |
| TP19-54-141 | TP1954 - 22 | 0.281722 | 0.000043 | 0.001968 | 2800.6 | 125.9 | 0.280983 | 0.281191 | 0.28113 1 | 0.28161 6 | 22.53 | 1.50 5 | 1.90 | 1.76868382 8 |
| TP19-54-155 | TP1954 - 23 | 0.281655 | 0.000037 | 0.00055 | 1799.4 | 39.8 | 0.281638 | 0.281940 | 0.28186 8 | 0.28163 6 | -0.07 | 1.29 5 | 2.45 | 2.29989527 6 |
| TP19-54-153 | TP1954 - 24 | 0.281594 | 0.000043 | 0.001909 | 3003.9 | 58.6 | 0.280849 | 0.281037 | 0.28098 0 | 0.28148 4 | 22.61 | 1.50 5 | 2.06 | 1.93803979 4 |
| TP19-54-150 | TP1954 - 25 | 0.281647 | 0.000047 | 0.000661 | 1852.1 | 37.4 | 0.281604 | 0.281900 | 0.28182 9 | 0.28162 4 | 0.70 | 1.64 5 | 2.45 | 2.29597717 8 |
| TP19-53-99 | TP1953a - 2 | 0.281544 | 0.000056 | 0.001159 | 1930.9 | 58.2 | 0.281553 | 0.281842 | 0.28177 2 | 0.28150 2 | -1.83 | 1.96 | 2.66 | 2.51231737 9 |
| TP19-53-120 | TP1953a - 3 | 0.281653 | 0.000046 | 0.000808 | 1785.1 | 57.2 | 0.281648 | 0.281950 | 0.28187 8 | 0.28162 6 | -0.78 | 1.61 | 2.48 | 2.33091999 |
| TP19-53-92 | TP1953a - 4 | 0.281283 | 0.000038 | 0.000827 | 2580.7 | 76.2 | 0.281128 | 0.281357 | 0.28129 4 | 0.28124 2 | 4.05 | 1.33 | 2.82 | 2.69074949 9 |
| TP19-53-127 | TP1953a - 5 | 0.281582 | 0.000053 | 0.000819 | 2115.9 | 69.8 | 0.281433 | 0.281704 | 0.28163 7 | 0.28154 9 | 4.14 | 1.85 5 | 2.45 | 2.30364978 8 |
| TP19-53-131 | TP1953a - 6 | 0.281567 | 0.000058 | 0.00068 | 1999.9 | 78.2 | 0.281508 | 0.281791 | 0.28172 1 | 0.28154 1 | 1.17 | 2.03 | 2.54 | 2.38746627 2 |
| TP19-53-132 | TP1953a - 7 | 0.280903 | 0.000054 | 0.000385 | 2640.0 | 83.9 | 0.281089 | 0.281312 | 0.28125 0 | 0.28088 4 | -7.32 | 1.89 | 3.54 | 3.41048194 |
| TP19-53-91 | TP1953a - 8 | 0.281568 | 0.000046 | 0.000924 | 1928.1 | 77.2 | 0.281555 | 0.281844 | 0.28177 4 | 0.28153 4 | -0.73 | 1.61 | 2.59 | 2.44407067 9 |
| TP19-53-87 | TP1953a - 9 | 0.281624 | 0.000033 | 0.00115 | 1890.6 | 58.4 | 0.281579 | 0.281872 | 0.28180 1 | 0.28158 3 | 0.13 | 1.15 5 | 2.51 | 2.36175874 1 |
| TP19-53-85 | TP1953a - 10 | 0.281528 | 0.000071 | 0.001003 | 1876.5 | 66.6 | 0.281588 | 0.281882 | 0.28181 2 | 0.28149 2 | -3.41 | 2.48 5 | 2.71 | 2.56360259 7 |
| TP19-53-141 | TP1953a - 11 | 0.28138 | 0.000045 | 0.001214 | 2420.7 | 74.7 | 0.281233 | 0.281477 | 0.28141 2 | 0.28132 4 | 3.22 | 1.57 5 | 2.75 | 2.60874232 9 |
| TP19-53-57 | TP1953a - 12 | 0.281634 | 0.000038 | 0.000468 | 1725.6 | 73.0 | 0.281686 | 0.281994 | 0.28192 2 | 0.28161 9 | -2.39 | 1.33 | 2.54 | 2.38054762 6 |
| TP19-53-56 | TP1953a - 13 | 0.281562 | 0.000051 | 0.001465 | 1834.4 | 60.5 | 0.281616 | 0.281914 | 0.28184 2 | 0.28151 1 | -3.71 | 1.78 5 | 2.70 | 2.54802366 2 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-53-55 | TP1953a - 14 | 0.281574 | 0.00004 8 | 0.00148 | 1825.4 | 52.1 | 0.281621 | 0.281920 | 0.28184 9 | 0.28152 3 | -3.50 | 1.68 | 2.68 | 2.52814430 8 |
| TP19-53-162 | TP1953a - 15 | 0.281637 | 0.00005 | 0.00143 | 1884.8 | 59.4 | 0.281583 | 0.281876 | 0.28180 6 | 0.28158 6 | 0.10 | 1.75 | 2.51 | 2.35842647 |
| TP19-53-163 | TP1953a - 16 | 0.281611 | 0.00004 3 | 0.0005027 | 1733.3 | 69.1 | 0.281681 | 0.281988 | 0.28191 6 | 0.28159 4 | -3.08 | 1.50 5 | 2.58 | 2.42808820 7 |
| TP19-53-39 | TP1953a - 17 | 0.281637 | 0.00003 9 | 0.000688 | 1751.7 | 71.6 | 0.281669 | 0.281975 | 0.28190 3 | 0.28161 4 | -1.95 | 1.36 5 | 2.53 | 2.37508291 7 |

