# Textural and LA-ICP-MS trace element chemistry analysis of pyrite from Telfer Au-Cu deposit, W.A.: Implications for a multi-stage and/or multi-source ore system

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# TEXTURAL AND LA-ICP-MS TRACE ELEMENT CHEMISTRY ANALYSIS OF PYRITE FROM TELFER AU-CU DEPOSIT, W.A.: IMPLICATIONS FOR A MULTI-STAGE AND/OR MULTI-SOURCE ORE SYSTEM

## PYRITE ANALYSIS FROM TELFER AU-CU DEPOSIT


## ABSTRACT

Latest-generation microanalytical techniques, offering ppm-level precision coupled with micron-scale resolution, represent new methods to decipher the genetic history of an orebody. The 38.5 Moz world-class Au-Cu Telfer deposit is hosted within a sequence of Paleo- to Neoproterozoic marine sediments on the northwestern margin of the Paterson Orogeny, Western Australia. The deposit is characterised by two dome structures hosting a series of stratabound and vertically-stacked ore horizons ('reefs'). Pyrite, a typically refractory mineral, is a common component of Au-ores and is the dominant ore mineral at Telfer. Petrographic analysis and Scanning Electron Microscope back-scatter imaging established four morphologically discrete stages of pyrite and an abundance of associated minerals. Laser-Ablation Inductively Coupled Plasma Mass-Spectrometry spot analysis and element mapping on selected pyrite grains delineated trace element patterns that allow for development of a model of multi-stage ore genesis. Gold distribution in pyrite indicates deformation-induced remobilisation of initially lattice-bound Au. Gold expelled from the sulphide lattice during remobilisation is observed as grains of electrum and native gold within brittle fractures and fissures as well as micro-, and likely also nanoscale inclusions in pyrite. Silver, Bi, Te, Pb, Tl, Co, Sn and As were also seen reconcentrated into micro-fractures and at grain margins. Oscillatory pyrite growth, expressed by zonation of As, Co and Ni are prominent; the latter two suggesting a metal source of mafic origin. Enrichment of Sn, Bi, Cu ± Zn, Te, Au, and associated presence of exsolved stannite, chalcopyrite and accessory bismuthinite, aikinite, calaverite, tetradymite and tsumoite suggest a granitic source for at least one generation of pyrite. The pyrite morphology, and recorded trace element chemistry distribution in pyrite are concordant with a hypothesis by which the Telfer deposit is the product of a protracted multi-stage ore forming system or single mineralising event with multiple sources of metals and/or sulphur.



## KEYWORDS

Telfer, Au-Cu, Pyrite, Textures, Laser-Ablation Inductively Coupled Plasma Mass-Spectrometry, grain-scale mapping, multi-stage ore formation

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## INTRODUCTION

In a complex, multi-stage ore deposit, the preserved textures and trace element chemistry patterns in pyrite can record discrete phases of mineralising fluid. This assists identification of growth stages and fluid sources within a multi-phase or overprinted mineral system.

The world-class Au-Cu Telfer deposit (Reserve 11.7Moz Au @ 0.86 g/t, 0.63Mt Cu @ 0.12%; Newcrest Mining Limited 2012) is hosted within an exposed sequence of Paleo- to Neoproterozoic marine sediments surrounded by the Canning Basin, located to the northwest of the Paterson Orogeny, Western Australia (Figure 1a&b; Bagas 2004a). Controlled by two dome structures, Main Dome and West Dome (Figure 1c), the ore bodies are vertically-stacked, stratabound and consist of Au-Cu mineralised horizons ('reefs') with associated stockwork, sheeted- and discordant- veins (Rowins et al. 1997).

Since its discovery in 1972, a variety of models have been applied to explain 'Telfer-style' mineralisation. The current model takes into account the interrelationships between sedimentary environment, orogenesis and granite intrusions (Rowins *et al.* 1997). Although granitoids are not considered a major source of ore metals or sulphur at Telfer, Rowins *et al.* (1997) suggest they may nevertheless have been instrumental in driving large-scale thermal convection of heated saline waters sourced from the sedimentary host rocks. This was assisted by the presence of deep basement faults and permeable host rocks that permitted extensive transport of ore fluids and abundant chemical traps in the host sequence (Rowins *et al.* 1997).

This study reports trace element analysis and textural characterisation of pyrite from within sediments and reefs taken from diamond drill core sourced from the West Dome deposit at Telfer, Western Australia. This complements data on the Main Dome, on which most of the previous work has been carried out. Pyrite is generally a refractory mineral and a common component of gold ores. This study aims to show that different generations of pyrite at Telfer have characteristic trace element and textural patterns. Providing different generations of pyrite can be identified, these discrete signatures can be used to interpret mineralisation events, mineralisation sources and deformation events during the evolution of the deposit. Results are also intended to clarify ambiguity surrounding emplacement and genesis of Au-Cu 'reef' mineralisation at Telfer.

## GEOLOGICAL SETTING

### Regional Geology

The Paterson Orogen, located in northwest Western Australia, is a 2,000 km-long southwest-trending belt of metamorphosed Palaeoproterozoic to Neoproterozoic sedimentary and igneous rocks (Williams & Myers 1990, Langsford 2000). Geographically, the Paterson Orogen lies east of the Pilbara Craton, is in tectonic contact with the late Neoproterozoic Officer Basin and is overlain by the Phanerozoic Canning Basin to the northeast (Figure 1a) (Bagas 2004a). The northwestern portion of the Paterson Orogen is informally acknowledged as the Paterson Province and hosts the World-class Telfer Au-Cu deposit, the Nifty and Maroochydore Cu deposits and the Kintyre uranium prospect (Figure 1a; Bagas 2004a). The Paterson Province consists of the Palaeoproterozoic Rudall

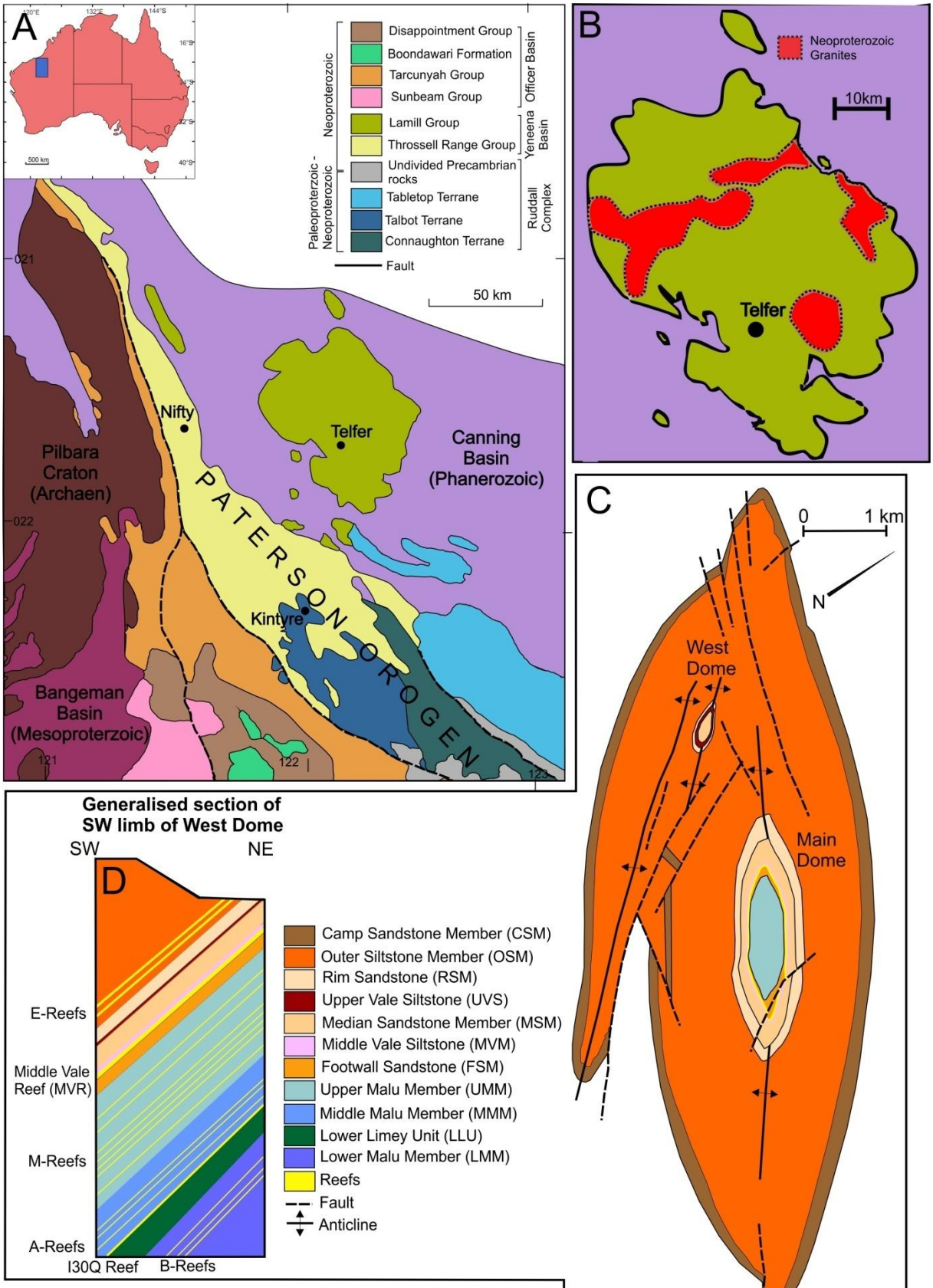


**Figure 1. (A) Geological map of the Paterson Province and locations of the Telfer and Nifty deposits and Kintyre prospects. Map adapted from Bagas (2004a); (B) Local granites are proximal to Telfer, located in the outcropping Neoproterozoic Lamil Group within the Phanerozoic Canning Basin. Map adapted from Czarnota (2009); (C) Telfer mine geology and locations of Main and West Dome structures (Map adapted from Goellnicht *et al.* 1989); and (D) a schematic generalised section of the SW limb of West Dome deposit looking WNW. Refer to Figure 2(b) for lithology horizon depths and thickness.**

Complex, the Neoproterozoic Yeneena Basin and the Tarcunyah Group of the northwest Officer Basin (Langsford 2000, Bagas 2004a).

## PROVINCE STRATIGRAPHY AND TECTONIC EVOLUTION

The basement Rudall Complex is a sequence of metamorphosed sedimentary and igneous rocks subdivided into three terranes (Figure 1a)(Bagas 2004b).

The Talbot Terrane (>1765 Ma) is the oldest of these rocks and is interpreted to have been a sedimentary and granitoid sequence prior to peak amphibolite facies metamorphism (Bagas 2004b). This unit outcrops in the northwestern margin of the complex. Outcropping in the central region of the complex, separated from the Talbot Terrane by an easterly dipping thrust fault, is the Connaughton Terrane (Bagas 2004b). The Connaughton Terrane (also <1765 Ma) is a mafic gneiss and schist sequence composed of amphibolite-granulite metamorphosed tholeiitic basalt and paragneiss derived from chemical and clastic sedimentary rocks (Bagas 2004b). The third terrane, the Tabletop Terrane, to the east of the Camel-Tabletop Fault Zone is located on the eastern margin of the complex (Figure 1a). This terrane is younger (ca. 1465 – 1222 Ma) and characterised by greenschist facies metamorphism, granitoids, banded iron-formations and ultramafic intrusive rocks in a tonalite-dominant lithology (Bagas 2004b). Unconformably overlying the Ruddall Complex is the Yeneena Supergroup which is subdivided into the Throssell Range and Lamil Group (Figure 1a) (Bagas 2004a, Grey *et al.* 2005). The Throssell Range Group comprises of the Coolbro Sandstone and Broadhurst Formation (Figure 2a). The Coolbro Sandstone consists of 0.5 to 3m-thick beds of massive to well-bedded sandstone. Trough and planar cross-bedding sedimentary features are common and low-grade greenschist metamorphism is

associated with the ca. 680 - 630 Ma Miles Orogeny (Bagas 2004a). The Coolbro sandstone fines upwards and contains interbedded silt lenses in a transitional contact with the overlying Broadhurst Formation. The Broadhurst Formation is a 2000 m-thick package of metamorphosed, grey, carbonaceous (graphitic) shale and siltstone, sandstone, lithic wacke, carbonate, and lenses of well exposed, fine- to coarse-grained sandstone. Sedimentary structures suggest the Throssell Range Group was deposited in a fluvial to shallow-water marine shelf environment (Grey *et al.* 2005).

Conformably overlying the Throssell Range Group is the Lamil Group comprising of the Isdell, Malu, Telfer, Puntapunta, and Wilki Formations (Figure 2a)(J. Maxlow pers. comm., 2012). The Isdell Formation is regionally variable, exceeds 1,000 m in thickness and is composed of dark-grey dolomitic limestone and dolomite intercalated with relatively thin layers of calcareous siltstone and shale (Grey *et al.* 2005).

The Telfer Au-Cu deposit is hosted within the Malu and Telfer Formations (Figure 2b). The Malu Formation is a regional term, which, in the Telfer mine stratigraphy includes the Rim-, Median- and Footwall-Sandstones, the Upper-, Middle- and Lower-Vale Siltstones and the Upper-, Middle- and Lower-Malu Members (Table 1, Figure 2b). A high-energy, prograding turbiditic depositional environment is suggested for the 1,500 m-thick sequence of predominantly siliciclastic sequences. The mineralised reefs (Middle Vale Reef, M-, A-, B- and I30Q reefs), stockwork, sheeted- and discordant-veins of the Telfer Au-Cu deposit are located within the Malu Formation (Figure 2b). Deposited in a shallow marine environment, the Telfer Formation overlies the Malu

Formation and is comprised of the Outer Siltstone, host to the E-reefs (Figure 1d and 2b), and Camp Sandstone Members. A detailed summary is provided in Table 1.

**Table 1 Lithology and mineralisation of the Telfer and Malu Formations.**

| Member | Thickness (m) | Lithology | Mineralisation |
|---|---|---|---|
| Camp Sandstone Member (CSM) | 100 | Defines top of the Telfer formation. Thickly bedded, fine to medium grained sandstone. | Weakly mineralised |
| Outer Siltstone Member (OSM) | 500 | Laminated argillaceous, calcareous and minor carbonaceous silstone and interbedded sandstones. | Host to the E-Reefs (West Dome) |
| Rim Sandstone (RSM) | 20-30 | Thickly bedded, coarse grained sandstone with argillaceous siltstone layers. | Hosts discordant quartz-sulphide veins and stockwork mineralisation |
| Upper Vale Siltstone (UVS) | 0-5 | Thinly bedded sideritic siltstone and minor fine-grained sandstone. | Weakly mineralised with disseminated pyrite |
| Median Sandstone Member (MSM) | 25-35 | Thickly bedded, fine grained, quartz sandstone with frequent silstone interbeds | Possible sheeted vein and stockwork related quartz-sulphide mineralisation |
| Middle Vale Siltstone (MVS) | 5-9 | Thinly bedded, fine grained argillaceous siltstone and claystone with minor interbedded carbonaceous limestone and calcareous sandstone | Hosts the Middle Vale Reef (MVR) |
| Footwall Sandstone (FSM) | 30-35 | Thickly bedded, fine to medium grained, siliclastic sandstone. Base of unit is often marked by coarse to very coarse turbidite activity. | Hosts discordant, sheeted vein and stockwork quartz-sulphide-carbonate mineralisation |
| Lower Vale Siltstone (LVS) | 2-5 | Thinly bedded silicified siltstone | Minor quartz sulphide veinlets |
| Upper Malu Member (UMM) | 620 | Thickly bedded, faintly laminated, fine - medium grained siliceous turbidite quartz sandstone, with a number of interbedded carbonate sandstone units. Sporadic dark carbonaceous silstone/shale units (interpreted as deposition in a deep marine environment) | M-Reefs and stockwork mineralisation |
| Middle Malu Member (MMM) | 290-320 | Sequence of very fine to coarse grained, interbedded to laminated quartz sandstone and siltstone, with varying amounts of dolomite and carbonaceous sediments. | M- and A-Reefs |
| Lower Limey Unit (LLU) | 9 | Variably massive to bedded fine to coarse grained carbonate sandstone. Muscovite flakes with dolomite and carbonate. Internal fabric, ptygmatic folding. | Massive sulphides |
| Lower Malu Member (LMM) | Open Ended | Faintly laminated, fine to medium grained siliceous turbidite quartz sandstone, minor interbedded siltstone and carbonate sandstone units. Dark, carbonaceous shale units occur towards base and top of the member. | Telfer deeps fold-axial vertical stockwork corridor, B-Reefs |

**Content from Maxlow (2012) adapted from Rowins *et al.* (1997)**

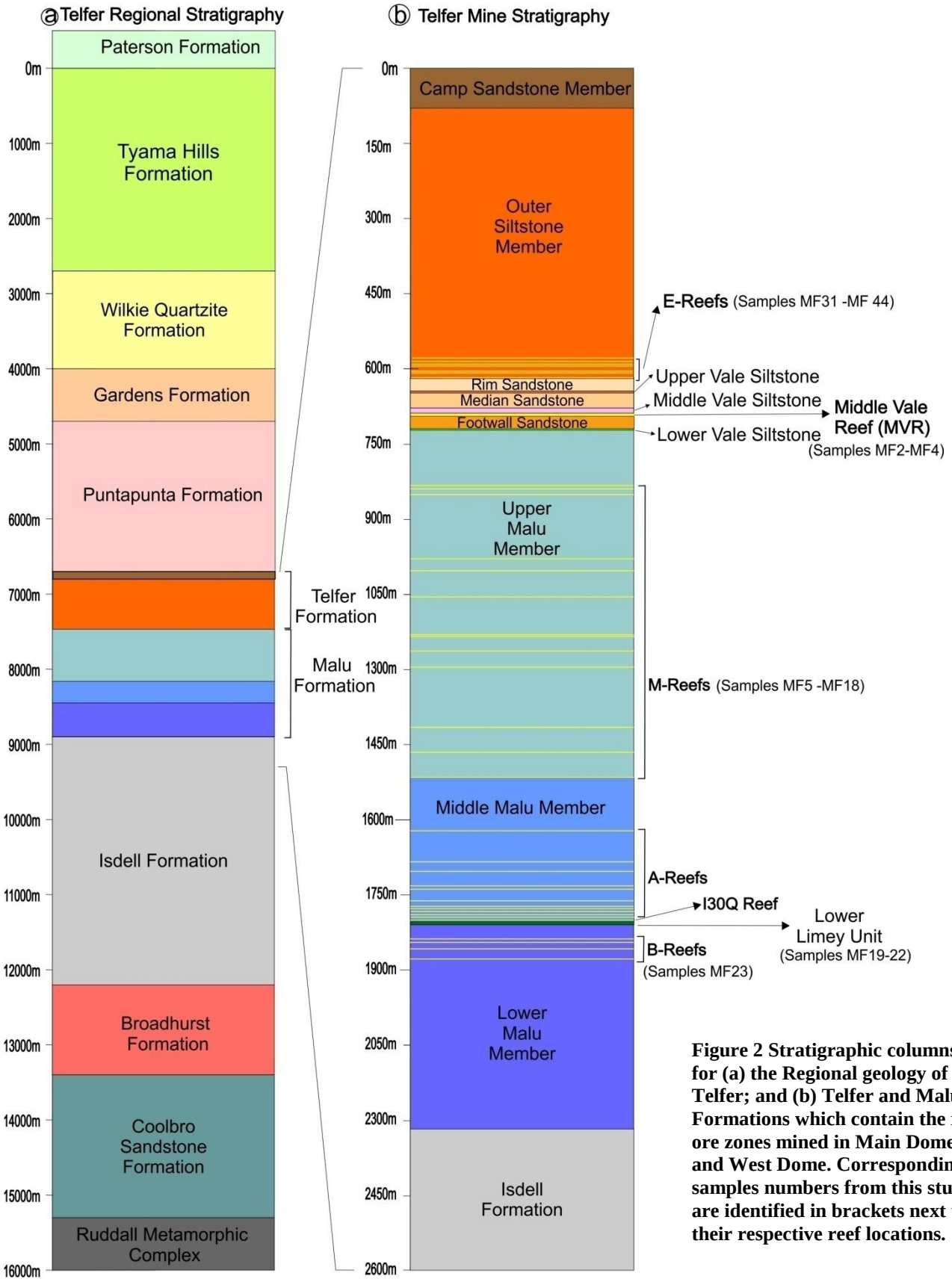


**Figure 2 Stratigraphic columns for (a) the Regional geology of Telfer; and (b) Telfer and Malu Formations which contain the reef ore zones mined in Main Dome and West Dome. Corresponding samples numbers from this study are identified in brackets next to their respective reef locations.**

Conformably overlying the Telfer Formation is the Puntapunta Formation, a 1.5 km-thick carbonate-shelf deposit comprising laminated dolomitic sandstone, grey dolomitic siltstone, chert, and shale with cross-bedding and planar sedimentary features (Grey *et al.* 2005). The Wilki Formation is the the youngest unit of the Lamil Group and conformably overlies the Puntapunta Formation through a transitional unit, the Gardens Formation. The Gardens Formation is composed of graphitic shale and siltstone, interbedded with fine-grained silt sandstone (Figure 2a). The bulk of 1.5 km-thick Wilki Formation consists of fine– to medium-grained silicified sandstone (Figure 2a; Grey *et al.* 2005).

An extensive history of metamorphism and deformation of the Paterson Orogen define three tectonic events detailed by Bagas (2004b). The earliest (ca. 1830-1765 Ma) Yapungku Orogeny (Geological Survey of Western 1996, Maxlow & Wilson 2005), is defined by southwest and west-directed thrust stacking and complex folding of the Rudall Group (Maxlow 2007). Convergence between the North and Western Australian Cratons has been interpreted as the cause of $D_1$-$D_2$ (Table 2) associated deformation and multiple stages of metamorphism (Bagas 2004b, Maxlow & Wilson 2005, Pirajno & Bagas 2008).

The Miles Orogeny (ca. 680 – 630 Ma) can be split into two regional scale compressive stress regimes differentiated by a progressive 15° anti-clockwise rotation (Bagas 2004b, Maxlow & Wilson 2005). NW-trending fold- thrust systems, particularly within the Rudall Complex, and local thrust faulting and isoclinal folding in the Throssell Range Group define a third deformation ($D_3$) event (Table 2; Bagas 2004b). Kilometre-scale

folding, conjugate oblique faults and well developed regional foliation is recognised as an expression of a $D_4$ event superimposed on $D_3$ (Table 2). Interference between $D_3$ and $D_4$ in conjunction with weak vertical compression is interpreted to have led to the development of doming, bedding dilation and quartz-pyrite reef mineralisation (Maxlow & Wilson 2005, Maxlow 2007).

The Paterson Orogenic event (ca. 550 Ma) saw progressive clockwise rotation of principle compressive stresses (Bagas 2004b). Characteristic $D_6$ (Table 2) orogenic scale NNW- striking dextral faults and ENE-striking sinistral faults are evident in both Rudall Range and Yeneena Supergroups. This Orogeny was synchronous with the emplacement of multiple phases of granite intrusions, associated contact metamorphism, reactivation of $D_4$ structures and development of mineralisation (Bagas 2004b).

**Table 2 Summary of the tectonic evolution of the Paterson Orogen**

| Deformation Event | Timing | Associated Orogenic Event | Resultant structural evidence and associated metamorphism |
|---|---|---|---|
| $D_1$ | Paleoproterozoic (SHRIMP U-Pb zircon min age 1802 ± 14 Ma) | Yapunku Orogeny | - Folitation defined by the preferred alignment of micaceous minerals.<br>- Overprinted folding with the exception of remnant hinges<br>- Amphibolite-granulite facies metamorphism |
| $D_2$ | Paleoproterozoic (SHRIMP U-Pb zircon min age 1778 ± 16 Ma) | Yapunku Orogeny | - N-trending isoclinal folding, thrusts and associated schistoscity and lineations within the Rudall Complex<br>- Granulite facies metamorphism |
| $D_3$ | Neoproterozoic (SHRIMP U-Pb titanite minimum age ca. 678) | Miles Orogeny | - NW-trending folds and faults in the Rudall Complex;<br>- Recumbent folds in the Throssell Group |
| $D_4$ | Neoproterozoic (SHRIMP U-Pb titanite minimum age ca. 678) | Miles Orogeny | - Kilometre-wide folds and a conjugate set of NNE - ESE oblique faults<br>- Low greenschist metamorphism |
| $D_5$ | Uncertain, may be related to the Paterson Orogeny | Paterson Orogeny (?) | - NE-trending open folds and strike-slip faults |
| $D_6$ | Neoproterozoic (post dates ca. 610 Ma glacdiogenic Boondawari Formation | Paterson Orogeny | - NW-striking dextral faults, ENE striking sinistral faults and associated strain-slip cleavage<br>- Reactivation of D4 faults<br>- Open folds |

Data from Bagas (2004b and references therein).

Sag or extensional regimes in the Officer and Canning Basins resulted in a final post orogenic succession of intra-cratonic basin infill of arenaceous strata (Maxlow 2007).

## Telfer mine geology and genesis

Since the discovery of the Telfer deposit in 1972, a variety of models have been proposed to explain the features of 'Telfer-style' mineralisation. These features are defined by Neoproterozoic (ca. 678 Ma) reef-style mineralisation and location within a polymetallic (Au, Cu, W, Pb, Zn, and U) province (Rowins *et al.* 1997). This is in contrast to other Au-dominant provinces in Western Australia that are predominantly Archaean lode-deposits. Early metallogenesis hypotheses for the Telfer deposit included syngenetic exhalative (Turner 1982, Tyrwhitt 1985), epigenetic replacement (Goellnicht 1987, Goellnicht *et al.* 1989), and the distal halo of a porphyry Cu-Au system (Dimo 1990, Harley & Charlesworth 1992).

Comparable lead isotope compositions from pyrite in Main Dome, West Dome and within the mine sequence suggested that mineralisation formed from hydrothermal fluids with similar magmatic and sedimentary sources; therefore implying mineralisation was the product of a single hydrothermal system rather than a series of unrelated systems (Rowins et al. 1997). These authors further proposed features of 'Telfer-style' mineralisation were attributable to the interrelationships between sedimentary environment, orogenesis and granite intrusions. Although granitoids are not considered a major source of ore metals or sulphur, they were instrumental in driving large-scale thermal convection of heated saline waters sourced from the sedimentary host rocks (Rowins *et al*. 1997). The model of sediment-derived mineralisation

proposed by Rowins *et al*. (1997) was supported by the high S/Se ratio (>100,000) from reef and sediment-hosted pyrite from Main and West Dome, and is based on pyrite formed in sedimentary environments having high S/Se ratios compared to those with a magmatic hydrothermal origin as reported by Hutson *et al.* (1995). Thermal convection and the leaching of metals from sediments may have been assisted by the presence of deep basement faults and permeable host rocks that permitted extensive transport of ore fluids, and abundant chemical traps in the host sequence. Although the single-source model has prevailed in recent years, the relatively wide range of $\delta^{34}S$ in Main Dome pyrite grains measured by Rowins *et al.* (1997) leaves the possibility of multiple sulphur sources open.

$^{40}Ar/^{39}Ar$ geochronology has been used to provide constraints on ore formation (Durocher *et al.* 2003). These data infer that Telfer is likely a product of a mineralisation event associated with the Miles Orogeny, however there is uncertainty about the relative roles of orogenic thermal activity (ca. 680-630 Ma), post-orogenic magmatism (ca. 630-610 Ma) and possible overprinting during the Paterson Orogeny (ca. 550 Ma). There are three Neoproterozoic granites within a 50 km radius to Telfer (Figure 1b). On the basis of overlapping SHRIMP U-Pb zircon ages Rowins *et al.* (1997) considered the granites to be coeval, contemporaneous with or post-dating the Miles Orogenic event, and important for ore genesis at Telfer. This, along with local deep basement structures, led Groves et al. (2003) to consider the possibility that the Telfer deposit may actually belong to the relatively new, and somewhat controversial category of ‘intrusion-related’ ore deposits.

## Trace element chemistry of pyrite

Pyrite is generally a refractory mineral and a common component of gold ores. Provided that total recrystallisation has not occurred, textural and trace element analysis of pyrite has proven useful in studies aimed at deciphering the multi-stage genetic development of ore deposits (Arehart *et al.* 1993, Fleet *et al.* 1993, Oberthür *et al.* 1997, Genkin *et al.* 1998). In particular, using trace element chemistry to identify distinct generations of pyrite can assist in identifying mineral growth stages within a multi-phase or overprinted mineral system (Large *et al.* 2009). Development of analytical tools to deliver more accurate concentration data with improved spatial resolution has enabled greater understanding in trace element distribution and mechanisms of incorporation within common sulphides (Large *et al.* 2007, Cook *et al.* 2009, Large *et al.* 2009, Sung *et al.* 2009, Thomas *et al.* 2011).

Microstructure growth features surrounding pre-hydrothermal pyrite are common. Rims and zonation often exhibit variable As and other trace element content (eg Co, Ni, Bi) to that of the original crystal, providing a record of ore-fluid evolution. For instance rims of Au-rich arsenian pyrite have been demonstrated to commonly occur as overgrowths in sediment-hosted disseminated Au ores (Arehart *et al.* 1993, Fleet *et al.* 1993). Oscillatory zonation within these ores was attributed to episodic fluctuation in fluid composition during crystal growth. High Au content correlated with elevated As values, but conversely As-rich bands did not correlate with high Au values inferring that As-rich ore solutions are not invariably Au-bearing (Fleet *et al.* 1993).

Deformation, sulphide recrystallisation and thermal evolution were invoked to explain the post-depositional redistribution and recrystallisation of Au in Bogosu and Prestea ores, Ghana (Mumin *et al.* 1994), with inferences for the behaviour of other lattice-bound elements. A study by Larocque & Hodgson (1995) on the metamorphic remobilisation of Au in pyrite from the Mobrun orebody, Quebec, reported that the highest values for Au were found in primary granular and massive fine-grained pyrite. Recrystallised pyrite and pyrite in secondary veins contained the lowest Au concentrations and was understood to be a function of the degree of recrystallisation; the lower the Au content the higher the extent of recrystallisation. The authors proposed that primary mineral assemblages influenced sulphur levels, and therefore controlled the preferential precipitation of pyrite in high sulphur systems and explained the partitioning of Au in secondary phases.

In contrast, other studies have shown that primary sulphide grains can also be Au-deficient (e.g. in orebodies from the Ashanti Belt, Ghana (Oberthur *et al.* 1997), or the Olympiada, Veduga, Nezhdaninskoye and Sentachan deposits, Siberia (Genkin *et al.* 1998). Alteration halos, growth zonation and late stage crosscutting veins containing native gold were interpreted to be growth mineralisation from mesothermal fluids in a multistage process.

An investigation on pyrite trace element chemistry and preserved textures in the Sunrise Dam deposit W.A (Sung *et al.* 2009) revealed a variety of distinct pyrite textures and mineral associations that broadly correlate with deformation stages. The paragenetic complexity and multifaceted speciation of Au at Sunrise Dam was associated with

mechanisms for mineral precipitation, mechanisms for Au incorporation and local redistribution of Au.

## METHODS

Representative core samples were collected from the West Dome deposit drillholes WRC17902, WRC28601 and WRC15023 (Appendix 2), identified by the district geologist to contain representative examples of West Dome mineralisation. A total of 43 one-inch polished blocks were prepared by Pontifex and Associates and examined under a Nikon LV100 polarizing microscope and FEI Quanta 450 scanning electron microscope (SEM) with energy dispersive X-ray spectrometry and back-scattered electron (BSE) imaging capabilities (Adelaide Microscopy, University of Adelaide).

A total of 2,765 Laser-ablation Inductively-Coupled Plasma Mass Spectroscopy (LA-ICP-MS) spot analyses were performed on 37 polished blocks representing different paragenetic stages within the West Dome ore system. A Resonetics M-50-LR 193-nm Excimer laser ablation instrument was used coupled to an Agilent 7700cx Quadrupole ICP-MS (Adelaide Microscopy, University of Adelaide). Data reduction was performed using Glitter software (GEMOC 2005). Single-spot analyses were performed with a laser beam diameter of 32 μm. Reference standard Mass-1 (Wilson *et al.* 2002) was used as the external standard, with Fe concentrations from ideal pyrite as the internal standard. Data was collected for 90 seconds, including an initial 30 seconds background measurement before firing the laser. The following 31 isotopes were monitored: $^{23}$Na, $^{29}$Si, $^{33}$ S, $^{34}$ S, $^{43}$Ca, $^{51}$V, $^{52}$Cr, $^{55}$Mn, $^{57}$Fe, $^{59}$Co, $^{60}$Ni, $^{65}$Cu, $^{66}$Zn, $^{69}$Ga, $^{75}$As, $^{82}$Se, $^{95}$Mo,

$^{107}$Ag, $^{111}$Cd, $^{115}$In, $^{118}$Sn, $^{121}$ Sb, $^{125}$Te, $^{137}$Ba, $^{184}$W, $^{193}$Ir, $^{197}$Au, $^{202}$Hg, $^{205}$Tl, $^{208}$Pb and $^{209}$Bi. The lowest values of minimum detection limit (mdl, 99% confidence) are detailed in Appendix C.

LA-ICP-MS element mapping, using the same LA-ICP-MS system was performed on four selected pyrite grains by ablating sets of parallel line rasters. 19 elements (Fe, S, Zn, Au, Co, Te, As, Bi, Ni, Se, Cl, Sn, Pb, Ag, W, Mo, Ga, Sb and U) were measured from the four samples. The smallest grain was ablated using a rectangular grid with 5μm line spacing, beam size of 5μm and scan speed of 10μm/s. Three larger grains were ablated using a rectangular grid with 7μm line spacing, beam size of 7μm and scan speed of 14μm/s. Images were compiled and processed using the program Iolite developed by the Melbourne Isotope Group at Melbourne University (Woodhead *et al.* 2007).

## RESULTS

Morphological and textural variation in pyrite, the associated minerals, the occurrence and distribution of Au-minerals within pyrite, and the concentrations and distribution of trace and minor elements in the different pyrite sub-populations within the West Dome deposit at Telfer are addressed below.

When selecting samples from the core, the mineralised quartz-dominant reef horizons were easily identifiable in contrast to the host sandstones and siltstones. Chalcopyrite and pyrite were the common sulphides, the latter observed as either euhedral

(pyritohedral), massive, milled or brecciated grains. Grain size was generally coarse (1mm to >1cm) and morphological variability between reefs was marginal. See Appendix B for detailed sample locality and descriptions.

**Pyrite morphology**

Interpretation of trace element signatures as a function of pyrite texture and paragenesis is dependent on identification and interpretation of key sub-populations that represent distinct metal sources or otherwise genetically-distinct types and the consistency of these across the deposit. Three main textures were consistently observed for pyrite throughout the sample suite.

The first texture was coarse-grained (50-400 µm), euhedral pyrite with inclusions of quartz, carbonate and illite were common in samples from outside the "reef" e.g. within sandstone host rocks in the foot- or hangingwalls (Figure 3a). Pyrite from within any given reef frequently contained subhedral grains, grain fragments and remnants of this first pyrite. This texture was identifiable within reef samples, where all three pyrite textures were frequently observed together, by areas containing dense clusters of gangue inclusions (Figure 3b).

The second texture was compositional zoning with respect to As and Co (Figure 3a, c and d). This zoning is primary and pre-dates any fracturing or subsequent infill. In its most simplistic form, zoning is recognised as a characteristic but not ubiquitous As-rich rim on euhedral pyrite (Figure 3a). More complex, compositional zonation can be distinguished in individual grains (Figure 3c) and as overgrowths merging between

multiple pyrite grains (Figure 3d). This pyrite is generally recrystallised as fine-grained, euhedral pyrite devoid of any gangue inclusions (Figure 3c and d).

The third texture was recognised from detailed micro-scale analyses of samples at high resolution revealed what may be a granitic signature evident within a discrete phase of pyrite. Exclusive to large to giant pyrite grains (>500 µm) in the reef ore zones, the texture is characterised by fine-grained (<10 µm) clustered multicomponent exsolution blebs of minerals containing 'exotic' elements (Bi-Sn-Cu ± Te, Au, Zn) (Figure 3f). Eleven of fourteen E-reef samples (Figure 1d and 2b), hosted by the Outer Siltstone Member (Table 1), and 50% of the samples taken from WRC17902 (Appendix C) were found to contain such exsolutions. These elements are interpreted to have been 'sweated out' from the pyrite during cooling (Figures 3f) and display little or no preferred orientation. The exsolved minerals are typically clustered together and are rarely observed without similar minerals of similar size and random orientation in close proximity. Taken together, the three phases of pyrite give rise to the likelihood for a multistage ore genesis.

Although varying in intensity from sample to sample, un-orientated brittle fracturing is ubiquitous and overprints all pyrite textures (Figure 3e). Fracturing is generally less intense among samples from outside the ore zones, consistent with previous structural studies of the system (e.g. Vearncombe and Hill 1993). The reef samples commonly exhibit intense fracturing cross-cutting inherited textures and, in some instances a late (?) brecciation. Arsenic zonation, coupled with selected fractures displaying similar cross-cutting relationships, provides evidence for secondary zonation (Figure 3e). Infill

often consists of gangue or remobilisation ductile sulphides, notably chalcopyrite and galena.

Unique to sample MF24, retrieved from a crumbly, clay-rich shale horizon, an aggregate of fine-grained hypidiomorphic pyrite was observed. The two examples, 200 x 100 µm and 500 x 200µm respectively, both contain cores of magnetite. It is likely that these represent a syngenetic (biogenic) pyrite. LA-ICP-MS spot analysis was not carried out on these two samples due to their limited distribution.

## Pyrite trace element chemistry (LA-ICP-MS spot and elemental map analyses)

In order to delineate the trace element chemistry within the three phases of pyrite, LA-ICP-MS spot analyses was conducted on 37 samples. Table 2 summarises minor and trace element concentrations in 2,765 spot analyses of pyrite by ore zone; a full data set and sample summary is given as Appendix C.

Measured Au concentrations range from <mdl – 112,642 ppm Au with a mean of 65.6 ppm Au. Mean Au concentration changed to 0.93 ppm Au if three outlier values (>1,000 ppm Au) were excluded from the data set (the next highest individual spot being only 107 ppm Au).

The three outliers are readily attributable to inclusions of electrum and Au-telluride based on anonymously high Ag and Te concentrations. The large variation of Au concentrations across the gamut of spots analysed most likely reflects a style of nugget effect whereby Au is found as sub-micron to nano-scale inclusions of native Au-

minerals, rather than lattice bound Au which would appear more homogenously distributed. Mean Au concentrations in pyrite from the ore zones range from 0.38 to 9.8 ppm Au, with five of eight samples reefs containing an average of <1.0 ppm Au. 94% of spot analyses for the non-orezone samples (total 50 spot analyses) are below mdl and the mean is reduced from 12 ppm to 1.41 ppm Au when an outlier (33ppm) is removed.

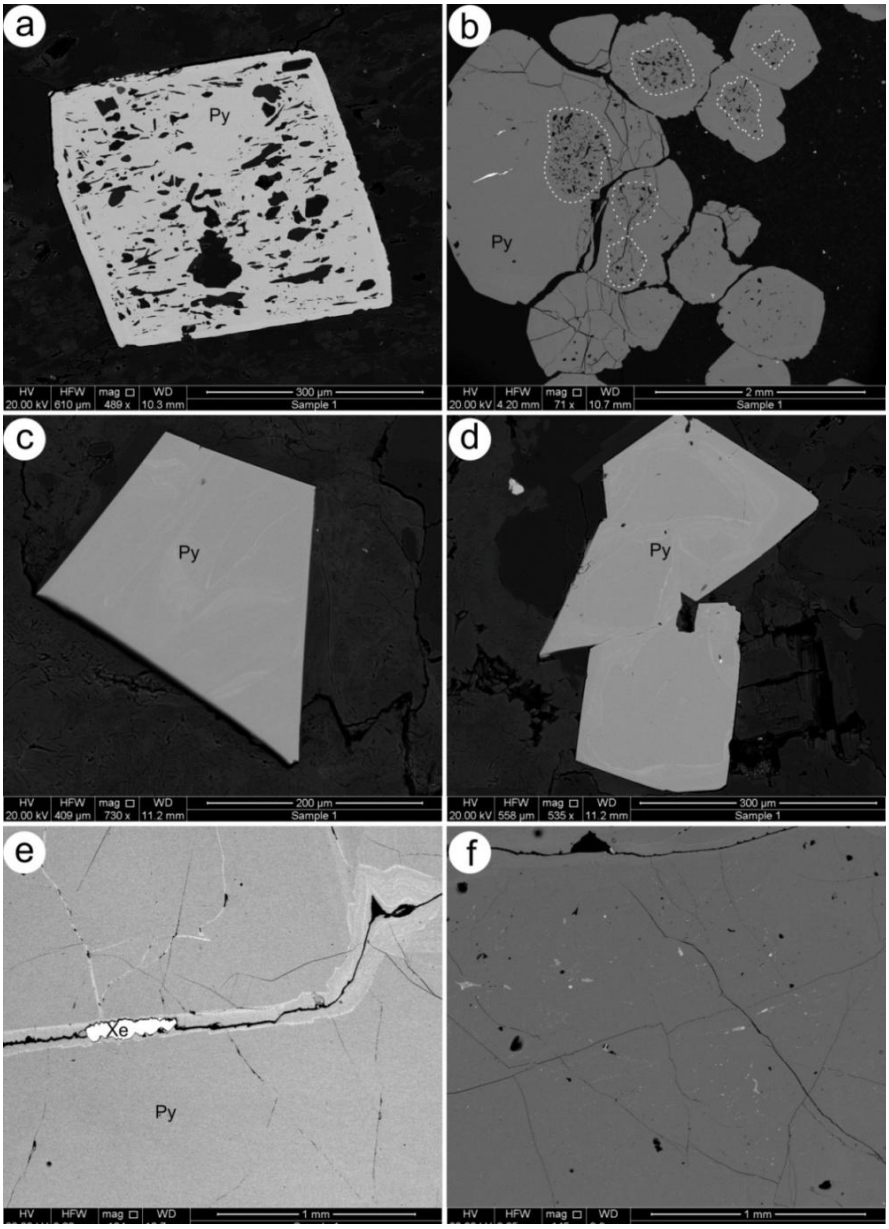


**Figure 3 Back-scatter electron images of identified textural phases in West Dome pyrite. (a) Inclusions of quartz and carbonate in a idiomorphic grain of pyrite. In addition an arsenic rim absent of inclusions can be identified; (b) Remnant pyrite containing gangue inclusions (circled in white) within larger grains of subhedral pyrites. Fractures cross cut both remnant and overgrowth pyrite; (c) Euhedral grain of pyrite with internal arsenic zonation; (d) Three euhedral pyrite grains joined by an overgrowth of oscillatory zonation; (e) Secondary arsenic zonation attributed to fracturing in which a large grain of xenotime (Xe) has crystallised; and (f) fine grained exsolution blebs in massive fractured pyrite.**

Arsenic content varies from 2.1 to 46,766 ppm. Values are consistently high (> several thousand ppm) amongst all sampled zones, with their means falling within one standard deviation of the overall average (6,732 ppm As).

Spot analyses were randomly placed in all samples except in E-reef samples MF33 (80 spot analyses) and MF44 (7 spot analyses) where As-enriched grain boundaries, identified using back-scatter electron imagery, were targeted. Cobalt was the only element with a comparable difference within the 87 spots analysed. Whereas all other E-reef samples had mean Co values of <600 ppm Co, sample MF33 and MF44 had mean Co concentrations of 1,891 and 6,912 ppm Co, respectively. Similar to As in these samples, Co concentrations varied widely within the remainder of the sample suite and ranged from 0.07 ppm to 25,999 ppm. Notably, higher average concentrations are seen in the samples from WRC17902 (average values >1,200 ppm Co). The non-orezone Co mean concentration was significantly lower (254 ppm Co).

Concentrations of Ni and, to a lesser extent, Se appeared to be the only trace elements that differed between the ‘possible M10’ reef and other orezones. The Ni and Se concentrations measured within the ‘possible M10’ reef correlated better with non-orezone samples relative to the orezone samples (Ni: 1,178 and 1,150 ppm, Se: 23 and 11 ppm, respectively). These data may suggest that a similar pyrite phase exists within ‘possible M10’ and the non-orezone pyrite.