## Appendix D: Supplementary Tables: Rutile Data from the Renner Group

| Sample | 206Pb/238U | 206Pb/238U | 207Pb/235U(calc) | 207Pb/235U(calc) | 206Pb/238U Age (Ma) | 206Pb/238U Age (Ma) | 207Pb/206Pb Age (Ma) | 207Pb/206Pb Age (Ma) | 207Pb/235U(calc) Age (Ma) | 207Pb/235U(calc) Age (Ma) | Concordance (206/238 and 207/206) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-45_ - 1 | 0.490889657 | 0.012599921 | 24.19148089 | 1.142339925 | 2575 | 66 | 3768 | 120 | 3276 | 155 | 68 |
| TP19-45_ - 2 | 0.687820448 | 0.011505222 | 49.35789616 | 1.518913617 | 3374 | 56 | 4324 | 28 | 3979 | 122 | 78 |
| TP19-45_ - 3 | 0.612298238 | 0.040172563 | 36.49472539 | 2.183149266 | 3079 | 202 | 4052 | 212 | 3680 | 220 | 76 |
| TP19-45_ - 4 | 0.483160115 | 0.013595745 | 15.00052315 | 0.826739896 | 2541 | 72 | 3040 | 103 | 2815 | 155 | 84 |
| TP19-45_ - 5 | 10.97335166 | 0.668161405 | 1253.144573 | 78.95037792 | 16004 | 974 | 4996 | 198 | 7244 | 456 | 320 |
| TP19-46_ - 1 | 17.88238623 | 1.920871056 | 2338.68081 | 254.1109715 | 18941 | 2035 | 5188 | 390 | 7877 | 856 | 365 |
| TP19-46_ - 10 | 0.549313039 | 0.018354997 | 32.25774736 | 2.009664607 | 2822 | 94 | 4027 | 126 | 3558 | 222 | 70 |
| TP19-46_ - 11 | 0.33377256 | 0.010407981 | 13.66515705 | 0.599740445 | 1857 | 58 | 3474 | 41 | 2727 | 120 | 53 |
| TP19-46_ - 12 | 0.335395526 | 0.009090042 | 7.000107418 | 0.323765562 | 1864 | 51 | 2379 | 88 | 2111 | 98 | 78 |
| ~~TP19-46_ - 13~~ | ~~1.317132997~~ | ~~0.145073946~~ | ~~134.1615707~~ | ~~31.99223358~~ | ~~5417~~ | ~~597~~ | ~~4837~~ | ~~1304~~ | ~~4982~~ | ~~1188~~ | ~~112~~ |
| TP19-46_ - 14 | 10.78064751 | 1.718389176 | 1247.375385 | 200.9066641 | 15900 | 2534 | 5012 | 152 | 7239 | 1166 | 317 |
| TP19-46_ - 15 | 0.367472277 | 0.007059984 | 10.92869862 | 0.470771787 | 2017 | 39 | 2966 | 85 | 2517 | 108 | 68 |
| TP19-46_ - 16 | 0.451835799 | 0.011466882 | 13.79992384 | 0.640144656 | 2403 | 61 | 3004 | 98 | 2736 | 127 | 80 |
| ~~TP19-46_ - 2~~ | ~~0.435270024~~ | ~~0.022129364~~ | ~~10.10916394~~ | ~~0.420494567~~ | ~~2329~~ | ~~118~~ | ~~2564~~ | ~~111~~ | ~~2445~~ | ~~102~~ | ~~91~~ |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TP19-46_ - 3 | 0.5765146 | 0.014897959 | 34.52116791 | 1.352337369 | 2935 | 76 | 4054 | 82 | 3625 | 142 | 72 |
| TP19-46_ - 4 | 0.415877575 | 0.008280029 | 14.91567269 | 0.621348737 | 2242 | 45 | 3269 | 84 | 2810 | 117 | 69 |
| TP19-46_ - 5 | 0.663668409 | 0.012784393 | 49.78723355 | 1.674912974 | 3281 | 63 | 4386 | 50 | 3988 | 134 | 75 |
| TP19-46_ - 6 | 0.457999474 | 0.009251987 | 19.96728753 | 0.777847499 | 2431 | 49 | 3573 | 79 | 3090 | 120 | 68 |
| TP19-46_ - 7 | 0.356942667 | 0.006538145 | 5.733453439 | 0.206788356 | 1968 | 36 | 1930 | 39 | 1936 | 70 | 102 |
| TP19-46_ - 8 | 3.444530371 | 0.18089249 | 409.8804378 | 23.8214499 | 9616 | 505 | 5047 | 150 | 6111 | 355 | 191 |
| TP19-46_ - 9 | 0.309088488 | 0.005692198 | 4.448364802 | 0.163235226 | 1736 | 32 | 1732 | 39 | 1721 | 63 | 100 |
| TP19-47_ - 1 | 0.490149841 | 0.01167148 | 25.51870084 | 1.535683418 | 2571 | 61 | 3837 | 166 | 3328 | 200 | 67 |
| TP19-47_ - 10 | 3.932427401 | 0.125860436 | 451.2723245 | 18.0526553 | 10287 | 329 | 4982 | 69 | 6208 | 248 | 206 |
| TP19-47_ - 11 | 0.414109398 | 0.029691916 | 12.87607635 | 1.057580277 | 2234 | 160 | 3023 | 271 | 2671 | 219 | 74 |
| TP19-47_ - 12 | 0.521633035 | 0.019120257 | 32.33926706 | 1.829333228 | 2706 | 99 | 4091 | 127 | 3561 | 201 | 66 |
| TP19-47_ - 13 | 2.370872369 | 0.169017684 | 276.9611013 | 23.56725913 | 7833 | 558 | 5006 | 60 | 5714 | 486 | 156 |
| TP19-47_ - 14 | 0.31863389 | 0.005178011 | 5.369464184 | 0.176542954 | 1783 | 29 | 1997 | 28 | 1880 | 62 | 89 |
| TP19-47_ - 15 | 0.290833973 | 0.007456883 | 4.360225113 | 0.217709195 | 1646 | 42 | 1783 | 72 | 1705 | 85 | 92 |
| TP19-47_ - 16 | 0.463014704 | 0.008921991 | 24.00848939 | 0.837829892 | 2453 | 47 | 3820 | 43 | 3269 | 114 | 64 |
| TP19-47_ - 2 | 0.454717326 | 0.010781524 | 21.57511937 | 0.924149772 | 2416 | 57 | 3697 | 68 | 3165 | 136 | 65 |
| TP19-47_ - 3 | 0.299169505 | 0.00658729 | 5.24997808 | 0.230130008 | 1687 | 37 | 2085 | 54 | 1861 | 82 | 81 |
| TP19-47_ - 4 | 0.30599234 | 0.006424057 | 6.438428924 | 0.263186306 | 1721 | 36 | 2388 | 65 | 2038 | 83 | 72 |
| TP19-47_ - 5 | 0.577771095 | 0.05259568 | 36.71775266 | 5.356232661 | 2940 | 268 | 4135 | 381 | 3686 | 538 | 71 |
| TP19-47_ - 6 | 0.34007972 | 0.006670054 | 6.515316746 | 0.234630361 | 1887 | 37 | 2224 | 44 | 2048 | 74 | 85 |
| TP19-47_ - 7 | 0.377109624 | 0.010194677 | 15.69116917 | 0.973472786 | 2063 | 56 | 3488 | 129 | 2858 | 177 | 59 |
| TP19-47_ - 8 | 0.331257908 | 0.007961156 | 5.203963061 | 0.272280233 | 1844 | 44 | 1873 | 82 | 1853 | 97 | 98 |
| ~~TP19-47_ - 9~~ | ~~0.96384337~~ | ~~0.034876672~~ | ~~80.2141655~~ | ~~3.93734712~~ | ~~4351~~ | ~~157~~ | ~~4529~~ | ~~166~~ | ~~4465~~ | ~~219~~ | ~~96~~ |
| TP19-49_ - 1 | 0.346179992 | 0.006358967 | 5.599196298 | 0.197578156 | 1916 | 35 | 1918 | 39 | 1916 | 68 | 100 |
| ~~TP19-49_ - 10~~ | ~~0.343086567~~ | ~~0.01247126~~ | ~~5.585637099~~ | ~~0.413693369~~ | ~~1901~~ | ~~69~~ | ~~1926~~ | ~~129~~ | ~~1914~~ | ~~142~~ | ~~99~~ |
| TP19-49_ - 11 | 0.333091168 | 0.005781265 | 5.196153013 | 0.173780181 | 1853 | 32 | 1850 | 30 | 1852 | 62 | 100 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~TP19-49_ - 12~~ | ~~0.329559709~~ | ~~0.006863925~~ | ~~5.50166823~~ | ~~0.316724355~~ | ~~1836~~ | ~~38~~ | ~~1975~~ | ~~85~~ | ~~1901~~ | ~~109~~ | ~~93~~ |
| TP19-49_ - 13 | 0.321895331 | 0.006736762 | 4.913667867 | 0.185027406 | 1799 | 38 | 1811 | 45 | 1805 | 68 | 99 |
| TP19-49_ - 14 | 0.337890042 | 0.007778861 | 5.736723388 | 0.255191581 | 1877 | 43 | 2004 | 63 | 1937 | 86 | 94 |
| TP19-49_ - 15 | 0.322883166 | 0.005923846 | 5.033738372 | 0.172962627 | 1804 | 33 | 1849 | 34 | 1825 | 63 | 98 |
| TP19-49_ - 16 | 0.336871586 | 0.005751182 | 5.552887322 | 0.176850587 | 1872 | 32 | 1952 | 21 | 1909 | 61 | 96 |
| TP19-49_ - 17 | 0.325300478 | 0.005704406 | 5.089401699 | 0.165339962 | 1816 | 32 | 1858 | 26 | 1834 | 60 | 98 |
| TP19-49_ - 2 | 0.349074261 | 0.005867566 | 5.71178256 | 0.180055747 | 1930 | 32 | 1939 | 19 | 1933 | 61 | 100 |
| TP19-49_ - 3 | 0.717486682 | 0.046903753 | 50.71397026 | 4.035321981 | 3487 | 228 | 4280 | 325 | 4006 | 319 | 81 |
| TP19-49_ - 4 | 0.445903101 | 0.027501126 | 13.54750058 | 1.305653944 | 2377 | 147 | 2987 | 278 | 2719 | 262 | 80 |
| TP19-49_ - 5 | 0.33679897 | 0.005630686 | 5.222683473 | 0.16151552 | 1871 | 31 | 1841 | 16 | 1856 | 57 | 102 |
| TP19-49_ - 6 | 0.338919529 | 0.006085706 | 5.466709014 | 0.189309133 | 1881 | 34 | 1912 | 36 | 1895 | 66 | 98 |
| ~~TP19-49_ - 7~~ | ~~0.349082229~~ | ~~0.010717773~~ | ~~6.100493843~~ | ~~0.344967777~~ | ~~1930~~ | ~~59~~ | ~~2057~~ | ~~106~~ | ~~1990~~ | ~~113~~ | ~~94~~ |
| TP19-49_ - 8 | 0.329000694 | 0.005461626 | 5.176540293 | 0.162708119 | 1834 | 30 | 1866 | 20 | 1849 | 58 | 98 |
| TP19-49_ - 9 | 0.34070831 | 0.005835407 | 5.456154432 | 0.178961633 | 1890 | 32 | 1899 | 28 | 1894 | 62 | 100 |
| TP19-52_ - 1 | 0.311833744 | 0.011790123 | 5.203866671 | 0.354321924 | 1750 | 66 | 1974 | 134 | 1853 | 126 | 89 |
| TP19-52_ - 2 | 0.298162344 | 0.006487254 | 4.336282231 | 0.172203102 | 1682 | 37 | 1725 | 49 | 1700 | 68 | 98 |
| TP19-52_ - 3 | 3.43302922 | 0.108824771 | 397.191344 | 16.20402007 | 9599 | 304 | 4992 | 32 | 6079 | 248 | 192 |
| TP19-52_ - 4 | 2.492616355 | 0.126839958 | 284.7230557 | 16.80208945 | 8062 | 410 | 4971 | 34 | 5742 | 339 | 162 |
| TP19-52_ - 5 | 0.269631622 | 0.005249196 | 3.873360807 | 0.135788244 | 1539 | 30 | 1704 | 32 | 1608 | 56 | 90 |
| TP19-54_ - 1 | 0.332281348 | 0.00681953 | 5.535518437 | 0.217000201 | 1849 | 38 | 1971 | 55 | 1906 | 75 | 94 |
| TP19-54_ - 2 | 0.383255558 | 0.007289362 | 9.805690848 | 0.336338642 | 2091 | 40 | 2711 | 45 | 2417 | 83 | 77 |
| TP19-54_ - 3 | 0.520805236 | 0.019092065 | 23.71915753 | 0.939171427 | 2703 | 99 | 3628 | 86 | 3257 | 129 | 75 |
| TP19-54_ - 4 | 1.460875865 | 0.026789159 | 128.6071754 | 4.072738246 | 5805 | 106 | 4610 | 41 | 4939 | 156 | 126 |
| TP19-54_ - 5 | 2.175664732 | 0.046008017 | 227.2280736 | 7.52666211 | 7449 | 158 | 4855 | 41 | 5514 | 183 | 153 |