Copper concentrations within the sample suite span more than six orders of magnitude (0.2 to 597,030 ppm ). Fifteen E-reef spot analyses recorded Cu-concentrations

| Ore Zone | | $^{55}$Mn | $^{59}$Co | $^{60}$Ni | $^{65}$Cu | $^{66}$Zn | $^{69}$Ga | $^{75}$As | $^{82}$Se | $^{95}$Mo | $^{107}$Ag | $^{111}$Cd | $^{115}$In | $^{118}$Sn | $^{121}$Sb | $^{125}$Te | $^{184}$W | $^{197}$Au | $^{197}$Au** | $^{202}$Hg | $^{205}$Tl | $^{208}$Pb | $^{209}$Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MVR** | Min | 0.09 | 0.71 | 0.03 | 0.69 | 0.33 | 0.01 | 808 | 0.89 | 0.00 | 0.00 | 0.01 | 0.00 | 0.04 | 0.00 | 0.02 | 0.00 | 0.00 | - | 0.14 | 0.00 | 0.01 | 0.00 |
| (n=239) | Max | 2663 | 12804 | 4138 | 824 | 919 | 4949 | 34778 | 35 | 53 | 92 | 8.2 | 40 | 8416 | 49 | 2387 | 2514 | 38 | - | 100 | 52 | 1243 | 3357 |
| | Mean | 19 | 1448 | 328 | 19 | 12 | 64 | 5562 | 2.5 | 0.92 | 2.7 | 0.15 | 0.53 | 55 | 0.54 | 17 | 17 | 0.38 | - | 8.3 | 0.49 | 24 | 26 |
| | SD | 186 | 2608 | 531 | 57 | 80 | 527 | 4206 | 3.4 | 5.2 | 7.7 | 0.87 | 4.4 | 609 | 3.6 | 168 | 177 | 2.8 | - | 28 | 4.4 | 94 | 220 |
| **Possible M10*** | Min | 0.15 | 0.48 | 0.64 | 0.69 | 0.47 | 0.01 | 6.1 | 1.4 | 0.01 | 0 | 0.02 | 0 | 0.07 | 0.01 | 0.02 | 0 | 0 | 0 | 0.41 | 0 | 0.02 | 0 |
| (n=240) | Max | 2054 | 23838 | 6427 | 220371 | 2685 | 39 | 46766 | 49 | 74 | 999 | 20 | 13 | 4266 | 37 | 289 | 16 | 1853 | 63 | 0.82 | 1 | 80850 | 544 |
| | Mean | 42 | 3243 | 1150 | 7106 | 30 | 2.3 | 6889 | 11 | 1.5 | 45 | 0.34 | 0.32 | 43 | 1.9 | 26 | 0.91 | 9.8 | 1.3 | 0.6 | 0.13 | 3195 | 58 |
| | SD | 194 | 4215 | 1479 | 22849 | 198 | 5.2 | 7185 | 9.6 | 7.6 | 101 | 2.1 | 1.1 | 317 | 3.5 | 42 | 2 | 125 | 6 | 0.11 | 0.16 | 11719 | 79 |
| **M20** | Min | 0.09 | 0.21 | 0.09 | 0.2 | 0.29 | 0 | 2.1 | 0.66 | 0.01 | 0 | 0.01 | 0 | 0.06 | 0 | 0.02 | 0 | 0 | 0 | 0.15 | 0 | 0.01 | 0 |
| (n=359) | Max | 3480 | 25999 | 4000 | 38739 | 10759 | 1910 | 37058 | 16 | 16 | 9251 | 4.3 | 74 | 9716 | 62 | 304 | 1192 | 112642 | 107 | 22 | 49 | 927 | 1841 |
| | Mean | 42 | 3291 | 392 | 734 | 72 | 19 | 8150 | 3.3 | 0.37 | 37 | 0.1 | 0.91 | 96 | 1.4 | 15 | 16 | 339 | 2 | 0.65 | 0.34 | 45 | 65 |
| | SD | 282 | 4793 | 563 | 3607 | 667 | 156 | 6707 | 2.7 | 1.5 | 522 | 0.43 | 6.1 | 748 | 4.6 | 28 | 86 | 6163 | 7 | 2 | 3 | 113 | 152 |
| **M40** | Min | 0.13 | 0.07 | 0.03 | 0.25 | 0.26 | 0 | 17 | 0.37 | 0 | 0 | 0.01 | 0 | 0.06 | 0 | 0.01 | 0 | 0 | - | 0.03 | 0 | 0.02 | 0 |
| (n=380) | Max | 3409 | 14565 | 1984 | 81279 | 313 | 204 | 19617 | 10 | 42 | 12 | 0.48 | 7.3 | 1418 | 12 | 35 | 76 | 9.2 | - | 1.2 | 0.68 | 258 | 154 |
| | Mean | 80 | 1226 | 173 | 297 | 11 | 3.6 | 5126 | 2.3 | 0.83 | 0.54 | 0.05 | 0.46 | 47 | 0.74 | 2.7 | 1.8 | 0.5 | - | 0.46 | 0.05 | 13 | 11 |
| | SD | 379 | 2026 | 311 | 4702 | 47 | 22 | 3432 | 2 | 5.1 | 1.5 | 0.07 | 1.2 | 174 | 1.6 | 5.4 | 8.7 | 1.3 | - | 0.22 | 0.12 | 32 | 22 |
| **LLU** | Min | 0.17 | 38 | 2.1 | 0.43 | 0.35 | 0.01 | 104 | 1.6 | 0.01 | 0 | 0.02 | 0 | 0.08 | 0 | 0.02 | 0 | 0 | - | 0.19 | 0 | 0.03 | 0 |
| (n=440) | Max | 2434 | 20961 | 1984 | 321159 | 301 | 48 | 24622 | 13 | 14 | 82 | 1.7 | 16 | 977 | 64 | 1159 | 179 | 36 | - | 1.1 | 55 | 2475 | 5973 |
| | Mean | 81 | 2683 | 463 | 7744 | 7.1 | 0.85 | 6261 | 4 | 0.22 | 7.4 | 0.13 | 0.69 | 20 | 4.7 | 24 | 1.8 | 0.79 | - | 0.42 | 2.5 | 92 | 67 |
| | SD | 266 | 3620 | 409 | 31914 | 20 | 3.9 | 3811 | 2.3 | 1.1 | 15 | 0.19 | 2.2 | 76 | 8.2 | 101 | 12 | 2.1 | - | 0.19 | 7.3 | 236 | 335 |
| **B-Reef** | Min | 0.32 | 33 | 17 | 0.71 | 0.67 | 0.01 | 636 | 3.00 | 0.01 | 0 | 0.03 | 0 | 0.17 | 0.04 | 0.21 | 0 | 0.01 | - | 0.37 | 0 | 0.04 | 0.02 |
| (n=80) | Max | 5103 | 12092 | 3067 | 120253 | 84 | 109.00 | 17330 | 11 | 0.50 | 6.0 | 0.68 | 2.4 | 106 | 6.7 | 100 | 68 | 12 | - | 0.91 | 0.39 | 152 | 294 |
| | Mean | 81 | 4505 | 630 | 2370 | 4.3 | 9.3 | 6245 | 5.0 | 0.08 | 0.81 | 0.09 | 0.12 | 11 | 0.95 | 15 | 1.9 | 0.83 | - | 0.51 | 0.08 | 24 | 35 |
| | SD | 633 | 3112 | 843 | 13543 | 10 | 21.7 | 3768 | 2.1 | 0.11 | 1.2 | 0.14 | 0.33 | 22 | 1.5 | 20 | 8.5 | 1.9 | - | 0.15 | 0.10 | 30 | 48 |
| **Non-orezone** | Min | 0.16 | 4.3 | 200 | 0.85 | 0.35 | 0.03 | 486 | 14 | 0.12 | 0.07 | 0.03 | 0.01 | 0.31 | 0.17 | 0.48 | 0.04 | 1 | 1.79 | 0.33 | 0.01 | 0.08 | 0.58 |
| (n=50) | Max | 1551 | 1469 | 8029 | 29805 | 150 | 31 | 25933 | 36 | 13 | 5.7 | 0.1 | 3.3 | 105 | 3.7 | 14 | 9.3 | 33 | 1.03 | 0.56 | 0.42 | 104 | 92 |
| | Mean | 96 | 254 | 1778 | 1143 | 14 | 3.6 | 6873 | 23 | 1.3 | 1.5 | 0.06 | 0.24 | 8 | 0.85 | 4.6 | 1.1 | 12 | 1.4 | 0.42 | 0.07 | 8.7 | 31 |
| | SD | 316 | 375 | 1693 | 4369 | 29 | 5.6 | 5099 | 5.1 | 3.3 | 1.7 | 0.02 | 0.62 | 19 | 0.76 | 3.3 | 2.2 | 18 | 0.54 | 0.08 | 0.08 | 20 | 24 |
| **E-Reefs** | Min | 0.13 | 0.08 | 0.17 | 0.31 | 0.34 | 0.01 | 2.9 | 1.6 | 0.05 | 0 | 0.03 | 0 | 0.14 | 0.05 | 0.43 | 0.01 | 0.01 | - | 0.7 | 0 | 0.05 | 0.07 |
| (n=887) | Max | 2463 | 22034 | 12208 | 597030 | 432 | 71 | 25941 | 31 | 6.1 | 30 | 43 | 16 | 3581 | 17 | 119 | 232 | 32 | - | 21 | 312 | 252 | 617 |
| | Mean | 7.6 | 540 | 593 | 13227 | 16 | 1.6 | 5870 | 4.8 | 0.31 | 1.1 | 0.7 | 0.78 | 67 | 0.96 | 7.3 | 4.5 | 0.47 | - | 3.9 | 5.1 | 12 | 28 |
| | SD | 91 | 1227 | 1274 | 79788 | 54 | 6.3 | 3986 | 3.9 | 0.64 | 2.9 | 3.3 | 2.7 | 281 | 1.6 | 16 | 17 | 1.6 | - | 4.6 | 23 | 28 | 58 |

**N.B** * Pyrite within this zone were sourced from veins and siliceous silstone due to the absence of a homogenous 'reef'

**Value excluding outliers, four outliers discussed.

(1) Unless noted otherwise, trace element concentrations were calculated on logarithmic concentrations in ppm.

(2) For plotting, analyses below minimum detection limit (mdl) were assigned an arbitrary half the mdl value.

(3) To enable logarithmic plots, values equal to zero were assigned a value of 0.01 but nevertheless given as zero in tables and statistical calculations.

>50wt% (see Appendix C), this is likely attributable to observed bornite, chalcocite and covellite inclusions. Detailed analyses of the E-reef sample (887 spot analyses) revealed an average Cu concentration of 13,227 ppm, approximately two-fold greater than all other measured samples. Copper concentrations within all zones varied substantially, which may be attributed to varying densities of included chalcopyrite or other Cu-minerals.

Tin, Te, Bi, Pb and Ag display wide ranges and standard deviations that exceed their average concentration. Inclusion mineralogy is a likely explanation for this trend and discussed in greater detail below.

In addition to LA-ICP-MS spot analyses, LA-ICP-MS element maps were obtained for four selected grains of texturally variable pyrite. Oscillatory zonation within lattice bound As, Co and Ni were observed in all four grains mapped (Figures 4 – 7). Sample MF6 preserves three discrete textures being cores of gangue inclusions, growth zones devoid of inclusions and pervasive fracturing. This grain shows a strong correlation between Ni and Co zonation, however, no such relationship between As-enrichment and Ni and Co zonation was observed. The visible micro-fractures in the back-scatter electron (BSE) image correlate with enrichment of Ag and Bi. Mobilisation of elements into a set of micro-fractures that are invisible on the BSE image was specific to Ag, Bi, Co and As; this trend was however not observed for Ni. Fracture orientation within the larger grain is apparent but absent in the smaller grains. Inclusion rich cores are deficient in Co and Ni, and to a lesser extent, As. Gallium enrichment is likely due to silicate inclusions into which Ga is preferentially partitioned. The inverse correlation of

the inclusions within the Fe map (Figure 4) provides evidence that Ga is not lattice-bound. Tungsten correlates with these inclusions, albeit in a more diffuse fashion.

Pyrite grains from sample MF8 (Figure 5) show an aggregate of three intergrown euhedral grains with observed complex internal As-growth zonation. The trace element maps display an aggregate of grains defined by As-Ni- and Co-poor cores and correlative enrichment in these elements from the core to grain boundaries. The lack of correlation between Au and Ag, and the As-rich zones indicates a negligible amount of lattice-bound invisible Au, as suggested by LA-ICP-MS spot analyses (Figure 8 and Table 2). Grain-scale remobilisation of Bi, Ag, Au, Te and Cu may explain the observed correlation of these elements at the margins of individual grain boundaries.

Pyrite from sample MF40 (Figure 6) shows grain-in-grain patterns, defined by the oscillatory zonation of As, Ni and Co. This texture indicates a clear multistage evolution. Micro-fracturing, pores and inclusions unidentifiable in the Fe map are clearly visible in the element maps in terms of enrichment of Bi, Zn, Cu, Ag, Pb, Tl and, to a lesser extent, Sn.

Anhedral pyrite from sample MF7 (Figure 7) surrounded by chalcopyrite with observed micro fractures, inclusions and pores has oscillatory zonation observed in As, Ni and Co, however is comparatively distorted relative to zonation observed in Figures 4, 5 and 6. This distortion may be attributed to the effects of deformation. Consistent with previous observations, a pervasive network of pores, micro-fractures and inclusions unidentifiable at the scale of the BSE image is highlighted in the enrichment of Bi, Pb,

Te, Sn, Cu and Sb. To a lesser extent, Au and Ag mimic these patterns, which may result from deformation-induced grain-scale remobilisation. The grain alignment within Cu supports this interpretation. Galium, although displaying a similar distribution, likely represents admixtures micro-inclusions of silicates in pores and fractures.

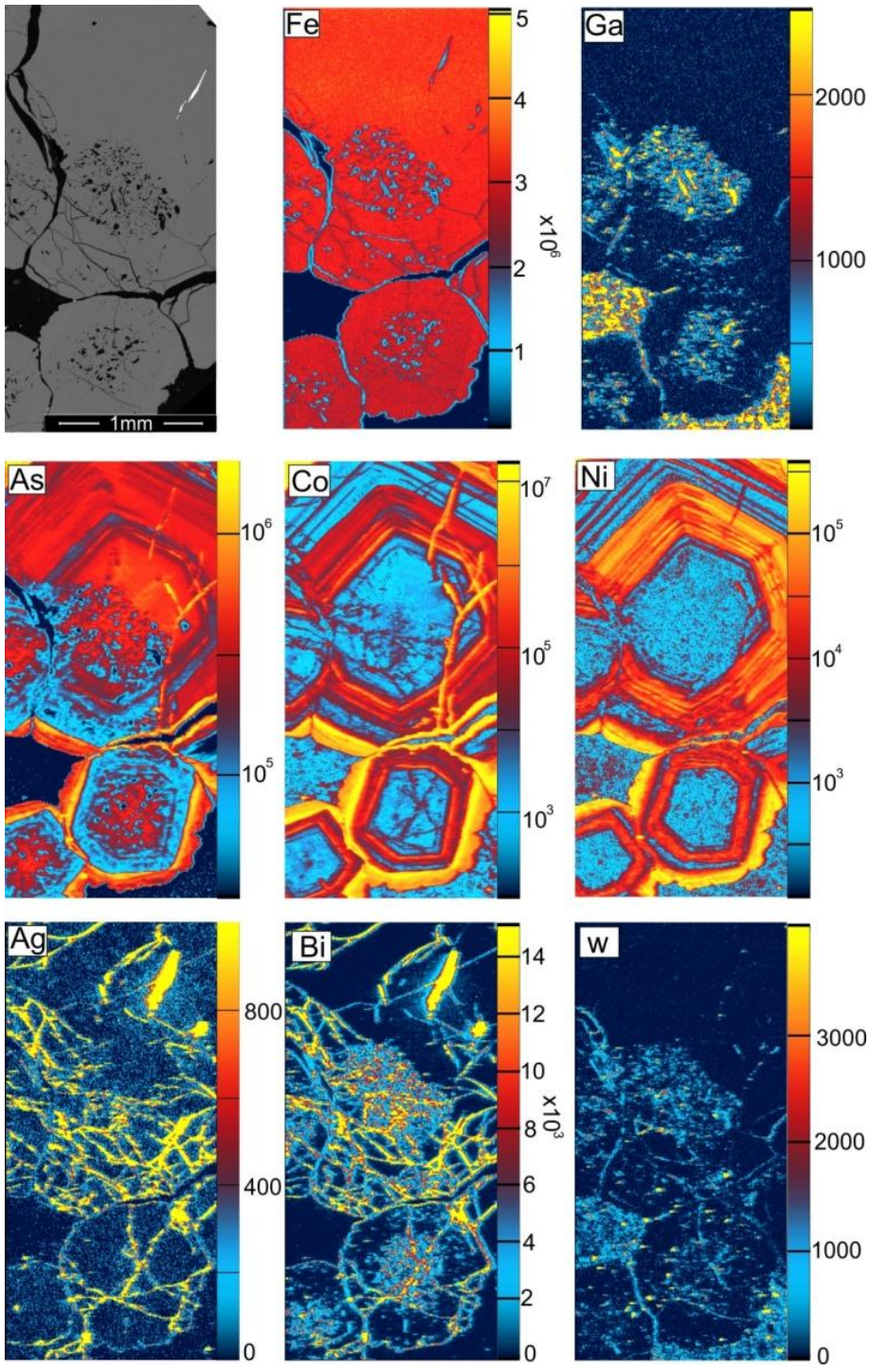


**Figure 4 LA-ICP-MS element maps of pyrite grains in sample MF6, with BSE image of the same grain (top left). The grain shows three distinct texturally-defined zones; inclusion-rich cores; an inclusion-free growth zone; and a zone of brittle fracturing. The scale for As, Co and Ni in counts-per-second (CPS) is logarithmic. Iron, Ga, Ag, Bi and W are shown calculated as ppm values.**

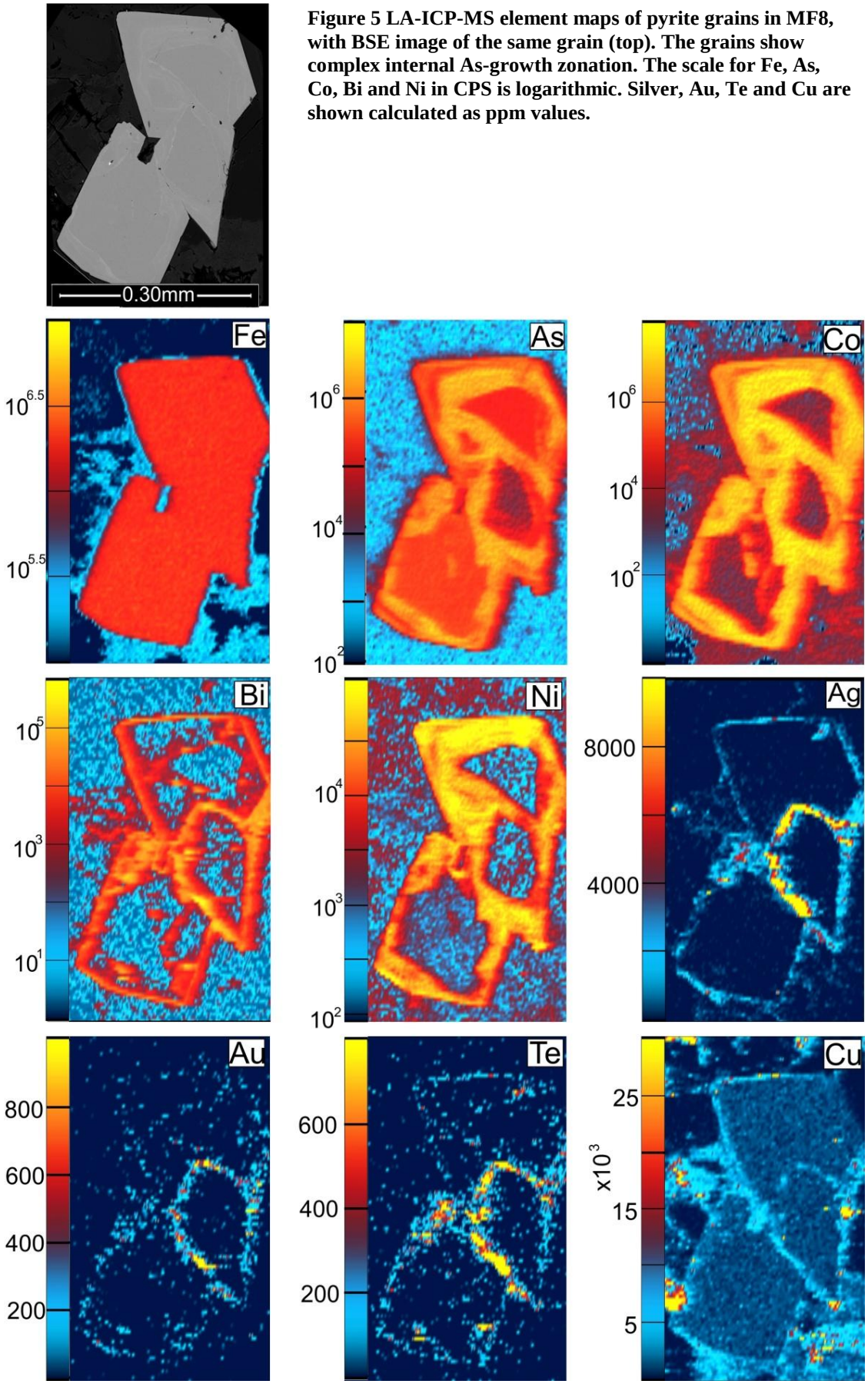


**Figure 5 LA-ICP-MS element maps of pyrite grains in MF8, with BSE image of the same grain (top). The grains show complex internal As-growth zonation. The scale for Fe, As, Co, Bi and Ni in CPS is logarithmic. Silver, Au, Te and Cu are shown calculated as ppm values.**

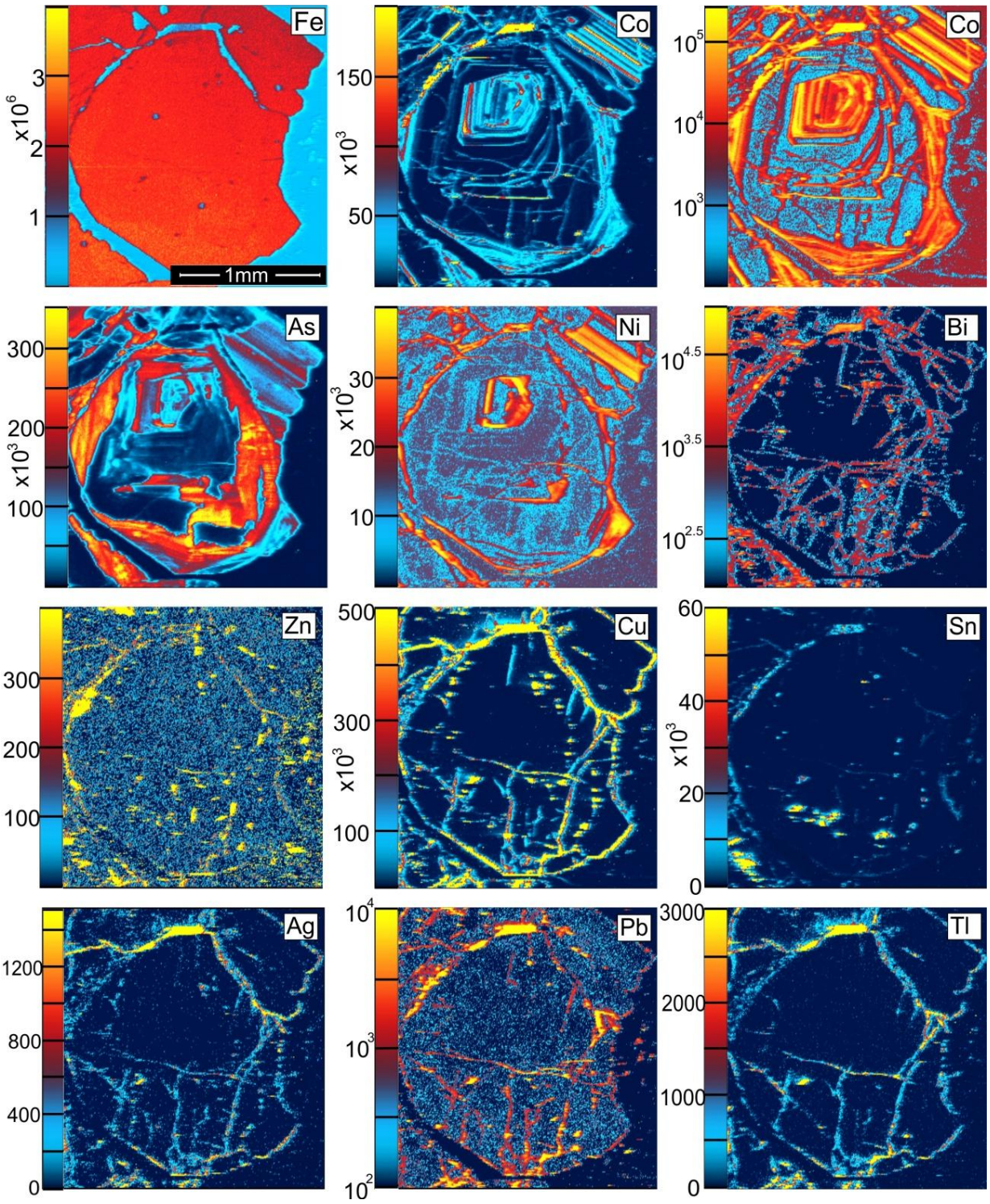


**Figure 6 LA-ICP-MS element maps of pyrite grain in sample MF40. The grain shows anhedral grain habit with fractures containing chalcopyrite and bornite. The scale for Co (top right), Bi and Pb in CPS is logarithmic. Iron, Co (top centre), As, Ni, Zn, Cu, Sn, Ag and Tl are shown calculated as ppm values.**

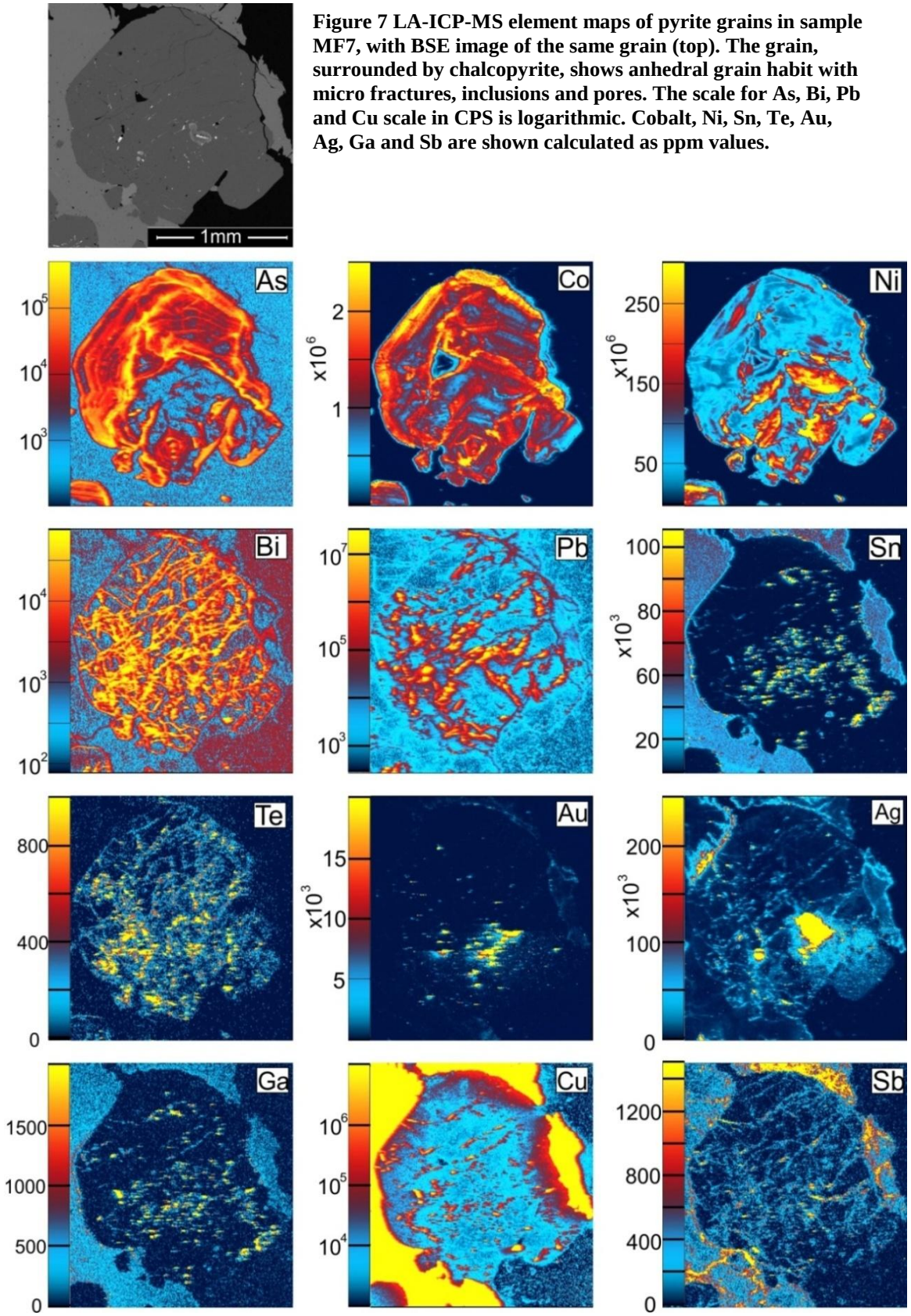


**Figure 7 LA-ICP-MS element maps of pyrite grains in sample MF7, with BSE image of the same grain (top). The grain, surrounded by chalcopyrite, shows anhedral grain habit with micro fractures, inclusions and pores. The scale for As, Bi, Pb and Cu scale in CPS is logarithmic. Cobalt, Ni, Sn, Te, Au, Ag, Ga and Sb are shown calculated as ppm values.**

## Associated minerals

In addition to the locally abundant gangue inclusions described above, a number of other minerals were observed as inclusions and/or associated with the pyrite. Of these, chalcopyrite and galena are the most common and are identified in most samples. Both sulphides occur as inclusions and/or as remobilised grains in fractures and voids (Figure 9a). Sphalerite is also widespread as inclusions in pyrite and generally occurs as sub-20 µm, rounded anhedral grains.

Arsenopyrite was observed in all samples except MF24 - MF30. Characteristically, arsenopyrite occurs either as small (<10 µm) xenomorphic grains within the zoned margins of pyrite or larger (up to 30 µm) idio to hypidiomorphic inclusions (Figure 9b). Remobilised chalcopyrite is occasionally accompanied by arsenopyrite and galena grains at chalcopyrite-pyrite grain boundaries (Figure 9b).

As described above, the major elements comprising exsolved minerals in pyrite were Cu, Bi and Sn with minor but nevertheless consistently measurable amounts of Zn, Te and Au. Non-orientated, round and elongated blebs of chalcopyrite and stannite ($Cu_2(Fe,Zn)SnS_4$) form populations varying in size from ~1 - 30 µm (Figure 3f, 8a-c and e). Frequently coupled with or in close proximity to the chalcopyrite and stannite were smaller grains (<5 µm) of bismuthinite ($Bi_2S_3$), aikinite ($CuPbBiS_3$) and the Bi-chalcogenides, tetradymite ($Bi_2Te_2S$) and tsumoite (BiTe) (Figure 8d and f). Locally, inclusions of cassiterite($SnO_2$) are observed. These are exclusive to the E-reef sample suite. Grain scale remobilisation of the exsolved minerals appeared to result in larger

grains (>50 µm) of chalcopyrite. Accompanying chalcopyrite was either bismuthinite or aikinite (Figure 3f).

Monazite was observed as a commong Ce- and La- bearing phase.. Monazite was predominantly coarse grained (<400 µm) and observed as inclusions within pyrite, along fractures and within the gangue host. Less abundant REE-bearing accessory phases include zircon, xenotime-(Y) and-(Yb) (Figure 3e) and the less common mineral churchite-(Dy).

One of the major observed differences between E-reef and MVR/M-reef/ LLU/ B-reef samples (Figure 1d and 2a) was the abundance and variety of Cu-minerals. MVR, M-reef, LLU and B-reef samples contained chalcopyrite, stannite and minute amounts of aikinite. In selected E-reef samples (MF32, MF40, MF41, MF42, MF43), however, notable contents of not only chalcopyrite but also bornite, chalcocite, covellite, wittichenite ($Cu_3BiS_3$) and stannite are observed. Moreover, interesting textures accompany these Cu-bearing minerals (Figure 9c, d and e).

Silver typically occurs as electrum and acanthite ($Ag_2S$); several other less common Ag-bearing minerals are observed. These include pyrargyrite ($Ag_3SbS_3$), a texturally impressive grain of native silver (Figure 10f), an aggregate of <1 µm spherical pods of chloroargyite (AgCl) and an Ag-Au telluride, probably petzite ($Ag_3AuTe_2$).

Several other minor mineral phases were recognised throughout the sample suite. Sample MF31 uniquely contained grains of scheelite ($CaWO_4$) and a secondary Fe-

phosphate-sulphate of uncertain identity. Grains of coffinite ($U(SiO_4)_{1-x}(OH)_{4x}$) (Figure 9f) were seen in samples MF33, MF34, MF39 and MF42. This was the only observed U-mineral within the sample suite. Two grains of gersdorffite (NiAsS) were identified in sample MF30 and MF7. Cobaltite (CoAsS), a relatively common mineral in Main Dome, was not observed.

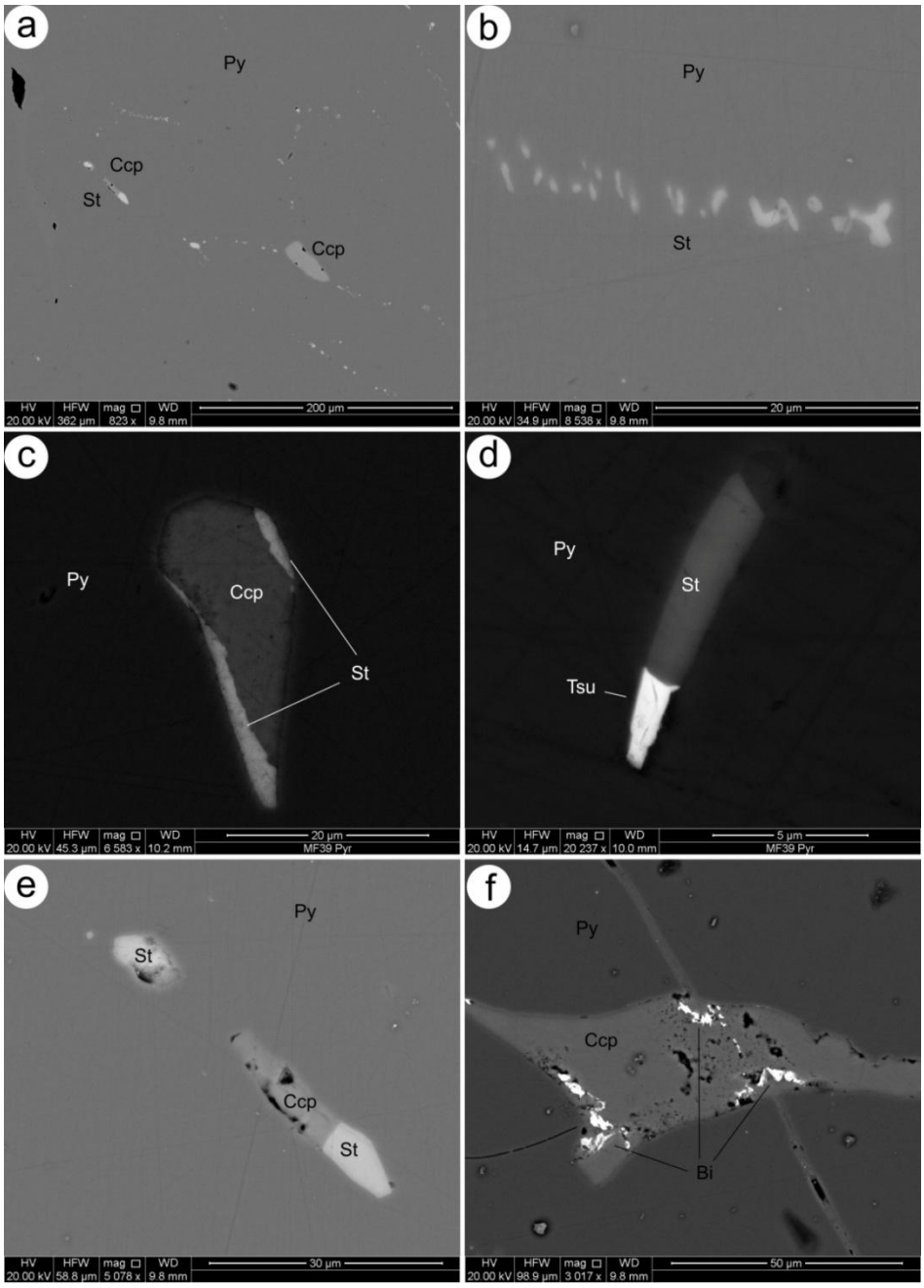


**Figure 8 Back-scatter electron images of Cu-Sn-Bi-Te mineralogy. (a) Grains of exsolved chalcopyrite (Ccp) and stannite (St) in massive pyrite (Py); (b) Grains of stannite with typical exsolution textures in pyrite; (c) A composite grain of chalcopyrite and stannite in pyrite; (d) a composite grain of stannite and tsumoite (Tsu) in pyrite; (e) An elongated composite grain of chalcopyrite and stannite and a solitary grain of stannite in pyrite; and (f) A larger grain of chalcopyrite with associated microfractures containing chalcopyrite and bismuthinite (Bi) The latter appears restricted to microscopic grains at pyrite - chalcopyrite grain boundaries.**

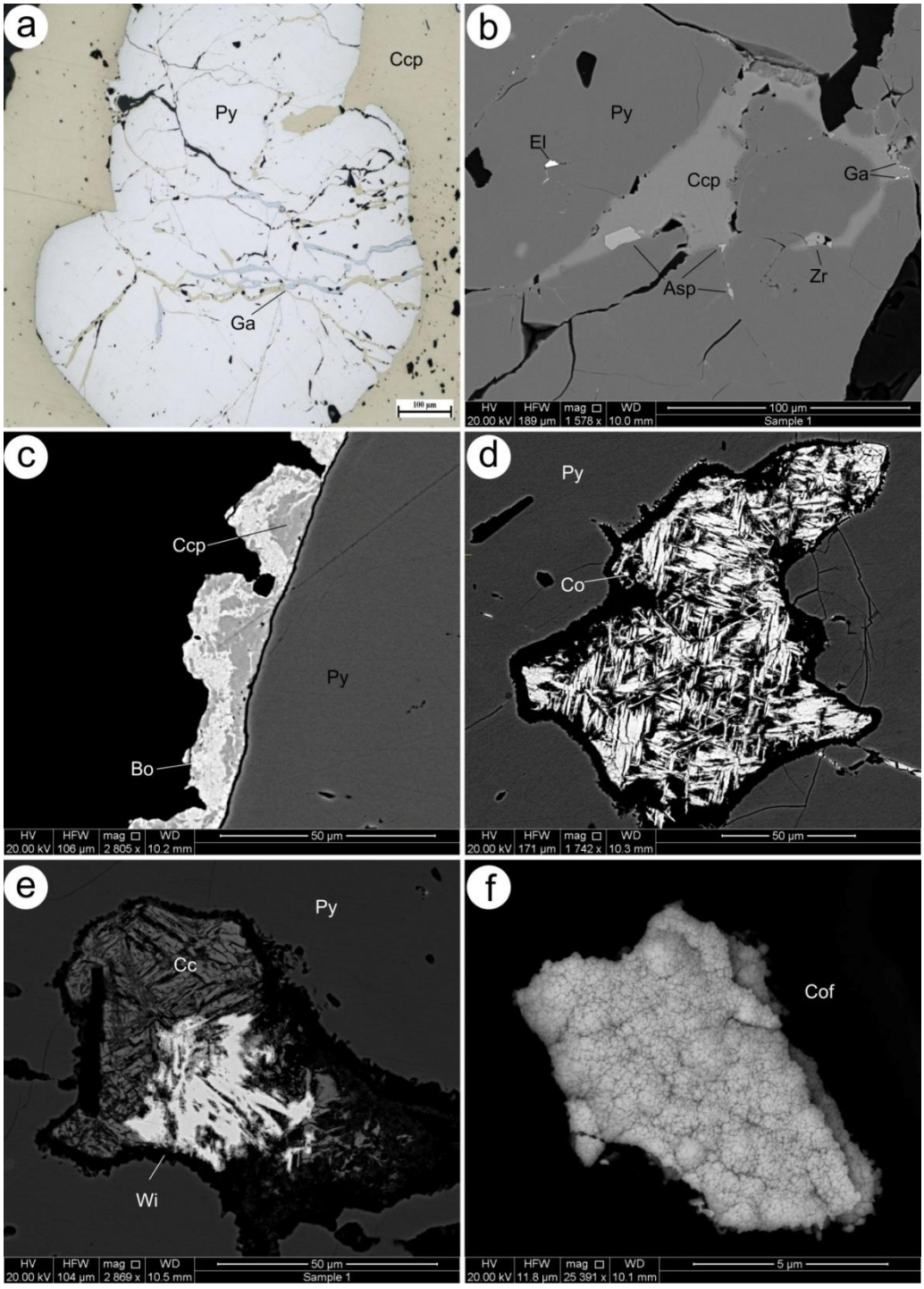


**Figure 9 Reflected light (a) and back-scatter electron images (b – f) of selected associated minerals in pyrite. (a) A fractured pyrite (Py) grain surrounded by chalcopyrite (Ccp). Galena (Ga) and chalcopyrite can be seen in the pyrite fractures; (b) Chalcopyrite amongst several grains of pyrite. Grains of arsenopyrite (Asp) and galena can be seen within the chalcopyrite at the pyrite boundary. A zircon (Zr) is also in the chalcopyrite and electrum (El) is observed within a fissure in the pyrite; (c) Chalcopyrite and bornite (Bo) at the boundary of a pyrite grain; (d) Covellite (Co) grain with typical 'boxwork' replacement texture; (e) Composite gain of chalcocite (Cc) and wittichenite (Wi) within a microfissure in pyrite; and (f) an inclusion of coffinite (Cof).**

**Gold**

Gold minerals were only sporadically observed in the sample suite. Three distinct mineralogical forms were observed; electrum (AuAg) (Figure 10c and e), native gold (Figure 10a and b) and Au-tellurides (Figure 10d).

Of these, electrum was the most abundant and was observed within all sampled zones except the non-orezone. Compositions ranged from ~$Au_{65}Ag_{35}$, to ~$Au_{85}Ag_{15}$ (electrum – native gold boundary). Most grains consistently contained 81–91atom.% Au. This contrasts somewhat with earlier suggestions of two distinct generations involving early Au with ~8% Ag and later, recrystallised gold with ~2% Ag (Turner 1982). Grain size ranges from ~5 to 50 µm and, although inclusions of electrum were observed in pyrite, the majority of grains were found within fractures and fissures (Figures 9b, 10b, c and e).

Native gold was observed in E-Reef samples MF32, MF39, MF40, MF41, MF43 and MF44. Individual occurrences from WRC17902 were identified in samples MF4, MF6, MF11, MF12, MF13 and MF19. Native gold grains ranged between ~5 and 50 µm size. The majority of native gold occurs as inclusions in pyrite with minor occurrences within fractures and fissures. This is a common trend within E-reef Au-mineralisation.

Au-tellurides, possibly calaverite ($AuTe_2$), were exclusively seen as micro-scale (<3 µm) inclusions coupled amongst the granitic exsolution textures within the E-reef sample suite (Figure 10d).

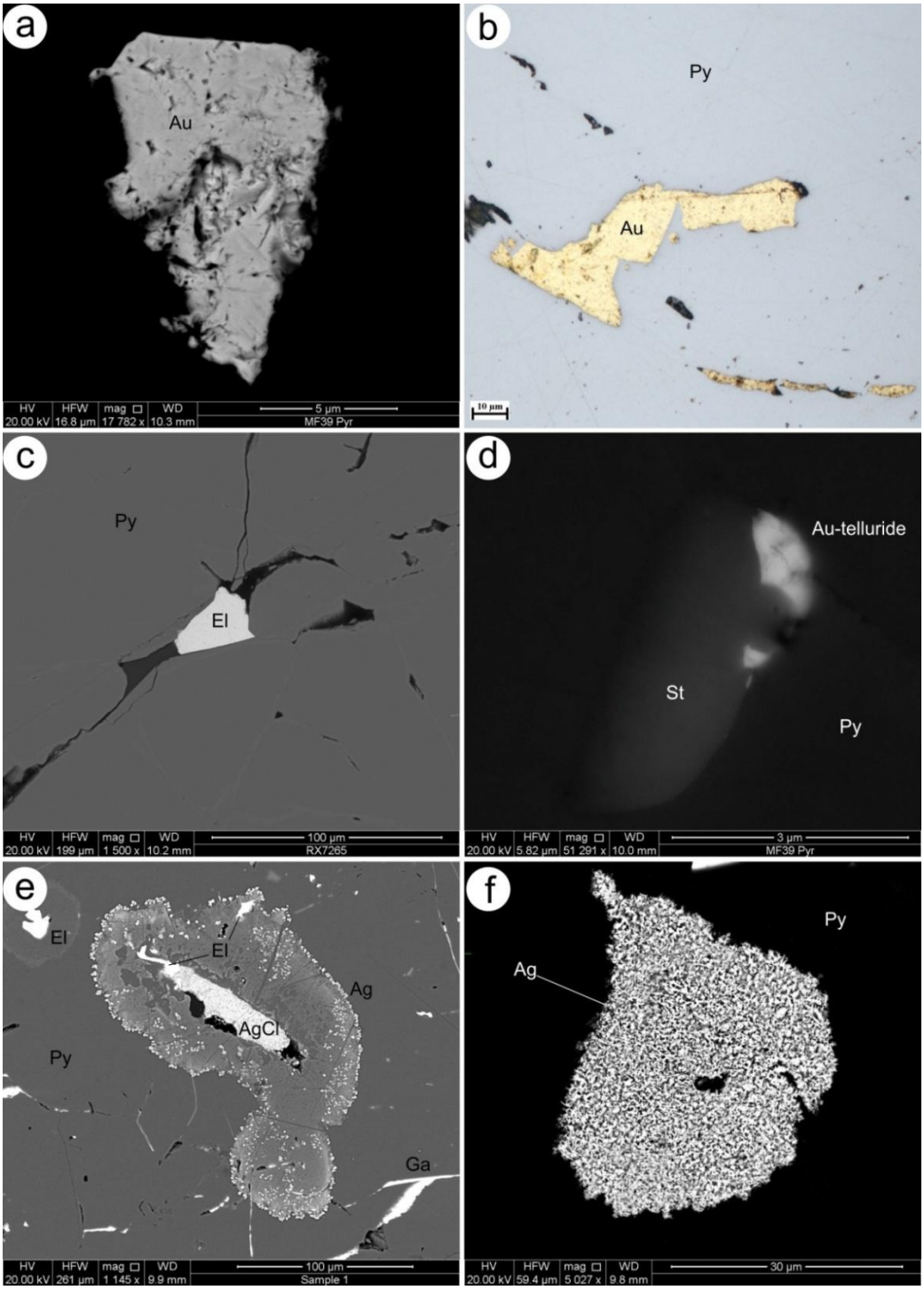


**Figure 10 Back-scatter electron (a,c-f) and reflected-light (b) images of Au-Ag minerals. (a) and (b) Grains of native gold (Au) within a microfracture in pyrite (Py); (c) Grain of electrum within a fracture in pyrite; (d) Au telluride (possibly calaverite?) adjacent to a grain of stannite (St) within a composite inclusion in pyrite;(e) Native silver (Ag) halo surrounding a grain of chloroargyite (AgCl) and electrum (El). An additional grain of electrum is seen in the top left and galena (Ga) is**

## Data trends

The textural complexities of the studied pyrite, their scale relative to the size of a LA-ICP-MS spot, and the fact that the textures are extremely difficult to recognise or classify from optical or BSE images alone present a significant challenge when interpreting trends in the complete dataset. Selective plotting of samples and reefs was required to identify informative correlations and, equally as important, any discrepancies in absolute concentrations and inter-element correlations.

The persistent enrichment of As, Co and Ni in pyrite implies very little geochemical discrimination between reefs. Arsenic, although abundant in two of the four identified morphologies does not correlate with any one particular element. This may, in part, be due to grain-scale zonation and the observation that Co- and Ni-rich zones do not coincide with As-rich zones.

As spatial relationships in Figures 4- 6 suggest, Co and Ni mimic one another within the oscillatory-zoned pyrite. This strong correlation is endorsed in Co vs.Ni plots for selected samples from the E-reef (e.g. Figure 11e) or M10 and M20 reefs (Figure 11c). A discrete cluster of high Ni and Co concentrations within the M10 sample suite (Figure 11c) suggests that although an overall proportionate relationship exists, there is nevertheless variability in the ratio of Co and Ni concentrations between reefs. Similar variability from sample to sample is shown in Figures 11b and 11f. Figure 11d shows a further example of disparate trends, with very little sample cohesion existing between samples.

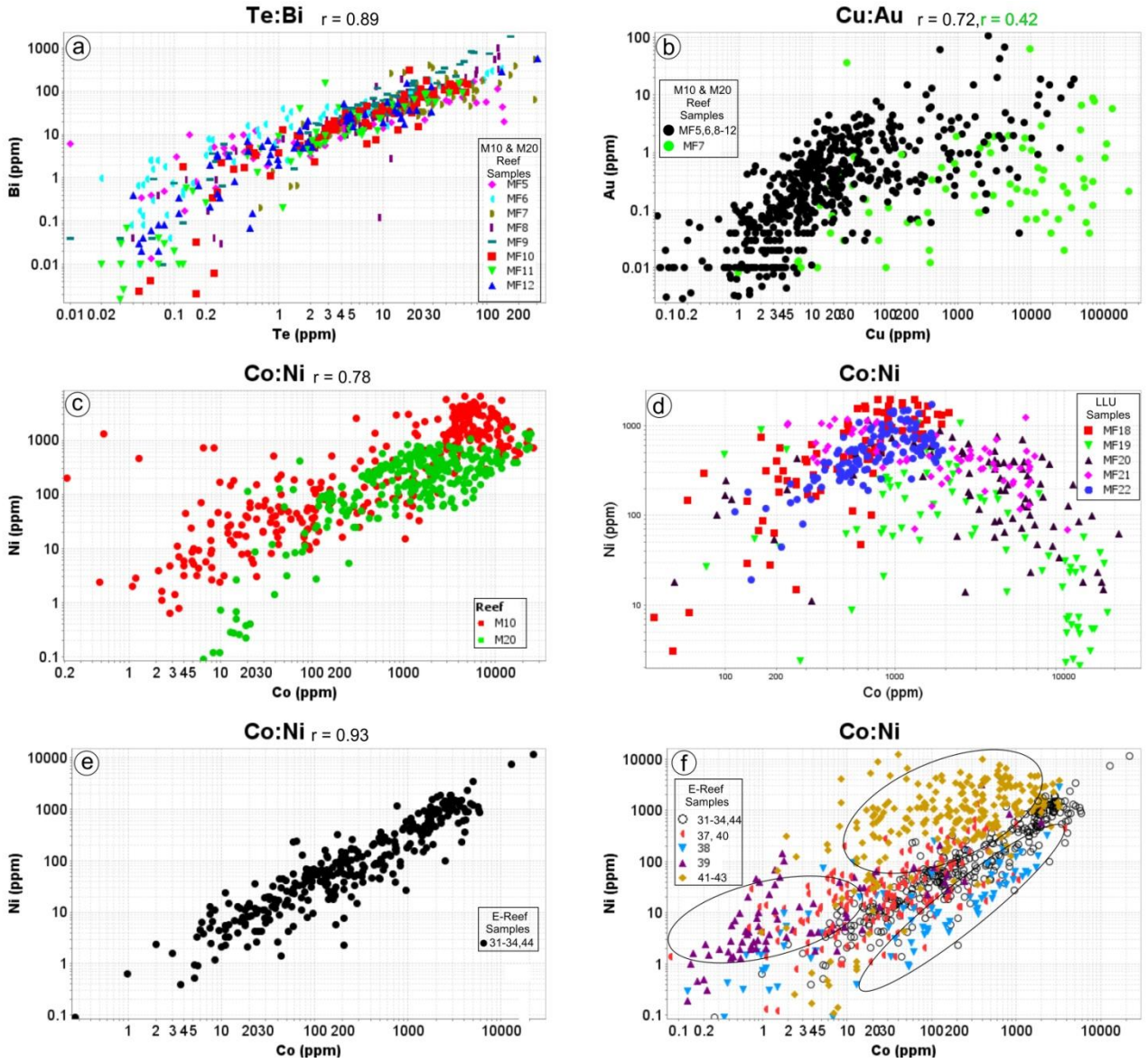


**Figure 11 (a-c) Trace element binary plots from M10 and M20 reefs, (d) LLU and(e and f) E-reefs. (a and e) Showing strong correlation amongst multiple samples and reefs between Te and Bi and Co and Ni; (b) single sample variability in the correlation between Cu and Au in an otherwise correlating reef sample suit ; (d) independent sample clusters between Co and Ni concentrations from the LLU; (e) and, circled sample(s) clustering outside of the strong correlation between Co and Ni observed from(f) E-reef sample concentrations.**

The elements Bi, Sn, Cu, Au and Te, which contribute to the exsolved granitophile minerals, correlate well with one another, as shown with Sample MF21, known to contain an abundance of such features (Figure 12). It is notable that the strong correlation is consistent amongst all five elements, further supporting that this unique trace element signature relates to a distinct generation of pyrite.