## Appendix E: GRS data and its associated errors from the Newcastle Waters region.

| measured K2O | K2O cross interference | U cross interference | Th cross interfernce | error on K | lower bound on K | upper bound on K |
|---|---|---|---|---|---|---|
| 5.9 | 0.328 | 0.048 | 0.127 | 0.36 | 5.54 | 6.26 |
| **0** | 0.050 | 0.042 | 0.037 | 0.08 | -0.08 | 0.08 |
| **0** | 0.050 | 0.043 | 0.031 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.042 | 0.028 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.039 | 0.029 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.044 | 0.035 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.038 | 0.033 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.039 | 0.034 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.039 | 0.046 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.037 | 0.032 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.044 | 0.056 | 0.09 | 0.01 | 0.19 |
| **0** | 0.050 | 0.035 | 0.033 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.037 | 0.030 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.037 | 0.035 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.037 | 0.036 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.039 | 0.035 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.040 | 0.049 | 0.08 | -0.08 | 0.08 |
| **0.1** | 0.056 | 0.038 | 0.038 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.037 | 0.041 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.035 | 0.038 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.037 | 0.035 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.037 | 0.034 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.037 | 0.034 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.037 | 0.032 | 0.07 | 0.03 | 0.17 |
| **0.1** | 0.056 | 0.039 | 0.036 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.039 | 0.039 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.039 | 0.035 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.041 | 0.031 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.044 | 0.045 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.039 | 0.039 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.041 | 0.033 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.041 | 0.039 | 0.08 | -0.08 | 0.08 |
| **0.1** | 0.056 | 0.040 | 0.035 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.039 | 0.036 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.037 | 0.036 | 0.08 | 0.02 | 0.18 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **0.2** | 0.062 | 0.037 | 0.045 | 0.08 | 0.12 | 0.28 |
| **0.1** | 0.056 | 0.040 | 0.050 | 0.09 | 0.01 | 0.19 |
| **0.1** | 0.056 | 0.033 | 0.034 | 0.07 | 0.03 | 0.17 |
| **0.2** | 0.062 | 0.036 | 0.038 | 0.08 | 0.12 | 0.28 |
| **0** | 0.050 | 0.034 | 0.040 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.037 | 0.035 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.041 | 0.055 | 0.09 | 0.01 | 0.19 |
| **0** | 0.050 | 0.039 | 0.033 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.036 | 0.042 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.040 | 0.038 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.038 | 0.039 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.039 | 0.046 | 0.08 | -0.08 | 0.08 |
| **0** | 0.050 | 0.039 | 0.041 | 0.08 | -0.08 | 0.08 |
| **0.1** | 0.056 | 0.043 | 0.034 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.037 | 0.041 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.041 | 0.057 | 0.09 | 0.01 | 0.19 |
| **0** | 0.050 | 0.045 | 0.041 | 0.08 | -0.08 | 0.08 |
| **0** | 0.050 | 0.045 | 0.040 | 0.08 | -0.08 | 0.08 |
| **0.1** | 0.056 | 0.045 | 0.034 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.044 | 0.038 | 0.08 | -0.08 | 0.08 |
| **0** | 0.050 | 0.047 | 0.036 | 0.08 | -0.08 | 0.08 |
| **0** | 0.050 | 0.041 | 0.041 | 0.08 | -0.08 | 0.08 |
| **0** | 0.050 | 0.041 | 0.039 | 0.08 | -0.08 | 0.08 |
| **0.1** | 0.056 | 0.039 | 0.029 | 0.07 | 0.03 | 0.17 |
| **0.1** | 0.056 | 0.043 | 0.051 | 0.09 | 0.01 | 0.19 |
| **0** | 0.050 | 0.041 | 0.039 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.040 | 0.043 | 0.08 | -0.08 | 0.08 |
| **0** | 0.050 | 0.039 | 0.038 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.038 | 0.038 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.040 | 0.038 | 0.07 | -0.07 | 0.07 |
| **0.2** | 0.062 | 0.044 | 0.061 | 0.10 | 0.10 | 0.30 |
| **0.1** | 0.056 | 0.038 | 0.043 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.037 | 0.038 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.035 | 0.043 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.037 | 0.041 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.036 | 0.037 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.040 | 0.045 | 0.08 | -0.08 | 0.08 |
| **0.1** | 0.056 | 0.037 | 0.042 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.037 | 0.037 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.034 | 0.042 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.038 | 0.034 | 0.07 | -0.07 | 0.07 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **0** | 0.050 | 0.040 | 0.036 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.044 | 0.038 | 0.08 | -0.08 | 0.08 |
| **0** | 0.050 | 0.043 | 0.043 | 0.08 | -0.08 | 0.08 |
| **0.1** | 0.056 | 0.044 | 0.033 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.043 | 0.037 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.044 | 0.036 | 0.08 | -0.08 | 0.08 |
| **0** | 0.050 | 0.042 | 0.035 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.040 | 0.038 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.038 | 0.035 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.038 | 0.039 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.039 | 0.039 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.037 | 0.033 | 0.07 | 0.03 | 0.17 |
| **0** | 0.050 | 0.043 | 0.041 | 0.08 | -0.08 | 0.08 |
| **0** | 0.050 | 0.037 | 0.030 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.036 | 0.033 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.041 | 0.036 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.033 | 0.033 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.037 | 0.051 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.042 | 0.038 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.045 | 0.048 | 0.08 | -0.08 | 0.08 |
| **0.1** | 0.056 | 0.043 | 0.037 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.046 | 0.052 | 0.09 | 0.01 | 0.19 |
| **0.3** | 0.068 | 0.049 | 0.058 | 0.10 | 0.20 | 0.40 |
| **0.1** | 0.056 | 0.044 | 0.037 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.048 | 0.033 | 0.08 | -0.08 | 0.08 |
| **0.1** | 0.056 | 0.048 | 0.043 | 0.09 | 0.01 | 0.19 |
| **0.1** | 0.056 | 0.046 | 0.042 | 0.08 | 0.02 | 0.18 |
| **0.2** | 0.062 | 0.043 | 0.062 | 0.10 | 0.10 | 0.30 |
| **0.1** | 0.056 | 0.041 | 0.045 | 0.08 | 0.02 | 0.18 |
| **0.2** | 0.062 | 0.045 | 0.062 | 0.10 | 0.10 | 0.30 |
| **0.1** | 0.056 | 0.040 | 0.042 | 0.08 | 0.02 | 0.18 |
| **0.2** | 0.062 | 0.040 | 0.059 | 0.09 | 0.11 | 0.29 |
| **0.2** | 0.062 | 0.040 | 0.064 | 0.10 | 0.10 | 0.30 |
| **0.2** | 0.062 | 0.042 | 0.067 | 0.10 | 0.10 | 0.30 |
| **0** | 0.050 | 0.042 | 0.055 | 0.09 | -0.09 | 0.09 |
| **0.1** | 0.056 | 0.034 | 0.042 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.038 | 0.056 | 0.09 | 0.01 | 0.19 |
| **0.2** | 0.062 | 0.035 | 0.069 | 0.10 | 0.10 | 0.30 |
| **0.1** | 0.056 | 0.035 | 0.046 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.035 | 0.044 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.035 | 0.043 | 0.07 | -0.07 | 0.07 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **0** | 0.050 | 0.033 | 0.034 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.031 | 0.030 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.033 | 0.035 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.039 | 0.050 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.042 | 0.042 | 0.08 | -0.08 | 0.08 |
| **0.1** | 0.056 | 0.036 | 0.056 | 0.09 | 0.01 | 0.19 |
| **0.1** | 0.056 | 0.034 | 0.036 | 0.08 | 0.02 | 0.18 |
| **0.1** | 0.056 | 0.037 | 0.028 | 0.07 | 0.03 | 0.17 |
| **0** | 0.050 | 0.033 | 0.033 | 0.07 | -0.07 | 0.07 |
| **0.1** | 0.056 | 0.035 | 0.038 | 0.08 | 0.02 | 0.18 |
| **0** | 0.050 | 0.035 | 0.031 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.032 | 0.031 | 0.07 | -0.07 | 0.07 |
| **0** | 0.050 | 0.033 | 0.034 | 0.07 | -0.07 | 0.07 |

| **measured U** | **K2O cross interference** | **U cross interference** | **Th cross interfernce** | **error on U** | **lower bound on U** | **upper bound on U** |
|---|---|---|---|---|---|---|
| **5.4** | 0.327903 | 0.625692 | 1.247032 | 1.43 | 3.97 | 6.83 |
| **3.2** | 0.0496 | 0.510148 | 0.390988 | 0.64 | 2.56 | 3.84 |
| **3.4** | 0.0496 | 0.520772 | 0.333392 | 0.62 | 2.78 | 4.02 |
| **3** | 0.0496 | 0.4995 | 0.300128 | 0.58 | 2.42 | 3.58 |
| **2.2** | 0.0496 | 0.456668 | 0.312632 | 0.56 | 1.64 | 2.76 |
| **3.7** | 0.0496 | 0.536663 | 0.3664 | 0.65 | 3.05 | 4.35 |
| **2** | 0.0496 | 0.4459 | 0.3458 | 0.57 | 1.43 | 2.57 |
| **2.2** | 0.0496 | 0.456668 | 0.362288 | 0.59 | 1.61 | 2.79 |
| **2.4** | 0.055883 | 0.467412 | 0.475912 | 0.67 | 1.73 | 3.07 |
| **1.7** | 0.0496 | 0.429703 | 0.337532 | 0.55 | 1.15 | 2.25 |
| **3.6** | 0.055883 | 0.531372 | 0.5669 | 0.78 | 2.82 | 4.38 |
| **1.3** | 0.0496 | 0.408023 | 0.354052 | 0.54 | 0.76 | 1.84 |
| **1.9** | 0.0496 | 0.440507 | 0.3251 | 0.55 | 1.35 | 2.45 |
| **1.7** | 0.0496 | 0.429703 | 0.370508 | 0.57 | 1.13 | 2.27 |
| **1.7** | 0.0496 | 0.429703 | 0.374612 | 0.57 | 1.13 | 2.27 |
| **2.2** | 0.055883 | 0.456668 | 0.370508 | 0.59 | 1.61 | 2.79 |
| **2.6** | 0.0496 | 0.478132 | 0.499852 | 0.69 | 1.91 | 3.29 |
| **2** | 0.055883 | 0.4459 | 0.395072 | 0.60 | 1.40 | 2.60 |
| **1.9** | 0.0496 | 0.440507 | 0.4276 | 0.62 | 1.28 | 2.52 |
| **1.4** | 0.055883 | 0.413452 | 0.395072 | 0.57 | 0.83 | 1.97 |
| **1.9** | 0.0496 | 0.440507 | 0.370508 | 0.58 | 1.32 | 2.48 |
| **1.8** | 0.0496 | 0.435108 | 0.362288 | 0.57 | 1.23 | 2.37 |
| **1.9** | 0.055883 | 0.440507 | 0.358172 | 0.57 | 1.33 | 2.47 |
| **1.9** | 0.055883 | 0.440507 | 0.337532 | 0.56 | 1.34 | 2.46 |
| **2.2** | 0.055883 | 0.456668 | 0.378712 | 0.60 | 1.60 | 2.80 |
| **2.3** | 0.055883 | 0.462043 | 0.403228 | 0.62 | 1.68 | 2.92 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **2.4** | 0.0496 | 0.467412 | 0.370508 | 0.60 | 1.80 | 3.00 |
| **2.8** | 0.0496 | 0.488828 | 0.333392 | 0.59 | 2.21 | 3.39 |
| **3.6** | 0.055883 | 0.531372 | 0.463888 | 0.71 | 2.89 | 4.31 |
| **2.4** | 0.055883 | 0.467412 | 0.411368 | 0.63 | 1.77 | 3.03 |
| **2.9** | 0.0496 | 0.494167 | 0.3458 | 0.61 | 2.29 | 3.51 |
| **2.8** | 0.0496 | 0.488828 | 0.4073 | 0.64 | 2.16 | 3.44 |
| **2.6** | 0.055883 | 0.478132 | 0.370508 | 0.61 | 1.99 | 3.21 |
| **2.4** | 0.055883 | 0.467412 | 0.374612 | 0.60 | 1.80 | 3.00 |
| **1.8** | 0.055883 | 0.435108 | 0.382808 | 0.58 | 1.22 | 2.38 |
| **1.7** | 0.062112 | 0.429703 | 0.463888 | 0.64 | 1.06 | 2.34 |
| **2.5** | 0.055883 | 0.472775 | 0.515732 | 0.70 | 1.80 | 3.20 |
| **1** | 0.055883 | 0.3917 | 0.358172 | 0.53 | 0.47 | 1.53 |
| **1.5** | 0.062112 | 0.418875 | 0.399152 | 0.58 | 0.92 | 2.08 |
| **1.2** | 0.0496 | 0.402588 | 0.415432 | 0.58 | 0.62 | 1.78 |
| **1.8** | 0.055883 | 0.435108 | 0.370508 | 0.57 | 1.23 | 2.37 |
| **2.7** | 0.055883 | 0.483483 | 0.562988 | 0.74 | 1.96 | 3.44 |
| **2.4** | 0.0496 | 0.467412 | 0.3458 | 0.58 | 1.82 | 2.98 |
| **1.5** | 0.055883 | 0.418875 | 0.439732 | 0.61 | 0.89 | 2.11 |
| **2.6** | 0.055883 | 0.478132 | 0.399152 | 0.63 | 1.97 | 3.23 |
| **2.1** | 0.055883 | 0.451287 | 0.4073 | 0.61 | 1.49 | 2.71 |
| **2.4** | 0.0496 | 0.467412 | 0.475912 | 0.67 | 1.73 | 3.07 |
| **2.2** | 0.0496 | 0.456668 | 0.4276 | 0.63 | 1.57 | 2.83 |
| **3.3** | 0.055883 | 0.515463 | 0.362288 | 0.63 | 2.67 | 3.93 |
| **1.7** | 0.055883 | 0.429703 | 0.4276 | 0.61 | 1.09 | 2.31 |
| **2.8** | 0.055883 | 0.488828 | 0.578612 | 0.76 | 2.04 | 3.56 |
| **4.1** | 0.0496 | 0.557767 | 0.423548 | 0.70 | 3.40 | 4.80 |
| **4** | 0.0496 | 0.5525 | 0.415432 | 0.69 | 3.31 | 4.69 |
| **4** | 0.055883 | 0.5525 | 0.362288 | 0.66 | 3.34 | 4.66 |
| **3.7** | 0.0496 | 0.536663 | 0.395072 | 0.67 | 3.03 | 4.37 |
| **4.8** | 0.0496 | 0.594468 | 0.374612 | 0.70 | 4.10 | 5.50 |
| **2.8** | 0.0496 | 0.488828 | 0.4276 | 0.65 | 2.15 | 3.45 |
| **2.9** | 0.0496 | 0.494167 | 0.411368 | 0.64 | 2.26 | 3.54 |
| **2.2** | 0.055883 | 0.456668 | 0.308468 | 0.55 | 1.65 | 2.75 |
| **3.5** | 0.055883 | 0.526075 | 0.519692 | 0.74 | 2.76 | 4.24 |
| **2.8** | 0.0496 | 0.488828 | 0.403228 | 0.64 | 2.16 | 3.44 |
| **2.5** | 0.0496 | 0.472775 | 0.443768 | 0.65 | 1.85 | 3.15 |
| **2.2** | 0.0496 | 0.456668 | 0.399152 | 0.61 | 1.59 | 2.81 |
| **2.1** | 0.055883 | 0.451287 | 0.399152 | 0.61 | 1.49 | 2.71 |