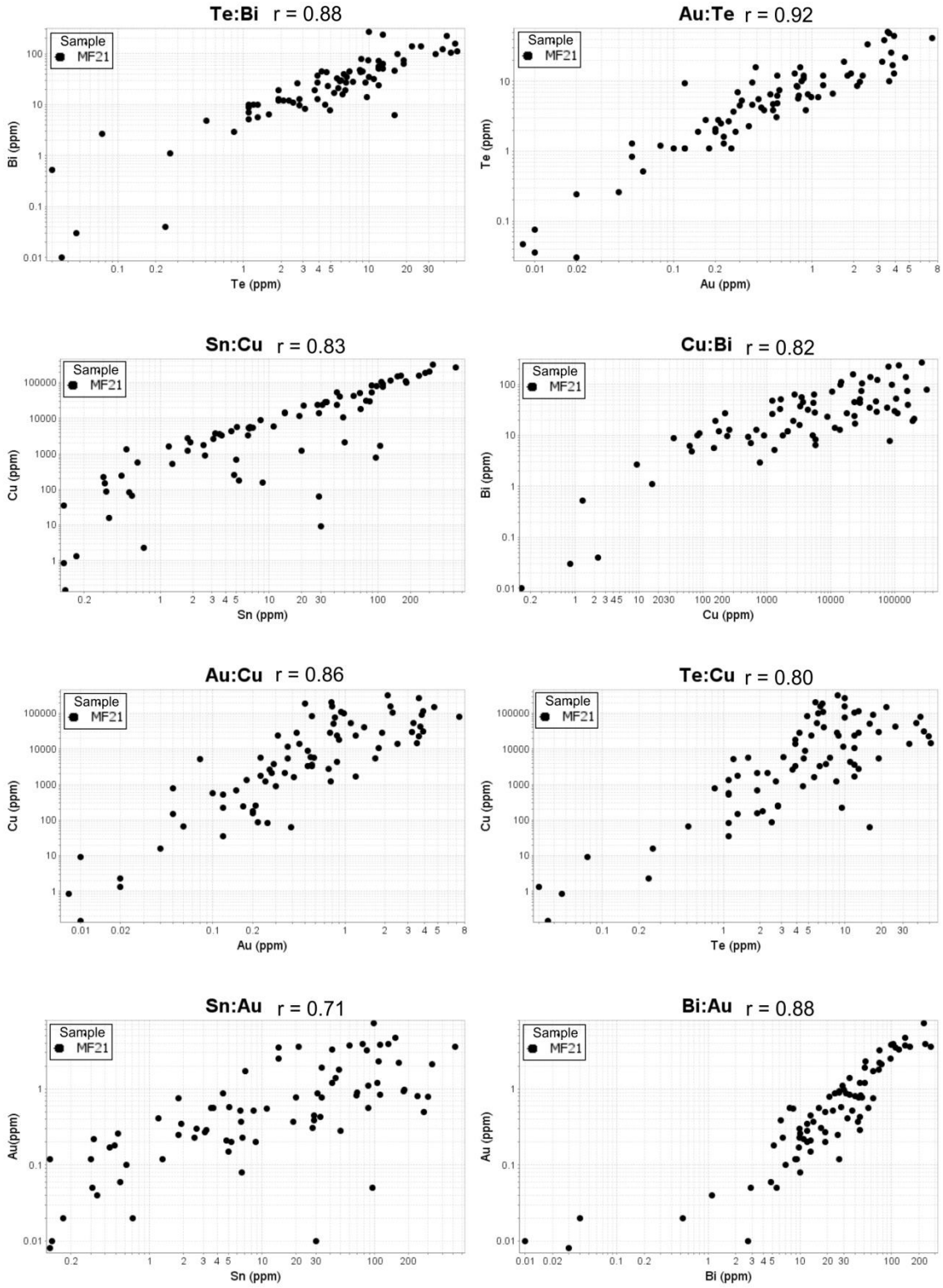


**Figure 12 Plots showing the consistent strong correlations between Sn and Cu, Cu and Bi, Au and Cu, Te and Cu, Sn and Au and Bi and Au in sample MF21(total of 80 spot analyses).**

## DISCUSSION

The ambiguity surrounding the style of mineralisation at the Telfer deposit is well justified given that it does not easily fit into established models for porphyry, replacement or 'orogenic' style mineralisation. This uncertainty is expressed in the variety of models proposed for the deposit to explain the features of "Telfer-style" mineralisation. These include a syngenetic exhalative (Tyrwhitt 1985), epigenetic replacement (Goellnicht *et al.* 1989) and porphyry Cu-Au system (Dimo, 1990). The recognition that "Telfer-style" mineralisation might be attributable to a coincidence of several factors (Rowins *et al.* 1997, 1998) was an important finding and one which is supported by the present study. Also important is the hypothesis expressed by Rowins *et al.* (1997) that granitoids may have contributed metals or sulphur to the system as well as driving large-scale thermal convection of heated saline waters sourced from the sedimentary host rocks.

Evidence for ore genesis can be sought in petrographic studies. Collins (1994) described discrete generations of pyrite in Telfer ore. Observed were composite pyrite grains containing a core and several stages of overgrowth, and porphyblastic pyrite with inclusions derived from altered host rock and chalcopyrite. Both textures were similarly reported by Rowins *et al.* (1997). Likewise, Anderson *et al.* (2001) described euhedral pyrite similar to that from the Nifty deposit, ~70 km west of Telfer, and interpreted them as being associated with hydrothermal alteration overprinting pyritic shale beds.

The textures preserved in pyrite and the variability of the trace element distributions are concordant with a hypothesis by which Telfer is the product either of a single mineralising event involving multiple sources of metals and/or sulphur, or, alternatively, represents the superposition of distinct styles of mineralisation during a protracted geological history.

The grain-scale morphological heterogeneity observed in all four element maps highlights the difficulty in applying geostatistical techniques to large sets of LA-ICP-MS spot analyses from pyrite in ores where a multi-stage and/or source genesis is plausible. Spot analysis performed on any one sample is likely to include two or more texturally-distinct sub-populations among the trace element data, and moreover, element distribution patterns that related to features that are not visible by conventional microscopy. Furthermore, such chemical heterogeneity in pyrite can be attributed not only to lattice-bound element enrichment, but also to nano- to micro-scale inclusions and to processes of grain-scale remobilisation. The influence of all these factors is clearly seen in the element maps (Figures 4 – 7).

Arsenic, Co, and Ni, and to a much lesser extent Se, were the only lattice-bound elements observed within pyrite from Telfer's West Dome. Although not observed in this study, lattice-bound elements in pyrite under restricted conditions can include Au (Cabri *et al.* 1989, Cook & Chryssoulis 1990, Harris 1990), Bi and Te (Cook *et al.* 2009), and less frequently Pb (Pačevski *et al.* 2012) and Cu (Pačevski *et al.* 2008). Hitherto, there has been negligible evidence supporting the incorporation of Sn within the pyrite lattice.

Distribution patterns of elements susceptible to being present as both lattice-bound substitutions and as nano- to micro-scale inclusions were notably problematic to interpret. Inclusions of chalcopyrite and other Cu-bearing minerals, stannite, galena and Bi-minerals (Figure 8) greatly influenced the variance in concentration of As, Ni, Co, Cu, Sn, Pb and Bi. Such features, coupled with oscillatory zoning within single grains of pyrite with respect to As, Co and Ni (Figures 4 and 6), make it intrinsically difficult to assign distinct trace element signatures to discrete textural or morphological sub-populations of pyrite.

As the element maps (Figure 4 – 7) show grain and sample-wide variation can be expected within, and between reefs. Correlations between sub-populations of trace element spot analyses in different samples may exist, but without well-defined parameters to delineate the relationship between geochemistry and texture in all 2,765 spot analyses, interpretation is at best speculative. It should also be borne in mind that the spot analyses give quantitative element concentrations in a volume of analysed pyrite that may be larger than that of individual micro-textures (e.g. Co-rich and Co-poor bands in a zoned grain, lattice- and nanoparticle-bound Sn). As such, the spot analyses cannot, as in any complex, multi-phase or overprinted mineral system, provide an independent endorsement of morphologically or texturally-distinct stages of mineralisation. This can only be achieved by element mapping of a sufficiently large number of representative grains.

The presence and relationship of gold within common ore sulphides is of particular interest to metallurgists, resource and exploration geologists (Cook & Chryssoulis 1990,

Vaughan & Kyin 2004). Colloidal sized and chemically bound Au, collectively termed 'invisible gold', has been comprehensively researched over the past ~20 years (Cabri *et al.* 1989, Cook & Chryssoulis 1990, Harris 1990). Analysis of sulphides within Au ores is now common practice to determine whether invisible gold is present and whether it contributes to the overall gold balance. Wood and Strens (1979) established the controls imposed on structurally-bound gold in sulphides as the gold content of the ore fluid, physiochemical parameters during ore genesis or metamorphism, host rock chemistry, and simultaneous formation of gold minerals (e.g. native gold, electrum and Au-(Ag)-tellurides). The persistent enrichment of As in pyrite and lack of correlation between As and other elements implies very little discrimination in As enrichment between reefs. The oscillatory growth zonation identified on the element maps is likely attributable to precipitation from an As-rich mineralising fluid.

The spot analyses, element mapping and lack of As-Au correlation indicates that lattice-bound (invisible) gold is negligible in West Dome pyrite and subsequently has little ramification for Au-processing and recovery. The evidence of Au enrichment within fine micro-fractures in pyrite (Figures 7 and 10a,b,c) does however support the hypothesis that West Dome pyrite may have contained significant invisible Au within the As-rich bands when it originally precipitated. This Au may have been released during recrystallisation and subsequently underwent grain-scale remobilisation.

Enrichment in Co and Ni from the spot analyses, marked oscillatory growth zonation patterns in the element maps, and the strong correlation between Co and Ni (Figures 11b and c) strongly point to the contribution of a mafic source of metals. In contrast, the

enrichment of pyrite in Bi-Sn-Cu ± Te and presence of exsolved chalcopyrite, stannite, bismuthinite, aikinite, Bi-chalcogenides and Au-tellurides in coarse-grained and massive pyrite in samples from E-reef, MVR, LLU and M-reef ore zones can be taken to support a granitic source for at least one generation of pyrite. These data emphasise the likelihood of pyrite generation from multiple sources and/or multi-stage events.

Petrographic observation has confirmed there are distinct morphological types of pyrite, even if these are partially obscured by processes of syn-metamorphic recrystallisation. LA-ICP-MS analysis, in particular the element maps, reveals a greater textural and geochemical heterogeneity than might be expected from the optical and BSE images. These data allow recognition of at least three distinct types of pyrite. Firstly, the presence of pyrite cores that inclusions of gangue silicates and lack any enrichment in As, Co and Ni (Figure 4 and 5).This phase is suggested to be an early phase of pyrite. Crystallisation of this (Stage-I) pyrite may have preceded mineralisation pyrite (Rowins *et al.* 1997). The second type of pyrite is the spectacular oscillatory-zoned pyrite (Figure 4) (Stage-2) that is enriched in a variety of metals, namely As, Co and Ni. This phase overgrows the early (Stage-I) pyrite and is suggested to have grown during the main mineralising event. A Stage-3 event is characterised by brittle deformation resulting in a network of micro-fractures that cut across the earlier pyrite. This fracturing extends to scales below the micro-scale such that the smallest micro-fractures cannot be seen in BSE images. This superimposed event assisted grain-scale remobilisation for a number of metals (e.g. Ag, Bi, Co) from the pyrite. These metals were reconcentrated within micro-fractures (Figures 4-7). The absence of pyrrhotite at Telfer, in contrast with its relative abundance in other sulphide-rich Au-ores, argues against sulphurdation as a

driving mechanism for grain-scale remobilisation. The two alternative mechanisms for element redistribution are solid-state diffusion, as shown by Tomkins and Mavrogenes (2002) for gold remobilisation in arsenopyrite during granulite facie metamorphism of the Challenger deposit; and porosity-controlled fluid-assisted replacement (Cook *et al*. 2009, Sung *et al.* 2009, Ciobanu *et al.* 2012, Cook *et al.* in press). The identification of nano- to micro-pores in the Telfer pyrite would tend to support this latter model.

Without independent age data, the relative timing of the above events remains uncertain. The timing of ore formation is supported by $^{40}Ar/^{39}Ar$ age data (e.g. Durocher *et al*., 2003). This infers that formation of the Telfer deposit was associated with the Miles Orogeny (ca. 680-630 Ma), post-orogenic magmatism (ca. 630-610 Ma) and possible overprinting during the Paterson Orogeny (ca. 550 Ma).

Based on this framework, the following tentative three-stage model is proposed:

(1) Initial orogenic-style mineralisation during the Miles Orogeny involving fluid flow through the sedimentary host rocks, leaching of metals and local replacement. The reefs are hosted within relatively ductile siltstone and shale horizons which would represent structural and litho-chemical traps for the fluids. These strata would accommodate slip, shearing and, critically, create voids for fluid precipitation. Stage-1 pyrite can potentially be assigned to this event.

(2) Post-orogenic overprinting associated with an intrusion-related mineralisation event that introduced additional metals into the system. Two chemically-distinct generations of pyrite may have evolved during Stage-2; coarse-grained and massive pyrite with a pronounced granitic signature, and the prominent Co- and Ni-rich overgrowths highlighted in the element maps. Inflow of intrusion-

derived hydrothermal fluids coupled with magmatic heat may also have contributed to limited pyrite recrystallisation and associated intra-grain remobilisation of released components. Chalcopyrite introduced during Stage-1 would have extensively recrystallised.

(3) A relatively weak deformational overprint (Stage-3) is consistent with the ~550 Ma Paterson Orogeny. Resultant grain-scale element-remobilisation, the additional influx of fluid and possibly further recrystallisation appear to be concentrated in reefs where relative zones of weakness may have been more susceptible to strain accommodation.

## CONCLUSIONS

This study has identified four discrete phases of pyrite generation.

1. An early pyrite containing abundant gangue inclusions (quartz, illite), chalcopyrite and carbonate. This generation is enriched in Ga and W and deficient in As, Co and Ni. It commonly forms a distinctive core within larger pyrites;
2. A generation of As-, Co- and Ni-rich euhedral pyrite devoid of gangue inclusions possibly attributable to a pervasive regional overprint;
3. Pyrite enriched in Co and Ni as oscillatory growth zones indicative of hydrothermal leaching of mafic rocks; and
4. A distinct pyrite containing Sn, Bi, Cu ± Zn, Te and Au as inclusions (and possibly also in lattice-bound form) within As-Co-Ni-poor pyrite potentially attributable to a second, granitic source.

These preserved textures in pyrite from the West Dome deposit, Telfer and their contained trace element signatures support one or a combination of the following two mineralisation models:

1. A single mineralising event where multiple sources of metal and/or sulphur is incorporated within the generation of pyrite; or alternatively,
2. A multi-stage ore genesis where the discrete pyrite characteristics reflect individual styles of mineralisation synchronous with geological events over time.

Subsequent deformation-induced grain-scale remobilisation of Au, Ag, Bi, Te, Cu, Sn, Co, Tl, Pb and As is common to all pyrite generations, explaining the heterogeneity observed within the trace element data. The dataset does however indicate a greater complexity to the geochemical patterns in pyrite than was evident from previous studies.

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*"It always seems impossible until it's done" – Nelson Mandela*

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# APPENDIX A: DETAILED METHODS

## Sampling

Newcrest Mining Limited selected suitable drill core with significant representative intersects of pyrite mineralisation from the West Dome deposit (see Appendix B). Mineralised reef and syngenetic pyrite intersects identified from assay results, Newcrest core logs and core photos were sampled. The aim was to have a sample suite spatially representative of the West Dome deposit. Sample targets included the E-Reefs, Middle Vale Reef (MVR), M-Reefs, Lower Limey Unit (LLU), B-Reefs and black shale syngenetic/sediment hosted pyrite.

## Optical microscopy and Scanning Electron Microscopy SEM

A Nikon petrological microscope with magnification up to 50x was used in reflected light mode to identify pyrite grains, textures, associated ore minerals, gold, associated gangue, their relative abundances and relationships between minerals and microstructures (Uytenbogaardt & Burke 1971, Ramdohr 1980).Each sample was photographed using a mounted digital camera.

SEM work was carried out using a FEI Quanta 450 instrument at Adelaide Microscopy, characterising and determining elemental composition through x-ray detection using a silicon drift detector (SDD) energy dispersive X-ray spectrometer (EDS) and back-scattered electron (BSE) detector. The SEM was operated at 20eV accelerating voltage and spot size 4. BSE imaging allowed for observations of pyrite and associated minerals at the micro-scale, notably fine textures, mineral intergrowths, compositional zoning and inclusions.

## Laser-Ablation Inductively-coupled Plasma Mass Spectrometry (LA-ICP-MS)

LA-ICP-MS mapping was conducted using a Resonetics M-50-LR 193-nm Excimer laser microprobe coupled to an Agilent 7700cx Quadrupole ICP-MS housed at Adelaide Microscopy, University of Adelaide, South Australia. The M-50 utilises a two-volume small volume ablation cell designed by Laurin Technic Pty. Ablation was performed in an atmosphere of UHP He (0.7 l/min), and upon exiting the cell the aerosol cell is mixed with Ar (0.93 l/min) immediately after the ablation cell, after which the mix is passed through a pulse-homogenizing device or "squid" prior to direct introduction into the torch. The ICP-MS was optimized daily to maximize sensitivity on isotopes of the mass range of interest, while keeping production of molecular oxide species (i.e., $^{232}Th^{16}O/^{232}Th$) and doubly charged ion species (i.e., $^{140}Ce^{2+}/^{140}Ce^{+}$) as low as possible, and usually <0.2%. Data reduction was performed using Glitter software (GEMOC 2005)

Suitable grains of pyrite were ablated. These had been inspected by SEM to check for inclusions and other textures (e.g., fractures) that might affect the quality of the trace element data. Analyses were made with spot size diameter of 32μm. The laser system was operated at pulse rates of 5 Hz, and 75% power level; laser energy was typically 6-9 J/cm-2, giving an ablation rate of approximately 1.5 μm/sec. The following

isotopes were monitored: $^{23}$Na, $^{29}$Si,$^{33}$ S,$^{34}$ S, $^{43}$Ca, $^{51}$V, $^{52}$Cr,$^{55}$Mn, $^{57}$Fe, $^{59}$Co, $^{60}$Ni, $^{65}$Cu, $^{66}$Zn, $^{69}$Ga, $^{75}$As, $^{82}$Se, $^{95}$Mo, $^{107}$Ag, $^{111}$Cd, $^{115}$In, $^{118}$Sn, $^{121}$ Sb, $^{125}$Te, $^{137}$Ba, $^{184}$W, $^{193}$Ir, $^{197}$Au, $^{202}$Hg, $^{205}$Tl, $^{208}$Pb and $^{209}$Bi. The analysis time for each sample was 90 seconds (30 second measurement of background with the laser off, and a 60 second analysis with the laser on. Data reduction was undertaken using Fe as the internal standard for pyrite.

Calibration was performed using the Mass-1 sulphide calibration standards (Wilson et al. 2002). The raw analytical data for each spot analysis is plotted as a line graph and the integration times for background and sample signal selected. The counts are then corrected for instrument drift (standards were run after each 10 unknown samples) and converted to concentration values using the known value of Fe in pyrite, in the analysed mineral (from EPMA data). Based on the measured concentrations, minimum detection limits (99% confidence) were calculated for each element in each spot analysis and are detailed for each spot in the appendix.

## LA-ICP-MS element mapping

LA-ICP-MS mapping was conducted using a Resonetics M-50-LR 193-nm Excimer laser microprobe coupled to an Agilent 7700cx Quadrupole ICP-MS housed at Adelaide Microscopy, University of Adelaide, South Australia. The M-50 utilises a two-volume small volume ablation cell designed by Laurin Technic Pty. Ablation was performed in an atmosphere of UHP He (0.7 l/min), and upon exiting the cell the aerosol cell is mixed with Ar (0.93 l/min) immediately after the ablation cell, after which the mix is passed through a pulse-homogenizing device or "squid" prior to direct introduction into the torch. The ICP-MS was optimized daily to maximize sensitivity on isotopes of the mass range of interest, while keeping production of molecular oxide species (i.e., $^{232}$Th$^{16}$O/$^{232}$Th) and doubly charged ion species (i.e., $^{140}$Ce$^{2+}$/$^{140}$Ce$^{+}$) as low as possible, and usually <0.2%.

The smallest grain was ablated using a rectangular grid with 5µm line spacing, beam size of 5µm and scan speed of 10µm/s. Three larger grains were ablated using a rectangular grid with 7µm line spacing, beam size of 7µm and scan speed of 14µm/s.The effect of redeposition during mapping was minimized by preablating each line prior to its main data collection run. A laser repetition of 10 Hz was selected at a constant energy output of 100mJ, resulting in an energy density of ~6 J/cm2 at the target. Using these beam conditions depth of ablation during mapping was around 5-10 µm. A set of 19 elements (e.g Fe, S, Zn, Au, Co, Te, As, Bi, Ni, Se, Cl, Sn, Pb, Ag, W, Mo, Ga, Sb and U) were analysed with dwell time for all masses set to 0.003 s, resulting in a total sweep time was ~0.07 s. A 30 second background acquisition was acquired at the start of every raster, and to allow for cell wash-out, gas stabilisation, and computing processing, a delay of 30 s was used after each line. Identical rasters were performed using the Mass-1 sulphide calibration standards (Wilson et al. 2002) at the start and end of a mapping run.

Images were compiled and processed using the program Iolite developed by the Melbourne Isotope Group at Melbourne University (Woodhead et al. 2007). Iolite is an open source software package for processing ICP-MS data, and is an add-in for the

data analysis program Igor developed by WaveMetrics. A typical mapping run was analysed over a 6-7h session, in which significant instrument drift could occur. To correct for this, standards were analysed immediately before and after the run to assess drift and if present, was corrected for by applying a linear fit between the two sets of standards. Following this, for each raster and every element, the average background was subtracted from its corresponding raster, and the rasters were compiled into a 2-D image displaying combined background/drift corrected intensity for each element.

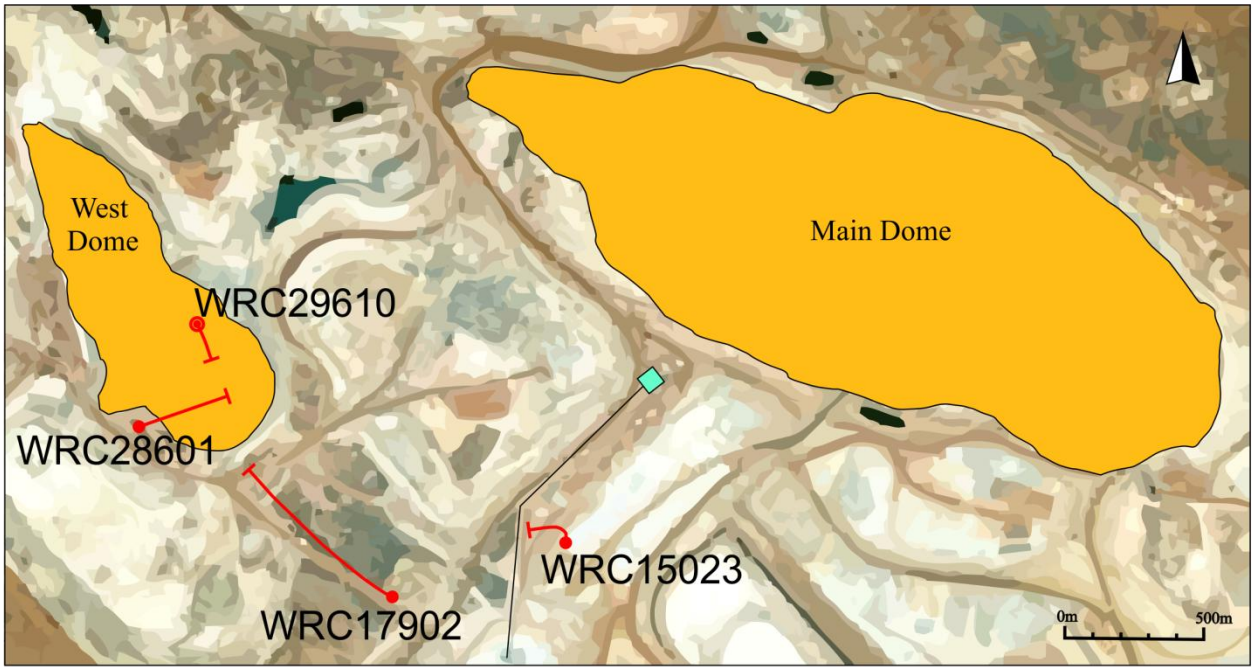
## REFERENCES

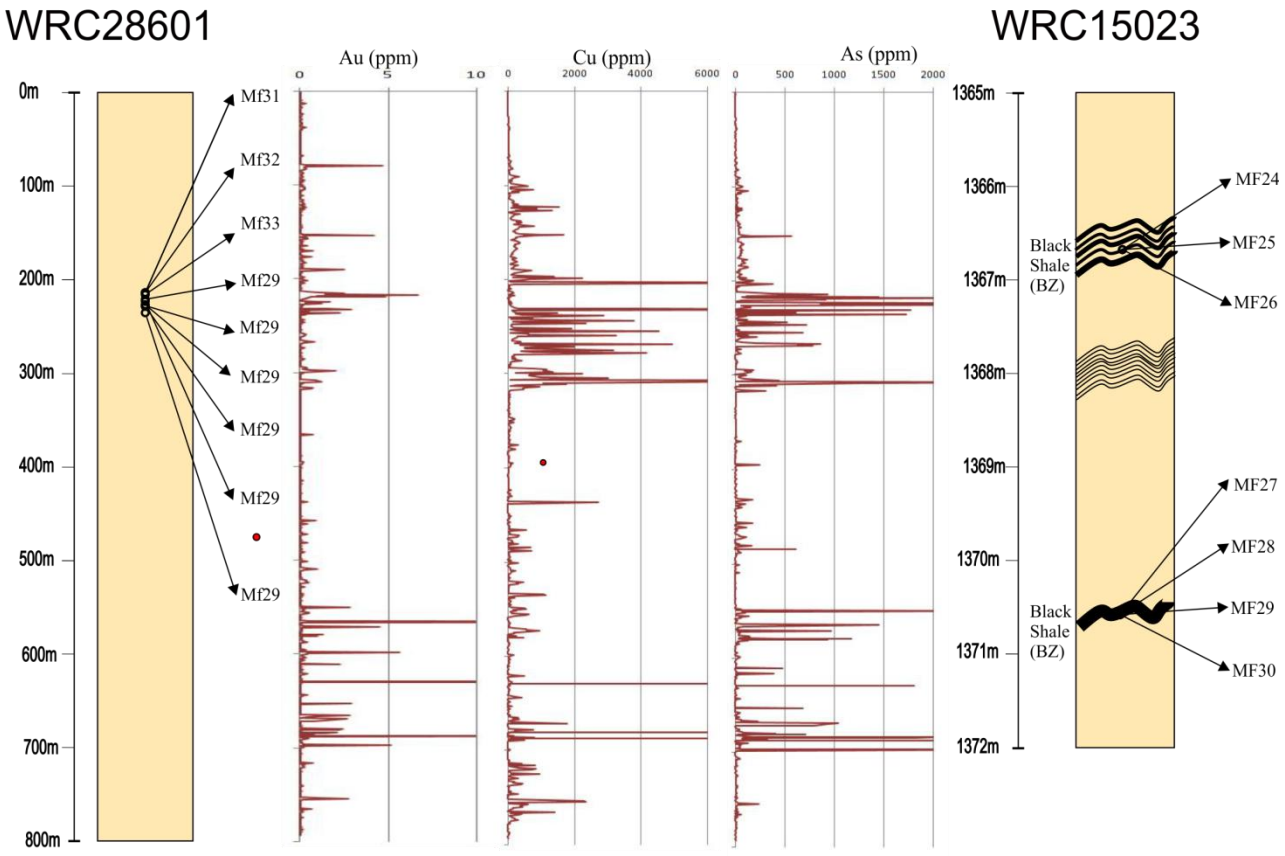
GEMOC 2005. Data Reduction Software for the Laser Ablation Microprobe <http://www.glitter-gemoc.com/>.

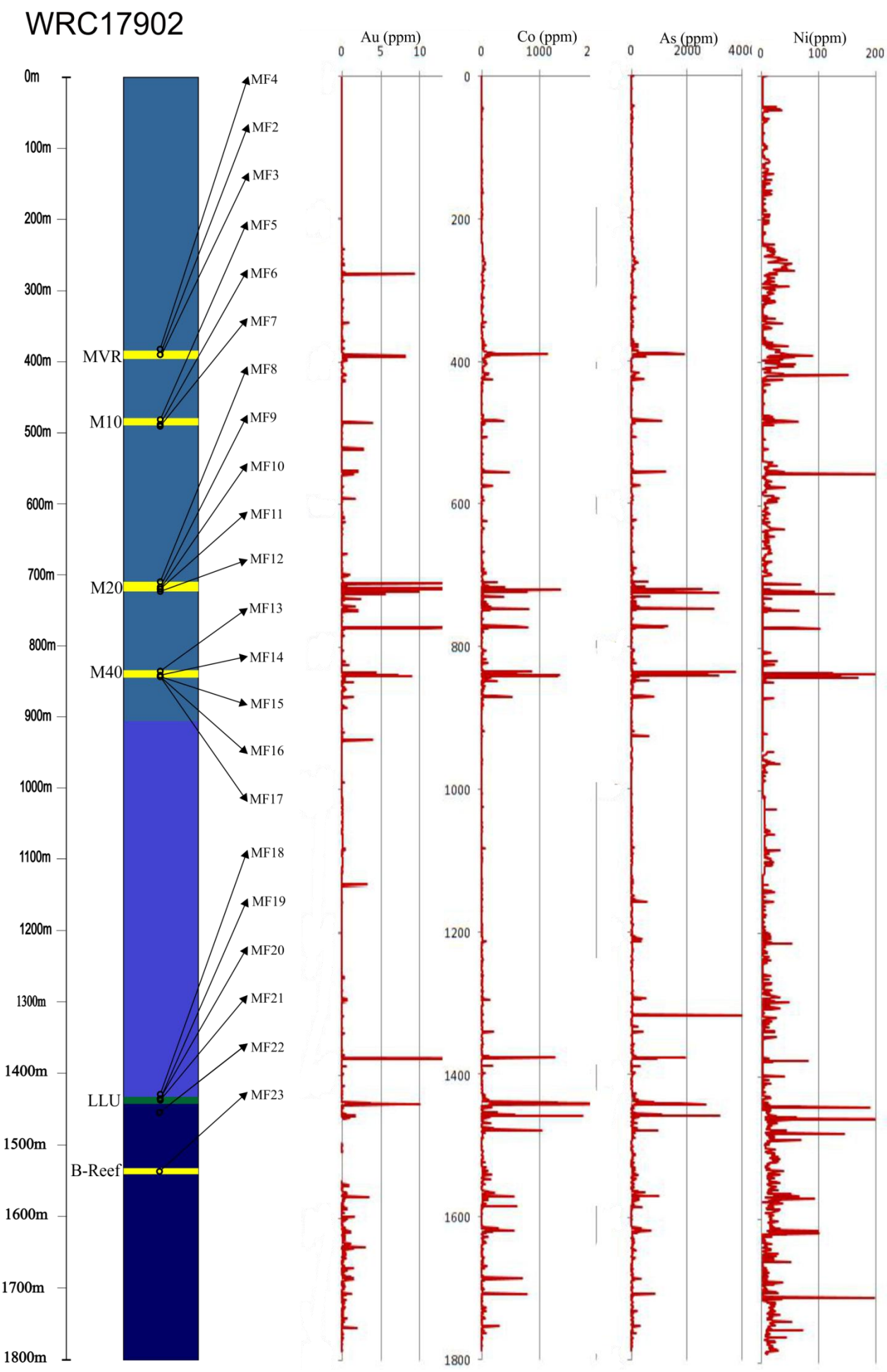
WILSON S. A., RIDLEY W. I. & KOENIG A. E. 2002. Development of sulfide calibration standards for t he laser ablation inductively-coupled plasma mass spectrometry technique. *Journal of Analytical Atomic Spectrometry* **17**, 406-409.

WOODHEAD J. D., HELLSTROM J., HERGT J. M., GREIG A. & MAAS R. 2007. Isotopic and elemental imaging of geological materials by laser ablation inductively coupled plasma-mass spectrometry. *Geostandards and Geoanalytical Research* **31**, 331-343.

## APPENDIX B: SAMPLE LOCALITY AND DESCRIPTION




WRC17902
Au (ppm)
Co (ppm)
As (ppm)
Ni(ppm)
0m
100m
200m
300m
400m
500m
600m
700m
800m
900m
1000m
1100m
1200m
1300m
1400m
1500m
1600m
1700m
1800m
MVR
M10
M20
M40
LLU
B-Reef
MF2
MF3
MF4
MF5
MF6
MF7
MF8
MF9
MF10
MF11
MF12
MF13
MF14
MF15
MF16
MF17
MF18
MF19
MF20
MF21
MF22
MF23

| Sample # | Interval | Core comments | Unit Interpretation |
|---|---|---|---|
| **WRC17902** | | | |
| 2 | 390.60m | - brecciated fine (<1mm) grained pyrite<br>- subhedral grain shape<br>- channel ways of quartz throughout | MVR |
| 3 | 391.25m | - euhedral medium - coarse grained pyrite<br>- siltstone host rock<br>- voids, fissures and fractures throughout host rock<br>- pervasive sericite | MVR |
| 4 | 388.8m | - fine grained anhedral pyrite adjacent to a quartz - carbonate vein<br>- vuggy texture to vein, small quartz crystals<br>- patchy sericite | Above MVR |
| 5 | 484.50m | - subhedral medium - coarse grained pyrtie (2mm - 5mm) in siltstone host rock<br>- gradual increase in pyrite abundance approaching structures (likely veins)<br>- silver metallic gleen to the pyrite | Poss. M10 |
| 6 | 488.68m | - qtz - carbonate vein with silver metallic pyrite rimming it<br>- gradational increase in pyrite approaching vein<br>- pyrite is fine-medium anhedral grains (<2mm) | Poss. M10 |
| 7 | 490.25m | - anhedral intergrowth of pyrite - chalcopyrite grain within a carbonate - qtz vein<br>- host rock is a siltstone | Poss. M10 |
| 8 | 710.55m | - reef with qtz - carbonate - grey dolomite - chalcopyrite - pyrite- pink dolomite - sericite<br>- pyrite is subhedral and medium - coarse grained (>2mm)<br>- deformed laminations throughout reef sequence | M20 |
| 9 | 717.60m | - well defined laminations within reef of pyrite, white qtz/carbonate, alterred siltstone, and carbonate-white-grey quartz.<br>- pyrite is fine - coarse grained, subhedral - massive | M20 |
| 10 | 719.15m | - blue and white qtz with 'popcorn' pyrite (clusters of subhedral pyrite)<br>- pyrite appears to be proximal to blue quartz as the bulk of the white quartz is unpopulated<br>- pyrite is medium - coarse grained with most being >2mm | M20 |
| 11 | 721.00m | - reef sequence of black shale, white quartz, fractured blue and white quartz and pyrite 1 - 4cm layers<br>- coarse grained pyrite and although occuring veins also overprints most stratigraphy except for blue and white fractured quartz<br>- proximal iron staining sporadic throughout | M20 |
| 12 | 724.80m | - pyrite dominant reef with white qtz, green/grey siltstone, think black shale<br>- pyrite variable in size and texture with grains up to 3cm and subhedral - anhedral - massive | M20 |
| 13 | 836.06m | - massive pyrite reef (95%) with minimal crystalline quartz | M40 |
| 14 | 840.00m | - massive pyrite bleb within a white quartz vein<br>- reef stratigraphy | M40 |
| 15 | 840.20m | - fine grained disseminated pyrite within a silica rich sandstone<br>- pyrite is in lamination concordant with bedding<br>- proximal moderate iron staining visible | M40 |
| 16 | 841.90m | - massive pyrite vein<br>- lower contact of reef | M40 |

| | | | |
|---|---|---|---|
| 17 | 843.60m | - fine grained anhedral pyrite vein<br>- discordant to bedding | Below M40 |
| 18 | 1431.56m | - clusters of medium grained pyrite in blue and white fractured quartz<br>- host grey siltstone with discordant quartz-pyrite veins | Above LLU |
| 19 | 1438.40m | - anhedral - massive pyrite in blue and white fractured quartz<br>- silvery metallic gleam to some pyrite grains<br>- appears to be some chalcopyrite<br>- proximal vuggy pink dolomite | LLU |
| 20 | 1442.6m | - patchy anhedral and massive pyrite in alterred quartz - carbonate and siltstone sequence within the LLU<br>- abundant voids and fissures | LLU |
| 21 | 1442.5m | - coarse grained euhedral pyrite in pink dolomite layer within the LLU<br>- contact is populated with largest grains but less before becoming a pyrite dominant layer with small grains<br>- chalcopyrite associated with pyrite<br>- sporadic voids within pink dolomite | LLU |
| 22 | 1458.5m | - >95% massive and coarse pyrite vein | Py Vein (LLU) |
| 23 | 1540.12m | - blue and white fractures quartz with fine grained massive pyrite and chalcopyrite<br>- minor fissures within quartz<br>- minor pervasive carbonate throughout quartz | B Reef |
| **WRC15023** | | | |
| 24 | 1366.70m | - black shale<br>- 20cm interval of fine grained dark/black silt<br>-waxy appearance (possible carbonate?)<br>-upper contact more qtz rich(sample 33)<br>- fine grained euhedral pyrite within black shale<br>- sedimentary sequence has intervals of fine laminated black shales, occasionally deformed, and quartz rich sandstone<br>- white/grey quartz veins commonly crosscut throughout sedimentary interval | Syngenetic sediment hosted pyrite |
| 25 | | As above | |
| 26 | | As above | |
| 27 | 1370.60m | - qtz rich sandstone with finely laminated black shales<br>- fine grained euhedral py visible within black shales | Syngenetic sediment hosted pyrite |
| 28 | | As above | |
| 29 | | As above | |
| 30 | | As above | |
| **WRC28601** | | | |
| 31 | 214.00m | - milled py<br>- white medium sized (~2mm) euhedral qtz inclusions<br>-within a sandstone sedimentary sequence<br>upper contact of sequence is a white crosscutting qtz vein<br>- voids within sandstone (pitted & leached.) | E-Reefs |
| 32 | 215.25m | -fine grained pyrite hosted in a blue/grey qtz bleb within pitted sandstone<br>- pitted sandstone structures look suspiciously like weathered box work | E-Reefs |

| | | | |
|---|---|---|---|
| 33 | 220.15m | - medium grained (1-2mm) euhedral py within black sediment bleb<br>-black sediment is surrounded by a white qtz and carbonate vein within a sandstone hosted sedimentary sequence<br>- discrete boundaries exist between the euhedral pyrite and the black sediment and also between the black sediment and qtz/carbonate vein<br>- Massive py at contact between black sediment bleb and qtz carbonate vein | E-Reefs |
| 34 | | As above | E-Reefs |
| 35 | 220.30m | - black sediment within a quartz - carbonate vein within the larger sandstone hosted edimentary sequence interval (similarly to 36).<br>- euhedral pyrite absent from black sediment<br>-fine grained massive py associated with black shale and quartz - carbonate vein | E-Reefs |
| 36 | | As above | E-Reefs |
| 37 | 224.60m | -a sequence of 'laminated' fine grained massive pyrite to coarse euhedral & anhedral massive pyrite<br>-within sedimentary sequence mentioned above<br>- black stainining left on hands (fine grained sulphides) | E-Reefs |
| 38 | | As above | E-Reefs |
| 39 | 225.40m | - fine (1mm) - coarse (up to 1cm) grained subhedral pyrite within black silt layer within the aforementioned sedimentary sequence<br>- pyrite has been fractured<br>- surficial variability in textures common | E-Reefs |
| 40 | 231.90m | -white qtz-carbonate vein with fractured subhedral pyrite<br>- host rock is a fine grained sandstone which contains ~1mm euhedral pyrites<br>- within sedimentary sequence | E-Reefs |
| 41 | 232.55m | - interlocking subhedral pyrite and chalcopyrite (cpy) with brown unknown sulph infill within quartz - carbonate vein<br>- pyrite is fractures with micro-channelways<br>-fine grained sandstone host in sedimentary sequence | E-Reefs |
| 42 | | As above | E-Reefs |
| 43 | | As above | E-Reefs |
| 44 | 235.15m | -Up to 5mm massive pyrite<br>- intergrowth within a qtz-carbonate vein<br>-crème colours carbonate/dolomite also visible | E-Reefs |

Site visit sample notes

## APPENDIX C: LA-ICP-MS SPOT ANALYSES FOR PYRITE

| Sample # | $^{55}$Mn | $^{59}$Co | $^{60}$Ni | $^{65}$Cu | $^{66}$Zn | $^{69}$Ga | $^{75}$As | $^{82}$Se | $^{95}$Mo | $^{107}$Ag | $^{111}$Cd | $^{115}$In | $^{118}$Sn | $^{121}$Sb | $^{125}$Te | $^{184}$W | $^{197}$Au | $^{202}$Hg | $^{205}$Tl | $^{208}$Pb | $^{209}$Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF2Pyr-1 | 0.23 | 12 | 3.4 | 14 | 1.4 | <0.01 | 2085 | 1.5 | 0.33 | <0.00 | <0.052 | <0.0025 | 0.10 | 0.07 | <0.102 | 0.98 | <0.0151 | <0.25 | <0.0042 | 0.08 | 1.5 |
| MF2Pyr-2 | 0.39 | 10 | 3.4 | 2.9 | 0.88 | <0.01 | 1787 | <1.43 | 0.33 | 0 | <0.00 | <0.0038 | 0.36 | 0.14 | <0.109 | 1.3 | <0.0131 | <0.24 | 0 | 0.09 | 2.1 |
| MF2Pyr-3 | 0.62 | 6.3 | 1.9 | 1.6 | 1.5 | 1.3 | 2312 | <1.32 | <0.00 | 0 | <0.00 | 0.01 | 0.26 | 0.08 | 0.15 | 0.27 | <0.0154 | <0.23 | 0.01 | 0.81 | 3.2 |
| MF2Pyr-4 | 0.17 | 305 | 4.8 | 2.4 | 1.8 | 0.01 | 1783 | 1.5 | 0.16 | 0.23 | <0.051 | 0.01 | 2.1 | 0.11 | 0.48 | 5.1 | <0.015 | <0.214 | <0.0071 | 0.52 | 2.6 |
| MF2Pyr-5 | 0.37 | 8.2 | 2.8 | 2.5 | 1.5 | <0.0150 | 2086 | <1.33 | <0.00 | <0.00 | 0.03 | <0.0048 | <0.083 | 0.02 | 0.02 | 0.06 | 0.01 | <0.22 | <0.0032 | 0.02 | 0.38 |
| MF2Pyr-6 | 0.30 | 6.0 | 8.2 | 2.8 | 1.1 | <0.0142 | 2065 | 2.1 | 0.01 | 0.01 | <0.081 | <0.0032 | <0.070 | 0.04 | <0.065 | 0.09 | <0.0110 | <0.182 | <0.0037 | <0.0133 | 0.53 |
| MF2Pyr-7 | 0.40 | 22 | 18 | 2.3 | 1.9 | <0.0141 | 1362 | <1.43 | 0.02 | 0.01 | <0.00 | <0.00 | 0.34 | 0.23 | 0.21 | 1.5 | 0.01 | <0.22 | 0 | 0.07 | 2.6 |
| MF2Pyr-8 | 0.26 | 35 | 72 | 3.1 | 0.99 | 0.01 | 808 | 1.9 | <0.00 | 0.01 | <0.00 | <0.0025 | 0.08 | 0.02 | <0.00 | 0.20 | <0.0123 | <0.22 | <0.0029 | 0.03 | 0.62 |
| MF2Pyr-9 | 0.89 | 9468 | 197 | 15 | 3.3 | 2.2 | 11952 | <1.83 | 0.14 | 1.3 | <0.074 | 0.04 | 3.9 | 0.31 | 6.0 | 15 | 0.22 | <0.31 | 0.05 | 4.3 | 15 |
| MF2Pyr-10 | 1.6 | 1131 | 61 | 10 | 1.1 | 0.14 | 3167 | 2.3 | 0.04 | 1.1 | <0.127 | 0.02 | 4.7 | 0.34 | 4.9 | 32 | 0.10 | <0.39 | <0.0124 | 4.5 | 12 |
| MF2Pyr-11 | 5.6 | 5236 | 203 | 103 | 4.9 | 0.59 | 7990 | <4.77 | 0.18 | 15 | <0.31 | 0.34 | 18 | 1.1 | 46 | 145 | 3.6 | <0.78 | 0.08 | 73 | 97 |
| MF2Pyr-12 | 0.69 | 4049 | 198 | 11 | 1.5 | <0.021 | 8074 | 2.7 | 0.04 | 1.2 | <0.099 | 0.02 | 0.55 | 0.21 | 6.4 | 4.6 | 0.18 | <0.29 | 0.01 | 7.8 | 16 |
| MF2Pyr-13 | 0.88 | 5670 | 117 | 9.1 | 1.6 | 0.07 | 6836 | 2.2 | 0.08 | 1.6 | <0.082 | 0.03 | 1.2 | 0.25 | 2.5 | 6.6 | 0.05 | <0.34 | 0.01 | 3.1 | 12 |
| MF2Pyr-14 | <0.140 | 5245 | 134 | 7.6 | 1.2 | <0.022 | 7462 | <1.67 | <0.032 | 0.38 | <0.093 | <0.0032 | 0.27 | 0.11 | 0.57 | 0.78 | <0.025 | <0.29 | 0.01 | 4.4 | 6.7 |
| MF2Pyr-15 | <0.121 | 273 | 20 | 6.2 | 2.1 | <0.0188 | 2086 | 1.9 | 0.06 | 0.34 | <0.078 | 0 | 0.13 | 0.07 | 0.55 | 0.43 | 0.03 | <0.22 | <0.0044 | 1.0 | 2.5 |
| MF2Pyr-16 | 0.15 | 25 | 3.7 | 3.1 | 1.9 | <0.0083 | 1843 | 1.7 | 0.02 | <0.00 | <0.00 | 0 | <0.067 | 0.06 | <0.076 | 0.23 | <0.0129 | <0.23 | 0 | 0.08 | 0.86 |
| MF2Pyr-17 | 0.21 | 17 | 6.8 | 3.9 | 2.1 | <0.0189 | 2423 | <1.58 | 0.03 | <0.00 | <0.088 | <0.0030 | <0.082 | 0.04 | 0.10 | 0.15 | <0.018 | <0.26 | <0.0035 | <0.037 | 1.0 |
| MF2Pyr-18 | 0.25 | 13 | 3.1 | 3.5 | 1.5 | <0.0092 | 1963 | <1.56 | 0.10 | <0.0092 | <0.00 | <0.0051 | 0.28 | 0.12 | <0.084 | 0.55 | <0.0101 | <0.25 | 0 | 0.17 | 1.8 |
| MF2Pyr-19 | 0.27 | 13 | 4.4 | 1.5 | 1.0 | <0.0108 | 1896 | 1.5 | <0.00 | 0.01 | <0.00 | <0.0035 | <0.074 | 0.04 | 0.04 | 0.08 | <0.0118 | <0.209 | <0.0040 | <0.029 | 0.72 |
| MF2Pyr-20 | 0.38 | 482 | 78 | 2.8 | 0.40 | <0.020 | 2251 | 1.5 | 0.11 | 0.70 | <0.050 | 0.01 | 0.09 | 0.05 | 0.84 | 0.37 | <0.017 | <0.20 | 0 | 1.1 | 2.5 |
| MF2Pyr-21 | 0.67 | 174 | 160 | 15 | 1.3 | <0.020 | 5216 | <1.17 | 0.04 | 0.75 | 0.52 | <0.0034 | <0.079 | 0.12 | 0.22 | 0.16 | 0.04 | <0.22 | 0.01 | 1.6 | 4.3 |
| MF2Pyr-22 | 5.0 | 170 | 191 | 91 | 12 | 1.7 | 4546 | <1.37 | 0.08 | <0.0082 | <0.054 | 0.02 | 4.2 | 1.6 | 0.33 | 9.2 | 0.04 | <0.24 | 0.03 | 1.9 | 20 |
| MF2Pyr-23 | 0.15 | 765 | 313 | 2.7 | 1.2 | <0.0138 | 4612 | 1.9 | <0.0223 | <0.0069 | 0.01 | 0 | 0.15 | 0.10 | 0.09 | 0.41 | <0.0152 | <0.191 | <0.0057 | <0.035 | 1.7 |
| MF2Pyr-24 | 0.17 | 121 | 143 | 3.8 | 1.7 | <0.00 | 4929 | 1.4 | <0.032 | 0.01 | <0.00 | <0.0032 | 0.11 | 0.05 | 0.04 | 0.50 | 0.01 | <0.195 | <0.0057 | <0.0190 | 0.81 |
| MF2Pyr-25 | 2.5 | 99 | 99 | 3.4 | 1.5 | 2.6 | 4786 | 2.6 | <0.032 | <0.0071 | <0.00 | 0.01 | 0.66 | 0.29 | 0.22 | 0.80 | 0.01 | <0.198 | 0.02 | 0.85 | 8.6 |
| MF2Pyr-26 | 0.14 | 29 | 36 | 2.6 | 1.1 | <0.0088 | 5341 | <1.02 | 0.06 | 0 | 0.02 | 0 | <0.061 | 0.02 | 0.03 | 0.22 | <0.0069 | 0.17 | 0 | 0.10 | 0.51 |
| MF2Pyr-27 | 1.2 | 100 | 146 | 1.3 | 1.7 | 1.7 | 2018 | <1.17 | 0.04 | <0.00 | 0.01 | 0.02 | 0.38 | 0.20 | 0.19 | 3.0 | 0.02 | <0.196 | 0.01 | 0.04 | 6.6 |
| MF2Pyr-28 | 0.25 | 615 | 243 | 11 | 2.0 | 0.04 | 2867 | <1.23 | <0.00 | 0.01 | <0.00 | <0.00 | <0.065 | 0.03 | <0.066 | 0.20 | <0.0135 | <0.194 | 0 | 0.03 | 0.90 |
| MF2Pyr-29 | 0.11 | 493 | 297 | 9.2 | 2.3 | <0.0118 | 3929 | 1.3 | 0.02 | 0.80 | <0.045 | 0.02 | 0.07 | 0.06 | 0.58 | 0.27 | 0.04 | <0.171 | 0.02 | 2.5 | 2.7 |
| MF2Pyr-30 | 0.29 | 152 | 282 | 2.6 | 1.5 | <0.0119 | 3920 | 3.0 | <0.044 | 0.01 | 0.03 | <0.0022 | 0.09 | 0.10 | <0.090 | 0.26 | <0.0076 | <0.193 | 0 | 0.05 | 1.8 |
| MF2Pyr-31 | 0.27 | 429 | 330 | 19 | 3.0 | <0.0102 | 3489 | <1.10 | 0.09 | 2.2 | <0.082 | 0.03 | 0.35 | 0.22 | 1.6 | 1.0 | 0.09 | 0.29 | 0.02 | 13 | 9.1 |
| MF2Pyr-32 | 3.7 | 544 | 586 | 18 | 3.6 | 0.21 | 4847 | 3.1 | 0.18 | 4.6 | <0.00 | 0.70 | 4.7 | 1.1 | 7.2 | 81 | 0.38 | <0.21 | 0.02 | 34 | 43 |
| MF2Pyr-33 | 1.1 | 501 | 686 | 12 | 2.0 | 0.04 | 4720 | 1.5 | 0.08 | 6.7 | 0.01 | 0.26 | 1.5 | 0.38 | 8.7 | 6.5 | 0.38 | <0.195 | 0.02 | 24 | 19 |
| MF2Pyr-34 | <0.100 | 67 | 203 | 4.4 | 1.3 | <0.0088 | 4551 | 2.0 | 0.04 | 0.27 | <0.041 | 0 | 0.26 | 0.12 | 0.14 | 0.82 | <0.0153 | <0.164 | <0.0061 | 0.15 | 1.8 |
| MF2Pyr-35 | 0.56 | 158 | 118 | 4.5 | 2.6 | 0.02 | 4231 | 1.7 | 0.02 | 0 | <0.097 | 0 | 0.29 | 0.22 | 0.83 | 2.1 | 0.02 | <0.183 | <0.00 | 0.09 | 6.0 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF2Pyr-36 | 29 | 88 | 91 | 4.4 | 10 | 0.26 | 3331 | 1.7 | <0.0198 | <0.0087 | 0.02 | 0 | 0.09 | 0.27 | <0.098 | 0.37 | <0.0067 | <0.163 | 0 | 0.92 | 5.0 |
| MF2Pyr-37 | 2.3 | 68 | 86 | 6.6 | 3.6 | 1.0 | 4068 | 1.7 | 0.03 | 0.01 | <0.00 | <0.0046 | 0.93 | 0.54 | 0.33 | 4.3 | 0.05 | <0.22 | 0.01 | 0.30 | 8.8 |
| MF2Pyr-38 | 0.24 | 23 | 15 | 2.7 | 2.0 | <0.0114 | 3078 | 1.6 | 0.02 | <0.0094 | 0.01 | <0.0037 | 0.14 | 0.03 | 0.04 | 0.21 | 0.01 | <0.176 | <0.0042 | 0.03 | 0.75 |
| MF2Pyr-39 | 0.29 | 4.4 | 2.0 | 7.3 | 1.2 | 0.01 | 3100 | <1.16 | <0.042 | 2.0 | <0.00 | 0.02 | 0.27 | 0.09 | 1.5 | 0.78 | 0.05 | <0.177 | <0.0048 | 4.5 | 7.2 |
| MF2Pyr-40 | 0.30 | 6.7 | 4.5 | 8.2 | 4.1 | <0.0154 | 2582 | 2.2 | 0.14 | 1.5 | 0.06 | 0.05 | 0.27 | 0.07 | 3.1 | 1.1 | 0.08 | <0.162 | 0.01 | 12 | 9.2 |
| MF2Pyr-41 | 0.34 | 2299 | 4138 | 19 | 0.41 | 0.01 | 13455 | 7.8 | 0.06 | 3.1 | <0.040 | 0.01 | 0.16 | 0.17 | 2.4 | 0.81 | 0.13 | <0.189 | 0.02 | 18 | 12 |
| MF2Pyr-42 | 0.23 | 407 | 17 | 5.8 | 1.2 | 0.05 | 1769 | 1.1 | <0.0220 | 0.37 | <0.045 | <0.0038 | 0.11 | 0.04 | 0.34 | 0.47 | 0.01 | <0.193 | 0 | 3.3 | 2.8 |
| MF2Pyr-43 | 0.33 | 19 | 9.1 | 3.1 | 2.0 | <0.0100 | 2128 | 1.3 | 0.01 | 0.07 | <0.00 | 0 | 0.11 | 0.03 | 0.07 | 0.12 | 0.01 | <0.207 | 0 | 1.30 | 0.80 |
| MF2Pyr-44 | 2.2 | 26 | 13 | 31 | 3.0 | 0.55 | 2123 | <1.37 | 0.04 | 2.9 | 0.01 | 0.02 | 0.96 | 0.20 | 1.2 | 1.1 | 0.05 | <0.207 | 0.06 | 33 | 11 |
| MF2Pyr-45 | 2.5 | 29 | 12 | 36 | 2.2 | 0.76 | 1511 | <1.27 | 0.29 | 7.9 | 0.06 | 0.04 | 2.6 | 0.52 | 7.0 | 6.6 | 0.31 | <0.20 | 0.06 | 64 | 38 |
| MF2Pyr-46 | 2.5 | 13 | 10 | 28 | 3.6 | 0.23 | 1777 | <1.57 | 0.52 | 0.47 | 0.05 | 0.08 | 1.7 | 0.12 | 0.88 | 1.8 | <0.018 | <0.26 | 0.01 | 6.8 | 5.4 |
| MF2Pyr-47 | <0.107 | 44 | 43 | 3.6 | 1.5 | <0.0106 | 2221 | 1.3 | 0.01 | 0.05 | <0.00 | <0.0020 | 0.12 | 0.09 | <0.057 | 0.05 | 0.01 | <0.170 | <0.0045 | 0.13 | 1.0 |
| MF2Pyr-48 | 2.8 | 85 | 102 | 5.6 | 7.0 | 0.31 | 2923 | <1.34 | <0.057 | <0.0080 | <0.00 | 0.04 | 8.7 | 1.4 | 0.36 | 78 | 0.03 | <0.205 | 0.01 | 2.1 | 7.6 |
| MF2Pyr-49 | 15 | 172 | 111 | 4.1 | 7.8 | 21 | 2598 | <2.50 | 0.61 | <0.0156 | <0.102 | 0.02 | 4.7 | 0.39 | 0.73 | 1.9 | <0.017 | <0.45 | 0.24 | 1.6 | 20 |
| MF2Pyr-50 | 0.22 | 2.3 | 1.7 | 2.4 | 0.71 | 0.01 | 1307 | 0.99 | <0.0172 | 0.21 | <0.00 | 0 | 0.07 | 0.01 | <0.086 | <0.0100 | <0.0059 | <0.152 | <0.0048 | 0.66 | <0.0077 |
| MF2Pyr-51 | 4.4 | 1961 | 281 | 174 | 6.5 | 1.1 | 3816 | 5.7 | 0.56 | 39 | 0.12 | 0.24 | 1.7 | 0.91 | 8.4 | 14 | 1.6 | 0.50 | 0.37 | 374 | 54 |
| MF2Pyr-52 | 2.3 | 2589 | 1929 | 44 | 1.8 | 0.08 | 8401 | 5.5 | 0.16 | 11 | <0.00 | 0.34 | 0.50 | 0.56 | 8.9 | 5.0 | 0.77 | <0.183 | 0.06 | 96 | 32 |
| MF2Pyr-53 | 12 | 183 | 220 | 5.3 | 1.5 | <0.0136 | 4025 | <1.52 | <0.0220 | 0 | 0.06 | 0 | 0.07 | 0.08 | 0.11 | 0.19 | 0.02 | <0.191 | <0.0035 | 0.14 | 2.5 |
| MF2Pyr-54 | 0.99 | 189 | 226 | 17 | 1.4 | <0.0160 | 5184 | <1.09 | <0.0211 | 0 | 0.17 | <0.0021( | 0.12 | 0.01 | 0.07 | 0.03 | <0.0102 | <0.175 | 0 | 0.30 | 1.0 |
| MF2Pyr-55 | 0.15 | 196 | 168 | 13 | 1.9 | 0.04 | 4442 | 1.8 | <0.0231 | 0.01 | 0.21 | 0 | 0.25 | 0.06 | <0.116 | 0.32 | <0.0079 | <0.185 | 0 | 0.34 | 1.4 |
| MF2Pyr-56 | 33 | 160 | 155 | 4.7 | 1.5 | 3.2 | 3099 | 1.8 | 0.06 | 0.05 | 0.02 | 0.02 | 0.74 | 0.18 | 0.23 | 0.42 | 0.32 | <0.19 | 0.03 | 1.3 | 8.0 |
| MF2Pyr-57 | 0.09 | 198 | 128 | 15 | 1.0 | <0.0127 | 4798 | 1.2 | 1.1 | <0.0100 | 0.03 | <0.0021( | <0.053 | 0.04 | <0.075 | 0.06 | 0.02 | <0.153 | <0.0030 | <0.068 | 0.57 |
| MF2Pyr-58 | 2.2 | 150 | 156 | 6.8 | 3.2 | 0.83 | 4821 | 2.4 | 0.04 | <0.0146 | 0.13 | 0.01 | 2.7 | 0.53 | 0.23 | 20 | 0.04 | <0.175 | 0.01 | 0.64 | 8.2 |
| MF2Pyr-59 | 0.47 | 65 | 126 | 4.9 | 1.8 | 0.53 | 3232 | 1.6 | 0.01 | 0.01 | 0.06 | <0.0020 | 0.26 | 0.13 | 0.24 | 0.30 | 0.03 | <0.165 | 0 | 0.39 | 5.3 |
| MF2Pyr-60 | <0.085 | 444 | 312 | 2.1 | 1.9 | <0.0058 | 3986 | 0.94 | 0.02 | 0.01 | <0.00 | <0.0019 | 0.10 | 0.02 | 0.15 | 0.09 | <0.0111 | <0.153 | <0.0021 | 0.01 | 0.50 |
| MF2Pyr-61 | 1.7 | 2358 | 58 | 47 | 2.2 | 0.92 | 3030 | 3.0 | 0.05 | 21 | 0.04 | 0.02 | 1.6 | 0.24 | 14 | 1.1 | 0.64 | <0.30 | 0.03 | 55 | 56 |
| MF2Pyr-62 | 1.2 | 1837 | 22 | 27 | 1.2 | 0.22 | 3540 | <1.51 | <0.054 | 10 | <0.064 | 0.01 | 0.55 | 0.22 | 8.3 | 1.0 | 0.34 | <0.28 | 0.03 | 53 | 50 |
| MF2Pyr-63 | 1.1 | 21 | 8.7 | 27 | 2.1 | 0.07 | 2631 | <2.13 | 0.25 | 8.9 | <0.00 | 0.03 | 0.51 | 0.20 | 9.6 | 1.3 | 0.50 | <0.36 | 0.24 | 75 | 53 |
| MF2Pyr-64 | 1.2 | 2347 | 89 | 48 | 1.2 | 1.1 | 5301 | <1.66 | 0.05 | 18 | 0.02 | 0.04 | 1.8 | 0.33 | 14 | 1.1 | 0.62 | <0.32 | 0.06 | 86 | 83 |
| MF2Pyr-65 | 0.77 | 5684 | 227 | 7.5 | 2.3 | 0.02 | 8009 | <1.67 | 0.02 | 1.3 | <0.00 | 0.02 | 0.19 | 0.05 | 0.40 | 0.25 | 0.05 | <0.27 | 0.01 | 9.2 | 5.6 |
| MF2Pyr-66 | 0.28 | 22 | 4.5 | 4.5 | 0.86 | <0.0196 | 2286 | <1.69 | <0.032 | 0.71 | <0.130 | 0.01 | 0.11 | 0.08 | 1.4 | 0.39 | 0.04 | <0.27 | <0.0051 | 5.7 | 12 |
| MF2Pyr-67 | 0.58 | 111 | 85 | 12 | 2.2 | 0.12 | 2891 | <1.61 | 0.04 | 2.2 | <0.00 | 0.03 | 0.59 | 0.17 | 3.4 | 0.48 | 0.12 | <0.27 | 0.05 | 16 | 26 |
| MF2Pyr-68 | <0.140 | 45 | 37 | 8.9 | 2.3 | <0.0159 | 3552 | 2.8 | 0.04 | 1.4 | <0.00 | 0.01 | 0.34 | 0.14 | 1.2 | 0.14 | 0.05 | <0.26 | 0.02 | 4.5 | 11 |
| MF2Pyr-69 | 17 | 76 | 17 | 102 | 15 | 0.25 | 1815 | 11 | 0.91 | 26 | 0.04 | 0.03 | 2.5 | 0.29 | 14 | 1.1 | 0.92 | 0.90 | 0.02 | 1243 | 25 |
| MF2Pyr-70 | 0.19 | 4.2 | 1.4 | 5.6 | 1.1 | <0.030 | 2385 | 2.4 | 0.02 | 0.03 | <0.00 | 0 | 0.59 | 0.32 | 0.26 | 6.9 | 0.03 | <0.32 | <0.0067 | <0.109 | 5.6 |
| MF2Pyr-71 | 0.40 | 710 | 132 | 4.1 | 1.2 | <0.0125 | 2328 | <1.50 | <0.041 | 1.1 | 0.02 | <0.0029 | 0.20 | 0.23 | 0.32 | 1.0 | 0.02 | <0.25 | <0.0033 | 0.43 | 2.6 |
| MF2Pyr-72 | <0.141 | 954 | 94 | 4.1 | 1.0 | 0.14 | 3132 | <1.46 | <0.043 | 0.58 | <0.089 | 0.01 | 0.53 | 0.06 | 0.56 | 0.45 | 0.02 | <0.25 | <0.0069 | 0.27 | 2.2 |
| MF2Pyr-73 | 0.38 | 135 | 8.6 | 4.0 | 1.2 | 0.03 | 1841 | <1.50 | 0.04 | 0.19 | <0.064 | <0.0030( | 1.3 | 0.32 | 0.44 | 4.2 | <0.018 | <0.24 | 0.01 | 0.52 | 4.3 |
| MF2Pyr-74 | <0.39 | 2818 | 426 | 33 | 3.1 | 0.36 | 5113 | 3.9 | <0.081 | 7.8 | 0.04 | 0.01 | 0.37 | 0.09 | 4.9 | 0.98 | 0.05 | <0.64 | 0.08 | 1.5 | 7.2 |
| MF2Pyr-75 | 0.46 | 548 | 58 | 5.6 | 2.4 | <0.023 | 2222 | <1.48 | 0.03 | 2.0 | <0.00 | <0.0030( | 0.13 | 0.15 | 1.5 | 0.48 | 0.01 | <0.25 | 0.02 | 0.48 | 3.7 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF2Pyr-76 | 0.18 | 305 | 35 | 9.1 | 1.3 | <0.0181 | 2147 | 1.6 | <0.0294 | 0.23 | <0.061 | 0 | 0.12 | 0.11 | 0.36 | 0.16 | 0.02 | <0.24 | <0.0047 | 0.13 | 2.1 |
| MF2Pyr-77 | 0.29 | 2533 | 59 | 4.3 | 0.57 | 0.12 | 4837 | 1.4 | <0.040 | 0.60 | 0.07 | <0.0028 | 0.63 | 0.05 | 1.5 | 2.1 | 0.01 | <0.23 | 0 | 0.55 | 4.1 |
| MF2Pyr-78 | 0.56 | 1854 | 54 | 8.8 | 2.7 | 0.20 | 3687 | 2.6 | 0.54 | 1.4 | 0.02 | 0.02 | 4.6 | 0.14 | 3.3 | 19 | 0.03 | <0.28 | 0.01 | 2.0 | 3.2 |
| MF2Pyr-79 | 1.5 | 1253 | 26 | 3.7 | 3.2 | 0.15 | 3347 | 1.5 | 0.02 | 0.36 | <0.00 | 0.02 | 3.2 | 0.24 | 0.76 | 7.7 | 0.02 | <0.24 | 0.01 | 0.83 | 4.9 |
| MF2Pyr-80 | 0.84 | 390 | 47 | 5.7 | 1.2 | 0.06 | 2218 | 1.3 | <0.035 | 4.9 | 0.03 | 0.04 | 1.9 | 0.22 | 1.7 | 9.9 | 0.10 | <0.201 | <0.0040 | 2.9 | 6.9 |
| **Mean n=80** | 2.4 | 873 | 185 | 15 | 2.4 | 1.0 | 3704 | 2.4 | 0.15 | 3.3 | 0.07 | 0.05 | 1.3 | 0.23 | 3.1 | 6.6 | 0.22 | 0.47 | 0.03 | 32 | 12 |
| **S.D** | 5.7 | 1670 | 508 | 27 | 2.4 | 3.1 | 2228 | 1.8 | 0.23 | 6.9 | 0.10 | 0.12 | 2.6 | 0.30 | 6.4 | 21 | 0.54 | 0.32 | 0.07 | 151 | 18 |
| **Min** | 0.09 | 2.3 | 1.4 | 1.3 | 0.40 | 0.01 | 808 | 0.94 | 0.01 | 0 | 0.01 | 0 | 0.07 | 0.01 | 0.02 | 0.03 | 0.01 | 0.17 | 0 | 0.01 | 0.38 |
| **Max** | 33 | 9468 | 4138 | 174 | 15 | 21 | 13455 | 11 | 1.1 | 39 | 0.52 | 0.70 | 18 | 1.6 | 46 | 145 | 3.6 | 0.90 | 0.37 | 1243 | 97 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF3Pyr-1 | 0.24 | 28 | 1.4 | 5.1 | 1.5 | 0.03 | 6905 | 1.5 | 0.01 | 0.57 | 0.03 | <0.0040 | 0.92 | 0.03 | 0.67 | 0.11 | 0.03 | <0.209 | 0 | 1.0 | 1.2 |
| MF3Pyr-2 | 1.4 | 4.1 | 1.6 | 17 | 0.99 | 0.02 | 5758 | 1.2 | 0.01 | 1.2 | <0.038 | 0.04 | 0.98 | 0.06 | 0.76 | 0.07 | 0.07 | <0.159 | 0.05 | 139 | 1.4 |
| MF3Pyr-3 | 3.8 | 13 | 1.8 | 121 | 1.7 | 0.09 | 5582 | 1.3 | 2.0 | 0.43 | 0.04 | 0.04 | 6.4 | 0.02 | 2.7 | 0.53 | 0.01 | <0.131 | 0.03 | 0.48 | 1.2 |
| MF3Pyr-4 | 3.5 | 6.4 | 2.7 | 27 | 4.6 | 0.08 | 6270 | 1.5 | 1.2 | 0.74 | <0.00 | 0.03 | 4.1 | 0.06 | 2.8 | 0.51 | 0.04 | <0.196 | 0.02 | 8.2 | 1.5 |
| MF3Pyr-5 | 1.2 | 40 | 12 | 43 | 2.6 | 0.14 | 5942 | 3.5 | 0.02 | 2.2 | 0.06 | 0.03 | 2.5 | 0.24 | 3.8 | 0.26 | 0.29 | <0.28 | 0.04 | 18 | 9.9 |
| MF3Pyr-6 | 0.37 | 348 | 36 | 5.4 | 0.98 | 0.01 | 5560 | 1.2 | 0.05 | 0.64 | <0.042 | 0.01 | 0.61 | 0.14 | 0.92 | 0.05 | 0.10 | <0.161 | <0.0034 | 0.26 | 5.0 |
| MF3Pyr-7 | 0.24 | 63 | 32 | 1.6 | 0.90 | <0.0083 | 5577 | 1.2 | 0.02 | 0.08 | 0.01 | <0.0040 | 0.13 | 0.02 | 0.09 | 0.04 | 0.01 | <0.121 | 0.01 | 0.41 | 0.28 |
| MF3Pyr-8 | 0.40 | 2.9 | 0.84 | 3.0 | 0.56 | <0.0051 | 5651 | 1.7 | <0.0162 | 0.05 | <0.00 | 0 | 0.47 | 0.01 | 0.11 | 0.03 | 0.01 | 0.14 | <0.0019 | 0.23 | 0.37 |
| MF3Pyr-9 | 0.22 | 8.0 | 3.0 | 15 | 1.2 | <0.0114 | 5926 | 0.99 | <0.028 | 0.76 | 0.01 | 0.01 | 0.48 | 0.06 | 1.1 | 0.04 | 0.23 | <0.125 | 0.01 | 135 | 3.0 |
| MF3Pyr-10 | 7 | 866 | 626 | 51 | 17 | <0.80 | 3623 | <52.13 | 0.27 | 2.9 | <3.66 | 0.14 | 26 | <0.61 | 19 | 1.5 | 0.83 | <7.94 | 0.10 | 22 | 229 |
| MF3Pyr-11 | 0.48 | 1375 | 178 | 6.1 | 1.4 | <0.0118 | 2308 | <0.94 | 4.5 | 0.22 | <0.054 | <0.0027 | 0.46 | 0.29 | 3.7 | 0.03 | 0.07 | <0.153 | <0.0031 | 0.73 | 14 |
| MF3Pyr-12 | 3.4 | 3587 | 436 | 6.7 | 2.7 | 0.12 | 6354 | <1.00 | <0.049 | 0.29 | <0.00 | 0 | 0.28 | 0.26 | 5.9 | 0.04 | 0.05 | <0.153 | 0.01 | 1.8 | 20 |
| MF3Pyr-13 | 0.27 | 292 | 58 | 3.7 | 1.1 | <0.0150 | 1462 | <0.94 | <0.028 | 0.07 | <0.040 | <0.0028 | 0.13 | 0.07 | 0.27 | <0.0081 | 0.07 | <0.164 | 0 | 1.2 | 2.6 |
| MF3Pyr-14 | 1.4 | 47 | 2.6 | 3.1 | 1.5 | 0.01 | 4585 | 1.8 | 0.01 | 0.29 | 0.01 | 0 | 0.10 | 0.25 | 0.42 | 0.01 | 0.10 | <0.158 | <0.0032 | 0.30 | 10 |
| MF3Pyr-15 | 1 | 25 | 0.71 | 4.8 | 1.3 | 0.01 | 5162 | 1.4 | <0.00 | 0.01 | <0.042 | <0.0021 | 0.26 | 0.02 | 0.14 | 0.07 | 0.02 | <0.158 | 0 | 0.09 | 0.88 |
| MF3Pyr-16 | 0.19 | 1.0 | 0.72 | 3.8 | 1.5 | <0.0108 | 6407 | 1.7 | <0.0201 | <0.0085 | <0.00 | <0.0028 | 0.16 | 0.03 | 0.52 | 0 | 0.23 | <0.159 | <0.0023 | 0.03 | 2.0 |
| MF3Pyr-18 | 7.6 | 52 | 9.0 | 53 | <17.15 | <0.95 | 3097 | <89.83 | <0.00 | 4.5 | <5.02 | <0.25 | 15 | <0.84 | 6.6 | <1.03 | <0.00 | <13.85 | <0.205 | 3.5 | 41 |
| MF3Pyr-19 | 3.1 | 65 | 27 | 17 | 2.9 | 0.03 | 3822 | 1.9 | 0.04 | 2.3 | 0.06 | 0.04 | 0.79 | 0.31 | 4.4 | 0.13 | 0.28 | <0.27 | 0.08 | 29 | 17 |
| MF3Pyr-20 | 0.10 | 3.4 | 0.77 | 4.4 | 1.5 | <0.0134 | 4176 | 1.1 | 0.01 | 0.06 | 0.01 | 0 | 0.49 | 0.01 | 0.40 | 0.26 | 0.01 | <0.144 | 0 | 1.5 | 0.54 |
| MF3Pyr-21 | 2.7 | 2165 | 380 | 20 | <3.40 | <0.200 | 6595 | <12.96 | <0.59 | 1.5 | <0.53 | 0.05 | 4.6 | 0.32 | 2.4 | 8.9 | 0.31 | <2.37 | 0.03 | 9.0 | 17 |
| MF3Pyr-22 | 0.98 | 129 | 49 | 25 | 1.2 | 0.13 | 6124 | 3.3 | 0.07 | 1.9 | 0.02 | 0.01 | 1.5 | 0.37 | 6.3 | 0.46 | 0.25 | <0.32 | 0.44 | 16 | 13 |
| MF3Pyr-23 | 0.35 | 32 | 10 | 35 | 1.6 | 0.14 | 7337 | <1.67 | 0.01 | 1.2 | <0.067 | 0.01 | 0.62 | 0.17 | 4.4 | 0.10 | 0.16 | <0.28 | 0.01 | 81 | 11 |
| MF3Pyr-24 | 0.13 | 7.1 | 0.80 | 1.5 | 1.0 | <0.0128 | 6209 | 1.1 | 0.01 | 0.06 | <0.00 | <0.0027 | 0.35 | 0.01 | 0.15 | 0.02 | 0.01 | <0.135 | <0.0031 | 0.09 | 0.28 |
| MF3Pyr-25 | 0.40 | 6.3 | 2.8 | 3.6 | 0.33 | 0.01 | 6792 | 1.5 | <0.00 | 0.44 | 0.03 | <0.00 | 0.13 | 0.05 | 0.87 | 0.30 | 0.04 | <0.187 | <0.0026 | 0.86 | 1.1 |
| MF3Pyr-26 | 1.4 | 40 | 16 | 23 | 1.6 | 0.19 | 5569 | <2.27 | 0.01 | 4.3 | <0.00 | 0.01 | 0.57 | 0.21 | 7.2 | 0.85 | 0.32 | <0.38 | 0 | 33 | 3.8 |
| MF3Pyr-27 | 0.23 | 24 | 5.0 | 18 | 1.4 | 0.26 | 4582 | 2.5 | <0.031 | 5.0 | 0.07 | <0.0043 | 0.51 | 0.23 | 4.3 | 0.12 | 0.33 | <0.25 | 0.02 | 89 | 7.4 |
| MF3Pyr-28 | 3 | 39 | 11 | 18 | 1.7 | 0.13 | 3635 | 3.4 | 0.05 | 5.6 | 0.02 | 0.01 | 0.69 | 0.30 | 9.0 | 4.5 | 0.36 | <0.32 | 0.02 | 70 | 252 |
| MF3Pyr-29 | 7.8 | 205 | 34 | 57 | 3.9 | 0.49 | 2862 | 4.1 | 0.04 | 8.6 | <0.00 | 0.05 | 2.4 | 0.39 | 12 | 15 | 1.6 | <0.60 | 0.03 | 102 | 24 |
| MF3Pyr-30 | 0.68 | 427 | 65 | 29 | 3.2 | 0.22 | 1842 | <1.48 | <0.028 | 5.3 | <0.098 | 0.02 | 2.6 | 0.18 | 10 | 0.60 | 0.42 | <0.22 | 0.07 | 193 | 63 |
| MF3Pyr-31 | 449 | 600 | 180 | <216.22 | 762 | 3834 | 6509 | <1064.6 | 26 | 92 | <41.20 | 40 | 8416 | 49 | 369 | 2514 | 38 | <163.04 | 23 | 77 | 74 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF3Pyr-32 | 0.34 | 143 | 43 | 3.8 | 0.94 | 0.03 | 3474 | <0.91 | 4.0 | 0.87 | 0.01 | 0.01 | 0.25 | 0.34 | 4.4 | 0.14 | 0.12 | <0.147 | 0.01 | 94 | 19 |
| MF3Pyr-33 | 0.20 | 31 | 8.5 | 8.5 | <0.34 | 0.16 | 3089 | <1.61 | <0.046 | 3.2 | <0.066 | 0.04 | 0.51 | 0.29 | 5.3 | 0.03 | 0.14 | <0.27 | 0.02 | 2.3 | 8.1 |
| MF3Pyr-34 | 2 | 67 | 17 | 23 | 3.8 | 0.45 | 2992 | <2.87 | <0.086 | 5.2 | <0.122 | 0.02 | 2.7 | 0.29 | 12 | 1.6 | 0.17 | <0.50 | 0.05 | 14 | 148 |
| MF3Pyr-35 | 0.68 | 74 | 20 | 19 | 2.1 | 0.77 | 3089 | 1.3 | 0.40 | 5.2 | <0.00 | 0.02 | 2.9 | 0.29 | 6.3 | 0.67 | 0.40 | <0.215 | 0.06 | 10 | 11 |
| MF3Pyr-36 | 8.7 | 62 | 11 | 13 | 2.5 | 0.33 | 2837 | 2.0 | 9.9 | 4.5 | 0.03 | 0.03 | 5.7 | 0.22 | 2.2 | 0.77 | 0.11 | <0.22 | 0.01 | 3.1 | 7.0 |
| MF3Pyr-37 | 0.66 | 44 | 21 | 22 | 1.7 | 0.60 | 3679 | 3.1 | 0.06 | 14 | 0.02 | 0.02 | 2.3 | 0.29 | 11 | 0.52 | 0.47 | <0.32 | 0.03 | 104 | 12 |
| MF3Pyr-38 | 0.41 | 63 | 26 | 13 | 0.87 | 0.69 | 2388 | <1.47 | 0.11 | 4.5 | <0.083 | 0.01 | 0.70 | 0.51 | 7.7 | 0.31 | 0.23 | <0.23 | 0.04 | 22 | 18 |
| MF3Pyr-39 | 1.1 | 44 | 23 | 35 | 2.7 | 0.87 | 2053 | 3.5 | 0.02 | 8.9 | <0.134 | 0.01 | 1.0 | 0.47 | 7.4 | 2.1 | 1.2 | <0.50 | 0.04 | 64 | 12 |
| MF3Pyr-40 | 0.77 | 88 | 30 | 8.1 | 2.3 | 0.75 | 4302 | 2.2 | 0.01 | 3.1 | <0.00 | 0.02 | 2.1 | 0.27 | 9.3 | 0.19 | 0.18 | <0.128 | 0.03 | 34 | 24 |
| MF3Pyr-41 | <1.70 | 7192 | 88 | 39 | <3.74 | 0.52 | 11443 | <14.56 | 0.19 | 7.9 | 1.9 | 0.16 | 1.7 | 0.80 | 3.4 | 0.04 | 0.32 | <3.08 | 0.23 | 31 | 19 |
| MF3Pyr-42 | 0.14 | 7.1 | 0.54 | 2.3 | 1.1 | <0.0089 | 3806 | 1.1 | 0.02 | 0.02 | 0.01 | <0.0016 | <0.050 | 0.10 | 0.20 | 0.04 | 0.03 | <0.145 | <0.0019 | 0.06 | 3.3 |
| MF3Pyr-43 | <0.076 | 1.1 | 0.03 | 1.9 | 0.78 | <0.0113 | 4570 | 0.93 | 0 | 0 | <0.030 | 0 | 0.12 | 0.05 | 0.07 | 0.69 | <0.0050 | <0.123 | <0.0030 | 0.03 | 0.72 |
| MF3Pyr-44 | 0.20 | 8.5 | 0.77 | 1.8 | 0.76 | <0.0064 | 3648 | 0.90 | 0.18 | 0 | 0.01 | <0.0014 | 0.04 | 0.01 | 0.08 | <0.0086 | 0.01 | <0.116 | 0 | <0.0081 | 1.0 |
| MF3Pyr-45 | 0.13 | 3.1 | 0.37 | 2.3 | 0.61 | <0.0083 | 4496 | 0.89 | <0.00 | <0.0047 | 0.01 | <0.0022 | <0.040 | 0 | <0.085 | <0.0127 | <0.0052 | <0.130 | 0 | <0.0094 | <0.0032 |
| MF3Pyr-46 | 0.10 | 4.4 | 0.56 | 1.6 | 0.90 | <0.0093 | 4282 | 1.9 | <0.00 | <0.00 | 0.03 | <0.0014 | <0.036 | 0.02 | <0.041 | 0.04 | 0.01 | <0.121 | 0 | <0.0108 | 0.81 |
| MF3Pyr-47 | 0.09 | 14 | 2.2 | 3.8 | 1.6 | <0.0131 | 4708 | <0.87 | <0.0225 | <0.0068 | <0.00 | <0.0015 | <0.047 | <0.0076 | <0.063 | <0.0093 | 0 | <0.133 | <0.0018 | <0.0082 | 0.02 |
| MF3Pyr-48 | 3.1 | 21 | 9.3 | 6.4 | 4.0 | 0.05 | 4268 | <4.06 | 0.11 | 3.9 | <0.00 | <0.0132 | 0.51 | 0.05 | 1.6 | 4.2 | 0.04 | <0.61 | <0.0177 | 1.3 | 1.7 |
| MF3Pyr-49 | 0.22 | 80 | 39 | 8.0 | 0.98 | <0.0077 | 3562 | 1.5 | <0.0143 | 6.0 | <0.00 | 0 | <0.038 | 0.50 | 6.6 | <0.0059 | 0.59 | <0.120 | 0.05 | 40 | 25 |
| MF3Pyr-50 | 0.16 | 7.1 | 4.2 | 3.1 | 2.2 | 0.01 | 4613 | 1.4 | 0 | 0.17 | 0.01 | 0.01 | 2.5 | 0.02 | 0.10 | 0.03 | 0.01 | <0.127 | <0.0025 | 0.06 | 0.33 |
| MF3Pyr-51 | 0.45 | 81 | 21 | 3.7 | 0.99 | 0.01 | 4964 | 2.1 | <0.00 | 0.55 | 0.05 | 0.01 | 0.19 | 0.09 | 2.5 | 0.01 | 0.03 | <0.122 | 0.01 | 27 | 6.8 |
| MF3Pyr-52 | 0.49 | 45 | 16 | 9.1 | 0.69 | 0.03 | 3809 | <1.03 | 0.01 | 2.0 | <0.00 | 0 | 0.29 | 0.12 | 2.0 | 0.07 | 0.08 | <0.175 | 0.03 | 24 | 11 |
| MF3Pyr-53 | 1.6 | 1392 | 272 | 25 | 2.0 | 0.03 | 7258 | 2.6 | <0.018 | 4.2 | 0.01 | 0.02 | 0.79 | 0.43 | 8.0 | 0.11 | 0.36 | <0.155 | 0.09 | 29 | 37 |
| MF3Pyr-54 | 2663 | 1628 | 939 | 824 | 919 | 4949 | 34778 | <657.78 | 53 | <5.56 | <37.07 | 38 | 3140 | 23 | 2387 | 562 | 1.2 | 100 | 52 | 185 | 3357 |
| MF3Pyr-55 | 0.29 | 1.3 | 0.42 | 7.6 | 0.67 | 0.07 | 5708 | <0.73 | 0 | <0.0046 | <0.00 | 0 | 0.12 | 0.01 | 0.12 | 0.03 | 0.01 | <0.117 | <0.00 | 0.04 | 0.52 |
| MF3Pyr-56 | 0.20 | 0.71 | 0.18 | 4.3 | 1.6 | <0.0123 | 7123 | 1.2 | 0.01 | <0.0049 | <0.00 | <0.0028 | 0.04 | 0 | <0.064 | <0.0094 | 0 | <0.130 | <0.0019 | <0.0147 | <0.0092 |
| MF3Pyr-57 | 0.10 | 1.3 | 0.38 | 2.9 | 0.71 | <0.0084 | 6359 | 1.7 | <0.0157 | 0.05 | <0.00 | 0 | 0.08 | 0.04 | 0.25 | 0.01 | 0.02 | <0.130 | 0 | 2.7 | 1.1 |
| MF3Pyr-58 | 0.23 | 3.6 | 2.3 | 3.8 | 1.1 | <0.0111 | 6399 | 1.5 | <0.0226 | 0.60 | 0.04 | <0.0022 | <0.045 | 0.13 | 0.67 | <0.0066 | 0.03 | <0.133 | 0.01 | 34 | 5.9 |
| MF3Pyr-59 | 0.25 | 7.3 | 4.1 | 3.4 | 1.5 | <0.0093 | 6724 | 1.1 | <0.00 | 0.35 | <0.035 | <0.0030 | <0.042 | 0.17 | 1.4 | <0.0100 | 0.03 | <0.142 | 0.02 | 37 | 8.7 |
| MF3Pyr-60 | 0.15 | 199 | 22 | 2.8 | 1.1 | 0.63 | 5848 | 1.2 | <0.017 | 17 | <0.034 | 0 | 0.49 | 0.02 | 0.41 | 0.12 | 0.11 | <0.134 | 0.02 | 0.04 | 0.33 |
| MF3Pyr-61 | 4.9 | 21 | 4.1 | 20 | 3.4 | 0.19 | 7077 | 1.7 | <0.0320 | 1.4 | <0.092 | 0.08 | 2.2 | 0.11 | 2.3 | 0.37 | 0.09 | <0.30 | 0.03 | 2.7 | 3.6 |
| MF3Pyr-62 | 2.8 | 32 | 4.7 | 22 | 2.0 | 0.23 | 6635 | 2.4 | 0.05 | 1.1 | <0.122 | 0.03 | 0.95 | 0.17 | 2.4 | 0.50 | 0.21 | <0.38 | 0.06 | 4.6 | 12 |
| MF3Pyr-63 | 0.24 | 1.5 | <0.08 | 6.3 | 2.0 | <0.0129 | 5744 | 1.8 | <0.041 | 0.05 | 0.03 | <0.0041 | <0.071 | 0.01 | <0.082 | <0.00 | 0.01 | 0.26 | 0 | 0.09 | 0.32 |
| MF3Pyr-64 | 1.8 | 1.8 | 0.27 | 5.5 | 1.8 | 0.01 | 4463 | <1.36 | 0.06 | 0.13 | <0.092 | 0 | 0.14 | 0.14 | 0.27 | <0.0108 | 0.06 | <0.22 | <0.0052 | 2.1 | 3.3 |
| MF3Pyr-65 | 0.29 | 8.6 | 1.4 | 3.7 | 0.61 | <0.00 | 3988 | 1.6 | 0.01 | <0.0113 | <0.00 | 0 | <0.066 | 0.08 | 0.12 | <0.0153 | 0.03 | <0.20 | <0.0043 | 0.07 | 2.3 |
| MF3Pyr-66 | 22 | 21 | 4.9 | 45 | 30 | 0.18 | 3178 | 2.9 | 0.39 | 1.2 | 0.05 | 0.03 | 1.9 | 0.23 | 1.2 | 0.21 | 0.06 | <0.26 | 0.09 | 16 | 9.0 |
| MF3Pyr-67 | 9.3 | 17 | 4.7 | 14 | 16 | 0.07 | 3474 | 1.6 | 14 | 0.31 | <0.094 | 0.02 | 0.91 | 0.13 | 0.96 | 0.19 | 0.04 | <0.22 | 0.08 | 4.4 | 8.5 |
| MF3Pyr-68 | 1.4 | 1.7 | 0.93 | 13 | 1.8 | <0.0180 | 6533 | <1.48 | <0.00 | 0.98 | <0.059 | 0.02 | 0.48 | <0.020 | 1.0 | <0.0119 | 0.04 | <0.24 | 0.02 | 5.7 | 2.5 |
| MF3Pyr-69 | 1.6 | 10 | 8.4 | 9.9 | 1.9 | <0.0167 | 5086 | 2.0 | <0.038 | 0.43 | 0.02 | 0.04 | 0.34 | 0.02 | 0.60 | 0.10 | 0.04 | <0.23 | 0.04 | 2.9 | 1.4 |
| MF3Pyr-70 | 10 | 4328 | 129 | 55 | 9.0 | 0.12 | 6037 | 2.6 | 0.04 | 2.0 | 0.02 | 0.05 | 13 | 0.18 | 1.3 | 1.1 | 0.20 | <0.24 | 0.01 | 11 | 5.0 |
| MF3Pyr-71 | 1.6 | 591 | 48 | 63 | 3.6 | 0.26 | 1885 | 35 | <0.00 | 2.3 | <0.00 | 0.06 | 2.4 | 0.24 | 1.3 | 0.32 | 0.24 | 1.7 | 0.11 | 15 | 14 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF3Pyr-72 | 0.86 | 219 | 71 | 44 | 4.4 | <0.0176 | 2686 | 3.8 | <0.040 | 1.9 | 0.05 | 0.02 | 0.46 | 0.25 | 1.3 | 0.15 | 0.28 | <0.34 | 0.29 | 16 | 9.4 |
| MF3Pyr-73 | 4.1 | 30 | 4.1 | 11 | 3.9 | 0.14 | 3183 | 2.0 | 0.03 | 0.22 | 0.11 | 0.03 | 0.39 | 0.08 | 1.4 | 0.14 | 0.02 | <0.32 | 0.01 | 3.9 | 3.7 |
| MF3Pyr-74 | 1.3 | 31 | 6.1 | 8.4 | 1.1 | 0.04 | 3986 | <1.69 | <0.063 | 0.46 | <0.00 | <0.0063 | <0.092 | 0.05 | 0.48 | 0.04 | 0.02 | <0.27 | 0.20 | 6.8 | 0.67 |
| MF3Pyr-75 | 1.1 | 26 | 7.3 | 24 | 1.5 | 0.07 | 5925 | <2.12 | 0.02 | 0.87 | <0.150 | 0.02 | 0.39 | 0.12 | 1.2 | 0.06 | 0.09 | <0.36 | 0.11 | 8.7 | 7.5 |
| MF3Pyr-76 | <0.112 | 7.9 | 4.7 | 6.3 | 1.3 | <0.0195 | 3694 | <1.23 | 0.01 | 0.34 | <0.068 | 0.02 | <0.066 | 0.02 | 0.13 | 0.02 | 0.01 | <0.190 | 0.02 | 0.56 | 2.0 |
| MF3Pyr-77 | 0.42 | 28 | 7.1 | 11 | 1.9 | <0.0200 | 3668 | 2.3 | 0.01 | 0.41 | <0.065 | 0.01 | 0.13 | 0.06 | 0.39 | 0.02 | <0.019 | <0.28 | 0.01 | 0.67 | 5.3 |
| MF3Pyr-78 | 7.4 | 261 | 23 | 21 | 1.9 | <0.0085 | 3670 | <1.37 | 0.04 | 0.94 | <0.055 | 0.01 | 0.14 | 0.11 | 0.40 | 0.03 | 0.07 | <0.23 | 0.01 | 0.64 | 4.0 |
| MF3Pyr-79 | 0.63 | 116 | 27 | 7.8 | 1.9 | <0.026 | 2426 | <1.85 | 0.01 | 0.43 | <0.078 | <0.0054 | 0.21 | 0.18 | 1.3 | <0.031 | 0.04 | <0.32 | 0.02 | 40 | 7.2 |
| MF3Pyr-80 | 22 | 1175 | 75 | 2.9 | 3.6 | <0.030 | 2999 | <1.53 | <0.043 | 0.01 | 0.04 | <0.00 | 0.10 | 0.33 | 0.83 | 0.02 | 0.07 | <0.25 | 0.01 | 1.2 | 12 |
| **Mean n=79** | 43 | 364 | 54 | 27 | 25 | 187 | 5124 | 2.5 | 2.4 | 3.5 | 0.09 | 1.4 | 172 | 1.1 | 40 | 48 | 0.69 | 26 | 1.3 | 26 | 61 |
| **S.D** | 309 | 1060 | 143 | 93 | 137 | 903 | 3784 | 4.7 | 8.7 | 11 | 0.34 | 7.3 | 1084 | 6.2 | 280 | 318 | 4.4 | 50 | 7.2 | 43 | 383 |
| **Min** | 0.09 | 0.71 | 0.03 | 1.5 | 0.33 | 0.01 | 1462 | 0.89 | 0 | 0 | 0.01 | 0 | 0.04 | 0 | 0.07 | 0 | 0 | 0.14 | 0 | 0.03 | 0.02 |
| **Max** | 2663 | 7192 | 939 | 824 | 919 | 4949 | 34778 | 35 | 53 | 92 | 1.9 | 40 | 8416 | 49 | 2387 | 2514 | 38 | 100 | 52 | 193 | 3357 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF4Pyr-1 | <0.26 | 10937 | 809 | 0.73 | 1.7 | <0.028 | 17366 | <2.68 | 0.01 | <0.0119 | <0.145 | <0.0057 | 0.51 | 0.07 | 0.22 | 0.51 | 0.03 | <0.40 | <0.0065 | <0.080 | 2.5 |
| MF4Pyr-2 | <0.27 | 2326 | 526 | 2.7 | 1.1 | 0.02 | 5788 | <2.67 | 0.01 | 0.01 | <0.00 | <0.0060 | 1.3 | 0.06 | 0.24 | 1.3 | 0.01 | 0.42 | <0.0069 | <0.093 | 2.4 |
| MF4Pyr-3 | 260 | 998 | 556 | 14 | 2.8 | 0.51 | 2846 | 13 | 0.11 | 0.05 | <0.20 | 0.02 | 1.4 | 0.92 | 7.3 | 3.2 | 0.11 | <0.98 | <0.016 | 7.3 | 63 |
| MF4Pyr-4 | <0.27 | 79 | 132 | 0.69 | <0.48 | <0.0195 | 9410 | <2.66 | 0.03 | 0.01 | <0.091 | <0.0043 | 0.21 | <0.039 | 0.15 | 0.26 | <0.025 | <0.43 | <0.0050 | <0.100 | 0.78 |
| MF4Pyr-5 | 0.42 | 41 | 11 | 3.7 | 2.6 | 2.6 | 2279 | 3.1 | 0.03 | 0 | <0.00 | 0.01 | 0.70 | 0.26 | <0.26 | 0.28 | 0.01 | <0.49 | 0.07 | <0.117 | 13 |
| MF4Pyr-6 | 0.32 | 249 | 178 | 7.5 | <0.53 | <0.028 | 1917 | <2.93 | <0.052 | <0.0150 | <0.182 | <0.00 | 0.35 | <0.039 | <0.00 | <0.0209 | <0.0167 | <0.49 | <0.0058 | 0.51 | 0.24 |
| MF4Pyr-7 | <0.28 | 891 | 643 | 2.7 | 1.8 | <0.0201 | 4669 | <2.83 | 0.05 | 0.01 | <0.00 | <0.0063 | 0.31 | <0.022 | 0.28 | 0.01 | <0.0148 | <0.44 | <0.0072 | <0.084 | 0.93 |
| MF4Pyr-8 | <0.25 | 647 | 724 | 1.6 | 1.1 | 0.01 | 4429 | 3.7 | <0.00 | 0 | 0.02 | <0.00 | 0.23 | <0.0196 | <0.195 | 0.01 | 0.01 | <0.40 | <0.0046 | <0.085 | 0.16 |
| MF4Pyr-9 | <0.28 | 109 | 50 | 8.7 | 1.6 | <0.021 | 1076 | <2.86 | <0.00 | 0.01 | 0.05 | <0.0095 | 0.50 | 0.05 | <0.23 | 0.13 | <0.0223 | 0.63 | 0 | 0.36 | 1.8 |
| MF4Pyr-10 | 0.57 | 26 | 8.5 | 1.4 | 1.6 | <0.0196 | 1970 | <2.63 | <0.045 | <0.00 | <0.091 | <0.0044 | 0.41 | 0.04 | <0.00 | 0.14 | 0.05 | <0.43 | 0 | 0.59 | 0.99 |
| MF4Pyr-11 | 0.30 | 378 | 486 | 2.9 | 0.73 | 0.05 | 6209 | <2.75 | 0.01 | 0 | <0.135 | 0 | 0.34 | 0.05 | <0.128 | 0.02 | 0.02 | <0.44 | <0.0128 | <0.083 | 1.2 |
| MF4Pyr-12 | 0.40 | 3589 | 714 | 1.8 | 2.1 | 0.01 | 9688 | <2.87 | <0.046 | 0.01 | 0.05 | 0 | 0.26 | <0.035 | 0.15 | 0.01 | <0.015 | <0.46 | <0.00 | 0.13 | 0.30 |
| MF4Pyr-13 | 0.78 | 1135 | 509 | 3.5 | 2.1 | 0.31 | 4148 | <3.05 | <0.053 | 1.2 | <0.00 | <0.0116 | 0.49 | 0.18 | 2.9 | 0.09 | 0.03 | <0.52 | 0.02 | 2.5 | 15 |
| MF4Pyr-14 | 0.52 | 66 | 98 | 3.7 | 1.7 | <0.0273 | 5706 | <2.76 | <0.00 | <0.00 | <0.127 | 0.01 | 0.79 | <0.030 | 0.10 | 0.02 | 0.01 | <0.42 | <0.0049 | <0.25 | 0.53 |
| MF4Pyr-15 | <0.22 | 354 | 313 | 4.1 | 2.9 | 0.02 | 5033 | <2.21 | <0.00 | <0.0152 | <0.106 | <0.0036 | 0.99 | 0.05 | 0.06 | 0.34 | <0.00 | <0.36 | <0.00 | <0.076 | 0.80 |
| MF4Pyr-16 | <0.24 | 10447 | 558 | 1.1 | 1.3 | <0.0286 | 16351 | <2.52 | <0.00 | 0.01 | <0.084 | <0.0040 | 0.54 | 0.04 | 0.19 | 0.05 | 0.02 | <0.39 | <0.00 | 0.10 | 0.93 |
| MF4Pyr-17 | 4.3 | 8042 | 343 | 20 | 7.6 | <0.021 | 12065 | <2.80 | <0.048 | 0.22 | <0.00 | 0.02 | 4.3 | 0.10 | 0.48 | 0.29 | <0.022 | 0.71 | <0.0053 | 23 | 4.9 |
| MF4Pyr-18 | 61 | 9407 | 476 | 6.6 | 2.0 | <0.028 | 16290 | <2.59 | <0.045 | 0.02 | <0.183 | 0.01 | 0.59 | 0.08 | 0.77 | 0.15 | 0.08 | <0.43 | <0.0071 | <0.33 | 6.1 |