| **2.6** | 0.0496 | 0.478132 | 0.395072 | 0.62 | 1.98 | 3.22 |
| **3.6** | 0.062112 | 0.531372 | 0.621248 | 0.82 | 2.78 | 4.42 |
| **2.1** | 0.055883 | 0.451287 | 0.4478 | 0.64 | 1.46 | 2.74 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **1.7** | 0.0496 | 0.429703 | 0.399152 | 0.59 | 1.11 | 2.29 |
| **1.4** | 0.0496 | 0.413452 | 0.4478 | 0.61 | 0.79 | 2.01 |
| **1.9** | 0.0496 | 0.440507 | 0.4276 | 0.62 | 1.28 | 2.52 |
| **1.5** | 0.0496 | 0.418875 | 0.390988 | 0.58 | 0.92 | 2.08 |
| **2.6** | 0.0496 | 0.478132 | 0.4679 | 0.67 | 1.93 | 3.27 |
| **1.9** | 0.055883 | 0.440507 | 0.431648 | 0.62 | 1.28 | 2.52 |
| **1.7** | 0.0496 | 0.429703 | 0.3869 | 0.58 | 1.12 | 2.28 |
| **1.1** | 0.0496 | 0.397147 | 0.431648 | 0.59 | 0.51 | 1.69 |
| **2** | 0.0496 | 0.4459 | 0.362288 | 0.58 | 1.42 | 2.58 |
| **2.5** | 0.0496 | 0.472775 | 0.374612 | 0.61 | 1.89 | 3.11 |
| **3.7** | 0.0496 | 0.536663 | 0.395072 | 0.67 | 3.03 | 4.37 |
| **3.3** | 0.0496 | 0.515463 | 0.443768 | 0.68 | 2.62 | 3.98 |
| **3.7** | 0.055883 | 0.536663 | 0.349928 | 0.64 | 3.06 | 4.34 |
| **3.3** | 0.055883 | 0.515463 | 0.3869 | 0.65 | 2.65 | 3.95 |
| **3.8** | 0.0496 | 0.541948 | 0.378712 | 0.66 | 3.14 | 4.46 |
| **3** | 0.0496 | 0.4995 | 0.370508 | 0.62 | 2.38 | 3.62 |
| **2.6** | 0.0496 | 0.478132 | 0.395072 | 0.62 | 1.98 | 3.22 |
| **2.1** | 0.055883 | 0.451287 | 0.370508 | 0.59 | 1.51 | 2.69 |
| **2** | 0.0496 | 0.4459 | 0.403228 | 0.60 | 1.40 | 2.60 |
| **2.2** | 0.0496 | 0.456668 | 0.411368 | 0.62 | 1.58 | 2.82 |
| **1.8** | 0.055883 | 0.435108 | 0.3458 | 0.56 | 1.24 | 2.36 |
| **3.5** | 0.0496 | 0.526075 | 0.423548 | 0.68 | 2.82 | 4.18 |
| **1.8** | 0.0496 | 0.435108 | 0.3251 | 0.55 | 1.25 | 2.35 |
| **1.6** | 0.0496 | 0.424292 | 0.349928 | 0.55 | 1.05 | 2.15 |
| **2.7** | 0.0496 | 0.483483 | 0.382808 | 0.62 | 2.08 | 3.32 |
| **1** | 0.0496 | 0.3917 | 0.354052 | 0.53 | 0.47 | 1.53 |
| **1.7** | 0.055883 | 0.429703 | 0.523648 | 0.68 | 1.02 | 2.38 |
| **3** | 0.055883 | 0.4995 | 0.395072 | 0.64 | 2.36 | 3.64 |
| **4.2** | 0.0496 | 0.563028 | 0.495872 | 0.75 | 3.45 | 4.95 |
| **3.4** | 0.055883 | 0.520772 | 0.3869 | 0.65 | 2.75 | 4.05 |
| **4.5** | 0.055883 | 0.578775 | 0.5276 | 0.79 | 3.71 | 5.29 |
| **5.6** | 0.068287 | 0.636052 | 0.590288 | 0.87 | 4.73 | 6.47 |
| **3.6** | 0.055883 | 0.531372 | 0.390988 | 0.66 | 2.94 | 4.26 |
| **5.3** | 0.0496 | 0.620503 | 0.3458 | 0.71 | 4.59 | 6.01 |
| **5.3** | 0.055883 | 0.620503 | 0.443768 | 0.76 | 4.54 | 6.06 |
| **4.6** | 0.055883 | 0.584012 | 0.431648 | 0.73 | 3.87 | 5.33 |
| **3.4** | 0.062112 | 0.520772 | 0.6251 | 0.82 | 2.58 | 4.22 |
| **2.8** | 0.055883 | 0.488828 | 0.4679 | 0.68 | 2.12 | 3.48 |
| **4.2** | 0.062112 | 0.563028 | 0.628948 | 0.85 | 3.35 | 5.05 |
| **2.6** | 0.055883 | 0.478132 | 0.435692 | 0.65 | 1.95 | 3.25 |
| **2.5** | 0.062112 | 0.472775 | 0.594172 | 0.76 | 1.74 | 3.26 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **2.5** | 0.062112 | 0.472775 | 0.6443 | 0.80 | 1.70 | 3.30 |
| **3.1** | 0.062112 | 0.504827 | 0.674812 | 0.85 | 2.25 | 3.95 |
| **3.1** | 0.0496 | 0.504827 | 0.562988 | 0.76 | 2.34 | 3.86 |
| **1.1** | 0.055883 | 0.397147 | 0.439732 | 0.60 | 0.50 | 1.70 |
| **2** | 0.055883 | 0.4459 | 0.574712 | 0.73 | 1.27 | 2.73 |
| **1.4** | 0.062112 | 0.413452 | 0.697528 | 0.81 | 0.59 | 2.21 |
| **1.4** | 0.055883 | 0.413452 | 0.471908 | 0.63 | 0.77 | 2.03 |
| **1.4** | 0.055883 | 0.413452 | 0.455852 | 0.62 | 0.78 | 2.02 |
| **1.3** | 0.0496 | 0.408023 | 0.443768 | 0.60 | 0.70 | 1.90 |
| **0.9** | 0.0496 | 0.386247 | 0.358172 | 0.53 | 0.37 | 1.43 |
| **0.5** | 0.0496 | 0.364375 | 0.3251 | 0.49 | 0.01 | 0.99 |
| **1** | 0.0496 | 0.3917 | 0.370508 | 0.54 | 0.46 | 1.54 |
| **2.3** | 0.055883 | 0.462043 | 0.511768 | 0.69 | 1.61 | 2.99 |
| **3.1** | 0.0496 | 0.504827 | 0.431648 | 0.67 | 2.43 | 3.77 |
| **1.5** | 0.055883 | 0.418875 | 0.570808 | 0.71 | 0.79 | 2.21 |
| **1.2** | 0.055883 | 0.402588 | 0.382808 | 0.56 | 0.64 | 1.76 |
| **1.9** | 0.055883 | 0.440507 | 0.3043 | 0.54 | 1.36 | 2.44 |
| **1** | 0.0496 | 0.3917 | 0.349928 | 0.53 | 0.47 | 1.53 |
| **1.4** | 0.055883 | 0.413452 | 0.399152 | 0.58 | 0.82 | 1.98 |
| **1.4** | 0.0496 | 0.413452 | 0.329248 | 0.53 | 0.87 | 1.93 |
| **0.8** | 0.0496 | 0.380788 | 0.333392 | 0.51 | 0.29 | 1.31 |
| **1** | 0.0496 | 0.3917 | 0.362288 | 0.54 | 0.46 | 1.54 |