| MF4Pyr-19 | 0.94 | 8629 | 429 | 0.86 | 0.70 | <0.024 | 15186 | <2.63 | <0.062 | 0.01 | <0.00 | 0 | 0.42 | 0.03 | 0.49 | <0.031 | 0.02 | <0.41 | <0.0070 | 0.11 | 1.7 |
| MF4Pyr-20 | <0.24 | 12259 | 586 | 1.3 | 1.5 | <0.0179 | 17372 | <2.41 | <0.058 | <0.0119 | 0.02 | 0.01 | 0.59 | 0.03 | 0.19 | 0.73 | 0 | <0.40 | <0.0064 | <0.089 | 1.4 |
| MF4Pyr-21 | 1.1 | 3109 | 695 | 6.9 | 2.0 | 5.3 | 6199 | <4.52 | <0.069 | 2.3 | <0.00 | 0.01 | 3.2 | 0.08 | 6.4 | 0.66 | <0.023 | <0.71 | 0.05 | 2.5 | 26 |
| MF4Pyr-22 | 0.28 | 877 | 737 | 3.6 | 2.2 | <0.0175 | 5936 | <2.48 | <0.00 | 0.05 | <0.00 | 0 | 0.65 | 0.02 | 0.36 | 0.04 | <0.013 | <0.40 | 0 | 0.49 | 1.9 |
| MF4Pyr-23 | 0.43 | 180 | 185 | 0.92 | 2.4 | 0.03 | 6716 | 2.2 | 0.01 | 0 | 0.02 | <0.0035 | 0.32 | 0.02 | <0.169 | <0.0144 | <0.0202 | <0.36 | <0.00 | 0.34 | 0.32 |
| MF4Pyr-24 | 0.37 | 964 | 700 | 10 | 10 | 0.08 | 4278 | <1.99 | <0.077 | <0.0100 | <0.070 | <0.0047 | 1.4 | 0.03 | 0.20 | <0.014 | 0.01 | <0.34 | <0.00 | 0.96 | 1.0 |
| MF4Pyr-25 | 1.5 | 5408 | 1103 | 14 | 4.9 | 11 | 8786 | <2.97 | <0.049 | 1.8 | 0.03 | 0.06 | 14 | <0.033 | 5.0 | 0.16 | 0.02 | <0.49 | 0.16 | 7.5 | 20 |
| MF4Pyr-26 | 0.46 | 352 | 360 | 3.5 | 2.3 | <0.036 | 4943 | <2.41 | <0.041 | 0.01 | <0.084 | 0 | 0.20 | <0.024 | <0.113 | <0.024 | 0.01 | <0.39 | <0.00 | 0.32 | 0.69 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF4Pyr-27 | 0.31 | 799 | 715 | 0.97 | 1.5 | 0.10 | 3854 | <2.33 | 0.01 | 0.01 | <0.108 | <0.0073 | 0.22 | 0.06 | 0.35 | 0.05 | <0.0174 | <0.34 | 0 | <0.130 | 2.8 |
| MF4Pyr-28 | <0.27 | 250 | 360 | 3.2 | 2.2 | 0.02 | 7351 | <2.41 | <0.00 | 0 | <0.00 | <0.0041 | 0.28 | <0.020 | <0.164 | <0.024 | <0.0139 | <0.40 | <0.0047 | 0.37 | 0.11 |
| MF4Pyr-29 | 0.36 | 135 | 172 | 2.5 | 2.8 | <0.0255 | 8645 | <2.36 | <0.052 | <0.00 | <0.075 | 0 | 0.27 | <0.0124 | 0.09 | 0.03 | <0.0121 | <0.34 | 0 | <0.076 | 0.03 |
| MF4Pyr-30 | 0.28 | 102 | 127 | 3.4 | 3.5 | 0.01 | 7452 | <2.18 | <0.00 | <0.0112 | <0.00 | <0.0053 | 0.44 | 0.03 | <0.00 | 0.07 | <0.00 | <0.34 | 0 | <0.144 | 0.44 |
| MF4Pyr-31 | <0.24 | 977 | 832 | 3.9 | 3.3 | <0.0116 | 4105 | 2.4 | <0.00 | 0.01 | 0.02 | 0 | 0.35 | 0.03 | <0.102 | 0.08 | 0.01 | <0.34 | 0 | 0.20 | 1.8 |
| MF4Pyr-32 | 0.42 | 3489 | 917 | 0.74 | 2.7 | <0.028 | 5860 | <2.13 | <0.034 | <0.00 | <0.00 | <0.0033 | 0.28 | 0.06 | 0.13 | 0.13 | 0.01 | <0.32 | 0 | <0.113 | 2.1 |
| MF4Pyr-33 | 0.55 | 8475 | 1218 | 30 | 315 | <0.026 | 17029 | 2.3 | 0.02 | 0.71 | 8.2 | 0.02 | 0.94 | 0.09 | 2.4 | 1.7 | 0.03 | <0.36 | 0.01 | 2.4 | 10 |
| MF4Pyr-34 | 0.59 | 4359 | 860 | 2.9 | 3.9 | <0.045 | 9026 | <2.46 | 0.04 | 8.1 | <0.00 | <0.0043 | 0.50 | 0.07 | 8.3 | 0.05 | 0.05 | <0.42 | <0.0120 | 2.6 | 22 |
| MF4Pyr-35 | 0.40 | 561 | 1193 | 3.1 | 1.5 | 0.27 | 4768 | <2.22 | <0.00 | <0.0103 | <0.00 | <0.0034 | 0.23 | 0.07 | <0.136 | 0.27 | <0.0164 | <0.34 | <0.0039 | <0.105 | 2.5 |
| MF4Pyr-36 | 0.71 | 1162 | 698 | 2.2 | 0.60 | 0.03 | 3932 | <2.06 | 0.01 | 0.01 | <0.072 | 0 | 0.43 | 0.06 | 0.32 | 0.16 | <0.0117 | <0.34 | <0.0039 | 0.08 | 3.0 |
| MF4Pyr-37 | 0.72 | 131 | 156 | 23 | 22 | 0.02 | 8325 | <2.22 | <0.038 | 0 | 0.06 | <0.00 | 0.71 | 0.02 | <0.105 | 0.02 | <0.022 | <0.36 | <0.0060 | 0.24 | 0.09 |
| MF4Pyr-38 | 0.38 | 79 | 82 | 4.0 | 3.7 | <0.016 | 9378 | <2.11 | 0.01 | 0.01 | 0.04 | <0.0036 | 0.26 | 0.03 | <0.143 | 0.04 | <0.017 | <0.37 | 0.01 | 0.24 | 1.2 |
| MF4Pyr-39 | <0.167 | 62 | 82 | 3.2 | 3.6 | <0.0160 | 7427 | <1.80 | <0.0297 | 0.01 | <0.086 | <0.0029 | 0.32 | 0.04 | 0.05 | 0.21 | 0.02 | <0.27 | 0 | <0.092 | 0.53 |
| MF4Pyr-40 | 0.39 | 499 | 383 | 3.2 | 2.8 | <0.031 | 4001 | <2.24 | 0.02 | 0.01 | <0.00 | <0.00 | 0.19 | 0.04 | 0.06 | 0.04 | 0.01 | <0.35 | 0 | <0.063 | 2.2 |
| MF4Pyr-41 | 4.5 | 5148 | 1060 | 18 | 3.2 | 0.16 | 11310 | <1.49 | 0.08 | 0.90 | <0.050 | 0 | 0.38 | 0.10 | 2.8 | 0.08 | 0.04 | <0.26 | 0.03 | 13 | 9.8 |
| MF4Pyr-42 | 2 | 12804 | 2139 | 22 | 4.2 | 1.1 | 22391 | <1.59 | 0.02 | 1.2 | 0.01 | 0.01 | 2.2 | 0.12 | 2.8 | 0.13 | 0.05 | <0.27 | 0.03 | 12 | 9.9 |
| MF4Pyr-43 | 4.4 | 4999 | 825 | 30 | 5.9 | 5.4 | 10637 | 2.1 | <0.056 | 1.6 | <0.057 | 0.03 | 7.3 | 0.25 | 7.2 | 2.7 | 0.10 | <0.27 | 0.08 | 21 | 8.3 |
| MF4Pyr-44 | 11 | 7415 | 1255 | 69 | 7.9 | 7.4 | 12969 | 2.8 | 0.03 | 2.9 | 0.08 | 0.05 | 11 | 1.4 | 42 | 0.56 | 0.30 | <0.29 | 0.17 | 52 | 29 |
| MF4Pyr-45 | 3.7 | 2362 | 1124 | 45 | 2.8 | 0.50 | 6159 | <1.94 | 0.05 | 3.0 | 0.02 | 0.01 | 3.4 | 0.44 | 13 | 0.09 | 0.27 | <0.33 | 0.11 | 35 | 60 |
| MF4Pyr-46 | 1.8 | 1110 | 1152 | 27 | 5.1 | 0.90 | 5772 | <2.73 | 0.04 | 3.1 | 0.02 | 0.02 | 1.8 | 0.37 | 6.2 | 0.15 | 0.12 | <0.42 | 0.08 | 28 | 9.0 |
| MF4Pyr-47 | <0.36 | 1710 | 1192 | 18 | 1.6 | <0.029 | 5558 | <3.87 | <0.00 | 1.0 | 0.06 | <0.0091 | 0.75 | 0.06 | 0.51 | 0.08 | 0.04 | <0.55 | 0.03 | 2.2 | 0.69 |
| MF4Pyr-48 | 2.2 | 262 | 369 | 4.1 | 2.4 | 0.05 | 7239 | 3.2 | <0.056 | 0.63 | <0.00 | <0.0039 | 0.65 | 0.08 | 1.0 | 0.35 | 0.02 | <0.37 | 0.01 | 5.0 | 2.4 |
| MF4Pyr-49 | 4.8 | 1475 | 1170 | 44 | 2.8 | 0.19 | 4999 | <1.68 | 0.05 | 3.3 | 0.02 | 0.01 | 0.69 | 1.1 | 13 | 0.11 | 0.54 | <0.31 | 0.12 | 38 | 68 |
| MF4Pyr-50 | 3.1 | 2175 | 1060 | 40 | 1.9 | 0.69 | 7486 | <1.81 | 0.05 | 2.5 | 0.03 | 0.01 | 1.3 | 0.42 | 7.0 | 0.13 | 0.22 | <0.29 | 0.07 | 31 | 16 |
| MF4Pyr-51 | 0.42 | 512 | 511 | 3.6 | 2.0 | <0.0132 | 6537 | 1.8 | <0.00 | 0.01 | 0.02 | <0.0024 | 0.12 | <0.0117 | 0.09 | <0.0173 | <0.012 | <0.25 | <0.0047 | <0.046 | 0 |
| MF4Pyr-52 | <0.133 | 454 | 70 | 1.2 | 1.5 | <0.0118 | 1048 | 2.5 | 0.02 | <0.0091 | <0.078 | 0 | <0.077 | <0.0074 | 0.03 | <0.00 | <0.0074 | 0.21 | <0.0035 | <0.049 | <0.0043 |
| MF4Pyr-53 | 2.5 | 2532 | 161 | 19 | 3.9 | 0.06 | 3984 | 2.0 | <0.035 | 0.88 | 0.03 | 0.01 | 1.2 | 0.12 | 2.0 | 0.10 | 0.15 | <0.25 | 0.03 | 18 | 4.8 |
| MF4Pyr-54 | <0.139 | 8166 | 1662 | 2.4 | 1.2 | <0.0097 | 15912 | <1.43 | <0.00 | <0.00 | <0.00 | <0.0030 | 0.12 | <0.0075 | 0.05 | <0.0090 | 0 | <0.22 | 0 | <0.036 | <0.0101 |
| MF4Pyr-55 | 0.79 | 2486 | 324 | 6.4 | 1.8 | 0.02 | 4284 | <1.48 | <0.00 | 0.57 | <0.00 | <0.0037 | 0.23 | 0.08 | 1.7 | 0.02 | 0.08 | <0.24 | 0.02 | 6.0 | 1.4 |
| MF4Pyr-56 | 13 | 5065 | 411 | 56 | 26 | 8.1 | 7716 | <2.18 | 0.04 | 1.9 | 0.15 | 0.05 | 8.3 | 0.34 | 9.0 | 4.5 | 0.33 | <0.37 | 0.10 | 28 | 7.3 |
| MF4Pyr-57 | 3.3 | 5090 | 1444 | 27 | 2.7 | <0.0098 | 10764 | 1.8 | 0.03 | 3.3 | <0.065 | <0.0049 | 2.7 | 0.65 | 6.3 | 0.04 | 0.55 | <0.22 | 0.07 | 16 | 7.9 |
| MF4Pyr-58 | 2.9 | 5328 | 1445 | 20 | 1.3 | 0.05 | 12291 | <2.00 | <0.00 | 2.6 | <0.065 | 0.01 | 0.30 | 0.65 | 5.4 | 0.26 | 0.24 | <0.33 | 0.11 | 15 | 5.2 |
| MF4Pyr-59 | 1.3 | 446 | 431 | 15 | 1.8 | 0.01 | 3385 | <1.46 | <0.024 | 0.78 | <0.00 | <0.0033 | 0.12 | 0.21 | 2.4 | 0.03 | 0.10 | <0.24 | 0.02 | 16 | 5.4 |
| MF4Pyr-60 | 0.28 | 380 | 352 | 1.3 | 1.7 | 0.01 | 2072 | <1.29 | <0.022 | 0.01 | 0.01 | 0 | 0.23 | <0.0074 | <0.060 | <0.0088 | 0.01 | <0.202 | <0.0024 | 0.06 | 0.12 |
| MF4Pyr-61 | 6.4 | 2802 | 173 | 31 | 9.3 | 0.72 | 3544 | <13.84 | 0.12 | 2.4 | <0.00 | <0.0212 | 1.2 | 1.4 | 2.6 | 0.20 | <0.074 | 2.5 | 0.05 | 20 | 0.45 |
| MF4Pyr-62 | <0.148 | 4630 | 736 | 11 | 1.4 | <0.0103 | 9030 | <1.51 | <0.00 | <0.0069 | 0.01 | 0 | <0.082 | <0.0074 | 0.02 | <0.0134 | <0.00 | <0.23 | <0.0025 | <0.051 | 0.07 |
| MF4Pyr-63 | 1.5 | 1273 | 261 | 12 | 1.5 | 0.07 | 2503 | 1.8 | 0.01 | 0.82 | 0.02 | <0.0051 | 0.14 | 0.09 | 0.31 | 0.02 | 0.02 | <0.31 | 0.01 | 3.9 | 0.33 |
| MF4Pyr-64 | 2.5 | 1022 | 584 | 14 | 7.2 | <0.0210 | 3747 | 1.4 | <0.024 | 0.53 | <0.069 | <0.0033 | 8.2 | 0.26 | 0.65 | 0.23 | 0.05 | <0.24 | 0.01 | 3.00 | 0.70 |
| MF4Pyr-65 | 2.6 | 8886 | 2143 | 8.8 | 3.0 | 0.02 | 19174 | <1.63 | 0.02 | 0.34 | 0.01 | <0.0023 | 0.52 | 0.03 | 0.38 | 0.06 | 0.03 | <0.23 | <0.0047 | 6.1 | 3.3 |
| MF4Pyr-66 | 3 | 9380 | 1509 | 13 | 7.2 | 0.58 | 16575 | <3.65 | 0.07 | 1.4 | 0.04 | <0.0144 | 1.5 | 0.41 | 0.67 | 0.02 | 0.01 | <0.59 | 0.02 | 1.00 | 0.50 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF4Pyr-67 | 8.2 | 1027 | 247 | 6.4 | 1.4 | <0.017 | 1912 | 1.5 | 0.01 | 0.52 | <0.050 | 0.01 | 0.13 | 0.22 | 0.99 | 0.07 | 0.07 | <0.25 | 0.02 | 13 | 1.3 |
| MF4Pyr-68 | 4.3 | 887 | 70 | 69 | 15 | 2.7 | 895 | <9.46 | 0.04 | 5.6 | 0.26 | 0.08 | 4.9 | 0.63 | 0.85 | 13 | 0.37 | <1.69 | 0.02 | 4.2 | 4.5 |
| MF4Pyr-69 | 5.1 | 4171 | 709 | 40 | 11 | 5.6 | 7294 | 4.0 | 0.08 | 4.5 | 0.03 | 0.02 | 4.5 | 1.0 | 2.9 | 1.3 | 0.27 | <0.50 | 0.12 | 14 | 4.4 |
| MF4Pyr-70 | 2.3 | 8438 | 2315 | 29 | 5.2 | 1.4 | 18257 | <2.93 | <0.050 | 4.4 | 0.03 | 0.01 | 1.8 | 0.92 | 2.8 | 0.49 | 0.23 | <0.51 | 0.08 | 5.8 | 5.8 |
| MF4Pyr-71 | 27 | 11932 | 1878 | 80 | 5.2 | 0.07 | 19298 | 2.7 | 0.28 | 1.6 | 0.01 | 0.01 | 1.4 | 0.16 | 1.1 | 0.30 | 0.72 | <0.25 | 0.02 | 15 | 1.8 |
| MF4Pyr-72 | 25 | 7572 | 1003 | 33 | 4.5 | 0.11 | 13141 | 2.2 | 0.04 | 1.8 | 0.03 | 0.01 | 0.67 | 0.18 | 2.6 | 0.21 | 0.20 | <0.26 | 0.05 | 20 | 9.9 |
| MF4Pyr-73 | 3.1 | 1880 | 1392 | 14 | 3.6 | 0.17 | 6358 | <2.13 | <0.037 | 1.0 | <0.00 | 0 | 0.40 | 0.12 | 4.2 | 0.21 | 0.03 | <0.36 | 0.01 | 3.5 | 4.2 |
| MF4Pyr-74 | 12 | 1857 | 1302 | 62 | 10 | 0.05 | 5957 | 1.8 | 0.04 | 5.0 | <0.078 | 0.01 | 1.3 | 0.51 | 21 | 2.2 | 0.84 | <0.28 | 0.07 | 35 | 17 |
| MF4Pyr-75 | 14 | 1373 | 1316 | 38 | 5.5 | 0.22 | 5574 | <1.86 | 0.01 | 3.9 | 0.04 | 0.01 | 0.88 | 0.45 | 17 | 0.15 | 0.61 | <0.31 | 0.05 | 23 | 25 |
| MF4Pyr-76 | 0.91 | 585 | 646 | 5.9 | 2.2 | <0.0114 | 3319 | <1.11 | <0.00 | 0.37 | <0.053 | 0 | 0.40 | 0.03 | 1.8 | 0.07 | 0.01 | <0.188 | 0.02 | 1.1 | 3.5 |
| MF4Pyr-77 | 0.64 | 172 | 216 | 5.3 | 1.3 | <0.0148 | 7318 | <1.21 | <0.00 | 0.19 | 0.05 | 0 | 0.13 | 0.02 | 0.66 | <0.0112 | 0.01 | <0.191 | 0.01 | 0.86 | 0.32 |
| MF4Pyr-78 | 0.63 | 1350 | 1420 | 13 | 1.7 | 0.09 | 4885 | <2.50 | <0.042 | 1.4 | <0.121 | 0 | 0.47 | 0.14 | 3.0 | 0.10 | 0.38 | <0.42 | 0.02 | 11 | 5.8 |
| MF4Pyr-79 | 3.5 | 2854 | 1431 | 23 | 3.3 | 0.61 | 9073 | <1.62 | 0.02 | 2.0 | <0.00 | 0.01 | 1.1 | 0.33 | 5.8 | <0.037 | 0.20 | <0.27 | 0.04 | 9.1 | 9.7 |
| MF4Pyr-80 | 2.5 | 2986 | 1670 | 21 | 2.3 | 0.75 | 10110 | <1.92 | <0.044 | 2.4 | <0.063 | 0.01 | 2.8 | 0.18 | 6.5 | 0.04 | 0.26 | <0.32 | 0.04 | 10 | 5.0 |
| **Mean n=80** | 8.2 | 3095 | 736 | 15 | 7.9 | 1.2 | 7854 | 2.9 | 0 | 1.3 | 0 | 0 | 1.5 | 0 | 3.6 | 0.6 | 0 | 0.9 | 0 | 10 | 7.3 |
| **S.D** | 33 | 3512 | 551 | 18 | 35 | 2.4 | 5020 | 2.5 | 0 | 1.7 | 1.4 | 0 | 2.5 | 0 | 6.4 | 1.7 | 0 | 0.9 | 0 | 12 | 13 |
| **Min** | 0.28 | 26 | 8.5 | 0.69 | 0.6 | 0.01 | 895 | 1.4 | 0.01 | 0 | 0.01 | 0 | 0.12 | 0.02 | 0.02 | 0.01 | 0 | 0.21 | 0 | 0.06 | 0 |
| **Max** | 260 | 12804 | 2315 | 80 | 315 | 11 | 22391 | 13 | 0.28 | 8.1 | 8.2 | 0.08 | 14 | 1.4 | 42 | 13 | 0.84 | 2.5 | 0.17 | 52 | 68 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF5Pyr-1 | 0.51 | 47 | 22 | 8.4 | <0.55 | <0.034 | 8224 | <2.48 | 74 | 0.46 | <0.140 | <0.00 | <0.145 | 0.46 | 3.9 | 0.51 | 0.08 | <0.51 | 0 | 2.9 | 8.3 |
| MF5Pyr-2 | <0.28 | 5.1 | 5.1 | 3.1 | 2.6 | 0.11 | 5659 | <2.66 | <0.00 | 0.05 | 0.08 | <0.0089 | <0.147 | 0.16 | 0.30 | 0.08 | 0.03 | <0.48 | <0.0050 | <0.136 | 4.8 |
| MF5Pyr-3 | 0.80 | 1.2 | 2.8 | 5.0 | <0.55 | 0.09 | 4776 | <2.72 | 0.07 | 0.01 | <0.00 | <0.0049 | 0.24 | 0.28 | 0.36 | 0.39 | 0.08 | 0.51 | 0 | 0.21 | 9.2 |
| MF5Pyr-4 | 4.9 | 19 | 17 | 6.3 | 3.2 | 2.7 | 3460 | <3.72 | <0.065 | 12 | <0.00 | <0.0110 | 0.60 | 1.5 | 13 | 0.09 | 0.06 | <0.67 | 0.01 | 453 | 48 |
| MF5Pyr-5 | 35 | 2.3 | 1.1 | 5.7 | 20 | 0.35 | 5683 | <2.75 | 0.97 | 0.07 | 0.03 | <0.0046 | 0.30 | 0.16 | 0.57 | 0.69 | 0.01 | <0.51 | 0.01 | 0.59 | 2.8 |
| MF5Pyr-6 | 0.79 | 2.1 | 3.9 | 4.7 | 1.4 | 1.4 | 8279 | <3.23 | <0.00 | 0.05 | <0.00 | <0.0086 | <0.152 | 0.19 | 0.60 | 0.01 | 0.04 | <0.63 | <0.0118 | 0.32 | 12 |
| MF5Pyr-7 | 0.52 | 8.1 | 2.6 | 2.4 | 1.1 | <0.030 | 6878 | <2.31 | <0.00 | 0.29 | <0.125 | 0 | 0.32 | 0.26 | 2.0 | 2.3 | 0.17 | <0.46 | <0.00 | 0.86 | 4.9 |
| MF5Pyr-8 | 1 | 22 | 6.3 | 7.1 | 0.81 | 0.06 | 7672 | <2.30 | 0.10 | 0.51 | <0.124 | 0.01 | 0.81 | 0.34 | 0.24 | 3.2 | 0.12 | <0.46 | 0.01 | 6.6 | 5.2 |
| MF5Pyr-9 | <0.23 | 20 | 37 | 2.5 | 1.1 | <0.028 | 5022 | <2.46 | <0.00 | 0.08 | <0.00 | <0.0062 | 0.13 | 0.09 | 0.62 | <0.0259 | 0.07 | <0.47 | <0.0049 | 1.3 | 3.4 |
| MF5Pyr-10 | 0.39 | 94 | 9.5 | 902 | 1.4 | <0.014 | 8280 | <2.69 | <0.00 | 6.7 | <0.135 | 0.02 | 0.54 | 0.69 | 4.4 | 0.56 | 0.18 | <0.48 | 0.03 | 11 | 15 |
| MF5Pyr-11 | <0.209 | 42 | 16 | 2.7 | 1.4 | 0.03 | 5155 | <2.20 | <0.00 | 1.1 | <0.00 | <0.0060 | 0.13 | 0.56 | 6.5 | 0.46 | 0.11 | <0.37 | <0.0088 | 4.3 | 13 |
| MF5Pyr-12 | <0.29 | 1.1 | 2.0 | 2.3 | 1.8 | 0.12 | 11974 | 2.6 | <0.00 | 0.05 | <0.136 | <0.0064 | <0.108 | 0.12 | 0.37 | <0.0190 | <0.035 | <0.50 | 0 | <0.141 | 4.9 |
| MF5Pyr-13 | <0.22 | 38 | 511 | 1.1 | 0.80 | <0.020 | 11760 | 2.1 | <0.00 | 0.02 | 0.04 | 0 | <0.105 | 0.02 | 0.06 | <0.0149 | 0.08 | <0.39 | <0.0040 | 0.15 | 0.40 |
| MF5Pyr-14 | 0.96 | 46 | 226 | 10 | 1.3 | 0.06 | 3270 | <3.66 | <0.069 | 0.02 | 0.12 | 0 | <0.210 | 0.26 | <0.00 | 0.07 | 0.04 | <0.76 | <0.0130 | <0.171 | 6.2 |
| MF5Pyr-15 | 0.54 | 3.4 | 11 | 4.3 | 1.6 | <0.073 | 3937 | <3.99 | <0.00 | 0.50 | <0.00 | <0.0069 | <0.193 | 0.30 | <0.28 | 0.16 | 0.09 | <0.73 | <0.0109 | 0.39 | 9.9 |
| MF5Pyr-16 | <0.210 | 59 | 35 | 5.0 | 1.3 | 0.04 | 7255 | <2.55 | <0.00 | 11 | 0.03 | <0.0043 | <0.114 | 1.3 | 18 | 0.03 | 0.43 | <0.46 | 0.02 | 22 | 37 |
| MF5Pyr-17 | 6 | 1314 | 165 | 21 | 6.7 | 4.1 | 7023 | <2.75 | <0.052 | 28 | 0.15 | 0.01 | 0.23 | 0.73 | 27 | 0.07 | 0.22 | <0.54 | 0.01 | 210 | 62 |
| MF5Pyr-18 | <0.199 | 4.0 | 3.2 | 1.4 | <0.41 | 0.03 | 6350 | <1.95 | <0.035 | 0.02 | <0.072 | 0 | <0.096 | 0.04 | <0.097 | 0.01 | 0.12 | <0.35 | <0.0054 | <0.087 | 0.35 |
| MF5Pyr-19 | <0.211 | 2.8 | 0.64 | 1.4 | 1.3 | <0.024 | 9322 | 2.4 | <0.061 | 0.02 | <0.00 | <0.0083 | <0.105 | <0.024 | 0.06 | 0 | 0.02 | <0.37 | <0.00 | <0.055 | <0.027 |
| MF5Pyr-20 | 180 | 0.48 | 2.4 | 0.92 | 1.9 | <0.0120 | 3214 | <1.98 | 0.17 | 0.02 | 0.05 | <0.0053 | <0.091 | 0.06 | 0.31 | 0 | 0.02 | <0.41 | <0.0042 | 0.12 | 3.6 |
| MF5Pyr-21 | 0.43 | 119 | 21 | 11 | 1.8 | 0.27 | 4268 | 2.8 | 0.09 | 4.5 | <0.00 | 0.01 | 0.18 | 0.29 | 4.9 | 0.07 | 0.09 | <0.46 | <0.0093 | 158 | 16 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF5Pyr-22 | 0.41 | 9.9 | 2.4 | 8.4 | 1.5 | 0.03 | 7876 | <2.00 | 1.2 | 1.2 | <0.00 | 0 | 0.22 | 0.08 | 3.0 | 0.70 | 0.12 | 0.41 | <0.0057 | 1.5 | 13 |
| MF5Pyr-23 | <0.26 | 36 | 8.2 | 106 | 2.4 | 0.05 | 10602 | <2.40 | <0.00 | 14 | <0.090 | 0.02 | 0.39 | 0.21 | 18 | 0.13 | 0.48 | <0.42 | 0.01 | 85 | 43 |
| MF5Pyr-24 | 0.35 | 3.5 | 0.79 | 0.69 | 0.91 | <0.030 | 7828 | <2.12 | <0.00 | 0.15 | <0.00 | <0.0071 | <0.117 | 0.05 | 0.25 | <0.0172 | 0.02 | <0.46 | <0.00 | <0.090 | 0.57 |
| MF5Pyr-25 | 1.2 | 3640 | 402 | 26 | 1.2 | 0.05 | 11469 | <2.39 | 3.7 | 111 | 0.05 | 0.01 | <0.111 | 1.8 | 90 | 0.37 | 1.9 | <0.45 | 0.28 | 10941 | 184 |
| MF5Pyr-26 | <0.25 | 348 | 50 | 13 | 0.94 | <0.038 | 9679 | <2.28 | <0.043 | 25 | <0.00 | 0 | 0.17 | 1.1 | 40 | 0.56 | 0.91 | <0.47 | 0.03 | 180 | 62 |
| MF5Pyr-27 | <0.25 | 7.9 | 14 | 42 | 1.7 | <0.036 | 12234 | 3.2 | 0.30 | 0.04 | 0.02 | <0.0055 | <0.113 | 0.19 | 3.8 | 0.03 | 1.1 | <0.42 | <0.00 | <0.104 | 13 |
| MF5Pyr-28 | 0.89 | 3.2 | 1.4 | 2.2 | 1.9 | <0.030 | 11602 | <2.40 | <0.044 | 0.04 | <0.00 | <0.0059 | <0.120 | <0.034 | 0.78 | 0.02 | 0.46 | <0.45 | <0.00 | 0.17 | 1.9 |
| MF5Pyr-29 | 0.28 | 25 | 3.0 | 11 | 2.3 | <0.035 | 9212 | 2.9 | 0.01 | 21 | <0.00 | <0.00 | 0.27 | 0.18 | 12 | 1.6 | 0.34 | <0.43 | <0.0062 | 268 | 19 |
| MF5Pyr-30 | 0.56 | 105 | 27 | 4.9 | 1.3 | 1.0 | 8191 | 3.3 | <0.095 | 0.24 | <0.00 | <0.0046 | 0.60 | 0.05 | 4.2 | 0.16 | 0.02 | <0.52 | 0.01 | 5.7 | 13 |
| MF5Pyr-31 | <0.26 | 11 | 3.1 | 3.5 | 2.4 | 0.51 | 5871 | <2.81 | 0.03 | 0.28 | <0.102 | <0.0068 | 0.27 | 0.31 | 2.0 | 0.32 | 0.04 | <0.55 | <0.0054 | 1.1 | 7.7 |
| MF5Pyr-32 | 0.44 | 2.3 | 1.6 | 540 | 2.8 | 0.03 | 7576 | 2.3 | 0.02 | 0.13 | <0.00 | 0.10 | 2.0 | 0.10 | 0.47 | <0.00 | 0.34 | <0.41 | 0 | <0.070 | 4.0 |
| MF5Pyr-33 | 0.76 | 2.8 | 4.7 | 948 | 3.6 | 0.13 | 10068 | <2.51 | <0.044 | 0.07 | <0.00 | 0.13 | 2.7 | 0.20 | 1.4 | <0.0180 | 0.50 | 0.45 | <0.0048 | <0.143 | 6.4 |
| MF5Pyr-34 | <0.23 | 5.5 | 3.2 | 1.7 | 1.6 | <0.0191 | 9338 | 2.5 | 0.01 | <0.019 | 0.03 | <0.0059 | <0.098 | <0.00 | <0.25 | <0.00 | 0.05 | <0.45 | 0 | <0.081 | 0.17 |
| MF5Pyr-35 | 1.4 | 68 | 44 | 3386 | 2.2 | 0.57 | 4246 | <2.46 | 0.02 | 22 | <0.00 | 0.31 | 4.0 | 3.2 | 28 | 0.35 | 0.48 | <0.47 | 0.15 | 46 | 55 |
| MF5Pyr-36 | 1.3 | 12 | 41 | 772 | 0.79 | 0.07 | 9157 | 3.4 | 2.8 | 164 | <0.00 | 0.09 | 2.5 | 1.7 | 144 | 0.17 | 0.38 | <0.43 | 0.06 | 18 | 20 |
| MF5Pyr-37 | 0.66 | 4.0 | 4.8 | 19 | 1.6 | 0.04 | 11772 | <2.76 | <0.050 | 0.19 | 0.03 | <0.0048 | <0.152 | 0.19 | 0.53 | <0.0203 | 0.26 | <0.50 | <0.0094 | 0.11 | 5.6 |
| MF5Pyr-38 | <0.21 | 5.1 | 10 | 7.2 | 2.0 | <0.0244 | 8999 | <2.27 | 0.01 | 0.08 | 0.02 | <0.0076 | <0.104 | 0.18 | 0.98 | <0.023 | 0.97 | <0.42 | <0.0060 | <0.067 | 7.2 |
| MF5Pyr-39 | 1.1 | 19 | 40 | 27 | 1.1 | 0.09 | 7882 | <2.61 | 0.01 | 12 | <0.00 | <0.0063 | <0.151 | 0.27 | 14 | 0.76 | 0.62 | <0.49 | 0.16 | 31 | 46 |
| MF5Pyr-40 | 0.48 | 81 | 18 | 1.3 | 1.6 | 0.12 | 5919 | <2.59 | 0.44 | 0.04 | <0.00 | <0.0068 | <0.113 | 0.06 | 0.16 | 0.04 | 0.07 | <0.50 | 0.02 | 0.25 | 0.81 |
| MF5Pyr-41 | 4.3 | 1242 | 199 | 313 | 3.8 | 7.7 | 5039 | <2.64 | <0.043 | 54 | <0.089 | 0.06 | 17 | 1.3 | 74 | 2.9 | 3.7 | <0.51 | 0.15 | 223 | 165 |
| MF5Pyr-42 | 1.4 | 405 | 70 | 1.7 | 2.2 | 1.2 | 7986 | 4.5 | <0.00 | 0.68 | <0.00 | <0.0052 | 0.94 | <0.019 | 2.4 | 0.13 | 0.04 | <0.58 | 0.02 | 9.2 | 6.2 |
| MF5Pyr-43 | 1.4 | 1258 | 93 | 18 | 2.0 | 0.45 | 3820 | <2.89 | <0.00 | 18 | 0.11 | <0.0065 | 0.30 | 0.65 | 23 | 0.06 | 0.51 | <0.53 | 0.02 | 187 | 33 |
| MF5Pyr-44 | 3.5 | 309 | 45 | 1.4 | 2.7 | 0.02 | 2317 | <2.32 | <0.042 | 0.07 | 0.03 | <0.0071 | <0.115 | 0.07 | <0.210 | <0.024 | 0.05 | <0.47 | 0.01 | <0.085 | 3.1 |
| MF5Pyr-45 | 0.45 | 1038 | 15 | 1.5 | 1.5 | 0.23 | 4315 | <2.73 | <0.069 | 0.07 | <0.174 | <0.0047 | <0.145 | <0.034 | 0.32 | 0.08 | 0.01 | <0.54 | <0.00 | 0.16 | 3.4 |
| MF5Pyr-46 | <0.30 | 17 | 7.9 | 2.6 | 2.1 | 0.83 | 4464 | <3.02 | 15 | 0.11 | <0.00 | <0.0054 | <0.176 | 0.42 | 0.46 | 0.24 | 0.08 | <0.60 | 0 | 0.35 | 9.8 |
| MF5Pyr-47 | <0.28 | 4.8 | 24 | 0.74 | 1.2 | <0.0144 | 6660 | 5.8 | <0.065 | 0.15 | <0.095 | <0.0077 | 0.13 | 0.04 | 0.08 | <0.0266 | 0.01 | <0.52 | 0 | <0.055 | 0.49 |
| MF5Pyr-48 | 0.27 | 7.9 | 30 | 1.5 | 2.2 | <0.0153 | 9309 | 3.2 | <0.049 | 0.60 | <0.00 | 0.01 | <0.133 | 0.05 | 2.0 | <0.028 | 0.06 | <0.55 | 0 | 0.74 | 3.2 |
| MF5Pyr-49 | <0.28 | 31 | 77 | 4.4 | 1.3 | <0.039 | 7644 | <2.69 | <0.047 | 0.60 | 0.03 | 0 | 0.16 | 0.23 | 2.8 | 0.02 | <0.028 | <0.51 | <0.0051 | 1.5 | 5.6 |
| MF5Pyr-50 | 0.31 | 106 | 25 | 1.6 | 1.2 | 0.01 | 7075 | 4.1 | 0.07 | 0.61 | 0.06 | <0.00 | <0.136 | 0.19 | 2.7 | 0.20 | 0.05 | <0.51 | <0.0075 | 1.4 | 5.8 |
| MF5Pyr-51 | 0.36 | 112 | 121 | 3997 | 3.4 | 0.13 | 7755 | 3.1 | <0.00 | 23 | <0.100 | 0.09 | 3.1 | 1.5 | 27 | 12 | 1.7 | <0.52 | 0.11 | 144 | 59 |
| MF5Pyr-52 | 1.9 | 154 | 64 | 25455 | 5.3 | 1.2 | 6508 | 5.4 | <0.055 | 38 | 0.19 | 0.69 | 19 | 0.89 | 18 | 0.71 | 1.2 | <0.58 | 0.20 | 172 | 80 |
| MF5Pyr-53 | 5.8 | 90 | 23 | 12438 | 18 | 0.74 | 7799 | 4.1 | <0.072 | 33 | 0.56 | 0.32 | 6.8 | 0.91 | 19 | 4.4 | 0.93 | <0.56 | 0.15 | 179 | 57 |
| MF5Pyr-54 | 3.1 | 106 | 38 | 10205 | 10 | 0.26 | 6470 | <2.64 | <0.00 | 54 | 0.32 | 0.52 | 13 | 0.89 | 43 | 0.21 | 1.8 | <0.52 | 0.09 | 133 | 57 |
| MF5Pyr-55 | 2.1 | 214 | 16 | 1089 | 2.2 | 0.17 | 7908 | 2.8 | 0.04 | 100 | 0.03 | 0.04 | 0.44 | 0.33 | 58 | 1.8 | 0.95 | <0.48 | 0.03 | 86 | 73 |
| MF5Pyr-56 | 2.6 | 1466 | 33 | 350 | 7.6 | 1.9 | 3730 | <3.26 | <0.00 | 80 | <0.00 | 0.02 | 0.81 | 0.29 | 98 | 1.2 | 0.38 | <0.61 | 0.03 | 76 | 56 |
| MF5Pyr-57 | <0.24 | 40 | 40 | 6.2 | 1.3 | <0.033 | 6435 | <2.49 | <0.043 | 194 | 0.05 | 0.01 | 0.59 | 0.15 | 140 | 7.1 | 1.6 | <0.47 | 0.02 | 19 | 44 |
| MF5Pyr-58 | 4.1 | 82 | 16 | 1031 | 7.3 | 5.9 | 4212 | 7.5 | 0.02 | 54 | <0.177 | 0.04 | 3.7 | 0.43 | 79 | 10 | 4.1 | <0.96 | 0.06 | 105 | 54 |
| MF5Pyr-59 | 0.38 | 20 | 8.1 | 278 | 1.1 | 0.03 | 9059 | <2.46 | <0.043 | 0.61 | <0.00 | 0.01 | 0.86 | 0.22 | 2.1 | 2.6 | 0.07 | <0.47 | 0.01 | 1.7 | 4.6 |
| MF5Pyr-60 | 6.5 | 8556 | 1074 | 70 | 7.4 | 4.1 | 16218 | <4.13 | 1.1 | 36 | 0.49 | <0.00 | 0.36 | 0.24 | 51 | 0.08 | 1.1 | <0.75 | 0.11 | 216 | 105 |
| MF5Pyr-61 | 1.1 | 531 | 75 | 1916 | 3.6 | 0.27 | 7293 | <2.35 | 0.03 | 20 | <0.00 | 0.08 | 2.2 | 0.95 | 33 | 2.1 | 0.62 | <0.47 | 0.07 | 121 | 70 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF5Pyr-62 | 2.7 | 439 | 45 | 85 | 3.8 | 8.7 | 13268 | <3.44 | 26 | 0.63 | <0.00 | 0.08 | 30 | 0.61 | 10 | 3.6 | 0.33 | <0.70 | 0.11 | 20 | 46 |
| MF5Pyr-63 | 17 | 7309 | 1402 | 901 | 20 | 11 | 13755 | <5.53 | <0.00 | 35 | <0.19 | 0.05 | 1.6 | 0.10 | 53 | 0.20 | 0.27 | <1.04 | 0.05 | 394 | 106 |
| MF5Pyr-64 | 4.6 | 43 | 12 | 18 | 4.1 | 0.59 | 4039 | <2.54 | 0.03 | 7.0 | <0.096 | 0.01 | <0.138 | 0.04 | 15 | 0.24 | 0.13 | <0.53 | 0.01 | 89 | 29 |
| MF5Pyr-65 | 2.9 | 111 | 13 | 17 | 6.3 | 1.2 | 2759 | <2.88 | <0.00 | 2.2 | <0.00 | <0.0109 | 0.34 | 0.53 | 11 | 0.22 | 0.48 | <0.54 | <0.0078 | 54 | 38 |
| MF5Pyr-66 | 8.7 | 3815 | 453 | 4397 | 6.2 | 4.7 | 11963 | 5.0 | 0.16 | 40 | 0.15 | 0.15 | 5.5 | 1.1 | 55 | 0.34 | 1.2 | <0.67 | 0.17 | 407 | 150 |
| MF5Pyr-67 | 2.8 | 2088 | 349 | 12 | 3.8 | 0.51 | 10730 | 3.0 | 1.7 | 36 | 0.06 | <0.0048 | <0.130 | 0.24 | 47 | 0.04 | 0.67 | <0.56 | 0.23 | 744 | 100 |
| MF5Pyr-68 | 2.3 | 1989 | 214 | 22 | 3.7 | 2.3 | 8579 | 3.5 | 5.5 | 40 | <0.140 | 0.02 | 1.1 | 1.1 | 52 | 0.44 | 1.1 | <0.54 | 0.13 | 2689 | 118 |
| MF5Pyr-69 | <0.22 | 46 | 48 | 4.1 | 1.7 | 0.02 | 8381 | 4.0 | 42 | 3.2 | <0.123 | <0.0057 | <0.118 | 0.52 | 8.1 | 0.25 | 0.28 | <0.48 | <0.0144 | <0.66 | 17 |
| MF5Pyr-70 | 0.25 | 92 | 11 | 7.8 | 1.2 | <0.029 | 11181 | <2.55 | 0.15 | 24 | <0.122 | 0.01 | 0.14 | 0.57 | 25 | 0.90 | 0.47 | <0.44 | 0.03 | 228 | 22 |
| MF5Pyr-71 | <0.26 | 23 | 5.3 | 1.6 | 1.3 | <0.027 | 12248 | 3.5 | <0.00 | 7.3 | <0.00 | <0.0041 | <0.104 | 0.15 | 10 | <0.017 | 0.46 | <0.49 | 0.02 | 67 | 14 |
| MF5Pyr-72 | 0.82 | 284 | 59 | 64 | 0.80 | 0.07 | 9001 | 4.1 | 0.44 | 5.6 | <0.091 | 0.01 | <0.119 | 0.82 | 13 | <0.0180 | 0.37 | <0.49 | 0.02 | 47 | 32 |
| MF5Pyr-73 | 1.3 | 3824 | 367 | 8.4 | 2.3 | 5.6 | 14846 | <2.48 | 3.7 | 2.4 | 0.03 | 0.03 | 6.9 | 0.20 | 11 | 1.1 | 0.19 | <0.47 | 0.04 | 48 | 39 |
| MF5Pyr-74 | 9.2 | 8545 | 1155 | 19 | 12 | 30 | 18436 | <3.52 | <0.00 | 4.5 | <0.124 | 0.09 | 29 | 0.35 | 30 | 5.3 | 0.25 | <0.68 | 0.22 | 266 | 91 |
| MF5Pyr-75 | 2.3 | 89 | 22 | 12 | 3.5 | 0.18 | 9446 | <2.41 | <0.00 | 1.5 | 0.02 | 0.01 | 1.2 | 0.02 | 4.2 | 0.17 | 0.21 | <0.47 | <0.0063 | 82 | 16 |
| MF5Pyr-76 | 2 | 149 | 99 | 177 | 1.4 | 0.12 | 8011 | 3.8 | 0.03 | 19 | <0.107 | <0.0035 | 0.20 | 0.29 | 20 | 0.11 | 0.92 | <0.41 | 0.07 | 195 | 66 |
| MF5Pyr-77 | 19 | 7246 | 791 | 279 | 31 | 7.2 | 15211 | <3.99 | 0.14 | 22 | <0.14 | 0.03 | 1.6 | 0.39 | 26 | 5.4 | 0.21 | <0.80 | 0.04 | 916 | 94 |
| MF5Pyr-78 | 14 | 10536 | 1453 | 18176 | 8.9 | 11 | 19404 | <3.13 | <0.078 | 23 | 0.23 | 0.60 | 17 | 1.3 | 40 | 0.88 | 15 | <0.61 | 0.24 | 798 | 137 |
| MF5Pyr-79 | 9.8 | 6929 | 703 | 48 | 15 | 8.3 | 17080 | <2.96 | 0.94 | 27 | 0.03 | 0.04 | 8.0 | 0.26 | 29 | 1.5 | 0.36 | <0.57 | 0.13 | 663 | 73 |
| MF5Pyr-80 | 5.6 | 11791 | 5530 | 818 | 14 | 22 | 46766 | 4.5 | 0.03 | 138 | 0.07 | 0.17 | 15 | 2.7 | 125 | 1.8 | 3.5 | <0.67 | 0.25 | 268 | 113 |
| **Mean n=80** | 6.4 | 1092 | 208 | 1115 | 4.1 | 2.6 | 8801 | 3.7 | 4.9 | 20 | 0.11 | 0.09 | 4.1 | 0.52 | 23 | 1.2 | 0.72 | 0.46 | 0.07 | 335 | 38 |
| **S.D** | 23 | 2553 | 675 | 3889 | 5.3 | 5.3 | 5626 | 1.2 | 14.3 | 37 | 0.14 | 0.16 | 7.2 | 0.60 | 33 | 2.3 | 1.8 | 0.05 | 0.08 | 1377 | 43 |
| **Min** | 0.25 | 0.48 | 0.64 | 0.69 | 0.79 | 0.01 | 2317 | 2.1 | 0.01 | 0.01 | 0.02 | 0 | 0.13 | 0.02 | 0.06 | 0 | 0.01 | 0.41 | 0 | 0.11 | 0.17 |
| **Max** | 180 | 11791 | 5530 | 25455 | 31 | 30 | 46766 | 7.5 | 74 | 194 | 0.56 | 0.69 | 30 | 3.2 | 144 | 12 | 15 | 0.51 | 0.28 | 10941 | 184 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF6Pyr-1 | 0.56 | 484 | 268 | 3.2 | 0.52 | <0.027 | 3686 | <1.70 | 0.02 | 0.01 | <0.00 | <0.0043 | <0.104 | 0.03 | 0.05 | 0.13 | 0.01 | <0.31 | <0.0068 | 0.38 | 0.70 |
| MF6Pyr-2 | 0.19 | 9.4 | 46 | 2.4 | 1.8 | 0.08 | 4859 | <1.85 | 0.01 | 0.05 | <0.063 | <0.0043 | 0.11 | 0.12 | <0.137 | 0.26 | <0.0138 | <0.30 | 0 | <0.089 | 2.5 |
| MF6Pyr-3 | 0.65 | 21 | 69 | 2.2 | 0.98 | 1.3 | 6108 | <2.02 | <0.034 | <0.0097 | <0.00 | <0.0033 | 0.42 | 0.29 | 0.23 | 0.98 | 0.04 | <0.31 | 0.01 | 0.16 | 7.5 |
| MF6Pyr-4 | 3.6 | 4.9 | 8.5 | 5.2 | 9.3 | 11 | 5519 | <2.29 | <0.00 | <0.0122 | <0.00 | 0.02 | 1.8 | 0.68 | 1.2 | 1.2 | 0.13 | <0.41 | 0.19 | <0.127 | 23 |
| MF6Pyr-5 | 3.9 | 16 | 18 | 6.2 | 4.6 | 11 | 5375 | 2.5 | <0.052 | 1.8 | <0.00 | 0.03 | 2.2 | 0.78 | 2.7 | 2.1 | 0.10 | <0.35 | 0.21 | 3.1 | 29 |
| MF6Pyr-6 | 0.47 | 13 | 14 | 2.1 | 1.1 | 1.3 | 7423 | 3.8 | <0.00 | 0.30 | <0.106 | <0.0036 | 0.32 | 0.27 | 0.65 | 0.43 | 0.08 | <0.34 | 0.02 | 1.0 | 9.4 |
| MF6Pyr-7 | 3.9 | 21 | 56 | 6.6 | 6.4 | 2.8 | 4713 | 2.8 | 0.01 | 0.48 | <0.082 | <0.0056 | 0.91 | 0.53 | 0.62 | 1.0 | 0.07 | <0.37 | 0.07 | 2.8 | 13 |
| MF6Pyr-8 | 0.15 | 8169 | 1892 | 0.94 | 1.8 | <0.0150 | 16594 | 2.4 | <0.0280 | 0.01 | <0.080 | <0.0027 | 0.08 | <0.018 | 1.2 | <0.0111 | <0.0125 | <0.27 | <0.0044 | <0.057 | 2.5 |
| MF6Pyr-9 | <0.175 | 1406 | 1202 | 1.3 | 1.4 | <0.0133 | 3809 | 3.4 | <0.00 | 0.01 | 0.02 | 0 | <0.081 | 0.01 | <0.078 | <0.0171 | 0 | <0.29 | <0.0047 | <0.054 | 0.08 |
| MF6Pyr-10 | <0.165 | 1373 | 1915 | 2.1 | 0.88 | <0.0130 | 5617 | 5.1 | <0.051 | <0.00 | <0.060 | 0 | 0.07 | <0.0138 | 0.09 | <0.00 | <0.0094 | <0.29 | <0.0073 | <0.055 | 0.04 |
| MF6Pyr-11 | 0.61 | 1694 | 2205 | 4.4 | <0.43 | <0.0191 | 6430 | 9.3 | <0.036 | 0.01 | <0.00 | <0.0060 | <0.108 | <0.0165 | <0.091 | <0.0141 | <0.00 | <0.34 | <0.0068 | <0.088 | 0 |
| MF6Pyr-12 | 0.28 | 5478 | 3466 | 6.4 | 1.6 | <0.0092 | 15767 | 3.8 | <0.030 | 0.03 | <0.00 | <0.0029 | <0.079 | 0.03 | 0.15 | 0.08 | 0.01 | <0.28 | <0.0046 | 0.13 | 0.76 |
| MF6Pyr-13 | 0.31 | 8188 | 1966 | 2.8 | 1.5 | <0.021 | 17470 | 3.4 | <0.00 | 0.07 | <0.00 | <0.0047 | <0.100 | 0.02 | <0.124 | 0.09 | 0 | <0.31 | <0.0053 | 0.09 | 0.30 |
| MF6Pyr-14 | 0.27 | 16571 | 448 | 2.3 | 2.1 | 0.01 | 21064 | 2.4 | <0.032 | 0.10 | 0.04 | <0.0044 | <0.101 | 0.07 | <0.163 | <0.00 | <0.00 | <0.32 | 0.01 | 11 | 1.8 |
| MF6Pyr-15 | <0.176 | 35 | 30 | 3.7 | 1.5 | 0.34 | 1395 | <1.67 | <0.030 | 0.01 | 0.04 | <0.0041 | 0.14 | 0.06 | <0.109 | 0.08 | <0.00 | <0.30 | 0 | 0.12 | 0.93 |
| MF6Pyr-16 | 0.36 | 491 | 410 | 7.5 | 0.77 | 0.09 | 3120 | 1.4 | <0.00 | 0 | <0.057 | <0.0039 | <0.085 | 0.05 | <0.125 | 0.04 | 0.02 | <0.26 | 0 | <0.049 | 1.6 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF6Pyr-17 | 0.21 | 759 | 434 | 1.7 | 1.6 | 0.03 | 4895 | 2.1 | <0.060 | 0.01 | <0.099 | <0.0034 | <0.102 | 0.04 | <0.089 | 0.10 | 0.01 | <0.32 | <0.0054 | <0.052 | 0.65 |
| MF6Pyr-18 | 0.21 | 26 | 60 | 4.0 | 1.4 | <0.028 | 5488 | <1.75 | <0.00 | 0 | <0.065 | 0.01 | <0.087 | 0.05 | 0.02 | 0.15 | <0.0145 | <0.30 | <0.0035 | <0.069 | 0.98 |
| MF6Pyr-19 | 0.44 | 4.9 | 5.8 | 2.8 | 2.3 | 1.9 | 4517 | 2.2 | <0.00 | 0.01 | 0.02 | <0.0030 | 0.49 | 0.63 | 0.50 | 0.78 | 0.07 | <0.30 | 0.02 | 0.30 | 16 |
| MF6Pyr-20 | 0.87 | 6.9 | 5.6 | 3.8 | 1.8 | 2.3 | 8745 | 2.4 | 0.01 | 0.01 | 0.02 | 0.01 | 0.44 | 0.77 | 0.51 | 0.56 | 0.02 | <0.33 | 0.03 | 3.2 | 8.9 |
| MF6Pyr-21 | 0.74 | 6231 | 3216 | 1.7 | 1.2 | <0.019 | 14991 | 6.4 | 0.04 | 1.2 | <0.00 | 0 | <0.093 | 0.06 | 0.92 | 0.12 | 0.03 | <0.32 | 0.01 | 0.88 | 6.1 |
| MF6Pyr-22 | <0.188 | 12837 | 765 | 1.3 | 1.1 | <0.0147 | 19108 | <1.88 | <0.00 | 0.01 | 0.02 | <0.0046 | 0.11 | <0.0156 | 0.12 | 0.11 | <0.0184 | <0.32 | 0 | <0.062 | 0.41 |
| MF6Pyr-23 | 0.21 | 339 | 408 | 6.3 | 2.4 | <0.022 | 3510 | <1.88 | 0.01 | <0.00 | <0.101 | <0.0049 | <0.087 | <0.0116 | 0.05 | <0.020 | <0.0158 | <0.34 | 0 | <0.087 | 0.13 |
| MF6Pyr-24 | 4.8 | 291 | 297 | 3.5 | 2.4 | 0.19 | 3165 | <2.10 | 0.21 | 0.01 | <0.147 | 0.02 | 6.0 | 1.4 | 0.21 | 16 | 0.07 | <0.35 | <0.0040 | 2.3 | 7.8 |
| MF6Pyr-25 | 0.52 | 42 | 194 | 2.3 | 2.2 | 1.3 | 5394 | <2.18 | <0.00 | <0.0117 | <0.00 | <0.00 | 0.25 | 0.08 | 0.06 | 0.30 | <0.00 | <0.38 | 0.03 | 0.20 | 2.5 |
| MF6Pyr-26 | 0.59 | 4.2 | 44 | 1.6 | 0.78 | <0.020 | 5233 | <2.09 | 0.04 | <0.0154 | 0.02 | 0 | <0.123 | 0.03 | 0.12 | 0.04 | 0.01 | <0.36 | <0.0041 | <0.065 | 0.51 |
| MF6Pyr-27 | <0.200 | 6.2 | 71 | 1.6 | <0.48 | <0.0261 | 6413 | <2.03 | <0.00 | 0 | 0.02 | 0 | <0.096 | <0.0125 | <0.170 | <0.026 | 0 | <0.36 | <0.00 | 0.02 | 0.14 |
| MF6Pyr-28 | 0.61 | 1699 | 659 | 5.9 | 0.57 | <0.00 | 5606 | <1.84 | 0.01 | <0.0100 | <0.070 | 0 | <0.108 | <0.0114 | 0.05 | <0.0195 | 0 | <0.33 | <0.0053 | <0.049 | 0.08 |
| MF6Pyr-29 | <0.206 | 3559 | 247 | 0.88 | 1.6 | 0.02 | 8757 | 3.1 | <0.00 | <0.0149 | <0.00 | <0.0035 | 0.50 | 0.04 | <0.190 | 0.06 | <0.00 | <0.34 | 0 | 0.13 | 0.74 |
| MF6Pyr-30 | 0.53 | 8277 | 1584 | 4.2 | 1.5 | <0.0155 | 15979 | 3.1 | <0.00 | 0.01 | <0.102 | <0.0034 | <0.104 | <0.0117 | <0.093 | <0.0142 | <0.00 | <0.33 | <0.0039 | <0.024 | 0.17 |
| MF6Pyr-31 | 0.28 | 6058 | 3924 | 1.3 | 1.2 | <0.0213 | 18522 | 4.9 | 0.01 | 0.03 | 0.02 | <0.0058 | 1.5 | 0.24 | 0.20 | 4.6 | 0 | <0.33 | <0.0053 | 0.14 | 3.3 |
| MF6Pyr-32 | <0.29 | 489 | 1333 | 4.5 | 2.9 | <0.038 | 5575 | <3.03 | 0.03 | 2.7 | <0.00 | <0.0076 | <0.158 | 0.23 | 3.5 | 0.04 | 0.13 | <0.55 | 0.04 | 66 | 33 |
| MF6Pyr-33 | 1.1 | 645 | 767 | 7.0 | 0.74 | 0.06 | 5620 | <2.82 | 0.17 | 6.5 | <0.00 | <0.0078 | 0.22 | 0.54 | 6.4 | 0.15 | 0.19 | <0.51 | 0.07 | 298 | 34 |
| MF6Pyr-34 | 3.3 | 454 | 678 | 16 | 6.8 | 0.22 | 3898 | <3.09 | 0.43 | 8.9 | 0.04 | 0 | 0.48 | 1.3 | 6.2 | 0.08 | 0.20 | <0.58 | 0.10 | 500 | 46 |
| MF6Pyr-35 | 1.6 | 124 | 130 | 8.7 | 2.6 | 0.10 | 1998 | <2.83 | 0.16 | 6.8 | <0.00 | 0 | 0.33 | 0.80 | 6.7 | 0.16 | 1.4 | <0.54 | 0.11 | 251 | 57 |
| MF6Pyr-36 | <0.25 | 12165 | 734 | 5.7 | 5.7 | 0.43 | 18759 | <2.36 | 0.10 | 6.5 | <0.00 | 0.01 | <0.137 | 0.43 | 8.0 | <0.029 | 0.19 | <0.41 | 0.15 | 236 | 41 |
| MF6Pyr-37 | 1 | 7.9 | 28 | 1.3 | 1.8 | 1.7 | 3999 | <2.49 | 0.01 | 0.11 | <0.095 | <0.0064 | 0.17 | 0.09 | 0.37 | 0.49 | 0.04 | <0.46 | 0.07 | 1.1 | 2.3 |
| MF6Pyr-38 | 4.5 | 29 | 20 | 6.9 | 6.2 | 16 | 4851 | <3.23 | 0.05 | 4.6 | <0.00 | 0.02 | 3.4 | 0.90 | 5.7 | 2.5 | 0.14 | <0.59 | 0.24 | 41 | 26 |
| MF6Pyr-39 | 2.6 | 73 | 36 | 12 | 3.3 | 7.1 | 7711 | 4.3 | 0.04 | 29 | <0.00 | 0.02 | 2.7 | 2.6 | 24 | 3.6 | 0.57 | <0.48 | 0.17 | 3223 | 106 |
| MF6Pyr-40 | 31 | 41 | 20 | 22 | 23 | 11 | 8817 | 5.1 | 0.16 | 3.3 | <0.00 | 0.05 | 4.3 | 0.89 | 4.2 | 2.5 | 0.22 | <0.68 | 0.25 | 111 | 42 |
| MF6Pyr-41 | 24 | 12 | 25 | 13 | 5.1 | 24 | 10616 | <4.39 | 0.05 | 0.01 | <0.00 | 0.03 | 4.7 | 1.0 | 1.3 | 2.2 | 0.16 | <0.82 | 0.30 | 0.67 | 33 |
| MF6Pyr-42 | 4.8 | 8.1 | 4.4 | 2.4 | <0.57 | 0.03 | 15073 | <2.31 | <0.00 | <0.0130 | <0.156 | 0 | 0.25 | 0.11 | <0.117 | 0.24 | 0.03 | <0.43 | 0 | <0.090 | 2.5 |
| MF6Pyr-43 | 6.3 | 17 | 27 | 7.4 | 5.0 | 6.5 | 9046 | <2.68 | <0.00 | 0.51 | <0.139 | 0.02 | 1.2 | 1.9 | 2.5 | 0.76 | 0.16 | <0.51 | 0.13 | 27 | 24 |
| MF6Pyr-44 | 2.6 | 5.8 | 9.2 | 3.0 | 5.2 | 11 | 5376 | <3.03 | 0.05 | 0.36 | 0.04 | 0.01 | 2.1 | 2.2 | 1.6 | 1.4 | 0.11 | <0.59 | 0.25 | 27 | 10 |
| MF6Pyr-45 | 2.3 | 8.0 | 9.3 | 4.6 | 5.0 | 8.7 | 6526 | <3.01 | 0.03 | 0.17 | 0.06 | 0.01 | 1.5 | 1.7 | 1.3 | 1.0 | 0.08 | <0.56 | 0.17 | 8.1 | 15 |
| MF6Pyr-46 | 4.3 | 5.8 | 4.3 | 6.4 | 4.8 | 8.8 | 5961 | <3.11 | 0.03 | 0.31 | <0.00 | 0.02 | 1.2 | 1.3 | 1.1 | 0.82 | 0.11 | <0.57 | 0.21 | 20 | 8.2 |
| MF6Pyr-47 | 7.5 | 137 | 80 | 35 | 11 | 0.58 | 7849 | <3.59 | 0.28 | 38 | 0.08 | <0.0095 | 0.60 | 2.7 | 28 | 0.51 | 1.1 | <0.67 | 0.28 | 1176 | 177 |
| MF6Pyr-48 | 6.9 | 157 | 122 | 11 | 6.1 | 0.44 | 6291 | <2.72 | <0.071 | 6.6 | <0.102 | <0.0085 | 0.84 | 0.66 | 7.5 | 0.31 | 0.38 | <0.49 | 0.06 | 103 | 36 |
| MF6Pyr-49 | 11 | 371 | 135 | 20 | 10 | 0.28 | 3364 | <2.67 | 0.19 | 18 | 0.03 | <0.0047 | 0.46 | 1.0 | 17 | 0.12 | 1.8 | <0.51 | 0.33 | 417 | 76 |
| MF6Pyr-50 | 1.7 | 23838 | 1447 | 15 | 8.7 | <0.023 | 36686 | 2.8 | 0.18 | 21 | <0.00 | 0.01 | <0.128 | 1.5 | 20 | 0.10 | 2.4 | <0.54 | 0.23 | 307 | 84 |
| MF6Pyr-51 | 1.5 | 22543 | 1097 | 7.2 | 4.7 | <0.032 | 36068 | 3.9 | 0.09 | 16 | 0.05 | <0.0063 | 0.17 | 1.2 | 12 | 0.16 | 0.19 | <0.43 | 0.18 | 1165 | 51 |
| MF6Pyr-52 | 2.9 | 8763 | 1662 | 21 | 6.3 | <0.046 | 14605 | 3.5 | 0.42 | 46 | <0.00 | 0.01 | 0.19 | 2.5 | 34 | 0.24 | 1.4 | <0.68 | 0.49 | 894 | 134 |
| MF6Pyr-53 | 1.6 | 43 | 59 | 13 | 3.8 | 0.18 | 3122 | <2.06 | 0.02 | 9.0 | <0.080 | <0.0054 | 0.60 | 0.76 | 7.6 | 0.49 | 0.37 | <0.39 | 0.08 | 135 | 34 |
| MF6Pyr-54 | 4.8 | 7976 | 296 | 11 | 13 | 5.3 | 11970 | <2.82 | <0.075 | 5.2 | 0.06 | 0.01 | 4.0 | 0.69 | 5.6 | 1.2 | 0.17 | 0.61 | 0.13 | 95 | 23 |
| MF6Pyr-55 | 0.64 | 6078 | 1305 | 3.8 | 0.47 | <0.028 | 8799 | 3.2 | 0.98 | 11 | <0.129 | <0.0043 | <0.116 | 0.49 | 7.1 | <0.025 | 0.08 | <0.43 | 0.04 | 2139 | 35 |
| MF6Pyr-56 | <0.26 | 16746 | 405 | 4.2 | 2.2 | <0.027 | 25659 | 3.3 | 0.02 | 17 | <0.00 | <0.0059 | 0.13 | 0.93 | 12 | 0.01 | 0.37 | <0.43 | 0.13 | 289 | 31 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF6Pyr-57 | <0.62 | 17501 | 637 | 12 | <1.44 | <0.033 | 38037 | 6.5 | <0.107 | 27 | <0.00 | 0 | <0.29 | 3.5 | 28 | <0.00 | 0.97 | <1.06 | 0.19 | 735 | 101 |
| MF6Pyr-58 | 0.94 | 109 | 51 | 11 | 3.8 | 0.10 | 8641 | <3.57 | 0.23 | 26 | <0.00 | <0.0092 | 0.26 | 1.3 | 18 | 0.12 | 0.61 | <0.65 | 0.22 | 2362 | 98 |
| MF6Pyr-59 | 1.6 | 1732 | 305 | 12 | 13 | 0.16 | 4479 | <3.90 | 0.44 | 23 | <0.150 | <0.0175 | <0.22 | 1.4 | 21 | 0.06 | 0.54 | <0.73 | 0.23 | 1190 | 90 |
| MF6Pyr-60 | 6 | 46 | 99 | 20 | 884 | 0.06 | 8131 | <3.48 | <0.064 | 10 | 0.15 | 0.04 | 3.8 | 1.4 | 6.1 | 0.25 | 0.32 | <0.65 | 0.11 | 174 | 33 |
| MF6Pyr-61 | 0.98 | 3.5 | 7.1 | 2.4 | <0.60 | 4.4 | 6321 | <2.76 | <0.00 | 0.03 | <0.105 | 0.01 | 1.5 | 0.56 | 0.75 | 1.1 | 0.14 | <0.57 | 0.02 | 0.45 | 17 |
| MF6Pyr-62 | 9 | 162 | 70 | 87 | 25 | 2.2 | 6630 | <3.42 | 0.20 | 36 | 0.04 | 0.02 | 3.4 | 1.7 | 19 | 1.7 | 0.69 | <0.67 | 0.10 | 2226 | 82 |
| MF6Pyr-63 | 0.42 | 4.0 | 5.8 | 6.4 | 1.7 | 0.39 | 6592 | 3.9 | 0.01 | 0.01 | <0.00 | <0.0067 | 0.27 | 0.11 | 0.22 | 0.16 | 0.02 | <0.48 | <0.0131 | 4.1 | 4.6 |
| MF6Pyr-64 | 1.8 | 13 | 27 | 2.7 | 3.9 | 7.8 | 9655 | <3.53 | <0.00 | 0.21 | <0.00 | 0.01 | 1.3 | 2.2 | 2.9 | 1.1 | 0.27 | <0.68 | 0.14 | 56 | 44 |
| MF6Pyr-65 | 2.3 | 218 | 98 | 12 | 3.5 | 8.7 | 5712 | <3.35 | <0.00 | 7.8 | <0.129 | 0.03 | 2.3 | 1.4 | 6.8 | 6.7 | 0.32 | <0.62 | 0.15 | 6.5 | 46 |
| MF6Pyr-66 | 1.1 | 12 | 19 | 13 | 3.1 | 4.6 | 6684 | 6.3 | 0.04 | 0.13 | 0.04 | 0.01 | 1.4 | 1.0 | 1.1 | 1.9 | 0.14 | <0.63 | 0.08 | 0.99 | 39 |
| MF6Pyr-67 | 1.9 | 13961 | 776 | 5147 | 5.4 | 0.08 | 26466 | <4.79 | 0.43 | 148 | 0.05 | 0.02 | 0.50 | 6.0 | 92 | 0.17 | 0.52 | <0.86 | 0.47 | 2495 | 186 |
| MF6Pyr-68 | 1.4 | 11486 | 544 | 776 | 0.93 | 0.04 | 20468 | 4.5 | 0.32 | 42 | <0.00 | 0.01 | <0.189 | 3.2 | 41 | 0.03 | 0.76 | <0.61 | 0.21 | 1276 | 115 |
| MF6Pyr-69 | 1.9 | 13122 | 2387 | 573 | 13 | 0.07 | 24289 | 3.9 | 0.45 | 139 | <0.00 | <0.0055 | 0.92 | 7.2 | 111 | 0.58 | 62 | <0.56 | 0.24 | 4199 | 295 |
| MF6Pyr-70 | 9.7 | 30 | 61 | 36 | 8.9 | 0.53 | 2325 | 2.4 | 0.42 | 26 | 0.02 | 0.02 | 3.1 | 0.56 | 11 | 1.5 | 0.04 | <0.39 | 0.10 | 109 | 16 |
| MF6Pyr-71 | 1.4 | 731 | 323 | 69 | 3.8 | 0.06 | 3233 | <2.59 | 0.32 | 78 | 0.03 | <0.0069 | 0.73 | 3.5 | 44 | 0.28 | 0.52 | <0.50 | 0.25 | 942 | 123 |
| MF6Pyr-72 | 5.5 | 8682 | 2556 | 1150 | 2.6 | 0.04 | 17663 | 5.0 | 0.91 | 225 | <0.00 | 0.01 | 0.40 | 11 | 137 | 0.31 | 2.1 | <0.51 | 0.62 | 7054 | 336 |
| MF6Pyr-73 | 3 | 18503 | 559 | 57 | 11 | 0.08 | 24493 | <3.33 | 0.15 | 26 | 0.06 | 0.01 | 0.91 | 2.4 | 16 | 0.38 | 0.62 | <0.53 | 0.12 | 566 | 59 |
| MF6Pyr-74 | 5 | 15447 | 1772 | 741 | 3.0 | <0.053 | 24588 | 4.3 | 0.77 | 147 | <0.00 | 0.01 | 0.46 | 6.8 | 99 | 0.36 | 0.96 | <0.56 | 0.37 | 3150 | 260 |
| MF6Pyr-75 | 1.2 | 5315 | 980 | 313 | 2.8 | <0.030 | 16800 | 3.5 | 0.20 | 24 | 0.27 | 0.01 | 0.29 | 2.5 | 28 | 0.12 | 0.41 | <0.44 | 0.13 | 1192 | 99 |
| MF6Pyr-76 | 2.7 | 11343 | 532 | 46 | 3.2 | 0.04 | 19016 | 2.8 | 0.42 | 38 | 0.14 | 0.02 | 1.0 | 2.0 | 25 | 2.7 | 0.37 | <0.38 | 0.09 | 2032 | 86 |
| MF6Pyr-77 | 0.92 | 127 | 166 | 20 | 142 | <0.021 | 3300 | <2.29 | 0.12 | 9.2 | 0.02 | <0.00 | 0.43 | 0.60 | 5.9 | 0.09 | 0.09 | <0.40 | 0.03 | 169 | 22 |
| MF6Pyr-78 | 1.9 | 78 | 30 | 110 | 465 | 0.02 | 10171 | 4.5 | 0.18 | 18 | 0.07 | 0.02 | 1.6 | 1.8 | 15 | 0.12 | 0.32 | <0.42 | 0.20 | 470 | 54 |
| MF6Pyr-79 | 0.57 | 144 | 80 | 6993 | 1.8 | 0.03 | 8007 | 2.6 | <0.032 | 8.9 | <0.113 | 0.06 | 0.60 | 0.68 | 3.4 | 0 | 0.04 | <0.34 | 0.11 | 58 | 15 |
| MF6Pyr-80 | 2.7 | 12014 | 668 | 25 | 3.7 | <0.025 | 18351 | <2.03 | 0.12 | 6.0 | <0.00 | <0.0067 | 0.43 | 1.1 | 12 | 0.17 | 0.12 | <0.40 | 0.03 | 194 | 49 |
| **Mean n=80** | 3.1 | 3945 | 614 | 207 | 24 | 3.1 | 10595 | 3.8 | 0.2 | 19 | 0.05 | 0 | 1.2 | 1.4 | 14 | 1.0 | 1.3 | - | 0.14 | 649 | 45 |
| **S.D** | 4.9 | 6137 | 871 | 974 | 115 | 5.0 | 8327 | 1.5 | 0.2 | 40 | 0.05 | 0 | 1.4 | 1.9 | 27 | 2.2 | 7.5 | - | 0.13 | 1229 | 65 |
| **Min** | 0.15 | 3.5 | 4.3 | 0.88 | 0.47 | 0.01 | 1395 | 1.4 | 0.01 | 0 | 0.02 | 0 | 0.07 | 0.01 | 0.02 | 0 | 0 | - | 0 | 0.02 | 0 |
| **Max** | 31 | 23838 | 3924 | 6993 | 884 | 24 | 38037 | 9.30 | 0.98 | 225 | 0.27 | 0.06 | 6 | 11 | 137 | 16 | 62 | - | 0.62 | 7054 | 336 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF7Pyr-1 | 0.35 | 5499 | 1378 | 0.98 | 1.3 | <0.017 | 403 | 15 | <0.00 | 0.07 | <0.00 | <0.0077 | <0.181 | 0.03 | 0.67 | <0.00 | <0.0165 | <0.58 | <0.0086 | <0.078 | 0.20 |
| MF7Pyr-2 | 6.2 | 5221 | 2112 | 12 | 4.0 | 0.19 | 6116 | 20 | <0.00 | 0.13 | <0.173 | <0.0085 | <0.178 | <0.027 | 0.88 | <0.024 | 0.01 | <0.60 | <0.0068 | 1.8 | 1.4 |
| MF7Pyr-3 | 0.51 | 5509 | 3189 | 5028 | 4.0 | 0.09 | 4164 | 41 | 0.05 | 215 | 0.14 | 0.22 | 19 | 1.3 | 28 | <0.00 | 2.0 | <0.59 | 1.0 | 80850 | 398 |
| MF7Pyr-4 | 357 | 3085 | 1367 | 386 | 7.4 | <0.020 | 1502 | 15 | 0.17 | 13 | <0.00 | 0.05 | 1.0 | 0.81 | 5.8 | 0.08 | 0.09 | <0.60 | 0.04 | 173 | 21 |
| MF7Pyr-5 | 0.48 | 3669 | 1506 | 15949 | 6.2 | 0.40 | 715 | 18 | 0.03 | 53 | 0.13 | 0.31 | 29 | 2.8 | 22 | 0.03 | 0.09 | 0.59 | 0.05 | 1383 | 27 |
| MF7Pyr-6 | 1.7 | 6859 | 6427 | 9832 | 6.6 | 0.14 | 2720 | 36 | 0.57 | 429 | 0.14 | 0.44 | 28 | 2.0 | 168 | 0.11 | 63 | <0.47 | 0.36 | 23740 | 235 |
| MF7Pyr-7 | 223 | 4504 | 4262 | 1651 | 14 | 0.01 | 462 | 25 | 0.20 | 84 | 0.17 | 0.17 | 6.2 | 2.1 | 34 | 0.43 | 0.42 | <0.48 | 0.25 | 8697 | 153 |
| MF7Pyr-8 | 137 | 4633 | 4181 | 46 | 4.8 | <0.030 | 249 | 28 | 0.07 | 20 | <0.114 | 0.02 | 0.55 | 2.6 | 68 | 0.15 | 1.9 | <0.53 | 0.06 | 1379 | 143 |
| MF7Pyr-9 | 158 | 5693 | 1761 | 953 | 9.3 | 0.08 | 729 | 21 | 0.66 | 66 | 0.13 | 0.12 | 3.3 | 1.9 | 188 | 2.4 | 1.9 | <0.52 | 0.20 | 10343 | 389 |
| MF7Pyr-10 | 1.7 | 6807 | 2861 | 38 | 4.2 | <0.038 | 416 | 25 | 0.19 | 26 | 0.13 | 0.04 | 1.6 | 1.4 | 72 | 0.04 | 0.83 | <0.57 | 0.09 | 725 | 141 |
| MF7Pyr-11 | 36 | 6511 | 2976 | 25 | 1.3 | <0.041 | 726 | 24 | <0.108 | 22 | <0.00 | 0.02 | 1.1 | 0.58 | 11 | <0.030 | 0.45 | 0.68 | 0.06 | 2066 | 33 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF7Pyr-12 | 2054 | 5270 | 4630 | 1E+05 | 37 | 1.1 | 2488 | 18 | 0.37 | 213 | 0.32 | 2.8 | 242 | 8.1 | 12 | 5.4 | 1.4 | <0.89 | 0.14 | 347 | 70 |
| MF7Pyr-13 | <0.24 | 4406 | 3463 | 6500 | 2.3 | 0.21 | 2369 | 31 | 0.14 | 249 | <0.096 | 0.17 | 21 | 1.6 | 41 | <0.019 | 0.23 | <0.46 | 0.26 | 33274 | 202 |
| MF7Pyr-14 | 0.65 | 3645 | 2955 | 2E+05 | 2685 | 2.3 | 5914 | 13 | <0.059 | 92 | 20 | 3.8 | 332 | 12 | 16 | <0.023 | 0.21 | <0.55 | 0.19 | 179 | 40 |
| MF7Pyr-15 | 1.8 | 4143 | 4220 | 74014 | 32 | 0.61 | 3896 | 20 | 1.1 | 999 | 0.22 | 2.0 | 137 | 13 | 132 | 0.08 | 7.9 | <0.55 | 0.43 | 9203 | 155 |
| MF7Pyr-16 | <0.32 | 4051 | 3775 | 11252 | 454 | <0.034 | 556 | 21 | 0.09 | 437 | 1.1 | 0.32 | 40 | 9.6 | 286 | 0.04 | 0.20 | <0.51 | 0.14 | 1980 | 64 |
| MF7Pyr-17 | 0.44 | 5827 | 4322 | 419 | 6.4 | <0.039 | 227 | 24 | <0.079 | 47 | 0.03 | 0.01 | 3.7 | 2.2 | 23 | <0.0220 | <0.024 | 0.49 | 0.01 | 5051 | 34 |
| MF7Pyr-18 | 0.56 | 4477 | 2686 | 10233 | 3.6 | 0.04 | 471 | 25 | 0.04 | 167 | 0.12 | 0.30 | 18 | 2.0 | 74 | 0.15 | 1.1 | <0.47 | 0.14 | 9967 | 106 |
| MF7Pyr-19 | 174 | 4695 | 3340 | 404 | 4.3 | <0.026 | 484 | 17 | <0.00 | 58 | <0.206 | 0.01 | 1.1 | 0.45 | 24 | 0.53 | 0.02 | <0.56 | 0.04 | 896 | 33 |
| MF7Pyr-20 | <0.35 | 4050 | 2501 | 27 | 1.7 | <0.031 | 293 | 12 | 0.03 | 0.36 | <0.115 | <0.0056 | 0.21 | <0.051 | 1.3 | 0.01 | 0.03 | <0.54 | 0.01 | 12 | 0.64 |
| MF7Pyr-21 | <0.30 | 4613 | 3966 | 2783 | 4.5 | <0.033 | 171 | 17 | 0.52 | 68 | <0.00 | 0.08 | 5.8 | 2.8 | 28 | 0.04 | 1.0 | <0.55 | 0.11 | 5790 | 75 |
| MF7Pyr-22 | <0.32 | 5275 | 3191 | 54353 | 20 | 0.05 | 106 | 49 | 0.18 | 180 | <0.16 | 0.68 | 60 | 6.7 | 16 | 0.23 | 0.25 | <0.58 | 0.67 | 58976 | 267 |
| MF7Pyr-23 | 0.58 | 5879 | 5023 | 57203 | 24 | 0.11 | 356 | 43 | <0.00 | 209 | 0.24 | 0.86 | 90 | 12 | 30 | 0.34 | 0.06 | <0.58 | 0.71 | 77763 | 343 |
| MF7Pyr-24 | 1.5 | 6131 | 4667 | 70518 | 38 | 0.28 | 871 | 16 | 0.08 | 106 | 0.31 | 1.2 | 124 | 9.0 | 19 | 0.15 | 8.9 | <0.50 | 0.34 | 148 | 70 |
| MF7Pyr-25 | <0.32 | 4645 | 6394 | 23684 | 10 | 0.15 | 319 | 26 | 0.05 | 283 | <0.16 | 0.50 | 55 | 7.8 | 90 | <0.00 | 0.07 | <0.54 | 0.33 | 31446 | 175 |
| MF7Pyr-26 | 123 | 5211 | 2917 | 36071 | 4.1 | 0.13 | 966 | 34 | 0.28 | 312 | 0.06 | 0.58 | 42 | 4.3 | 21 | <0.020 | 0.11 | <0.47 | 0.27 | 13078 | 152 |
| MF7Pyr-27 | 0.79 | 7304 | 2857 | 49646 | 18 | 0.36 | 3399 | 16 | 0.02 | 96 | <0.109 | 0.96 | 64 | 3.8 | 38 | <0.037 | 6.7 | <0.52 | 0.09 | 1749 | 106 |
| MF7Pyr-28 | <0.34 | 6591 | 1516 | 27677 | 864 | 0.42 | 2938 | 8.9 | 0.34 | 634 | 1.6 | 1.2 | 44 | 4.4 | 40 | 0.02 | 0.26 | 0.82 | 0.31 | 426 | 125 |
| MF7Pyr-29 | 0.41 | 3663 | 1434 | 1E+05 | 115 | 1.0 | 2261 | 7.6 | <0.055 | 95 | <0.110 | 1.9 | 164 | 3.9 | 33 | <0.053 | 0.81 | <0.52 | 0.26 | 720 | 70 |
| MF7Pyr-30 | 7.3 | 4174 | 1098 | 14308 | 3.4 | 2.7 | 2337 | 9.7 | <0.00 | 80 | 0.06 | 0.38 | 30 | 3.0 | 217 | 0.03 | 1853 | <0.52 | 0.04 | 1430 | 391 |
| MF7Pyr-31 | 0.73 | 5610 | 3978 | 70845 | 11 | 0.46 | 2014 | 20 | 0.03 | 44 | <0.111 | 1.0 | 83 | 3.0 | 18 | 0.02 | 0.31 | <0.50 | 0.12 | 178 | 47 |
| MF7Pyr-32 | 0.43 | 5417 | 3011 | 63376 | 71 | 1.2 | 7358 | 11 | <0.00 | 29 | 0.08 | 0.81 | 78 | 1.6 | 5.8 | 0.01 | 0.04 | <0.42 | 0.05 | 5407 | 39 |
| MF7Pyr-33 | 4.6 | 5153 | 3885 | 18 | 3.6 | 0.03 | 2880 | 15 | 0.02 | 3.9 | 0.06 | 0.01 | 0.29 | 0.26 | 28 | 0.08 | 0.04 | 0.48 | 0.01 | 26 | 30 |
| MF7Pyr-34 | <0.34 | 5053 | 2720 | 6.4 | 2.1 | <0.047 | 340 | 11 | <0.00 | 0.35 | <0.115 | 0 | 0.24 | 0.12 | 3.9 | <0.00 | <0.025 | <0.51 | <0.00 | <0.54 | 14 |
| MF7Pyr-35 | <0.34 | 3871 | 890 | 7.1 | 0.69 | <0.032 | 42 | 10 | <0.060 | 0.13 | <0.121 | 0 | <0.158 | 0.24 | 19 | <0.034 | 0.01 | <0.56 | <0.0067 | 13 | 40 |
| MF7Pyr-36 | <0.28 | 2960 | 682 | 82 | 1.6 | 0.05 | 33 | 6.4 | <0.081 | 0.23 | <0.00 | 0.04 | 9.6 | 0.12 | 3.1 | 0.15 | 0.03 | <0.46 | 0 | 5.6 | 9.5 |
| MF7Pyr-37 | 0.36 | 3760 | 1283 | 8839 | 1.8 | 2.4 | 521 | 12 | <0.00 | 17 | <0.00 | 0.13 | 12 | 5.1 | 31 | <0.0229 | 0.21 | <0.51 | 0.04 | 892 | 67 |
| MF7Pyr-38 | 0.65 | 3183 | 1278 | 598 | 1.1 | 6.1 | 200 | 7.9 | 0.02 | 89 | 0.14 | 0.18 | 56 | 1.3 | 69 | 0.01 | 0.55 | <0.54 | 0.02 | 1586 | 45 |
| MF7Pyr-39 | 1 | 4436 | 1989 | 13 | 2.7 | 0.08 | 1762 | 16 | 0.02 | 0.29 | <0.115 | <0.0056 | 0.55 | 0.28 | 27 | <0.039 | 0.12 | <0.51 | <0.0109 | 8.9 | 53 |
| MF7Pyr-40 | 3.5 | 3674 | 2160 | 103 | 1.4 | 0.27 | 113 | 12 | <0.059 | 0.26 | 0.03 | <0.0100 | 0.20 | 0.25 | 30 | 0.01 | 0.01 | <0.56 | 0.01 | 9.9 | 48 |
| MF7Pyr-41 | 1 | 3593 | 3193 | 1E+05 | 12 | 0.75 | 620 | 12 | 0.05 | 74 | <0.00 | 1.5 | 161 | 10 | 12 | 0.12 | 5.8 | <0.53 | 0.21 | 125 | 40 |
| MF7Pyr-42 | 1.9 | 3541 | 2656 | 170 | 1.9 | <0.047 | 457 | 18 | 0.40 | 79 | 0.03 | 0.03 | 4.6 | 2.7 | 37 | <0.021 | 0.92 | <0.52 | 0.24 | 167 | 49 |
| MF7Pyr-43 | 1.2 | 3432 | 4171 | 8794 | 2.3 | 0.08 | 264 | 16 | 0.43 | 22 | <0.00 | 0.14 | 11 | 1.5 | 16 | 0.05 | 0.07 | <0.52 | 0.11 | 73 | 34 |
| MF7Pyr-44 | 0.35 | 4553 | 4174 | 53240 | 9.6 | 0.38 | 345 | 15 | 0.11 | 127 | 0.12 | 0.75 | 85 | 9.9 | 47 | 0.57 | 0.35 | <0.48 | 0.39 | 656 | 74 |
| MF7Pyr-45 | 0.86 | 4135 | 1084 | 19 | 1.4 | 0.05 | 155 | 13 | 0.03 | 20 | <0.00 | 0 | 0.31 | 2.1 | 8.5 | 0.02 | 0.08 | <0.55 | 0.03 | 4877 | 40 |
| MF7Pyr-46 | 0.73 | 4801 | 1952 | 46270 | 1.8 | 0.33 | 271 | 13 | 0.19 | 48 | 0.04 | 0.30 | 29 | 3.3 | 18 | <0.024 | 0.78 | <0.58 | 0.22 | 130 | 46 |
| MF7Pyr-47 | 6.5 | 3538 | 788 | 71298 | 7.7 | 2.4 | 70 | 10 | <0.081 | 26 | 0.03 | 1.0 | 128 | 1.9 | 15 | 0.24 | 0.12 | <0.54 | 0.11 | 345 | 55 |
| MF7Pyr-48 | <0.34 | 5129 | 2416 | 289 | 1.1 | 1.3 | 26 | 12 | 0.03 | 0.09 | <0.00 | 0.54 | 237 | 0.19 | 1.6 | <0.00 | 0.06 | <0.53 | <0.0108 | <0.105 | 4.3 |
| MF7Pyr-49 | 0.51 | 4136 | 2999 | 61 | 1.6 | 0.03 | 130 | 15 | 0.03 | 3.6 | <0.00 | <0.0078 | 2.2 | 0.66 | 42 | <0.022 | 0.09 | <0.54 | <0.0087 | 9.4 | 92 |
| MF7Pyr-50 | 0.53 | 4750 | 3982 | 6.6 | 1.4 | <0.037 | 97 | 21 | <0.103 | 0.04 | <0.00 | 0 | <0.184 | 0.20 | 3.8 | 0.01 | <0.026 | 0.68 | 0.01 | 1.7 | 12 |
| MF7Pyr-51 | <0.35 | 5382 | 4069 | 31511 | 3.0 | 0.13 | 475 | 26 | 0.02 | 36 | <0.115 | 0.31 | 33 | 2.8 | 13 | <0.0227 | 0.20 | 0.72 | 0.24 | 88 | 40 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF7Pyr-52 | 0.90 | 4962 | 3773 | 14445 | 3.4 | 0.13 | 653 | 22 | 0.50 | 98 | 0.13 | 0.41 | 47 | 3.0 | 44 | <0.022 | 0.34 | <0.53 | 0.22 | 123 | 95 |
| MF7Pyr-53 | 0.77 | 7503 | 4451 | 28799 | 10 | 0.22 | 301 | 43 | <0.00 | 219 | <0.16 | 0.52 | 55 | 4.9 | 50 | <0.032 | 0.02 | 0.63 | 0.77 | 66872 | 254 |
| MF7Pyr-54 | <0.30 | 8914 | 3836 | 18767 | 7.3 | 0.21 | 466 | 19 | <0.00 | 74 | 0.25 | 0.30 | 37 | 15 | 21 | 0.01 | 0.04 | <0.48 | 0.15 | 5585 | 45 |
| MF7Pyr-55 | <0.32 | 9186 | 3788 | 687 | 0.95 | <0.040 | 336 | 14 | <0.058 | 2.2 | <0.00 | 0.02 | 1.9 | 1.1 | 9.2 | 0.01 | 0.23 | <0.54 | <0.0110 | 9.2 | 29 |
| MF7Pyr-56 | 0.66 | 3903 | 1125 | 2024 | 3.2 | 4.1 | 687 | 16 | <0.076 | 9.4 | <0.108 | 0.62 | 89 | 0.46 | 5.1 | <0.030 | 0.09 | <0.48 | 0.05 | 27 | 25 |
| MF7Pyr-57 | 1.2 | 4275 | 2883 | 2035 | 1.3 | <0.030 | 720 | 20 | 0.10 | 201 | <0.114 | 0.09 | 19 | 1.6 | 74 | 0.04 | 1.2 | <0.51 | 0.08 | 4436 | 69 |
| MF7Pyr-58 | 2.8 | 5933 | 1249 | 1928 | 2.3 | 0.20 | 302 | 9.0 | <0.095 | 39 | <0.220 | 0.05 | 6.1 | 1.6 | 28 | 0.02 | 0.09 | <0.53 | 0.08 | 145 | 66 |
| MF7Pyr-59 | 0.46 | 5932 | 1158 | 1669 | 1.3 | 2.4 | 207 | 9.6 | 0.02 | 15 | <0.00 | 0.51 | 150 | 0.72 | 13 | 0.23 | 0.18 | <0.52 | 0.03 | 2756 | 40 |
| MF7Pyr-60 | 12 | 4611 | 1535 | 206 | 7.1 | 1.0 | 110 | 11 | <0.00 | 2.7 | <0.120 | 0.20 | 51 | 0.63 | 18 | 0.51 | 0.06 | 0.64 | 0.04 | 21 | 47 |
| MF7Pyr-61 | 1.2 | 3681 | 1874 | 8285 | 17 | 0.26 | 224 | 7.8 | 0.02 | 34 | <0.115 | 0.22 | 29 | 5.4 | 9.9 | <0.023 | 1.8 | <0.57 | 0.08 | 334 | 27 |
| MF7Pyr-62 | 5.2 | 3937 | 1655 | 14000 | 60 | 0.39 | 154 | 14 | <0.056 | 65 | 0.13 | 0.28 | 33 | 14 | 31 | 0.36 | 2.9 | <0.49 | 0.19 | 5003 | 86 |
| MF7Pyr-63 | 1 | 2852 | 812 | 47626 | 33 | 1.4 | 93 | 10 | 0.02 | 128 | 0.41 | 0.87 | 102 | 37 | 41 | <0.031 | 2.5 | <0.52 | 0.76 | 37747 | 184 |
| MF7Pyr-64 | 0.50 | 3182 | 1315 | 11783 | 2.8 | 0.25 | 258 | 32 | <0.00 | 131 | 0.30 | 0.26 | 29 | 5.6 | 12 | <0.044 | 0.07 | <0.59 | 0.32 | 69942 | 257 |
| MF7Pyr-65 | <0.33 | 3429 | 2626 | 12 | 2.1 | <0.057 | 6.1 | 7.6 | 0.02 | 0.08 | <0.00 | <0.00 | <0.176 | 0.06 | 1.5 | <0.00 | <0.00 | <0.57 | <0.0096 | 19 | 0.66 |
| MF7Pyr-66 | 2.2 | 2923 | 986 | 2521 | 4.8 | 0.18 | 161 | 9.3 | <0.077 | 68 | <0.00 | 0.08 | 11 | 1.3 | 25 | <0.0215 | 1.4 | <0.51 | 0.08 | 578 | 33 |
| MF7Pyr-67 | 876 | 3905 | 2996 | 30 | 1.1 | 0.58 | 170 | 11 | 0.23 | 57 | <0.00 | <0.0098 | 1.0 | 1.0 | 12 | <0.023 | 37 | <0.54 | 0.06 | 264 | 46 |
| MF7Pyr-68 | 370 | 2349 | 2443 | 437 | 45 | <0.038 | 583 | 13 | 0.30 | 31 | <0.00 | 0.04 | 4.1 | 1.6 | 14 | 1.0 | 0.33 | <0.52 | 0.11 | 308 | 78 |
| MF7Pyr-69 | 1276 | 2719 | 1274 | 897 | 8.4 | 0.82 | 445 | 13 | 0.33 | 18 | <0.00 | 0.07 | 2.0 | 2.5 | 10 | 0.10 | 0.65 | <0.57 | 0.13 | 976 | 54 |
| MF7Pyr-70 | 2 | 10542 | 2944 | 12615 | 23 | 0.34 | 15239 | 5.3 | <0.087 | 20 | 0.25 | 0.22 | 45 | 2.6 | 13 | 0.08 | 0.54 | <0.55 | 0.10 | 187 | 38 |
| MF7Pyr-71 | 249 | 6504 | 3436 | 5212 | 19 | 3.5 | 10284 | 18 | 0.05 | 12 | 0.04 | 0.11 | 3.2 | 1.8 | 289 | <0.182 | 0.13 | <0.57 | 0.04 | 256 | 544 |
| MF7Pyr-72 | 2.9 | 3964 | 1507 | 7699 | 5.0 | 0.82 | 610 | 13 | 0.19 | 32 | 0.03 | 0.52 | 118 | 2.3 | 45 | 0.12 | 1.2 | 0.64 | 0.04 | 159 | 100 |
| MF7Pyr-73 | 1.8 | 2933 | 5723 | 55 | 1.2 | <0.046 | 388 | 11 | 0.08 | 9.8 | <0.00 | <0.0098 | 0.81 | 1.1 | 16 | <0.045 | 0.15 | 0.58 | 0.02 | 318 | 54 |
| MF7Pyr-74 | 375 | 4053 | 1322 | 14934 | 12 | 0.11 | 794 | 19 | 0.92 | 149 | 0.09 | 0.44 | 35 | 5.5 | 80 | 0.13 | 0.49 | <0.71 | 0.36 | 4960 | 105 |
| MF7Pyr-75 | 3.5 | 3502 | 606 | 5199 | 38 | 39 | 93 | 8.6 | 0.05 | 1.0 | 0.18 | 13 | 4266 | 1.2 | 1.7 | <0.0307 | 0.28 | <0.49 | <0.0060 | 7.0 | 17 |
| MF7Pyr-76 | 326 | 3593 | 1246 | 113 | 3.5 | <0.033 | 204 | 14 | 0.26 | 38 | <0.150 | 0.05 | 4.3 | 1.9 | 17 | 0.12 | 0.11 | <0.70 | 0.11 | 2215 | 60 |
| MF7Pyr-77 | 391 | 3161 | 1424 | 36 | 2.5 | 0.07 | 266 | 9.7 | 0.05 | 143 | <0.00 | 0.12 | 9.4 | 1.0 | 61 | 0.66 | 0.27 | <0.58 | 0.06 | 278 | 65 |
| MF7Pyr-78 | 348 | 2515 | 572 | 3068 | 1.7 | 0.09 | 211 | 10 | 0.07 | 42 | <0.173 | 0.14 | 6.8 | 1.5 | 18 | 0.21 | 0.18 | <0.58 | 0.11 | 384 | 48 |
| MF7Pyr-79 | 1.3 | 3910 | 746 | 3135 | 2.2 | <0.047 | 827 | 10 | 0.03 | 17 | 0.07 | 0.06 | 6.5 | 0.76 | 7.3 | 0.05 | 1.9 | <0.61 | 0.03 | 19 | 16 |
| MF7Pyr-80 | 0.64 | 4217 | 577 | 18 | 3.0 | 0.08 | 190 | 13 | <0.00 | 2.4 | 0.10 | <0.0105 | 0.21 | 0.27 | 10 | 0.01 | 0.28 | <0.59 | 0 | 22 | 18 |
| **Mean n=80** | 116 | 4690 | 2628 | 19996 | 61 | 1.4 | 1272 | 17 | 0.19 | 94 | 0.7 | 0.64 | 102 | 3.7 | 40 | 0.32 | 27 | 0.63 | 0.18 | 7797 | 92 |
| **S.D** | 324 | 1505 | 1413 | 36201 | 316 | 5.1 | 2378 | 9.0 | 0.23 | 152 | 3.3 | 1.6 | 491 | 5.2 | 56 | 0.84 | 214 | 0.10 | 0.20 | 18360 | 104 |
| **Min** | 0.35 | 2349 | 572 | 0.98 | 0.69 | 0.01 | 6.1 | 5.3 | 0.02 | 0.04 | 0.03 | 0 | 0.20 | 0.03 | 0.67 | 0.01 | 0.01 | 0.48 | 0 | 1.7 | 0.2 |
| **Max** | 2054 | 10542 | 6427 | 2E+05 | 2685 | 39 | 15239 | 49 | 1.1 | 999 | 20 | 13 | 4266 | 37 | 289 | 5.4 | 1853 | 0.82 | 1.0 | 80850 | 544 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF8Pyr-1 | 2.7 | 1126 | 2967 | 24 | 1.5 | <0.041 | 9764 | 11 | 0.14 | 3.8 | 0.03 | 0 | 1.7 | 0.18 | 3.9 | 19 | 0.18 | <0.62 | <0.0052 | 9.0 | 19 |
| MF8Pyr-2 | 1.6 | 4982 | 1227 | 44 | 1.7 | 0.27 | 8384 | 5.0 | 0.50 | 19 | <0.00 | 0.09 | 20 | 1.2 | 20 | 551 | 1.8 | 0.81 | 0.01 | 24 | 84 |
| MF8Pyr-3 | 3.2 | 10076 | 3081 | 43 | 9.3 | 0.35 | 22703 | 5.2 | 0.26 | 7.5 | 0.06 | 0.04 | 6.6 | 0.62 | 8.2 | 78 | 0.78 | <0.65 | 0.01 | 8.0 | 51 |
| MF8Pyr-4 | 0.56 | 12864 | 1733 | 12 | 1.9 | <0.032 | 20852 | 4.3 | 0.09 | 3.6 | <0.00 | <0.0086 | 0.99 | 0.14 | 1.9 | 1.1 | 0.27 | 0.66 | <0.0053 | 4.8 | 15 |
| MF8Pyr-5 | 8.6 | 7677 | 1257 | 31 | 2.2 | 0.25 | 16317 | 9.8 | 0.26 | 16 | <0.092 | 0.17 | 9.5 | 1.3 | 14 | 154 | 1.0 | <0.55 | 0.01 | 27 | 60 |
| MF8Pyr-6 | <0.33 | 9153 | 3243 | 29 | 1.3 | <0.030 | 24730 | <3.11 | 0.28 | 15 | <0.093 | 0.01 | 0.96 | 0.56 | 19 | 5.0 | 1.1 | <0.56 | 0.03 | 12 | 60 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF8Pyr-7 | 10 | 3371 | 1533 | 77 | 4.5 | 1.1 | 8711 | 5.6 | 0.46 | 27 | <0.156 | 0.11 | 36 | 0.97 | 24 | 366 | 7.8 | <0.51 | 0.01 | 19 | 80 |
| MF8Pyr-8 | 8.5 | 6703 | 1205 | 134 | 2.7 | 0.14 | 15308 | 3.3 | 0.24 | 21 | <0.00 | 0.02 | 3.1 | 1.5 | 20 | 108 | 1.4 | 0.67 | 0.15 | 21 | 62 |
| MF8Pyr-9 | 8.1 | 24094 | 735 | 28 | 4.5 | 28 | 27824 | <3.85 | 0.12 | 8.0 | <0.123 | 0.02 | 1.6 | 0.41 | 13 | 33 | 0.68 | <0.71 | <0.0093 | 3.3 | 37 |
| MF8Pyr-10 | 0.63 | 165 | 517 | 8.5 | 3.8 | <0.020 | 1154 | 3.6 | 0.12 | 2.4 | <0.00 | <0.0071 | 0.59 | 0.30 | 2.9 | 11 | 0.26 | 0.59 | 0.03 | 1.4 | 8.5 |
| MF8Pyr-11 | 0.57 | 14592 | 1043 | 18 | 0.96 | <0.025 | 33657 | <2.97 | 0.10 | 8.7 | <0.089 | 0.01 | 0.73 | 0.76 | 5.4 | 17 | 0.87 | <0.49 | 0.01 | 7.9 | 18 |
| MF8Pyr-12 | 0.50 | 11038 | 748 | 53 | 0.99 | <0.0220 | 19123 | 4.5 | <0.074 | 18 | 0.03 | <0.0084 | 1.4 | 0.35 | 13 | 27 | 2.1 | <0.56 | 0.03 | 5.8 | 39 |
| MF8Pyr-13 | 1.3 | 648 | 169 | 25 | 2.5 | <0.037 | 4197 | 2.7 | <0.059 | 9.2 | 0.02 | <0.0086 | 1.4 | 1.6 | 11 | 17 | 1.8 | <0.42 | 0.03 | 30 | 25 |
| MF8Pyr-14 | <0.31 | 166 | 210 | 9.2 | 0.95 | <0.036 | 3847 | 8.9 | 0.09 | 5.7 | <0.098 | <0.0050 | 0.66 | 2.2 | 7.2 | 30 | 0.45 | <0.55 | 0.01 | 30 | 17 |
| MF8Pyr-15 | 0.64 | 836 | 2948 | 5.8 | <0.59 | <0.0160 | 4296 | 9.3 | 0.08 | 2.4 | <0.00 | <0.00 | 0.29 | 0.84 | 2.3 | 4.0 | 0.21 | 0.68 | 0.16 | 4.2 | 4.8 |
| MF8Pyr-16 | <0.35 | 1345 | 1356 | 1.1 | 1.5 | <0.023 | 4403 | 7.3 | <0.077 | 0.01 | <0.00 | 0.01 | <0.218 | <0.059 | 0.25 | 0.03 | <0.023 | 0.83 | <0.00 | <0.056 | 0.90 |
| MF8Pyr-17 | 0.33 | 5322 | 1085 | 4.2 | 2.2 | <0.036 | 8563 | 4.7 | 0.02 | 1.4 | <0.098 | <0.0070 | 0.37 | 0.10 | 6.7 | 5.3 | 0.06 | 0.65 | <0.0074 | 2.8 | 16 |
| MF8Pyr-18 | 1.5 | 25 | 35 | 38 | <0.37 | <0.041 | 7071 | 6.5 | <0.00 | 9.5 | <0.080 | <0.0070 | 0.95 | 0.36 | 7.8 | 7.0 | 1.6 | 0.83 | 0.03 | 10 | 28 |
| MF8Pyr-19 | 7.3 | 13 | 14 | 106 | 6.2 | 0.04 | 8944 | 6.1 | 0.24 | 10 | 0.03 | 0.03 | 3.3 | 0.41 | 11 | 15 | 1.3 | <0.54 | 0.04 | 20 | 43 |
| MF8Pyr-20 | 0.82 | 14 | 12 | 125 | 0.82 | 0.04 | 8631 | 4.7 | 0.13 | 13 | <0.00 | 0.02 | 1.6 | 0.58 | 14 | 17 | 2.3 | <0.52 | 0.08 | 9.4 | 50 |
| MF8Pyr-21 | <0.28 | 0.21 | 201 | 12 | 1.7 | <0.052 | 11686 | 4.5 | 0.09 | 1.8 | <0.00 | 0.01 | 0.39 | 0.12 | 4.5 | 13 | 0.78 | <0.57 | <0.0074 | 5.2 | 14 |
| MF8Pyr-22 | 1 | 0.53 | 1316 | 12 | 2.8 | <0.029 | 11466 | 4.9 | 0.11 | 1.2 | <0.00 | <0.0075 | 0.47 | 0.17 | 4.5 | 5.9 | 0.44 | <0.57 | <0.0079 | 3.0 | 10 |
| MF8Pyr-23 | 0.46 | 1.3 | 462 | 5.3 | 0.74 | 0.03 | 126 | <3.20 | <0.074 | 1.1 | 0.06 | <0.0069 | 0.26 | 0.19 | 2.6 | 0.56 | 0.25 | 0.70 | 0 | 0.43 | 9.8 |
| MF8Pyr-24 | 4.3 | 6.5 | 726 | 1409 | 6.9 | 0.03 | 1111 | <3.38 | 0.53 | 19 | <0.00 | 0.09 | 2.6 | 0.35 | 6.7 | 1.7 | 1.0 | <0.54 | 0.01 | 2.1 | 28 |
| MF8Pyr-25 | 3.5 | 64 | 184 | 128 | 1.6 | 0.04 | 13337 | 7.4 | 0.08 | 19 | <0.00 | <0.0103 | 1.4 | 0.46 | 17 | 14 | 1.7 | <0.53 | 0.03 | 12 | 85 |
| MF8Pyr-26 | <0.36 | 9.9 | 169 | 41 | 2.3 | <0.050 | 14757 | 6.3 | 0.22 | 27 | 0.03 | <0.0078 | 0.58 | 0.97 | 24 | 15 | 2.8 | <0.56 | 0.01 | 22 | 80 |
| MF8Pyr-27 | 0.47 | 14 | 181 | 56 | 2.1 | <0.033 | 13800 | 7.5 | 0.02 | 88 | <0.00 | <0.0089 | <0.195 | 2.9 | 15 | 3.6 | 4.2 | 0.56 | 0.03 | 35 | 191 |
| MF8Pyr-28 | 0.62 | 8.5 | 715 | 15 | <0.49 | <0.024 | 16541 | 6.3 | <0.00 | 7.3 | <0.00 | 0 | <0.21 | 1.0 | 11 | 3.1 | 2.6 | <0.55 | 0.02 | 13 | 30 |
| MF8Pyr-29 | 0.78 | 305 | 2562 | 9.5 | 0.99 | <0.029 | 18837 | <3.22 | <0.00 | 2.8 | <0.101 | <0.0126 | <0.20 | 0.48 | 3.7 | 0.61 | 0.53 | <0.54 | 0 | 19 | 18 |
| MF8Pyr-30 | <0.27 | 16351 | 641 | 4.7 | 0.81 | <0.0258 | 26035 | <2.76 | <0.00 | 2.3 | 0.03 | <0.0047 | <0.170 | 1.7 | 5.2 | 0.01 | 0.81 | <0.48 | 0 | 6.3 | 19 |
| MF8Pyr-31 | 0.35 | 25999 | 720 | 2.4 | 0.81 | <0.031 | 37058 | <2.94 | <0.00 | 0.03 | <0.00 | 0.01 | <0.169 | 0.02 | 0.21 | <0.00 | 0.01 | <0.50 | <0.00 | 0.06 | 0.17 |
| MF8Pyr-32 | <0.26 | 12983 | 2136 | 1.7 | 1.6 | <0.0188 | 27511 | <2.58 | <0.044 | <0.0114 | <0.116 | <0.0059 | <0.129 | <0.051 | 0.13 | <0.024 | 0 | 0.70 | 0 | 0.11 | 0.90 |
| MF8Pyr-33 | <0.30 | 9946 | 3119 | 3.4 | 1.3 | <0.023 | 23538 | 4.3 | <0.054 | 0.72 | <0.00 | <0.0072 | <0.181 | <0.052 | 11 | 0.66 | 0.08 | <0.53 | 0 | 1.3 | 24 |
| MF8Pyr-34 | 0.45 | 10991 | 2394 | 11 | 0.87 | <0.017 | 22811 | 3.7 | <0.00 | 5.4 | 0.06 | <0.0104 | <0.199 | 0.29 | 6.6 | 2.8 | 0.18 | <0.53 | 0.02 | 7.4 | 33 |
| MF8Pyr-35 | 4.8 | 13186 | 1515 | 1632 | 2.5 | 1.3 | 22505 | 4.6 | 1.3 | 205 | <0.00 | 0.09 | 20 | 6.3 | 129 | 113 | 15 | <0.50 | 0.15 | 135 | 656 |
| MF8Pyr-36 | 4.6 | 11427 | 1858 | 3455 | 5.3 | 0.52 | 19447 | 9.5 | 1.3 | 353 | <0.099 | 0.09 | 16 | 5.8 | 127 | 101 | 20 | <0.52 | 0.12 | 204 | 1015 |
| MF8Pyr-37 | 4.5 | 10111 | 2685 | 437 | 4.9 | 1.5 | 23605 | 3.6 | 1.4 | 155 | <0.00 | 0.04 | 8.1 | 5.9 | 118 | 85 | 13 | <0.54 | 0.20 | 113 | 531 |
| MF8Pyr-38 | 4.7 | 13180 | 2114 | 128 | 6.1 | 2.6 | 24123 | 4.7 | 0.77 | 50 | <0.00 | 0.04 | 10 | 2.8 | 78 | 66 | 4.5 | <0.59 | 0.06 | 90 | 250 |
| MF8Pyr-39 | 0.80 | 9887 | 2882 | 46 | 2.2 | 0.31 | 20757 | 5.1 | 0.22 | 23 | <0.134 | 0.02 | 1.1 | 1.4 | 29 | 21 | 3.0 | <0.48 | 0.02 | 31 | 109 |
| MF8Pyr-40 | 2.6 | 6443 | 4000 | 163 | 5.3 | 0.79 | 20254 | 9.3 | 0.27 | 21 | <0.00 | 0.02 | 2.6 | 2.7 | 128 | 27 | 2.8 | <0.63 | 0.02 | 34 | 323 |
| MF8Pyr-41 | 5.8 | 328 | 25 | 47 | 13 | <0.048 | 14281 | 8.1 | 0.04 | 3.0 | <0.229 | 0.02 | 35 | 0.16 | 4.7 | 6.1 | 0.70 | <0.72 | 0 | 15 | 15 |
| MF8Pyr-42 | 1.1 | 1167 | 40 | 17 | 1.6 | 0.05 | 15133 | <3.44 | <0.084 | 7.6 | <0.00 | <0.0079 | 0.47 | 0.33 | 8.5 | 10 | 2.5 | <0.56 | 0.03 | 10 | 26 |
| MF8Pyr-43 | 0.93 | 1274 | 95 | 57 | 0.95 | <0.038 | 16691 | 9.7 | 0.14 | 25 | <0.236 | <0.0098 | 0.94 | 0.48 | 26 | 28 | 3.7 | <0.68 | 0.09 | 19 | 72 |
| MF8Pyr-44 | 2.1 | 506 | 141 | 65 | 1.7 | 0.12 | 16015 | 8.9 | 0.15 | 23 | <0.198 | <0.0100 | 1.2 | 1.4 | 25 | 30 | 3.6 | <0.67 | 0.09 | 53 | 73 |
| MF8Pyr-45 | 2.1 | 888 | 95 | 115 | 3.2 | 0.06 | 15357 | 8.1 | 0.11 | 24 | 0.12 | <0.0140 | 0.68 | 1.4 | 21 | 29 | 2.7 | <0.71 | 0.10 | 51 | 76 |
| MF8Pyr-46 | 9 | 759 | 84 | 119 | 58 | 0.30 | 11725 | 6.4 | 0.53 | 31 | 0.16 | 0.02 | 5.9 | 1.7 | 32 | 42 | 3.5 | <0.72 | 0.12 | 51 | 99 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF8Pyr-47 | 4.1 | 365 | 59 | 89 | 520 | 0.14 | 10180 | 9.8 | 0.46 | 48 | <0.126 | 0.02 | 6.4 | 2.6 | 40 | 47 | 6.3 | <0.62 | 0.17 | 73 | 110 |
| MF8Pyr-48 | 0.72 | 1078 | 68 | 19 | 1.4 | 0.02 | 7421 | <3.18 | 0.18 | 7.5 | <0.00 | <0.0053 | 0.44 | 0.35 | 8.0 | 11 | 1.2 | <0.54 | 0.03 | 5.2 | 25 |
| MF8Pyr-49 | <0.33 | 1932 | 267 | 2.5 | 3.0 | <0.041 | 1622 | 14 | <0.086 | 0.40 | <0.00 | 0 | <0.186 | 0.07 | 12 | 0.23 | 0.04 | <0.55 | <0.0061 | 0.26 | 2.8 |
| MF8Pyr-50 | <0.33 | 1323 | 241 | 2.1 | <0.49 | <0.053 | 1284 | 9.8 | <0.00 | 0 | <0.109 | <0.00 | 0.19 | <0.032 | 9.3 | <0.00 | <0.00 | <0.56 | <0.0059 | <0.051 | 0.12 |
| MF8Pyr-51 | 10 | 1251 | 60 | 60 | 1.2 | 0.36 | 1156 | <3.09 | 0.32 | 4.2 | <0.00 | 0.01 | 1.9 | 1.0 | 15 | 20 | 1.6 | <0.52 | 0.03 | 19 | 27 |
| MF8Pyr-52 | 0.84 | 97 | 166 | 27 | 1.9 | <0.038 | 8180 | 5.3 | 0.04 | 3.2 | <0.095 | <0.0048 | 0.29 | 0.04 | 2.7 | 0.79 | 0.73 | <0.48 | <0.0051 | 3.1 | 14 |
| MF8Pyr-53 | 0.71 | 108 | 104 | 32 | 1.3 | <0.035 | 10540 | 6.9 | 0.18 | 23 | <0.00 | 0.01 | 0.31 | 0.27 | 12 | 2.9 | 2.4 | 0.62 | <0.0083 | 13 | 51 |
| MF8Pyr-54 | <0.30 | 104 | 123 | 4.1 | 1.0 | <0.038 | 9389 | <3.13 | <0.00 | 4.5 | <0.148 | 0.01 | <0.181 | 0.05 | 2.0 | 0.48 | 0.88 | <0.54 | 0 | 0.52 | 8.5 |
| MF8Pyr-55 | 0.36 | 41 | 28 | 28 | 2.0 | <0.0226 | 11428 | 4.8 | 0.26 | 20 | <0.098 | <0.0050 | 0.53 | 0.62 | 11 | 2.7 | 2.7 | <0.48 | 0.02 | 12 | 50 |
| MF8Pyr-56 | 6.3 | 13 | 145 | 29 | 4.6 | 0.07 | 6217 | <3.17 | 0.09 | 5.3 | 0.03 | <0.0087 | 2.6 | 0.09 | 3.3 | 1.2 | 0.15 | <0.50 | <0.0053 | 2.1 | 13 |
| MF8Pyr-57 | 1.4 | 25 | 151 | 33 | 3.0 | 0.04 | 8501 | 8.3 | 0.15 | 22 | 0.03 | <0.0055 | 0.69 | 1.6 | 17 | 5.4 | 1.9 | <0.55 | 0.10 | 32 | 71 |
| MF8Pyr-58 | 1.8 | 37 | 38 | 18 | 6.3 | <0.053 | 10371 | 5.0 | 0.08 | 7.8 | <0.102 | <0.0073 | 0.99 | 1.8 | 9.6 | 1.6 | 1.1 | 0.77 | 0.01 | 30 | 43 |
| MF8Pyr-59 | 3.1 | 10621 | 1213 | 44 | 5.0 | 11 | 14171 | <10.14 | 0.53 | 22 | <0.45 | <0.028 | 2.2 | 1.0 | 17 | 6.6 | 1.4 | <1.55 | 0.09 | 35 | 95 |
| MF8Pyr-60 | 0.88 | 6431 | 1017 | 6.7 | 2.0 | <0.0138 | 11637 | 2.7 | 0.05 | 3.4 | <0.120 | 0.01 | 0.35 | 0.08 | 1.1 | 0.34 | 0.11 | 0.51 | <0.0046 | 2.0 | 7.9 |
| MF8Pyr-61 | <0.36 | 88 | 50 | 9.9 | 1.3 | <0.031 | 4988 | <3.47 | 0.02 | 0.02 | <0.156 | <0.0079 | <0.194 | <0.041 | 0.04 | <0.022 | <0.022 | <0.61 | <0.0060 | <0.035 | 0.04 |
| MF8Pyr-62 | 7.3 | 101 | 54 | 2624 | 1.1 | 0.19 | 4926 | 5.4 | 0.04 | 28 | <0.00 | 0.13 | 9.6 | 0.65 | 16 | 21 | 2.0 | <0.64 | 0.07 | 15 | 79 |