| measured Th | K2O cross interference | U cross interference | Th cross interfernce | error on Th | lower bound on Th | upper bound on Th |
|---|---|---|---|---|---|---|
| **26.8** | 0.046476 | 0.048272 | 2.95676 | 2.96 | 23.84 | 29.76 |
| **3.1** | 0.0073 | 0.042288 | 0.879455 | 0.88 | 2.22 | 3.98 |
| **1.7** | 0.0073 | 0.042952 | 0.739175 | 0.74 | 0.96 | 2.44 |
| **0.9** | 0.0073 | 0.0416 | 0.658135 | 0.66 | 0.24 | 1.56 |
| **1.2** | 0.0073 | 0.038608 | 0.6886 | 0.69 | 0.51 | 1.89 |
| **2.5** | 0.0073 | 0.043903 | 0.819575 | 0.82 | 1.68 | 3.32 |
| **2** | 0.0073 | 0.0378 | 0.7694 | 0.77 | 1.23 | 2.77 |
| **2.4** | 0.0073 | 0.038608 | 0.80956 | 0.81 | 1.59 | 3.21 |
| **5.2** | 0.008196 | 0.039392 | 1.0862 | 1.09 | 4.11 | 6.29 |
| **1.8** | 0.0073 | 0.036543 | 0.74926 | 0.75 | 1.05 | 2.55 |
| **7.5** | 0.008196 | 0.043592 | 1.307575 | 1.31 | 6.19 | 8.81 |
| **2.2** | 0.0073 | 0.034783 | 0.7895 | 0.79 | 1.41 | 2.99 |
| **1.5** | 0.0073 | 0.037387 | 0.718975 | 0.72 | 0.78 | 2.22 |
| **2.6** | 0.0073 | 0.036543 | 0.82958 | 0.83 | 1.77 | 3.43 |
| **2.7** | 0.0073 | 0.036543 | 0.839575 | 0.84 | 1.86 | 3.54 |
| **2.6** | 0.008196 | 0.038608 | 0.82958 | 0.83 | 1.77 | 3.43 |
| **5.8** | 0.0073 | 0.040152 | 1.14446 | 1.15 | 4.65 | 6.95 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **3.2** | 0.008196 | 0.0378 | 0.8894 | 0.89 | 2.31 | 4.09 |
| **4** | 0.0073 | 0.037387 | 0.9686 | 0.97 | 3.03 | 4.97 |
| **3.2** | 0.008196 | 0.035232 | 0.8894 | 0.89 | 2.31 | 4.09 |
| **2.6** | 0.0073 | 0.037387 | 0.82958 | 0.83 | 1.77 | 3.43 |
| **2.4** | 0.0073 | 0.036968 | 0.80956 | 0.81 | 1.59 | 3.21 |
| **2.3** | 0.008196 | 0.037387 | 0.799535 | 0.80 | 1.50 | 3.10 |
| **1.8** | 0.008196 | 0.037387 | 0.74926 | 0.75 | 1.05 | 2.55 |
| **2.8** | 0.008196 | 0.038608 | 0.84956 | 0.85 | 1.95 | 3.65 |
| **3.4** | 0.008196 | 0.039003 | 0.90926 | 0.91 | 2.49 | 4.31 |
| **2.6** | 0.0073 | 0.039392 | 0.82958 | 0.83 | 1.77 | 3.43 |
| **1.7** | 0.0073 | 0.040888 | 0.739175 | 0.74 | 0.96 | 2.44 |
| **4.9** | 0.008196 | 0.043592 | 1.056935 | 1.06 | 3.84 | 5.96 |
| **3.6** | 0.008196 | 0.039392 | 0.92908 | 0.93 | 2.67 | 4.53 |
| **2** | 0.0073 | 0.041247 | 0.7694 | 0.77 | 1.23 | 2.77 |
| **3.5** | 0.0073 | 0.040888 | 0.919175 | 0.92 | 2.58 | 4.42 |
| **2.6** | 0.008196 | 0.040152 | 0.82958 | 0.83 | 1.77 | 3.43 |
| **2.7** | 0.008196 | 0.039392 | 0.839575 | 0.84 | 1.86 | 3.54 |
| **2.9** | 0.008196 | 0.036968 | 0.859535 | 0.86 | 2.04 | 3.76 |
| **4.9** | 0.009084 | 0.036543 | 1.056935 | 1.06 | 3.84 | 5.96 |
| **6.2** | 0.008196 | 0.039775 | 1.1831 | 1.18 | 5.02 | 7.38 |
| **2.3** | 0.008196 | 0.0334 | 0.799535 | 0.80 | 1.50 | 3.10 |
| **3.3** | 0.009084 | 0.035675 | 0.899335 | 0.90 | 2.40 | 4.20 |
| **3.7** | 0.0073 | 0.034328 | 0.938975 | 0.94 | 2.76 | 4.64 |
| **2.6** | 0.008196 | 0.036968 | 0.82958 | 0.83 | 1.77 | 3.43 |
| **7.4** | 0.008196 | 0.040523 | 1.29806 | 1.30 | 6.10 | 8.70 |
| **2** | 0.0073 | 0.039392 | 0.7694 | 0.77 | 1.23 | 2.77 |
| **4.3** | 0.008196 | 0.035675 | 0.998135 | 1.00 | 3.30 | 5.30 |
| **3.3** | 0.008196 | 0.040152 | 0.899335 | 0.90 | 2.40 | 4.20 |
| **3.5** | 0.008196 | 0.038207 | 0.919175 | 0.92 | 2.58 | 4.42 |
| **5.2** | 0.0073 | 0.039392 | 1.0862 | 1.09 | 4.11 | 6.29 |
| **4** | 0.0073 | 0.038608 | 0.9686 | 0.97 | 3.03 | 4.97 |
| **2.4** | 0.008196 | 0.042623 | 0.80956 | 0.81 | 1.59 | 3.21 |
| **4** | 0.008196 | 0.036543 | 0.9686 | 0.97 | 3.03 | 4.97 |
| **7.8** | 0.008196 | 0.040888 | 1.33606 | 1.34 | 6.46 | 9.14 |
| **3.9** | 0.0073 | 0.045087 | 0.958735 | 0.96 | 2.94 | 4.86 |
| **3.7** | 0.0073 | 0.0448 | 0.938975 | 0.94 | 2.76 | 4.64 |
| **2.4** | 0.008196 | 0.0448 | 0.80956 | 0.81 | 1.59 | 3.21 |
| **3.2** | 0.0073 | 0.043903 | 0.8894 | 0.89 | 2.31 | 4.09 |
| **2.7** | 0.0073 | 0.046928 | 0.839575 | 0.84 | 1.86 | 3.54 |
| **4** | 0.0073 | 0.040888 | 0.9686 | 0.97 | 3.03 | 4.97 |
| **3.6** | 0.0073 | 0.041247 | 0.92908 | 0.93 | 2.67 | 4.53 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **1.1** | 0.008196 | 0.038608 | 0.678455 | 0.68 | 0.42 | 1.78 |
| **6.3** | 0.008196 | 0.043275 | 1.192735 | 1.19 | 5.11 | 7.49 |
| **3.4** | 0.0073 | 0.040888 | 0.90926 | 0.91 | 2.49 | 4.31 |
| **4.4** | 0.0073 | 0.039775 | 1.00796 | 1.01 | 3.39 | 5.41 |
| **3.3** | 0.0073 | 0.038608 | 0.899335 | 0.90 | 2.40 | 4.20 |
| **3.3** | 0.008196 | 0.038207 | 0.899335 | 0.90 | 2.40 | 4.20 |
| **3.2** | 0.0073 | 0.040152 | 0.8894 | 0.89 | 2.31 | 4.09 |
| **8.9** | 0.009084 | 0.043592 | 1.439735 | 1.44 | 7.46 | 10.34 |
| **4.5** | 0.008196 | 0.038207 | 1.017775 | 1.02 | 3.48 | 5.52 |
| **3.3** | 0.0073 | 0.036543 | 0.899335 | 0.90 | 2.40 | 4.20 |
| **4.5** | 0.0073 | 0.035232 | 1.017775 | 1.02 | 3.48 | 5.52 |
| **4** | 0.0073 | 0.037387 | 0.9686 | 0.97 | 3.03 | 4.97 |
| **3.1** | 0.0073 | 0.035675 | 0.879455 | 0.88 | 2.22 | 3.98 |
| **5** | 0.0073 | 0.040152 | 1.0667 | 1.07 | 3.93 | 6.07 |
| **4.1** | 0.008196 | 0.037387 | 0.978455 | 0.98 | 3.12 | 5.08 |
| **3** | 0.0073 | 0.036543 | 0.8695 | 0.87 | 2.13 | 3.87 |
| **4.1** | 0.0073 | 0.033867 | 0.978455 | 0.98 | 3.12 | 5.08 |
| **2.4** | 0.0073 | 0.0378 | 0.80956 | 0.81 | 1.59 | 3.21 |
| **2.7** | 0.0073 | 0.039775 | 0.839575 | 0.84 | 1.86 | 3.54 |
| **3.2** | 0.0073 | 0.043903 | 0.8894 | 0.89 | 2.31 | 4.09 |
| **4.4** | 0.0073 | 0.042623 | 1.00796 | 1.01 | 3.39 | 5.41 |
| **2.1** | 0.008196 | 0.043903 | 0.779455 | 0.78 | 1.32 | 2.88 |
| **3** | 0.008196 | 0.042623 | 0.8695 | 0.87 | 2.13 | 3.87 |
| **2.8** | 0.0073 | 0.044208 | 0.84956 | 0.85 | 1.95 | 3.65 |
| **2.6** | 0.0073 | 0.0416 | 0.82958 | 0.83 | 1.77 | 3.43 |
| **3.2** | 0.0073 | 0.040152 | 0.8894 | 0.89 | 2.31 | 4.09 |
| **2.6** | 0.008196 | 0.038207 | 0.82958 | 0.83 | 1.77 | 3.43 |
| **3.4** | 0.0073 | 0.0378 | 0.90926 | 0.91 | 2.49 | 4.31 |
| **3.6** | 0.0073 | 0.038608 | 0.92908 | 0.93 | 2.67 | 4.53 |
| **2** | 0.008196 | 0.036968 | 0.7694 | 0.77 | 1.23 | 2.77 |
| **3.9** | 0.0073 | 0.043275 | 0.958735 | 0.96 | 2.94 | 4.86 |
| **1.5** | 0.0073 | 0.036968 | 0.718975 | 0.72 | 0.78 | 2.22 |
| **2.1** | 0.0073 | 0.036112 | 0.779455 | 0.78 | 1.32 | 2.88 |
| **2.9** | 0.0073 | 0.040523 | 0.859535 | 0.86 | 2.04 | 3.76 |
| **2.2** | 0.0073 | 0.0334 | 0.7895 | 0.79 | 1.41 | 2.99 |
| **6.4** | 0.008196 | 0.036543 | 1.20236 | 1.20 | 5.20 | 7.60 |
| **3.2** | 0.008196 | 0.0416 | 0.8894 | 0.89 | 2.31 | 4.09 |
| **5.7** | 0.0073 | 0.045368 | 1.134775 | 1.14 | 4.56 | 6.84 |
| **3** | 0.008196 | 0.042952 | 0.8695 | 0.87 | 2.13 | 3.87 |
| **6.5** | 0.008196 | 0.046175 | 1.211975 | 1.21 | 5.29 | 7.71 |
| **8.1** | 0.009964 | 0.048672 | 1.364455 | 1.37 | 6.73 | 9.47 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **3.1** | 0.008196 | 0.043592 | 0.879455 | 0.88 | 2.22 | 3.98 |
| **2** | 0.0073 | 0.048063 | 0.7694 | 0.77 | 1.23 | 2.77 |
| **4.4** | 0.008196 | 0.048063 | 1.00796 | 1.01 | 3.39 | 5.41 |
| **4.1** | 0.008196 | 0.046432 | 0.978455 | 0.98 | 3.12 | 5.08 |
| **9** | 0.009084 | 0.042952 | 1.4491 | 1.45 | 7.55 | 10.45 |
| **5** | 0.008196 | 0.040888 | 1.0667 | 1.07 | 3.93 | 6.07 |
| **9.1** | 0.009084 | 0.045368 | 1.458455 | 1.46 | 7.64 | 10.56 |
| **4.2** | 0.008196 | 0.040152 | 0.9883 | 0.99 | 3.21 | 5.19 |
| **8.2** | 0.009084 | 0.039775 | 1.3739 | 1.37 | 6.83 | 9.57 |
| **9.5** | 0.009084 | 0.039775 | 1.495775 | 1.50 | 8.00 | 11.00 |
| **10.3** | 0.009084 | 0.041947 | 1.569935 | 1.57 | 8.73 | 11.87 |
| **7.4** | 0.0073 | 0.041947 | 1.29806 | 1.30 | 6.10 | 8.70 |
| **4.3** | 0.008196 | 0.033867 | 0.998135 | 1.00 | 3.30 | 5.30 |
| **7.7** | 0.008196 | 0.0378 | 1.326575 | 1.33 | 6.37 | 9.03 |
| **10.9** | 0.009084 | 0.035232 | 1.625135 | 1.63 | 9.27 | 12.53 |
| **5.1** | 0.008196 | 0.035232 | 1.076455 | 1.08 | 4.02 | 6.18 |
| **4.7** | 0.008196 | 0.035232 | 1.037375 | 1.04 | 3.66 | 5.74 |
| **4.4** | 0.0073 | 0.034783 | 1.00796 | 1.01 | 3.39 | 5.41 |
| **2.3** | 0.0073 | 0.032927 | 0.799535 | 0.80 | 1.50 | 3.10 |
| **1.5** | 0.0073 | 0.030975 | 0.718975 | 0.72 | 0.78 | 2.22 |
| **2.6** | 0.0073 | 0.0334 | 0.82958 | 0.83 | 1.77 | 3.43 |
| **6.1** | 0.008196 | 0.039003 | 1.173455 | 1.17 | 4.93 | 7.27 |
| **4.1** | 0.0073 | 0.041947 | 0.978455 | 0.98 | 3.12 | 5.08 |
| **7.6** | 0.008196 | 0.035675 | 1.31708 | 1.32 | 6.28 | 8.92 |
| **2.9** | 0.008196 | 0.034328 | 0.859535 | 0.86 | 2.04 | 3.76 |
| **1** | 0.008196 | 0.037387 | 0.6683 | 0.67 | 0.33 | 1.67 |
| **2.1** | 0.0073 | 0.0334 | 0.779455 | 0.78 | 1.32 | 2.88 |
| **3.3** | 0.008196 | 0.035232 | 0.899335 | 0.90 | 2.40 | 4.20 |
| **1.6** | 0.0073 | 0.035232 | 0.72908 | 0.73 | 0.87 | 2.33 |
| **1.7** | 0.0073 | 0.032448 | 0.739175 | 0.74 | 0.96 | 2.44 |
| **2.4** | 0.0073 | 0.0334 | 0.80956 | 0.81 | 1.59 | 3.21 |