| MF8Pyr-63 | 1.8 | 100 | 36 | 204 | 1.2 | 0.11 | 8374 | 9.9 | 0.18 | 179 | <0.00 | 0.01 | 2.0 | 1.3 | 79 | 38 | 15 | <0.63 | 0.12 | 180 | 307 |
| MF8Pyr-64 | <0.43 | 15 | 18 | 6.1 | 2.2 | <0.052 | 8370 | 4.5 | <0.070 | 5.7 | <0.130 | <0.0066 | <0.23 | 0.24 | 5.5 | 0.14 | 0.44 | <0.65 | 0 | 5.4 | 11 |
| MF8Pyr-65 | 0.46 | 83 | 12 | 16691 | 3.7 | 0.36 | 7424 | 6.1 | 0.09 | 76 | <0.121 | 0.20 | 46 | 2.4 | 37 | 14 | 4.7 | <0.62 | 0.26 | 74 | 122 |
| MF8Pyr-66 | 0.67 | 7.9 | 8.1 | 28 | 3.0 | 0.09 | 7347 | <5.19 | <0.087 | 16 | 0.05 | 0 | 1.9 | 0.49 | 9.9 | 9.8 | 0.45 | <0.79 | 0 | 6.7 | 46 |
| MF8Pyr-67 | 0.79 | 35 | 51 | 403 | 1.2 | 0.26 | 7913 | <4.72 | 0.31 | 80 | <0.205 | 0.04 | 6.8 | 4.1 | 62 | 34 | 5.9 | <0.70 | 0.84 | 132 | 205 |
| MF8Pyr-68 | 0.49 | 168 | 75 | 30 | 1.6 | <0.048 | 7995 | 4.8 | 0.16 | 10 | 0.13 | <0.0130 | 2.4 | 0.24 | 14 | 14 | 0.50 | <0.76 | <0.0113 | 13 | 52 |
| MF8Pyr-69 | <0.42 | 2346 | 107 | 22 | 1.4 | <0.051 | 7196 | <4.38 | <0.106 | 2.5 | <0.00 | 0.01 | 1.6 | 0.14 | 4.1 | 4.0 | 0.35 | <0.67 | 0.02 | 18 | 24 |
| MF8Pyr-70 | 0.30 | 29 | 21 | 19 | 1.1 | <0.021 | 3922 | <2.75 | <0.049 | 5.4 | 0.03 | <0.0047 | 0.16 | 0.60 | 2.7 | 1.3 | 0.39 | <0.46 | 0.02 | 25 | 12 |
| MF8Pyr-71 | 0.31 | 11261 | 919 | 0.64 | 1.3 | <0.048 | 18633 | <3.17 | <0.056 | 0.01 | <0.00 | 0.01 | <0.172 | 0.04 | <0.14 | <0.0300 | 0.01 | <0.51 | <0.00 | 0.14 | 0.39 |
| MF8Pyr-72 | 0.40 | 22329 | 877 | 4.4 | 2.0 | <0.024 | 35920 | <3.28 | 0.05 | 6.9 | <0.00 | <0.0053 | 0.27 | 0.05 | 2.9 | 6.9 | 0.15 | <0.55 | <0.0057 | 1.6 | 22 |
| MF8Pyr-73 | <0.38 | 2543 | 105 | 14 | 0.96 | 0.10 | 9799 | <3.74 | <0.111 | 9.9 | <0.00 | 0.01 | <0.220 | 0.60 | 6.0 | 5.1 | 0.37 | <0.57 | 0.01 | 19 | 16 |
| MF8Pyr-74 | 31 | 201 | 30 | 301 | 3722 | 0.26 | 10205 | <3.60 | 1.6 | 18 | 0.20 | 0.09 | 24 | 1.4 | 14 | 22 | 1.6 | 0.63 | 0.04 | 28 | 71 |
| MF8Pyr-75 | 0.53 | 869 | 207 | 13 | 4.9 | <0.035 | 11324 | 6.5 | 0.17 | 5.6 | <0.00 | 0.01 | 0.51 | 0.31 | 6.7 | 14 | 0.52 | <0.60 | 0 | 10 | 31 |
| MF8Pyr-76 | 0.90 | 246 | 47 | 21 | 2.7 | <0.035 | 9724 | 5.3 | 0.08 | 24 | <0.106 | <0.0054 | 0.35 | 0.40 | 8.6 | 15 | 1.5 | <0.50 | 0.21 | 8.0 | 128 |
| MF8Pyr-77 | 2 | 156 | 96 | 59 | 1.9 | <0.029 | 6154 | <4.12 | <0.096 | 20 | <0.00 | <0.0065 | 0.61 | 0.73 | 13 | 12 | 0.50 | <0.64 | 0.06 | 16 | 38 |
| MF8Pyr-78 | <0.35 | 59 | 35 | 4.0 | 1.2 | <0.025 | 4543 | 3.5 | 0.02 | 0.36 | <0.157 | <0.0079 | 0.25 | <0.049 | 0.28 | 0.03 | 0.01 | <0.54 | <0.00 | 0.23 | 0.03 |
| MF8Pyr-79 | <0.33 | 55 | 48 | 1.3 | <0.68 | <0.017 | 4267 | <3.17 | <0.078 | 0.29 | <0.00 | 0 | <0.148 | 1.2 | 0.39 | <0.021 | 0.01 | <0.49 | 0.01 | 24 | 4.2 |
| MF8Pyr-80 | <0.32 | 91 | 56 | 1.6 | <0.62 | <0.031 | 6728 | 3.9 | <0.058 | <0.0221 | <0.155 | <0.0078 | <0.176 | <0.041 | 0.24 | <0.00 | 0.06 | <0.55 | <0.0059 | 0.06 | 0.04 |
| **Mean n=80** | 3.0 | 4053 | 784 | 371 | 61 | 1.5 | 12685 | 6.3 | 0.28 | 25 | 0.06 | 0 | 5.0 | 1.1 | 19 | 33 | 2.2 | 0.68 | 0.06 | 26 | 77 |
| **S.D** | 4.6 | 6143 | 1010 | 1922 | 436 | 5.1 | 8279 | 2.4 | 0.36 | 52 | 0.05 | 0 | 9.3 | 1.3 | 29 | 79 | 3.6 | 0.10 | 0.12 | 39 | 150 |
| **Min** | 0.3 | 0.21 | 8.1 | 0.64 | 0.74 | 0.02 | 126 | 2.7 | 0.02 | 0 | 0.02 | 0 | 0.16 | 0.02 | 0.04 | 0.01 | 0 | 0.51 | 0 | 0.06 | 0.03 |
| **Max** | 31 | 25999 | 4000 | 16691 | 3722 | 28 | 37058 | 14 | 1.6 | 353 | 0.20 | 0.2 | 46 | 6.3 | 129 | 551 | 20 | 0.83 | 0.84 | 204 | 1015 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF9Pyr-1 | 0.73 | 1955 | 61 | 125 | 0.54 | <0.026 | 2182 | <2.73 | <0.00 | 0.96 | <0.131 | <0.0047 | 0.19 | 0.18 | 5.1 | 0.09 | 0.42 | <0.49 | 0.03 | 29 | 41 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF9Pyr-2 | 1.6 | 811 | 57 | 105 | 0.57 | <0.050 | 1463 | <2.85 | 0.01 | 1.1 | <0.00 | <0.0045 | 0.25 | 0.17 | 8.1 | 0.14 | 0.39 | <0.45 | 0.10 | 15 | 49 |
| MF9Pyr-3 | 4.5 | 1334 | 121 | 567 | 1.4 | 0.05 | 2224 | 3.2 | <0.085 | 9.1 | <0.00 | 0.01 | 0.23 | 1.7 | 34 | 0.12 | 4.2 | <0.47 | 0.44 | 157 | 268 |
| MF9Pyr-4 | 15 | 576 | 100 | 4448 | 27 | 0.08 | 1288 | 3.9 | 0.07 | 8.6 | 0.10 | 0.12 | 11 | 3.4 | 37 | 5.3 | 4.9 | <0.49 | 0.62 | 341 | 277 |
| MF9Pyr-5 | 5.4 | 2532 | 131 | 110 | 2.3 | 0.02 | 3450 | <3.41 | 0.03 | 2.1 | 0.03 | <0.0057 | 0.64 | 0.36 | 5.8 | 0.23 | 0.14 | <0.53 | 0.21 | 65 | 37 |
| MF9Pyr-6 | 4.7 | 2129 | 121 | 48 | 3.5 | 0.05 | 3087 | 4.2 | <0.00 | 0.93 | <0.093 | 0 | 0.25 | 0.37 | 5.7 | 0.35 | 0.39 | <0.47 | 0.02 | 12 | 36 |
| MF9Pyr-7 | 2.3 | 1998 | 83 | 2432 | 1.4 | 0.03 | 2936 | <2.63 | <0.00 | 0.62 | <0.00 | 0.03 | 0.55 | 0.80 | 4.1 | 0.11 | 0.19 | <0.45 | 0.15 | 38 | 26 |
| MF9Pyr-8 | 5.5 | 110 | 24 | 5348 | 3.2 | 0.04 | 1051 | <2.82 | <0.00 | 5.3 | 0.05 | 0.09 | 0.56 | 1.4 | 20 | 0.20 | 3.7 | <0.44 | 0.89 | 90 | 174 |
| MF9Pyr-9 | 3.5 | 2161 | 221 | 5740 | 1.7 | <0.034 | 5497 | <3.48 | <0.056 | 3.7 | 0.06 | 0.07 | 0.75 | 2.1 | 8.8 | 0.25 | 2.0 | <0.50 | 0.63 | 87 | 117 |
| MF9Pyr-10 | 0.99 | 3984 | 192 | 1846 | 2.4 | <0.027 | 5665 | 3.7 | <0.071 | 1.7 | <0.095 | 0.04 | 0.69 | 0.46 | 5.7 | 0.04 | 0.92 | <0.47 | 0.09 | 17 | 48 |
| MF9Pyr-11 | 14 | 3262 | 186 | 13192 | 3.7 | 0.09 | 4109 | 3.6 | 3.5 | 9251 | <0.110 | 0.14 | 3.0 | 7.4 | 59 | 0.29 | 1E+05 | 4.9 | 1.5 | 127 | 210 |
| MF9Pyr-12 | 6.8 | 1104 | 168 | 8131 | 7.9 | 0.06 | 1914 | 3.5 | 0.06 | 5.9 | 0.04 | 0.14 | 5.7 | 3.1 | 26 | 0.99 | 3.3 | <0.36 | 0.81 | 143 | 205 |
| MF9Pyr-13 | <0.23 | 2602 | 398 | 1.2 | 1.7 | <0.0227 | 5289 | <2.54 | <0.00 | 0.23 | <0.00 | <0.0041 | <0.148 | <0.00 | 0.12 | <0.040 | <0.052 | <0.40 | <0.0044 | <0.054 | 0.09 |
| MF9Pyr-14 | 1.6 | 3548 | 475 | 548 | 3.1 | 0.05 | 6701 | 3.4 | <0.065 | 1.3 | <0.00 | <0.0044 | <0.161 | 1.2 | 19 | 0.04 | 1.9 | 0.50 | 0.04 | 24 | 76 |
| MF9Pyr-15 | 16 | 3566 | 726 | 13673 | 3.5 | 0.05 | 4368 | 16 | <0.041 | 25 | 0.14 | 0.16 | 0.93 | 8.6 | 104 | <0.163 | 19 | 0.47 | 1.2 | 750 | 737 |
| MF9Pyr-16 | **** | 1659 | 578 | 25899 | 4.9 | 1.4 | 2386 | 7.0 | 0.06 | 15 | <0.00 | 0.22 | 5.6 | 9.5 | 60 | 0.39 | 8.8 | <0.46 | 1.8 | 404 | 487 |
| MF9Pyr-17 | 13 | 1527 | 336 | 35345 | 6.1 | 0.06 | 1756 | 6.2 | <0.049 | 22 | 0.18 | 0.36 | 4.1 | 10 | 71 | 1.4 | 15 | <0.47 | 2.5 | 429 | 827 |
| MF9Pyr-18 | 274 | 1913 | 254 | 38739 | 106 | 36 | 2854 | <7.37 | 0.14 | 25 | 0.41 | 0.63 | 6.9 | 14 | 75 | 1.4 | 19 | <1.18 | 3.8 | 460 | 782 |
| MF9Pyr-19 | 4.4 | 1746 | 139 | 12330 | 3.2 | 0.25 | 1952 | 3.7 | <0.075 | 11 | 0.19 | 0.26 | 2.6 | 4.3 | 39 | 0.16 | 6.7 | <0.39 | 1.3 | 152 | 343 |
| MF9Pyr-20 | 1.1 | 2667 | 60 | 220 | 2.0 | <0.028 | 3186 | <2.66 | 0.01 | 1.6 | <0.086 | 0.01 | <0.142 | 0.16 | 13 | 0.06 | 0.31 | <0.41 | 0.06 | 52 | 78 |
| MF9Pyr-21 | 68 | 5423 | 512 | 3750 | 4.3 | 0.47 | 6604 | 13 | 0.04 | 67 | 0.18 | 0.10 | 3.3 | 7.5 | 169 | 1.7 | 43 | <0.70 | 1.7 | 835 | 1841 |
| MF9Pyr-22 | 1.5 | 3487 | 600 | 20 | 0.73 | <0.042 | 7133 | <3.20 | <0.00 | 0.65 | <0.00 | <0.0053 | 0.36 | 0.06 | 3.0 | 0.25 | 0.07 | <0.54 | 0.02 | 4.3 | 19 |
| MF9Pyr-23 | 0.64 | 1042 | 152 | 1.2 | 1.1 | <0.034 | 4947 | <2.68 | 0.01 | <0.018 | <0.00 | 0 | <0.130 | 0.05 | 0.29 | <0.017 | 0.01 | <0.44 | <0.0046 | 0.04 | 0.64 |
| MF9Pyr-24 | 0.91 | 1472 | 356 | 54 | <0.63 | <0.031 | 6336 | <2.76 | <0.00 | 1.4 | <0.094 | 0.01 | 2.4 | 0.19 | 8.5 | 0.50 | 0.67 | <0.49 | 0.12 | 11 | 53 |
| MF9Pyr-25 | 3.6 | 1877 | 264 | 223 | 4.5 | <0.045 | 3996 | <2.49 | 0.01 | 0.53 | <0.00 | 0.01 | 1.2 | 0.05 | 2.4 | 0.73 | 0.07 | <0.45 | 0.05 | 11 | 17 |
| MF9Pyr-26 | <0.28 | 3537 | 439 | 6.8 | 0.64 | <0.0261 | 3592 | <2.83 | <0.00 | 0.07 | <0.00 | 0 | <0.162 | <0.032 | 0.33 | 0.02 | 0.06 | <0.44 | <0.0071 | 0.50 | 3.7 |
| MF9Pyr-27 | 1.4 | 3550 | 157 | 1.3 | 0.68 | 0.03 | 2697 | <2.88 | <0.00 | 0.01 | 0.03 | <0.0049 | <0.174 | 0.10 | 0.23 | 0.19 | 0.06 | <0.51 | <0.0106 | 0.10 | 3.6 |
| MF9Pyr-28 | 4.2 | 1845 | 556 | 148 | 1.8 | 0.94 | 3376 | <3.00 | 0.04 | 0.88 | <0.00 | 0.04 | 7.3 | 0.67 | 10 | 0.19 | 0.36 | <0.50 | 0.14 | 21 | 61 |
| MF9Pyr-29 | <0.31 | 2070 | 292 | 319 | 2.9 | 0.02 | 3063 | <2.69 | <0.050 | 0.38 | <0.135 | 0.01 | 0.28 | 0.35 | 1.9 | 0.04 | 0.29 | <0.49 | 0.24 | 5.3 | 11 |
| MF9Pyr-30 | 4.8 | 2419 | 275 | 265 | 2.5 | <0.028 | 4467 | <2.96 | <0.00 | 5.0 | <0.00 | <0.0102 | 0.30 | 0.66 | 26 | 0.10 | 1.1 | <0.52 | 0.15 | 69 | 203 |
| MF9Pyr-31 | <0.28 | 1494 | 448 | 429 | 1.3 | <0.032 | 4559 | <2.88 | <0.073 | 0.12 | <0.00 | 0 | 0.39 | 0.19 | 0.93 | 1.4 | 0.06 | <0.51 | 0.01 | 54 | 5.1 |
| MF9Pyr-32 | 4.3 | 661 | 333 | 61 | 0.57 | <0.037 | 2445 | <2.55 | 0.03 | 0.82 | <0.00 | <0.0081 | 1.0 | 0.42 | 11 | 0.06 | 0.32 | 0.80 | 0.04 | 49 | 41 |
| MF9Pyr-33 | 7.4 | 1653 | 425 | 134 | 0.40 | <0.030 | 3691 | <2.78 | <0.00 | 3.3 | <0.161 | <0.0047 | 0.23 | 0.92 | 19 | 0.32 | 2.9 | <0.46 | 0.42 | 86 | 153 |
| MF9Pyr-34 | 1.4 | 2127 | 492 | 34 | 2.1 | <0.037 | 5333 | 3.1 | <0.00 | 0.87 | <0.133 | <0.0048 | <0.139 | 0.21 | 9.7 | 0.04 | 0.43 | <0.47 | 0.08 | 40 | 39 |
| MF9Pyr-35 | 2.8 | 2450 | 377 | 64 | 2.3 | <0.0145 | 4850 | 2.8 | <0.00 | 2.4 | 0.05 | <0.0064 | 0.48 | 0.58 | 20 | 0.09 | 2.2 | <0.44 | 0.22 | 46 | 134 |
| MF9Pyr-36 | 2.2 | 3312 | 390 | 74 | <0.69 | <0.032 | 4778 | <3.04 | <0.00 | 1.9 | <0.00 | <0.0087 | 0.17 | 0.70 | 15 | <0.020 | 1.1 | <0.47 | 0.16 | 47 | 97 |
| MF9Pyr-37 | 3 | 1936 | 173 | 41 | 2.4 | <0.023 | 3018 | 3.0 | <0.076 | 1.4 | <0.00 | <0.0073 | 0.97 | 0.37 | 7.9 | 0.43 | 0.64 | <0.49 | 0.03 | 27 | 48 |
| MF9Pyr-38 | 3.2 | 3003 | 283 | 49 | 1.4 | <0.016 | 2679 | <2.92 | <0.00 | 1.6 | 0.03 | <0.0049 | 0.26 | 0.36 | 11 | 0.15 | 0.68 | <0.49 | 0.07 | 34 | 85 |
| MF9Pyr-39 | 1.1 | 3759 | 378 | 26 | 1.8 | <0.036 | 3455 | 3.0 | 0.04 | 1.2 | 0.06 | <0.0050 | 0.19 | 0.26 | 8.1 | 0.03 | 1.1 | 0.49 | 0.03 | 10 | 68 |
| MF9Pyr-40 | 13 | 2725 | 65 | 433 | 2.3 | <0.029 | 3064 | 3.4 | 0.09 | 10 | <0.00 | 0.01 | 1.4 | 2.3 | 55 | 0.27 | 6.2 | <0.51 | 0.65 | 244 | 415 |
| MF9Pyr-41 | 1.7 | 2091 | 188 | 64 | 0.64 | <0.037 | 2419 | 3.6 | <0.053 | 0.95 | <0.00 | <0.0102 | 0.69 | 0.29 | 7.9 | 0.10 | 0.35 | <0.55 | 0.06 | 26 | 28 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF9Pyr-42 | 1.4 | 2420 | 344 | 815 | 0.79 | <0.048 | 3325 | 3.1 | <0.049 | 3.4 | <0.094 | 0.02 | 0.22 | 1.6 | 19 | 0.08 | 2.6 | <0.50 | 0.44 | 54 | 108 |
| MF9Pyr-43 | 6.3 | 2788 | 326 | 1335 | 3.0 | 0.42 | 3762 | <3.19 | 0.03 | 6.6 | 0.22 | 0.05 | 4.1 | 2.5 | 33 | 0.18 | 3.0 | <0.55 | 0.44 | 93 | 153 |
| MF9Pyr-44 | 2.1 | 2846 | 273 | 3674 | 1.5 | 0.63 | 2740 | <3.14 | <0.00 | 2.3 | <0.103 | 0.04 | 5.4 | 2.1 | 11 | 1.6 | 2.0 | <0.53 | 0.40 | 39 | 61 |
| MF9Pyr-45 | 29 | 3254 | 160 | 2632 | 1.9 | 3.6 | 2858 | 4.5 | 0.54 | 76 | 0.24 | 0.22 | 30 | 62 | 54 | 408 | 107 | <0.55 | 1.4 | 879 | 106 |
| MF9Pyr-46 | 10 | 1260 | 171 | 4409 | 3.1 | <0.031 | 1935 | 5.7 | <0.063 | 55 | 0.05 | 0.18 | 1.1 | 46 | 68 | 0.12 | 69 | <0.44 | 3.0 | 927 | 161 |
| MF9Pyr-47 | 8.3 | 342 | 50 | 115 | 3.7 | 0.02 | 984 | <2.53 | 0.09 | 1.5 | <0.00 | 0.01 | 0.82 | 0.69 | 11 | 4.0 | 1.1 | <0.44 | 0.14 | 30 | 29 |
| MF9Pyr-48 | 6.9 | 2262 | 218 | 646 | 1.4 | 13 | 3324 | <3.66 | <0.00 | 2.2 | <0.00 | <0.0120 | 4.0 | 1.2 | 21 | 1.6 | 1.2 | <0.57 | 0.28 | 66 | 94 |
| MF9Pyr-49 | 19 | 874 | 108 | 2285 | 6.2 | 4.6 | 1625 | <3.06 | 0.08 | 2.1 | <0.00 | 0.07 | 19 | 2.2 | 19 | 4.6 | 1.5 | <0.53 | 0.30 | 63 | 78 |
| MF9Pyr-50 | 15 | 1524 | 88 | 1729 | 3.8 | 2.0 | 2202 | 3.2 | <0.054 | 6.4 | <0.00 | 0.10 | 15 | 2.6 | 50 | 5.8 | 4.2 | <0.54 | 0.40 | 131 | 220 |
| MF9Pyr-51 | 81 | 1200 | 108 | 646 | 4.0 | 0.55 | 1770 | <4.15 | 7.3 | 4.3 | <0.00 | 0.02 | 1.9 | 1.2 | 22 | 0.47 | 2.5 | <0.67 | 0.28 | 87 | 101 |
| MF9Pyr-52 | 2 | 2927 | 329 | 0.76 | 1.5 | 0.11 | 4187 | <3.07 | <0.055 | <0.0155 | <0.00 | <0.0075 | <0.156 | 0.15 | 0.25 | 0.01 | 0.04 | <0.54 | <0.0057 | 2.7 | 2.4 |
| MF9Pyr-53 | 0.56 | 1315 | 234 | 2.5 | 2.2 | <0.019 | 2269 | <2.36 | <0.060 | <0.00 | <0.00 | <0.0041 | <0.127 | <0.028 | <0.155 | <0.0164 | 0.02 | <0.40 | <0.0077 | <0.025 | 0.01 |
| MF9Pyr-54 | <0.33 | 1700 | 165 | 6.2 | 0.89 | <0.053 | 2297 | 3.4 | <0.057 | 0.09 | <0.00 | 0 | 0.20 | <0.019 | 1.8 | <0.00 | 0.05 | <0.54 | <0.0059 | 2.2 | 5.3 |
| MF9Pyr-55 | 0.41 | 814 | 78 | <0.63 | 0.99 | <0.041 | 1586 | <3.46 | <0.00 | <0.0237 | 0.03 | <0.0081 | <0.168 | <0.00 | <0.152 | 0.01 | <0.0256 | <0.56 | 0 | <0.057 | 0.01 |
| MF9Pyr-56 | 1.6 | 2022 | 60 | 47 | 4.1 | <0.043 | 2542 | <3.85 | <0.069 | 2.0 | <0.132 | 0 | 0.61 | 0.49 | 11 | 0.26 | 0.65 | <0.63 | 0.14 | 38 | 62 |
| MF9Pyr-57 | <0.29 | 2598 | 298 | 13 | <0.54 | 0.01 | 4591 | <3.16 | <0.054 | 0.61 | <0.00 | <0.0052 | <0.154 | 0.26 | 4.9 | <0.0294 | 0.25 | <0.50 | 0.03 | 93 | 30 |
| MF9Pyr-58 | 0.74 | 1450 | 153 | 0.86 | 1.8 | 0.02 | 1904 | <2.67 | <0.00 | 0.01 | <0.00 | <0.0049 | <0.155 | 0.01 | 0.26 | <0.027 | 0.12 | <0.47 | <0.0053 | 0.14 | 0.44 |
| MF9Pyr-59 | <0.25 | 1198 | 483 | 0.77 | 1.6 | <0.033 | 3837 | <2.45 | <0.00 | <0.00 | 0.07 | <0.0083 | <0.136 | <0.028 | <0.00 | 0.01 | <0.013 | <0.41 | <0.00 | 0.08 | 0.04 |
| MF9Pyr-60 | 0.82 | 1031 | 268 | 7.9 | 2.4 | <0.037 | 4880 | <3.28 | 0.05 | 0.15 | 0.03 | <0.0073 | 0.37 | 0.16 | 2.4 | 0.02 | 0.16 | <0.52 | <0.0056 | 14 | 9.7 |
| MF9Pyr-61 | 1.8 | 1440 | 412 | 25 | 0.96 | <0.042 | 4506 | <3.19 | 0.02 | 0.50 | <0.00 | <0.0106 | 0.29 | 0.26 | 4.9 | 0.12 | 0.24 | <0.57 | 0.01 | 14 | 18 |
| MF9Pyr-62 | 1822 | 50 | 59 | <10.39 | 557 | 266 | 769 | <66.66 | <1.08 | <0.309 | <0.00 | 24 | 2140 | 7.2 | <2.81 | 3.9 | <0.34 | <11.11 | 0.03 | 16 | 1.6 |
| MF9Pyr-63 | 7.5 | 860 | 134 | 23 | 2.0 | 1.2 | 2913 | 4.3 | 0.35 | 0.27 | <0.00 | <0.0085 | 1.1 | 0.15 | 2.2 | 4.4 | 0.17 | <0.44 | 0.01 | 3.2 | 7.8 |
| MF9Pyr-64 | 69 | 1183 | 391 | 2.2 | 1.9 | 1.3 | 3378 | <3.31 | <0.00 | <0.0157 | <0.00 | 0.01 | 0.55 | 0.11 | 0.30 | 0.22 | 0.04 | <0.54 | <0.0058 | 0.20 | 6.0 |
| MF9Pyr-65 | <0.25 | 1890 | 634 | 3.3 | 0.73 | 0.31 | 6401 | <2.71 | <0.00 | 0.02 | <0.161 | <0.0093 | <0.152 | 0.07 | 0.22 | <0.019 | 0.02 | <0.46 | 0 | <0.037 | 0.92 |
| MF9Pyr-66 | 1.6 | 588 | 572 | 51 | 1.2 | <0.033 | 3981 | <2.82 | <0.047 | 2.0 | 0.05 | 0 | <0.153 | 0.19 | 6.5 | 0.08 | 0.16 | <0.47 | 0.10 | 19 | 52 |
| MF9Pyr-67 | <0.28 | 166 | 93 | 3.0 | 0.99 | <0.040 | 6785 | <2.83 | <0.048 | 0.01 | <0.093 | <0.00 | <0.150 | 0.42 | <0.126 | 0.03 | <0.0152 | <0.46 | 0.51 | 1.0 | 0.94 |
| MF9Pyr-68 | 0.48 | 6959 | 152 | 15 | 2.7 | 0.03 | 9726 | <2.98 | <0.00 | 0.05 | <0.103 | <0.0052 | 0.19 | 0.05 | 1.6 | <0.036 | 0.06 | <0.50 | 0.01 | 0.54 | 4.8 |
| MF9Pyr-69 | 1460 | 9078 | 247 | 58 | 3.1 | 2.2 | 14761 | <3.47 | <0.00 | 0.04 | <0.00 | <0.0058 | 0.73 | 0.03 | 3.5 | 0.24 | 0.04 | <0.58 | 0.04 | 2.7 | 23 |
| MF9Pyr-70 | <0.25 | 2611 | 100 | 0.75 | 0.83 | <0.021 | 3363 | 3.1 | 0.03 | <0.00 | <0.00 | <0.0064 | <0.127 | <0.016 | <0.122 | 0.01 | <0.0148 | <0.47 | 0 | 0.06 | 0.04 |
| MF9Pyr-71 | <0.26 | 3304 | 72 | 3.9 | 1.7 | <0.019 | 3971 | <2.52 | <0.062 | <0.00 | <0.00 | <0.0074 | <0.124 | <0.021 | 0.03 | <0.0240 | <0.014 | <0.40 | <0.0065 | <0.028 | 0.04 |
| MF9Pyr-72 | 2667 | 1190 | 74 | 53 | <1.07 | <0.041 | 2305 | <4.54 | <0.076 | 0.09 | <0.209 | 0.06 | 0.26 | <0.0256 | 1.5 | <0.051 | 0.03 | <0.74 | <0.0114 | 1.6 | 9.4 |
| MF9Pyr-73 | 1.7 | 1215 | 135 | 0.71 | 1.9 | 0.02 | 2255 | <2.56 | <0.066 | <0.0134 | <0.00 | <0.0045 | 0.22 | 0.03 | 0.10 | 1.5 | 0.01 | <0.45 | <0.0085 | <0.029 | 0.75 |
| MF9Pyr-74 | 2.8 | 4786 | 69 | 156 | <0.61 | 0.04 | 3547 | <3.18 | 0.02 | 1.1 | 0.06 | 0.01 | 0.48 | 0.22 | 12 | 0.03 | 0.26 | <0.54 | 0.05 | 53 | 53 |
| MF9Pyr-75 | 0.60 | 4660 | 209 | 46 | 1.8 | 0.04 | 4263 | 3.5 | <0.00 | 0.43 | <0.095 | <0.00 | 0.37 | 0.13 | 5.2 | <0.033 | 0.98 | <0.49 | 0.01 | 13 | 23 |
| MF9Pyr-76 | 4.8 | 6583 | 284 | 814 | 4.3 | 0.03 | 9181 | <2.61 | 0.01 | 3.6 | <0.00 | 0.01 | 0.88 | 0.62 | 22 | 0.33 | 1.0 | <0.40 | 0.18 | 128 | 120 |
| MF9Pyr-77 | 4.9 | 236 | 40 | 142 | 4.0 | 0.18 | 1162 | <2.00 | <0.00 | 0.42 | <0.071 | 0.01 | 2.7 | 0.18 | 2.3 | 0.55 | 0.20 | <0.36 | 0.03 | 5.0 | 18 |
| MF9Pyr-78 | 2.1 | 2071 | 131 | 23 | 4.8 | 6.3 | 2031 | <2.84 | <0.00 | 0.84 | <0.163 | 0.02 | 2.3 | 0.26 | 8.9 | 0.58 | 0.51 | 0.59 | 0.10 | 3.3 | 46 |
| MF9Pyr-79 | 24 | 3334 | 82 | 141 | 11 | 0.09 | 3659 | <2.39 | 0.08 | 1.9 | <0.078 | 0.02 | 2.7 | 0.48 | 14 | 3.3 | 0.62 | <0.41 | 0.06 | 23 | 73 |
| MF9Pyr-80 | 1.2 | 1685 | 107 | 149 | 1.5 | 0.04 | 3035 | <2.64 | <0.044 | 0.71 | <0.00 | <0.0043 | 0.22 | 0.25 | 4.4 | 0.36 | 0.43 | <0.43 | 0.02 | 7.3 | 40 |
| **Mean n=80** | 99 | 2260 | 244 | 2502 | 12 | 8.0 | 3681 | 4.7 | 0.47 | 138 | 0.10 | 0.62 | 37 | 3.1 | 19 | 6.9 | 1548 | 1.3 | 0.44 | 106 | 123 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S.D** | 423 | 1541 | 166 | 6904 | 65 | 41 | 2150 | 3.1 | 1.5 | 1105 | 0.10 | 3.6 | 271 | 9.3 | 28 | 50 | 13183 | 1.8 | 0.74 | 203 | 255 |
| **Min** | 0.41 | 50 | 24 | 0.71 | 0.40 | 0.01 | 769 | 2.80 | 0.01 | 0.01 | 0.03 | 0 | 0.17 | 0.01 | 0.03 | 0.01 | 0.01 | 0.47 | 0 | 0.04 | 0.01 |
| **Max** | 2667 | 9078 | 726 | 38739 | 557 | 266 | 14761 | 16 | 7.30 | 9251 | 0.41 | 24 | 2140 | 62 | 169 | 408 | ##### | 4.90 | 3.80 | 927 | 1841 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF10Pyr-1 | 36 | 10295 | 488 | 34 | 29 | 17 | 13146 | <2.88 | <0.00 | 2.7 | <0.00 | 0.06 | 23 | 2.3 | 31 | 2.1 | 1.9 | <0.51 | 0.36 | 47 | 104 |
| MF10Pyr-2 | 4.3 | 4062 | 300 | 13 | 2.0 | 0.03 | 9909 | 2.6 | <0.00 | 1.2 | 0.03 | <0.0040 | 0.15 | 1.3 | 21 | 0.09 | 1.2 | <0.31 | 0.08 | 69 | 53 |
| MF10Pyr-3 | 2 | 84 | 11 | 8.8 | 2.7 | 0.11 | 5993 | <1.59 | <0.00 | 0.81 | <0.00 | <0.0047 | 0.19 | 0.37 | 3.4 | 0.10 | 0.35 | <0.29 | 0.11 | 40 | 21 |
| MF10Pyr-4 | 1.7 | 207 | 77 | 14 | 1.3 | 0.02 | 5626 | <2.01 | <0.00 | 0.61 | 0.02 | 0 | 0.14 | 0.63 | 3.0 | 0.11 | 0.51 | <0.34 | 0.10 | 77 | 17 |
| MF10Pyr-5 | 2.6 | 464 | 197 | 6.9 | 1.9 | <0.0172 | 4305 | <1.72 | <0.00 | 0.51 | <0.00 | <0.0044 | 0.17 | 0.13 | 2.3 | 0.09 | 0.27 | <0.32 | 0.05 | 15 | 5.8 |
| MF10Pyr-6 | 0.31 | 410 | 185 | 3.6 | 1.7 | <0.0140 | 5307 | 2.2 | <0.032 | <0.0093 | <0.00 | 0 | <0.106 | <0.0151 | <0.118 | <0.0245 | 0.02 | 0.31 | <0.0047 | <0.045 | <0.0086 |
| MF10Pyr-7 | 3.8 | 741 | 279 | 7.1 | 20 | <0.0190 | 5588 | <1.98 | <0.035 | 0.40 | <0.068 | <0.0044 | 0.32 | 0.73 | 8.5 | 0.13 | 0.21 | <0.35 | 0.01 | 29 | 7.7 |
| MF10Pyr-8 | 22 | 8597 | 253 | 54 | 33 | 2.9 | 14828 | <2.23 | 0.28 | 2.5 | <0.00 | 0.02 | 3.2 | 3.0 | 23 | 1.6 | 3.1 | <0.38 | 0.31 | 200 | 111 |
| MF10Pyr-9 | 3.7 | 310 | 111 | 14 | 3.0 | 2.2 | 5748 | <1.84 | 0.04 | 0.83 | <0.00 | 0.02 | 5.4 | 0.67 | 9.0 | 0.19 | 0.71 | <0.31 | 0.10 | 46 | 29 |
| MF10Pyr-10 | 8.7 | 292 | 85 | 5.7 | 10 | <0.0195 | 6270 | <1.77 | <0.054 | 0.56 | 0.03 | <0.0030 | <0.092 | 0.57 | 14 | <0.0171 | 0.18 | <0.32 | 0.03 | 10 | 13 |
| MF10Pyr-11 | 9.6 | 113 | 26 | 9.4 | 2.7 | <0.0219 | 6576 | <1.77 | <0.00 | 0.84 | <0.00 | <0.0030 | 0.14 | 0.91 | 19 | 0.16 | 0.68 | <0.31 | 0.07 | 34 | 32 |
| MF10Pyr-12 | 18 | 159 | 51 | 10 | 4.1 | 0.06 | 5765 | <1.61 | 0.06 | 0.83 | <0.00 | 0 | 0.20 | 1.4 | 20 | 1.1 | 1.0 | <0.31 | 0.11 | 56 | 46 |
| MF10Pyr-13 | 15 | 3108 | 260 | 6.4 | 5.6 | 0.14 | 7972 | 1.8 | 0.60 | 0.56 | <0.060 | <0.0042 | 0.13 | 0.72 | 6.0 | 0.29 | 0.61 | <0.30 | 0.06 | 22 | 35 |
| MF10Pyr-14 | 0.33 | 1374 | 639 | 1.9 | 1.6 | <0.0131 | 4668 | <1.70 | <0.042 | 0 | <0.081 | <0.0028 | <0.083 | 0.01 | 0.16 | <0.0230 | <0.0139 | <0.28 | <0.0031 | 0.09 | <0.065 |
| MF10Pyr-15 | 8.8 | 6681 | 283 | 9.6 | 5.0 | 0.33 | 15151 | <1.89 | 0.03 | 0.84 | <0.063 | <0.0063 | 0.39 | 0.51 | 4.4 | 0.24 | 0.76 | <0.30 | 0.11 | 26 | 30 |
| MF10Pyr-16 | 11 | 3031 | 356 | 27 | 4.6 | 1.7 | 6447 | <1.44 | 0.01 | 1.6 | <0.086 | 0.01 | 2.3 | 2.1 | 39 | 0.31 | 1.4 | <0.26 | 0.14 | 83 | 110 |
| MF10Pyr-17 | 0.60 | 418 | 190 | 3.7 | 2.1 | <0.0089 | 5118 | <1.76 | <0.00 | 0.28 | <0.00 | 0 | <0.079 | 0.08 | 0.58 | <0.0110 | 0.12 | <0.29 | 0.03 | 8.3 | 3.7 |
| MF10Pyr-18 | 0.76 | 1426 | 772 | 12 | 2.3 | <0.0217 | 4847 | 2.2 | <0.044 | 0.83 | <0.00 | <0.0030 | <0.090 | 0.51 | 2.9 | 0.05 | 0.44 | <0.31 | 0.05 | 28 | 12 |
| MF10Pyr-19 | 2 | 1103 | 819 | 7.9 | 0.66 | <0.0155 | 3942 | 1.8 | <0.00 | 1.0 | 0.02 | <0.00 | 0.16 | 0.60 | 9.7 | 0.32 | 0.63 | <0.29 | 0.04 | 54 | 30 |
| MF10Pyr-20 | 3.6 | 2162 | 515 | 11 | 8.5 | 0.09 | 2526 | <1.65 | 0.01 | 0.33 | <0.00 | <0.0029 | 1.1 | 0.41 | 2.6 | 0.47 | 0.22 | <0.28 | 0.06 | 30 | 8.8 |
| MF10Pyr-21 | 2.8 | 1529 | 740 | 10 | 1.4 | 0.02 | 3885 | <1.66 | <0.041 | 0.63 | <0.00 | <0.0028 | <0.082 | 2.0 | 59 | 0.09 | 0.59 | <0.33 | 0.01 | 15 | 163 |
| MF10Pyr-22 | 20 | 3880 | 289 | 31 | 245 | 12 | 8979 | <8.54 | 0.25 | 2.2 | <0.51 | 0.05 | 1.5 | 6.8 | 62 | 1.7 | 2.7 | <1.53 | 0.30 | 123 | 94 |
| MF10Pyr-23 | 4.4 | 6685 | 246 | 9.3 | 16 | <0.0177 | 10856 | 3.0 | <0.032 | 0.69 | 0.11 | <0.0032 | 0.36 | 0.82 | 12 | 0.89 | 0.46 | <0.34 | 0.08 | 116 | 35 |
| MF10Pyr-24 | 17 | 8328 | 466 | 21 | 37 | 0.65 | 12339 | 2.5 | <0.029 | 1.0 | <0.100 | 0 | 0.26 | 2.3 | 31 | 0.58 | 1.7 | <0.29 | 0.48 | 747 | 81 |
| MF10Pyr-25 | 8.5 | 8887 | 285 | 12 | 6.2 | 0.03 | 16231 | <1.84 | <0.045 | 0.89 | <0.00 | <0.0044 | 0.31 | 0.76 | 13 | 0.23 | 3.4 | <0.33 | 0.01 | 8.6 | 31 |
| MF10Pyr-26 | 7.5 | 5218 | 161 | 11 | 37 | 0.76 | 11939 | <1.88 | <0.00 | 0.67 | 0.04 | <0.0043 | 0.58 | 0.79 | 11 | 0.38 | 2.2 | <0.32 | 0.10 | 15 | 43 |
| MF10Pyr-28 | 8.9 | 5343 | 298 | 6.2 | 20 | 5.4 | 5060 | <2.71 | <0.049 | 0.43 | <0.00 | <0.0048 | 0.45 | 0.72 | 5.1 | 0.22 | 0.29 | <0.51 | 0.13 | 31 | 23 |
| MF10Pyr-29 | 0.27 | 820 | 41 | 3.1 | 0.70 | <0.0138 | 3536 | <1.47 | <0.00 | <0.0076 | <0.00 | 0 | 0.50 | 0.06 | 0.12 | 2.0 | 0.02 | <0.25 | 0 | 0.08 | 1.8 |
| MF10Pyr-30 | 0.31 | 118 | 60 | 4.6 | 1.3 | <0.022 | 6464 | <1.60 | 0.02 | 0.01 | <0.055 | <0.0028 | <0.076 | <0.0097 | 0.24 | <0.0110 | 0.12 | <0.28 | <0.0052 | <0.031 | <0.0123 |
| MF10Pyr-31 | 3.8 | 1799 | 326 | 11 | 3.7 | 0.04 | 2810 | <1.51 | 0.02 | 1.2 | <0.00 | 0 | 0.10 | 1.0 | 64 | 0.10 | 0.90 | <0.26 | 0.07 | 41 | 146 |
| MF10Pyr-32 | 1.7 | 396 | 192 | 7.7 | 0.84 | 0.01 | 2494 | <1.76 | <0.027 | 0.77 | <0.053 | <0.0026 | 0.17 | 0.28 | 2.8 | 0.96 | 0.36 | <0.27 | 0.03 | 21 | 8.9 |
| MF10Pyr-33 | 3.4 | 1326 | 567 | 9.8 | 34 | 0.02 | 2907 | <1.57 | 0.18 | 0.87 | <0.053 | 0 | 0.44 | 0.78 | 22 | 2.4 | 0.45 | <0.28 | 0.07 | 49 | 15 |
| MF10Pyr-34 | 1.7 | 431 | 245 | 6.7 | 7.6 | <0.0086 | 5618 | 1.5 | <0.039 | 0.28 | <0.00 | 0 | 0.20 | 0.12 | 2.2 | 0.18 | 0.09 | <0.27 | 0.01 | 3.4 | 2.3 |
| MF10Pyr-35 | 0.19 | 142 | 87 | 3.7 | 2.1 | 0.01 | 5089 | 2.3 | <0.034 | 0.40 | 0.01 | <0.0041 | <0.068 | 0.14 | 2.2 | 0.02 | 0.17 | <0.25 | 0.02 | 19 | 7.2 |
| MF10Pyr-36 | 0.72 | 159 | 107 | 2.7 | 1.9 | <0.0201 | 5037 | <1.45 | <0.026 | 0.05 | <0.051 | <0.0036 | 1.2 | 0.06 | 0.47 | 0.10 | 0.03 | <0.25 | 0.01 | 14 | 1.7 |
| MF10Pyr-37 | 0.19 | 139 | 86 | 3.8 | 2.0 | <0.0141 | 5133 | 2.4 | <0.036 | 0.15 | <0.050 | <0.0036 | 0.17 | 0.10 | 0.52 | 0.05 | 0.15 | <0.26 | 0.03 | 4.2 | 4.7 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF10Pyr-38 | 0.35 | 120 | 78 | 1.9 | 1.6 | <0.0076 | 4931 | <1.31 | 0.01 | <0.0126 | 0.03 | <0.0023 | 0.06 | 0 | <0.092 | <0.0133 | 0.05 | <0.25 | <0.0045 | <0.024 | <0.0047 |
| MF10Pyr-39 | 0.30 | 134 | 93 | 2.2 | 1.2 | <0.0149 | 4674 | <1.35 | <0.024 | <0.0123 | <0.00 | 0 | <0.065 | <0.0082 | 0.26 | 0.03 | 0.02 | <0.24 | 0.01 | 0.55 | 0.47 |
| MF10Pyr-40 | 0.23 | 147 | 99 | 6.5 | 1.6 | 0.01 | 5461 | <1.57 | <0.00 | <0.00 | 0.03 | <0.0045 | <0.072 | <0.0131 | 0.16 | <0.0104 | 0.04 | <0.26 | <0.0057 | <0.050 | <0.0043 |
| MF10Pyr-41 | 1.2 | 464 | 161 | 8.1 | 1.7 | <0.0160 | 5780 | <1.59 | 0.06 | 0.26 | 0.01 | 0 | <0.075 | 0.16 | 1.6 | 0.04 | 0.32 | <0.27 | 0.05 | 15 | 9.2 |
| MF10Pyr-42 | 7.2 | 4669 | 115 | 8.0 | 5.9 | 0.09 | 10000 | 1.6 | 0.01 | 0.15 | 0.04 | <0.0031 | 0.13 | 0.40 | 9.5 | 0.18 | 0.59 | <0.24 | 0.02 | 34 | 31 |
| MF10Pyr-43 | 1 | 120 | 78 | 6.9 | 0.84 | 0.01 | 4462 | <1.28 | 0.01 | 0.28 | 0.01 | 0 | <0.075 | 0.04 | 0.84 | 0.02 | 0.44 | <0.23 | 0.02 | 0.83 | 1.1 |
| MF10Pyr-44 | 6.7 | 1162 | 545 | 9.9 | 8.0 | 0.10 | 4794 | 2.5 | <0.00 | 0.31 | 0.03 | 0 | 0.37 | 0.26 | 2.0 | 0.09 | 0.09 | <0.27 | 0.03 | 14 | 4.7 |
| MF10Pyr-45 | <0.142 | 864 | 341 | 4.9 | 1.5 | <0.0153 | 2836 | <1.43 | <0.00 | 0.12 | <0.00 | <0.0034 | 0.08 | 0.19 | 1.9 | 0.02 | 0.02 | <0.24 | 0.01 | 23 | 6.1 |
| MF10Pyr-46 | 2 | 763 | 360 | 11 | 1.6 | 0.06 | 4357 | <1.46 | <0.00 | 0.76 | <0.050 | <0.0050 | 0.09 | 0.73 | 4.5 | 0.11 | 0.80 | <0.26 | 0.08 | 68 | 22 |
| MF10Pyr-47 | 1.8 | 150 | 56 | 7.6 | 1.4 | 0.28 | 5983 | <1.47 | <0.025 | 0.47 | 0.04 | <0.0043 | 0.74 | 0.37 | 3.5 | 0.04 | 0.54 | <0.26 | 0.03 | 12 | 14 |
| MF10Pyr-48 | 4.8 | 2330 | 274 | 12 | 2.8 | 0.03 | 8497 | 1.8 | <0.031 | 0.24 | <0.00 | <0.0031 | 0.09 | 0.28 | 6.8 | 0.04 | 0.31 | <0.23 | 0.03 | 11 | 19 |
| MF10Pyr-49 | 5.6 | 6659 | 306 | 11 | 8.6 | 0.07 | 11922 | 1.9 | 0.01 | 0.60 | 0.01 | 0 | 0.34 | 0.88 | 15 | 0.13 | 0.83 | <0.206 | 0.06 | 24 | 48 |
| MF10Pyr-50 | 31 | 8003 | 280 | 6.0 | 14 | 0.24 | 12322 | 1.3 | 0.01 | 0.19 | 0.02 | <0.0035 | 0.41 | 0.76 | 4.2 | 0.14 | 0.32 | <0.214 | 0.05 | 27 | 21 |
| MF10Pyr-51 | 0.74 | 867 | 242 | 3.7 | 1.2 | <0.0133 | 7174 | <1.23 | <0.030 | 0.03 | <0.00 | <0.0021 | <0.067 | 0.06 | 7.3 | <0.0082 | 0.04 | <0.22 | 0 | <0.039 | 16 |
| MF10Pyr-52 | 1.4 | 333 | 96 | 2.8 | 0.60 | 0.03 | 6804 | <1.16 | 0.01 | 0.01 | <0.039 | 0 | <0.054 | 0.05 | 0.60 | <0.0174 | 0.02 | <0.21 | 0 | <0.039 | 3.3 |
| MF10Pyr-53 | <0.113 | 359 | 222 | 3.6 | 0.55 | 0.01 | 5386 | 1.9 | <0.00 | <0.0088 | <0.069 | <0.0035 | <0.055 | 0.05 | 0.99 | <0.0080 | 0.17 | <0.21 | <0.00 | <0.026 | 3.8 |
| MF10Pyr-54 | 58 | 3797 | 320 | 175 | 434 | 1010 | 5345 | <219.60 | 5.5 | 2.4 | 4.3 | <0.66 | 55 | 2.0 | 18 | 18 | 1.6 | <38.18 | <0.42 | 263 | 307 |
| MF10Pyr-55 | 3 | 1015 | 140 | 14 | 4.1 | 0.09 | 1790 | <1.25 | 3.3 | 1.2 | 0.01 | 0 | 0.54 | 1.3 | 9.9 | 3.0 | 0.53 | <0.208 | 0.10 | 37 | 44 |
| MF10Pyr-56 | 0.37 | 213 | 141 | 8.5 | 0.65 | <0.0112 | 5154 | 1.6 | 0.01 | 0.60 | 0.01 | 0 | 0.06 | 0.70 | 2.8 | 0.06 | 0.43 | <0.209 | 0.07 | 47 | 13 |
| MF10Pyr-57 | 0.56 | 619 | 306 | 5.5 | 0.98 | <0.0152 | 4476 | 1.7 | 0.28 | 0.21 | 0.02 | <0.0039 | 0.65 | 0.31 | 1.5 | 3.8 | 0.26 | <0.21 | 0.01 | 3.9 | 9.4 |
| MF10Pyr-58 | 0.19 | 1075 | 493 | 2.1 | 0.83 | <0.0116 | 4643 | <1.24 | 0.01 | <0.0065 | <0.00 | <0.0020 | 0.06 | 0 | 0.23 | <0.0082 | 0.02 | <0.214 | 0 | <0.039 | 0.34 |
| MF10Pyr-59 | 0.28 | 914 | 383 | 1.5 | 2.1 | <0.0113 | 4367 | <1.22 | 0.01 | 0.07 | <0.057 | <0.0020 | <0.060 | 0.07 | 0.37 | 0.01 | 0.03 | <0.207 | 0.01 | 2.1 | 1.6 |
| MF10Pyr-60 | 0.39 | 562 | 269 | 3.0 | 0.81 | 0 | 4847 | <1.19 | <0.021 | 0.03 | <0.042 | 0 | 0.07 | 0.23 | 0.28 | <0.0117 | 0.01 | <0.21 | 0.01 | 1.7 | 2.2 |
| MF10Pyr-61 | 10 | 5625 | 444 | 3.5 | 2.0 | 0.06 | 11097 | <2.56 | <0.00 | 0.11 | <0.079 | 0 | <0.116 | 0.52 | 15 | <0.0221 | 0.42 | <0.43 | 0.01 | 1.3 | 49 |
| MF10Pyr-62 | 27 | 11557 | 395 | 5.0 | 4.6 | 4.5 | 14245 | <3.34 | <0.104 | 0.19 | <0.119 | 0.01 | 0.78 | 0.42 | 7.0 | 3.2 | 0.23 | <0.65 | 0.05 | 5.0 | 6.1 |
| MF10Pyr-63 | 8.8 | 5956 | 205 | 13 | 3.5 | 10 | 7467 | <2.72 | 0.19 | 0.69 | 0.08 | 0.03 | 3.8 | 0.68 | 15 | 3.0 | 1.4 | <0.49 | 0.27 | 24 | 57 |
| MF10Pyr-64 | 30 | 10376 | 481 | 7.1 | 18 | 5.5 | 12968 | 3.3 | 0.07 | 0.61 | 0.04 | 0.02 | 4.9 | 0.72 | 15 | 1.0 | 0.70 | <0.41 | 0.14 | 11 | 41 |
| MF10Pyr-65 | 46 | 7091 | 373 | 21 | 5.8 | 0.35 | 8641 | 6.2 | 0.07 | 1.6 | 0.07 | 0 | 0.44 | 3.1 | 27 | 12 | 2.5 | <0.58 | 0.10 | 50 | 95 |
| MF10Pyr-66 | 11 | 4838 | 253 | 14 | 1.5 | 0.05 | 5888 | <2.15 | 0.62 | 0.68 | <0.077 | 0 | <0.111 | 1.1 | 16 | 0.37 | 1.2 | <0.41 | 0.11 | 32 | 52 |
| MF10Pyr-67 | 22 | 6264 | 499 | 17 | 10 | 0.18 | 11137 | <2.27 | <0.039 | 1.3 | 0.04 | 0 | 0.22 | 2.8 | 47 | 0.32 | 4.5 | <0.39 | 0.13 | 49 | 134 |
| MF10Pyr-68 | 35 | 4923 | 280 | 44 | 17 | 14 | 5686 | <3.58 | 0.32 | 2.0 | <0.00 | 0.16 | 55 | 2.8 | 44 | 217 | 4.6 | <0.64 | 0.39 | 56 | 144 |
| MF10Pyr-69 | 15 | 2570 | 444 | 9.4 | 6.6 | 1.7 | 5460 | <2.21 | <0.038 | 0.56 | 0.04 | 0.01 | 1.6 | 0.41 | 8.6 | 0.47 | 0.67 | <0.37 | 0.15 | 9.1 | 31 |
| MF10Pyr-70 | 30 | 7021 | 257 | 18 | 2.8 | 0.58 | 7980 | <2.15 | 0.17 | 1.2 | <0.071 | 0.02 | 2.3 | 1.9 | 22 | 13 | 1.9 | <0.37 | 0.21 | 48 | 79 |
| MF10Pyr-71 | 1.5 | 1945 | 726 | 3.2 | 1.2 | 0.01 | 4523 | 2.2 | 0.39 | 0.14 | <0.00 | <0.0054 | <0.117 | 0.12 | 3.4 | 0.41 | 0.20 | <0.39 | 0.01 | 5.9 | 13 |
| MF10Pyr-72 | 6 | 1160 | 151 | 17 | 2.3 | 0.12 | 5306 | <1.91 | 0.01 | 0.61 | 0.02 | 0 | 1.4 | 0.88 | 9.5 | 22 | 0.74 | <0.35 | 0.07 | 26 | 27 |
| MF10Pyr-73 | 66 | 3731 | 410 | 5.9 | 3.2 | 0.19 | 5095 | <2.25 | 0.06 | 0.42 | <0.101 | 0.05 | 13 | 0.92 | 50 | 82 | 0.92 | <0.37 | 0.02 | 14 | 103 |
| MF10Pyr-74 | 41 | 2245 | 395 | 23 | 8.1 | 0.61 | 4091 | <2.19 | 0.02 | 1.4 | 0.04 | 0.01 | 1.2 | 1.6 | 16 | 3.5 | 1.8 | <0.37 | 0.10 | 26 | 82 |
| MF10Pyr-75 | 3480 | 3355 | 552 | 9.8 | 18 | 0.08 | 5702 | <3.37 | 0.53 | 0.86 | <0.00 | 0.04 | 0.63 | 0.73 | 21 | 4.9 | 0.81 | <0.61 | 0.01 | 15 | 66 |
| MF10Pyr-76 | 95 | 11763 | 299 | 13 | 8.0 | 0.36 | 16577 | 2.1 | 0.06 | 0.96 | 0.02 | 0.01 | 0.78 | 0.87 | 24 | 2.8 | 1.0 | <0.35 | 0.07 | 82 | 72 |
| MF10Pyr-77 | 22 | 642 | 358 | 16 | 4.4 | 1.4 | 4661 | <1.84 | <0.00 | 1.6 | <0.00 | 0 | 1.9 | 1.7 | 7.0 | 0.23 | 1.5 | <0.33 | 0.13 | 70 | 46 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF10Pyr-78 | 31 | 5894 | 120 | 38 | 4.2 | 0.15 | 6685 | <2.16 | 0.04 | 2.5 | 0.04 | <0.0035 | 0.40 | 1.8 | 26 | 0.36 | 4.0 | <0.37 | 0.18 | 74 | 171 |
| MF10Pyr-79 | 5.8 | 2535 | 303 | 5.3 | 2.9 | 0.23 | 3852 | <2.36 | 0.01 | 0.63 | 0.02 | <0.0088 | 0.11 | 0.34 | 1.1 | 0.63 | 0.35 | <0.43 | 0.08 | 27 | 13 |
| MF10Pyr-80 | 1.5 | 1508 | 54 | 9.1 | 2.1 | 2.2 | 1552 | <1.80 | <0.034 | 0.42 | <0.00 | <0.00 | 0.30 | 0.11 | 1.6 | 0.27 | 0.41 | <0.34 | 0.03 | 3.7 | 5.5 |
| **Mean n=79** | 56 | 2868 | 285 | 13 | 15 | 20 | 6743 | 2.3 | 0.35 | 0.75 | 0.17 | 0 | 3.2 | 0.9 | 13 | 6.2 | 0.84 | - | 0.08 | 46 | 43 |
| **S.D** | 396 | 3142 | 186 | 21 | 55 | 136 | 3483 | 1.0 | 1.0 | 0.64 | 0.78 | 0 | 10 | 1.0 | 15 | 28.4 | 1.0 | - | 0.10 | 95 | 53 |
| **Min** | 0.19 | 84 | 11 | 1.5 | 0.55 | 0 | 1552 | 1.3 | 0.01 | 0 | 0.01 | 0 | 0.06 | 0 | 0.12 | 0.01 | 0.01 | - | 0 | 0.08 | 0.34 |
| **Max** | 3480 | 11763 | 819 | 175 | 434 | 1010 | 16577 | 6.2 | 5.5 | 2.7 | 4.3 | 0.16 | 55 | 6.8 | 64 | 217 | 4.6 | - | 0.48 | 747 | 307 |