| K2O (wt%) | +/- | U (ppm) | +/- | Th (ppm) | +/- |
|---|---|---|---|---|---|
| 5.9 | 0.36 | 5.4 | 1.43 | 26.8 | 2.96 |
| 0 | 0.08 | 3.2 | 0.64 | 3.1 | 0.88 |
| 0 | 0.07 | 3.4 | 0.62 | 1.7 | 0.74 |
| 0 | 0.07 | 3 | 0.58 | 0.9 | 0.66 |
| 0 | 0.07 | 2.2 | 0.56 | 1.2 | 0.69 |
| 0 | 0.07 | 3.7 | 0.65 | 2.5 | 0.82 |
| 0 | 0.07 | 2 | 0.57 | 2 | 0.77 |
| 0 | 0.07 | 2.2 | 0.59 | 2.4 | 0.81 |

| | | | | | |
|---|---|---|---|---|---|
| 0.1 | 0.08 | 2.4 | 0.67 | 5.2 | 1.09 |
| 0 | 0.07 | 1.7 | 0.55 | 1.8 | 0.75 |
| 0.1 | 0.09 | 3.6 | 0.78 | 7.5 | 1.31 |
| 0 | 0.07 | 1.3 | 0.54 | 2.2 | 0.79 |
| 0 | 0.07 | 1.9 | 0.55 | 1.5 | 0.72 |
| 0 | 0.07 | 1.7 | 0.57 | 2.6 | 0.83 |
| 0 | 0.07 | 1.7 | 0.57 | 2.7 | 0.84 |
| 0.1 | 0.08 | 2.2 | 0.59 | 2.6 | 0.83 |
| 0 | 0.08 | 2.6 | 0.69 | 5.8 | 1.15 |
| 0.1 | 0.08 | 2 | 0.60 | 3.2 | 0.89 |
| 0 | 0.07 | 1.9 | 0.62 | 4 | 0.97 |
| 0.1 | 0.08 | 1.4 | 0.57 | 3.2 | 0.89 |
| 0 | 0.07 | 1.9 | 0.58 | 2.6 | 0.83 |
| 0 | 0.07 | 1.8 | 0.57 | 2.4 | 0.81 |
| 0.1 | 0.08 | 1.9 | 0.57 | 2.3 | 0.80 |
| 0.1 | 0.07 | 1.9 | 0.56 | 1.8 | 0.75 |
| 0.1 | 0.08 | 2.2 | 0.60 | 2.8 | 0.85 |
| 0.1 | 0.08 | 2.3 | 0.62 | 3.4 | 0.91 |
| 0 | 0.07 | 2.4 | 0.60 | 2.6 | 0.83 |
| 0 | 0.07 | 2.8 | 0.59 | 1.7 | 0.74 |
| 0.1 | 0.08 | 3.6 | 0.71 | 4.9 | 1.06 |
| 0.1 | 0.08 | 2.4 | 0.63 | 3.6 | 0.93 |
| 0 | 0.07 | 2.9 | 0.61 | 2 | 0.77 |
| 0 | 0.08 | 2.8 | 0.64 | 3.5 | 0.92 |
| 0.1 | 0.08 | 2.6 | 0.61 | 2.6 | 0.83 |
| 0.1 | 0.08 | 2.4 | 0.60 | 2.7 | 0.84 |
| 0.1 | 0.08 | 1.8 | 0.58 | 2.9 | 0.86 |
| 0.2 | 0.08 | 1.7 | 0.64 | 4.9 | 1.06 |
| 0.1 | 0.09 | 2.5 | 0.70 | 6.2 | 1.18 |
| 0.1 | 0.07 | 1 | 0.53 | 2.3 | 0.80 |
| 0.2 | 0.08 | 1.5 | 0.58 | 3.3 | 0.90 |
| 0 | 0.07 | 1.2 | 0.58 | 3.7 | 0.94 |
| 0.1 | 0.08 | 1.8 | 0.57 | 2.6 | 0.83 |
| 0.1 | 0.09 | 2.7 | 0.74 | 7.4 | 1.30 |
| 0 | 0.07 | 2.4 | 0.58 | 2 | 0.77 |
| 0.1 | 0.08 | 1.5 | 0.61 | 4.3 | 1.00 |
| 0.1 | 0.08 | 2.6 | 0.63 | 3.3 | 0.90 |
| 0.1 | 0.08 | 2.1 | 0.61 | 3.5 | 0.92 |
| 0 | 0.08 | 2.4 | 0.67 | 5.2 | 1.09 |
| 0 | 0.08 | 2.2 | 0.63 | 4 | 0.97 |
| 0.1 | 0.08 | 3.3 | 0.63 | 2.4 | 0.81 |

| | | | | | |
|---|---|---|---|---|---|
| 0.1 | 0.08 | 1.7 | 0.61 | 4 | 0.97 |
| 0.1 | 0.09 | 2.8 | 0.76 | 7.8 | 1.34 |
| 0 | 0.08 | 4.1 | 0.70 | 3.9 | 0.96 |
| 0 | 0.08 | 4 | 0.69 | 3.7 | 0.94 |
| 0.1 | 0.08 | 4 | 0.66 | 2.4 | 0.81 |
| 0 | 0.08 | 3.7 | 0.67 | 3.2 | 0.89 |
| 0 | 0.08 | 4.8 | 0.70 | 2.7 | 0.84 |
| 0 | 0.08 | 2.8 | 0.65 | 4 | 0.97 |
| 0 | 0.08 | 2.9 | 0.64 | 3.6 | 0.93 |
| 0.1 | 0.07 | 2.2 | 0.55 | 1.1 | 0.68 |
| 0.1 | 0.09 | 3.5 | 0.74 | 6.3 | 1.19 |
| 0 | 0.07 | 2.8 | 0.64 | 3.4 | 0.91 |
| 0 | 0.08 | 2.5 | 0.65 | 4.4 | 1.01 |
| 0 | 0.07 | 2.2 | 0.61 | 3.3 | 0.90 |
| 0.1 | 0.08 | 2.1 | 0.61 | 3.3 | 0.90 |
| 0 | 0.07 | 2.6 | 0.62 | 3.2 | 0.89 |
| 0.2 | 0.10 | 3.6 | 0.82 | 8.9 | 1.44 |
| 0.1 | 0.08 | 2.1 | 0.64 | 4.5 | 1.02 |
| 0 | 0.07 | 1.7 | 0.59 | 3.3 | 0.90 |
| 0 | 0.07 | 1.4 | 0.61 | 4.5 | 1.02 |
| 0 | 0.07 | 1.9 | 0.62 | 4 | 0.97 |
| 0 | 0.07 | 1.5 | 0.58 | 3.1 | 0.88 |
| 0 | 0.08 | 2.6 | 0.67 | 5 | 1.07 |
| 0.1 | 0.08 | 1.9 | 0.62 | 4.1 | 0.98 |
| 0 | 0.07 | 1.7 | 0.58 | 3 | 0.87 |
| 0 | 0.07 | 1.1 | 0.59 | 4.1 | 0.98 |
| 0 | 0.07 | 2 | 0.58 | 2.4 | 0.81 |
| 0 | 0.07 | 2.5 | 0.61 | 2.7 | 0.84 |
| 0 | 0.08 | 3.7 | 0.67 | 3.2 | 0.89 |
| 0 | 0.08 | 3.3 | 0.68 | 4.4 | 1.01 |
| 0.1 | 0.08 | 3.7 | 0.64 | 2.1 | 0.78 |
| 0.1 | 0.08 | 3.3 | 0.65 | 3 | 0.87 |
| 0 | 0.08 | 3.8 | 0.66 | 2.8 | 0.85 |
| 0 | 0.07 | 3 | 0.62 | 2.6 | 0.83 |
| 0 | 0.07 | 2.6 | 0.62 | 3.2 | 0.89 |
| 0.1 | 0.08 | 2.1 | 0.59 | 2.6 | 0.83 |
| 0 | 0.07 | 2 | 0.60 | 3.4 | 0.91 |
| 0 | 0.07 | 2.2 | 0.62 | 3.6 | 0.93 |
| 0.1 | 0.07 | 1.8 | 0.56 | 2 | 0.77 |
| 0 | 0.08 | 3.5 | 0.68 | 3.9 | 0.96 |
| 0 | 0.07 | 1.8 | 0.55 | 1.5 | 0.72 |

| | | | | | |
|---|---|---|---|---|---|
| 0 | 0.07 | 1.6 | 0.55 | 2.1 | 0.78 |
| 0 | 0.07 | 2.7 | 0.62 | 2.9 | 0.86 |
| 0 | 0.07 | 1 | 0.53 | 2.2 | 0.79 |
| 0.1 | 0.08 | 1.7 | 0.68 | 6.4 | 1.20 |
| 0.1 | 0.08 | 3 | 0.64 | 3.2 | 0.89 |
| 0 | 0.08 | 4.2 | 0.75 | 5.7 | 1.14 |
| 0.1 | 0.08 | 3.4 | 0.65 | 3 | 0.87 |
| 0.1 | 0.09 | 4.5 | 0.79 | 6.5 | 1.21 |
| 0.3 | 0.10 | 5.6 | 0.87 | 8.1 | 1.37 |
| 0.1 | 0.08 | 3.6 | 0.66 | 3.1 | 0.88 |
| 0 | 0.08 | 5.3 | 0.71 | 2 | 0.77 |
| 0.1 | 0.09 | 5.3 | 0.76 | 4.4 | 1.01 |
| 0.1 | 0.08 | 4.6 | 0.73 | 4.1 | 0.98 |
| 0.2 | 0.10 | 3.4 | 0.82 | 9 | 1.45 |
| 0.1 | 0.08 | 2.8 | 0.68 | 5 | 1.07 |
| 0.2 | 0.10 | 4.2 | 0.85 | 9.1 | 1.46 |
| 0.1 | 0.08 | 2.6 | 0.65 | 4.2 | 0.99 |
| 0.2 | 0.09 | 2.5 | 0.76 | 8.2 | 1.37 |
| 0.2 | 0.10 | 2.5 | 0.80 | 9.5 | 1.50 |
| 0.2 | 0.10 | 3.1 | 0.85 | 10.3 | 1.57 |
| 0 | 0.09 | 3.1 | 0.76 | 7.4 | 1.30 |
| 0.1 | 0.08 | 1.1 | 0.60 | 4.3 | 1.00 |
| 0.1 | 0.09 | 2 | 0.73 | 7.7 | 1.33 |
| 0.2 | 0.10 | 1.4 | 0.81 | 10.9 | 1.63 |
| 0.1 | 0.08 | 1.4 | 0.63 | 5.1 | 1.08 |
| 0.1 | 0.08 | 1.4 | 0.62 | 4.7 | 1.04 |
| 0 | 0.07 | 1.3 | 0.60 | 4.4 | 1.01 |
| 0 | 0.07 | 0.9 | 0.53 | 2.3 | 0.80 |
| 0 | 0.07 | 0.5 | 0.49 | 1.5 | 0.72 |
| 0 | 0.07 | 1 | 0.54 | 2.6 | 0.83 |
| 0.1 | 0.08 | 2.3 | 0.69 | 6.1 | 1.17 |
| 0 | 0.08 | 3.1 | 0.67 | 4.1 | 0.98 |
| 0.1 | 0.09 | 1.5 | 0.71 | 7.6 | 1.32 |
| 0.1 | 0.08 | 1.2 | 0.56 | 2.9 | 0.86 |
| 0.1 | 0.07 | 1.9 | 0.54 | 1 | 0.67 |
| 0 | 0.07 | 1 | 0.53 | 2.1 | 0.78 |
| 0.1 | 0.08 | 1.4 | 0.58 | 3.3 | 0.90 |
| 0 | 0.07 | 1.4 | 0.53 | 1.6 | 0.73 |
| 0 | 0.07 | 0.8 | 0.51 | 1.7 | 0.74 |
| 0 | 0.07 | 1 | 0.54 | 2.4 | 0.81 |
| 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |

## Appendix F: Extended Methods:

Mineral Separation

*Crushing*

Ensure the bench space, jaw crusher and disc mill are thoroughly cleaned before and after use with the compressed air gun, metal brush and ethanol.

Line the collection tray in the jaw crusher with paper to minimise contamination between samples.

Transfer sample from the collection tray to the disc mill to achieve zircon fraction.

Run sample through sieve using <79μm and >400μm mesh. Place the sieve into the Endcotts EPL2000 Super Shaker to allow fractions to separate.

Place each fraction into 3 seperate sample bags (>400μm, 400-79μm or <79μm) labelled accordingly with their grain fraction and sample number

*Mineral Separation*

Separation was done in B29 Mawson Laboratories at Adelaide University

Thoroughly clean the lab before use by wiping down benches, vacuuming floors and cleaning equipment with water and a compressed air gun before use.

Pan samples to separate light and heavy grains.

The lights were placed into a funnel with filter paper and dried in the oven overnight.

Heavies extracted are then placed on the hotplate to dry at 50°C.

A Neodymium (Nd) hand magnet is then run over the top of the heavy minerals to remove magnetic minerals.

Final separation is done using heavy liquids:

Rinse all equipment with deionised water and dry with a compressed air gun.

Funnel 8ml LST into each tube.

Add sample (no more than ½ small vile) and shake gently so grains are not sticking to the side and let sit for an hour.

Freeze samples on dry ice (allowing only the heavy fraction to freeze)

Pour off the light fraction into the filter paper-lined funnels to drain into beakers.

Rinse light fraction grains through 3-5 times with deionised water.
Light fraction then placed on a hotplate at 50°C to dry.

Once the heavy fraction has thawed out, repeat the filtration process.

*Picking Zircon*

Clean a glass petri dish with ethanol

Transfer the zircon sample into the glass petri dish and place under a microscope

Using a fine tipped pick, select zircons from the petri dish and place onto a glass plane with double sided tape applied to allow zircons to stick.

Repeat the process until ~250-300 grains have been picked. Lay out the zircons in rows ensuring that they don't get too close to the edge of the circle traced on the slide. Try to space the zircons so they are not touching one another and the mount is well labelled and recorded in a lab book.

*Epoxy Resin Zircon Mounts*

A teflon tubular mount coated in vaseline was placed on top of the glass pane so zircons are in the centre.

Epoxy resin was prepared using a two part epoxy resin; 5g epoxy with 1.15g hardener. These were carefully mixed in a disposable cup using a figure-8 pattern (to prevent air pockets forming) for 2-3min.

The resin was carefully poured into the teflon mount and left for a minimum of 12hours to set.

The epoxy mount was then removed from the glass plane using a razor blade and then cleaned with ethanol.

This process was repeated across all samples.

Epoxy mounts were polished using 9µm paper for the first cut and 6µm and 3µm paper after until the zircons were exposed and grinded down to approximately halfway through the zircon.

Samples were then polished on a 3 and 1 micron cloth lap using diamond paste.