| Sample # | $^{55}$Mn | $^{59}$Co | $^{60}$Ni | $^{65}$Cu | $^{66}$Zn | $^{69}$Ga | $^{75}$As | $^{82}$Se | $^{95}$Mo | $^{107}$Ag | $^{111}$Cd | $^{115}$In | $^{118}$Sn | $^{121}$Sb | $^{125}$Te | $^{184}$W | $^{197}$Au | $^{202}$Hg | $^{205}$Tl | $^{208}$Pb | $^{209}$Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF11Pyr-1 | 0.21 | 13 | 0.28 | <0.26 | 1.0 | <0.0051 | 5341 | 1.4 | <0.00 | <0.00 | 0.01 | <0.0017 | <0.051 | <0.0056 | 0.02 | <0.0117 | 0.01 | <0.189 | <0.00 | 0.02 | <0.00 |
| MF11Pyr-2 | 0.11 | 15 | 0.5 | 0.20 | 0.80 | <0.0104 | 6007 | 1.6 | <0.0166 | 0 | 0.03 | <0.0030 | <0.049 | <0.0080 | 0.03 | <0.0221 | 0.03 | 0.54 | <0.0022 | 0.04 | <0.0031 |
| MF11Pyr-3 | <0.073 | 15 | 0.68 | <0.154 | 0.29 | <0.0091 | 7079 | 0.90 | <0.00 | <0.0049 | <0.00 | <0.0025 | <0.047 | <0.0081 | 0.12 | <0.0105 | 0.08 | 0.48 | 0 | <0.0124 | <0.00 |
| MF11Pyr-4 | 1.7 | 65 | 8.4 | 8.7 | 1.7 | <0.0078 | 7791 | 1.1 | 0.01 | 0.12 | <0.036 | 0 | 0.10 | 0.18 | 2.1 | 0.17 | 0.04 | 0.42 | 0.01 | 9.0 | 7.1 |
| MF11Pyr-5 | 1.8 | 52 | 7.6 | 9.2 | 1.7 | <0.0118 | 7390 | 1.6 | <0.0240 | 0.17 | <0.035 | 0.01 | 1.2 | 0.09 | 1.9 | 0.14 | 0.07 | <0.182 | 0 | 22 | 4.7 |
| MF11Pyr-6 | 0.33 | 5744 | 85 | 2.1 | 0.42 | <0.0103 | 13074 | 1.6 | <0.00 | 0.08 | 0.01 | 0 | 0.07 | 0.03 | 1.3 | 0.02 | 0.07 | 0.17 | 0.01 | 1.2 | 2.3 |
| MF11Pyr-7 | 0.44 | 17345 | 384 | 3.5 | 0.94 | 0.01 | 25898 | 0.77 | <0.00 | 0.10 | <0.00 | 0 | <0.049 | 0.08 | 2.8 | 0.02 | 0.10 | 0.25 | <0.0030 | 1.7 | 6.5 |
| MF11Pyr-8 | 0.22 | 23795 | 738 | <0.166 | 0.82 | <0.0122 | 31303 | 1.5 | <0.0147 | <0.0087 | <0.00 | 0 | 0.09 | 0 | 0.20 | <0.00 | 0.01 | 0.22 | <0.0020 | 0.20 | 0.27 |
| MF11Pyr-9 | 1.2 | 23110 | 1045 | 2.2 | 2.8 | 0.02 | 32494 | 2.1 | 0.01 | 0.07 | <0.00 | 0.06 | 0.85 | 0.04 | 2.3 | 0.02 | 0.02 | 0.30 | 0.01 | 3.5 | 5.8 |
| MF11Pyr-10 | 9.1 | 21530 | 1313 | 15 | 1.3 | 0.01 | 28460 | 1.4 | <0.0268 | 0.38 | 0.01 | 0.01 | 0.16 | 0.20 | 6.5 | 0.27 | 0.23 | 0.21 | 0 | 22 | 12 |
| MF11Pyr-11 | 8.3 | 13474 | 1604 | 8.0 | 1.1 | <0.0105 | 22053 | 2.3 | 0.01 | 0.11 | <0.00 | 0.01 | 2.3 | 0.10 | 2.5 | 0.39 | 0.10 | 0.19 | <0.0028 | 5.9 | 5.7 |
| MF11Pyr-12 | 0.36 | 24514 | 1324 | 0.21 | 1.1 | <0.0092 | 36961 | 1.6 | <0.0208 | 0.01 | 0.01 | 0.01 | 0.17 | 0.02 | 0.63 | <0.0113 | 0.06 | 0.20 | <0.00 | 0.29 | 1.3 |
| MF11Pyr-13 | 0.28 | 22086 | 683 | 4.1 | 0.77 | <0.0076 | 28556 | 1.5 | 0.01 | 0.16 | <0.041 | <0.0014 | 0.15 | 0.04 | 1.6 | 0.03 | 0.11 | 0.19 | 0 | 2.1 | 3.5 |
| MF11Pyr-14 | 0.35 | 4545 | 120 | 0.67 | 0.42 | <0.0090 | 11886 | 1.7 | <0.00 | <0.0085 | <0.00 | <0.0024 | 0.06 | 0 | 0.15 | 0.01 | 0.01 | <0.160 | 0 | 0.18 | 0.48 |
| MF11Pyr-15 | 1 | 128 | 92 | 29 | 1.3 | 0.11 | 15 | 2.8 | <0.0176 | 0.02 | <0.00 | 0.27 | 47 | 2.9 | 2.8 | <0.0078 | 0.03 | 0.18 | <0.0023 | 0.16 | 150 |
| MF11Pyr-16 | 0.96 | 73 | 411 | 2116 | 23 | 25 | 5.2 | 2.5 | 0.01 | 0.28 | 0.12 | 9.4 | 1420 | 0.61 | 14 | 0.01 | 0.29 | 0.32 | 0 | 0.20 | 32 |
| MF11Pyr-17 | 1.5 | 62 | 123 | 6545 | 60 | 22 | 4.4 | 2.5 | <0.0177 | 0.76 | 0.07 | 35 | 4755 | 0.86 | 3.8 | 0.01 | 0.37 | 0.29 | 0 | 0.26 | 42 |
| MF11Pyr-18 | 0.81 | 20 | 112 | 2404 | 38 | 3.7 | 2.1 | 1.8 | <0.00 | 0.10 | <0.069 | 7.8 | 580 | 0.30 | 4.8 | 0.04 | 0.10 | 0.21 | 0.01 | 0.25 | 12 |
| MF11Pyr-19 | 4.3 | 44 | 128 | 12963 | 145 | 40 | 5.3 | 2.2 | <0.00 | 1.5 | 0.28 | 74 | 9716 | 0.99 | 12 | 0.19 | 10 | <0.186 | <0.0036 | 0.40 | 49 |
| MF11Pyr-20 | 0.25 | 589 | 143 | 5.4 | 1.7 | <0.0156 | 97 | 1.8 | <0.0189 | 0.21 | <0.00 | 0.01 | 1.4 | 0.86 | 1.6 | 0 | 0.17 | 0.24 | 0.01 | 38 | 39 |
| MF11Pyr-21 | 0.14 | 6.5 | 0.09 | <0.34 | 0.79 | <0.0073 | 7089 | <0.62 | <0.0165 | 0 | 0.02 | 0 | <0.051 | <0.0080 | 0.10 | <0.0073 | <0.0058 | 0.30 | <0.00 | 0.03 | 0.02 |
| MF11Pyr-22 | 0.15 | 8.3 | 0.12 | <0.202 | 1.2 | <0.0109 | 7428 | <0.61 | <0.0174 | 0 | <0.00 | 0 | 0.09 | <0.0060 | <0.065 | 0 | <0.0061 | 0.34 | <0.0033 | 0.04 | <0.0053 |
| MF11Pyr-23 | 0.30 | 9.8 | 0.12 | <0.199 | 1.5 | <0.0078 | 7348 | <0.69 | <0.0306 | <0.0053 | 0.03 | 0 | 0.14 | <0.0137 | <0.094 | <0.00 | 0.02 | 0.21 | <0.0024 | 0.02 | 0.01 |
| MF11Pyr-24 | 9.4 | 18108 | 793 | 38 | 2.6 | 0.04 | 25085 | 1.8 | 0.06 | 1.2 | 0.02 | 0.01 | 24 | 0.68 | 11 | 1.1 | 0.28 | <0.172 | 0.05 | 48 | 50 |
| MF11Pyr-25 | 0.30 | 111 | 2.7 | 1.1 | 0.92 | <0.0121 | 5341 | 1.3 | <0.00 | 0.01 | 0.04 | 0 | 0.19 | 0.02 | 0.13 | 0.01 | 0.01 | <0.179 | <0.00 | 0.21 | 0.57 |
| MF11Pyr-26 | 0.26 | 39 | 1.4 | <0.25 | 1.1 | <0.0083 | 389 | 1.6 | 0.01 | 0.01 | <0.055 | 0 | 0.07 | <0.0092 | 1.1 | <0.00 | <0.00 | 0.41 | 0 | 0.22 | 0.20 |
| MF11Pyr-27 | 7 | 21725 | 698 | 26 | 1.7 | <0.0101 | 28556 | 1.8 | 0.03 | 1.9 | 0.04 | 0 | 1.1 | 1.4 | 27 | 0.26 | 0.65 | 0.21 | 0.12 | 71 | 56 |
| MF11Pyr-28 | 12 | 4537 | 156 | 43 | 3.1 | 0.02 | 12546 | 0.91 | 0.02 | 2.3 | <0.00 | 0 | 0.72 | 1.8 | 26 | 0.33 | 2.0 | <0.162 | 0.18 | 101 | 86 |
| MF11Pyr-29 | 12 | 3586 | 56 | 18 | 2.3 | 0.03 | 8080 | 1.7 | <0.0168 | 0.89 | <0.035 | 0 | 0.19 | 0.63 | 13 | 0.13 | 0.30 | 0.32 | 0.02 | 60 | 39 |
| MF11Pyr-30 | 7.3 | 15889 | 385 | 24 | 11 | 0.06 | 19921 | 1.5 | 0.03 | 0.27 | <0.033 | 0.01 | 7.9 | 0.33 | 2.8 | 1.2 | 0.23 | 0.20 | <0.0030 | 10 | 9.6 |
| MF11Pyr-31 | 16 | 251 | 5.4 | 0.92 | 3.2 | 0.18 | 7141 | 1.9 | 0.01 | 0.04 | <0.036 | <0.0032 | <0.058 | 0.16 | 1.0 | 0.03 | 0.10 | 0.37 | 0 | 0.48 | 9.2 |
| MF11Pyr-32 | 3.8 | 4103 | 692 | 8.8 | 3.2 | 0.03 | 11916 | 2.9 | 0.01 | 0.63 | <0.00 | <0.0042 | 0.23 | 1.2 | 54 | 0.13 | 0.65 | 0.21 | 0.03 | 68 | 149 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF11Pyr-33 | 9.7 | 4579 | 525 | 0.91 | 3.2 | 0.07 | 9919 | 2.2 | <0.00 | 0.07 | <0.045 | 0 | 0.11 | 0.09 | 9.5 | 0.01 | 0.04 | 0.27 | 0.01 | 29 | 23 |
| MF11Pyr-34 | 9.1 | 2146 | 285 | 29 | 9.7 | 0.13 | 7546 | 1.1 | 0.09 | 0.25 | <0.00 | 0.15 | 23 | 0.20 | 58 | 1.1 | 0.10 | 0.25 | 0.02 | 11 | 90 |
| MF11Pyr-35 | 1.5 | 13023 | 526 | 1.0 | 1.1 | 0.02 | 18423 | 1.4 | <0.0159 | 0.09 | <0.033 | <0.0023 | 0.14 | 0.33 | 5.1 | 0.02 | 0.09 | 0.28 | 0.01 | 0.61 | 30 |
| MF11Pyr-36 | 2.6 | 3888 | 175 | 20 | 3.0 | <0.0120 | 10795 | 1.9 | 0.73 | 0.61 | <0.036 | 0.02 | 29 | 0.71 | 16 | 0.55 | 0.50 | <0.180 | 0.02 | 12 | 44 |
| MF11Pyr-37 | 0.20 | 10 | 0.72 | 0.39 | 1.7 | <0.0121 | 6890 | 1.4 | <0.0172 | <0.0051 | <0.00 | 0 | 0.10 | <0.0092 | 0.07 | <0.00 | 0.01 | 0.18 | <0.00 | <0.0127 | 0.01 |
| MF11Pyr-38 | 3 | 8051 | 510 | 19 | 1.4 | 0.05 | 10605 | 2.9 | 0.29 | 0.03 | <0.034 | <0.0024 | 0.40 | 0.16 | 5.9 | 0.03 | 0.06 | 0.19 | 0.01 | 2.4 | 11 |
| MF11Pyr-39 | 27 | 7574 | 703 | 0.53 | 6.0 | 0.30 | 12556 | 1.9 | <0.016 | 0.17 | <0.00 | <0.0024 | 0.11 | 0.11 | 4.9 | 0.02 | 0.07 | 0.26 | 0.02 | 1.3 | 15 |
| MF11Pyr-40 | 2.5 | 8563 | 650 | 22 | 4.8 | 0.34 | 11762 | 1.8 | 0.01 | 0.23 | <0.00 | 0.03 | 17 | 0.78 | 32 | 1.4 | 0.27 | 0.15 | 0.05 | 16 | 55 |
| MF11Pyr-41 | 1.7 | 2803 | 311 | 78 | 1.3 | 0.01 | 15303 | 2.1 | <0.00 | 0.02 | <0.042 | 0 | 0.18 | 0.08 | 0.67 | 0.01 | 0.27 | <0.25 | <0.0026 | 0.10 | 4.6 |
| MF11Pyr-42 | 1.9 | 287 | 62 | 62 | 1.4 | 0.03 | 9408 | 1.4 | <0.0187 | 0.07 | <0.00 | 0.02 | 0.45 | 0.31 | 5.8 | <0.0083 | 3.7 | 0.27 | 0 | 0.28 | 26 |
| MF11Pyr-43 | 2.4 | 215 | 49 | 1.3 | 1.5 | 0.01 | 7986 | 1.2 | <0.00 | 0.03 | 0.03 | 0 | 0.12 | 0.11 | 2.3 | <0.00 | 0.42 | 0.26 | <0.0031 | 0.43 | 11 |
| MF11Pyr-44 | 0.80 | 78 | 8.6 | 3.0 | 1.6 | <0.0115 | 8424 | 1.6 | <0.00 | 0.08 | <0.038 | 0 | 0.16 | 0.08 | 2.0 | 0.04 | 0.36 | 0.29 | 0.01 | 1.0 | 3.6 |
| MF11Pyr-45 | 3.2 | 53 | 3.1 | 7.2 | 1.3 | 0.01 | 9155 | 1.3 | 0.01 | 0.36 | <0.00 | 0 | 0.12 | 0.37 | 8.9 | 0.08 | 0.67 | <0.171 | 0.02 | 8.7 | 12 |
| MF11Pyr-46 | 43 | 1412 | 483 | 96 | 4.0 | 0.05 | 9585 | 1.3 | 0.02 | 2.1 | <0.047 | 0.01 | 0.74 | 3.3 | 54 | 0.39 | 1.6 | <0.170 | 0.07 | 117 | 152 |
| MF11Pyr-47 | 33 | 150 | 33 | 92 | 3.3 | 0.01 | 13323 | 0.82 | 0.03 | 2.5 | <0.00 | 0.01 | 1.3 | 2.3 | 43 | 0.70 | 2.1 | <0.150 | 0.15 | 132 | 89 |
| MF11Pyr-48 | 7 | 15 | 2.6 | 19 | 1.3 | <0.0119 | 14272 | 0.66 | 0.01 | 0.40 | <0.00 | 0 | 0.17 | 0.32 | 6.3 | 0.08 | 0.14 | 0.23 | 0.06 | 7.8 | 10 |
| MF11Pyr-49 | 4 | 1239 | 484 | 11 | 2.9 | 0.12 | 15323 | 0.95 | <0.0160 | 0.63 | 0.01 | 0.01 | 0.25 | 1.4 | 25 | 0.05 | 0.33 | 0.21 | 0.03 | 70 | 84 |
| MF11Pyr-50 | 0.15 | 16 | 0.26 | 0.37 | 1.7 | <0.0074 | 5022 | 1.5 | <0.0167 | <0.0071 | <0.035 | 0 | 0.15 | <0.0083 | 0.11 | <0.0075 | <0.00 | 0.19 | 0 | 0.01 | 0 |
| MF11Pyr-51 | 0.42 | 14 | 0.27 | 0.39 | 1.4 | <0.0117 | 4840 | 2.1 | <0.0187 | <0.0056 | <0.00 | 0.01 | 0.20 | <0.0093 | <0.070 | <0.0083 | 0.01 | <0.199 | <0.00 | <0.0125 | 0.07 |
| MF11Pyr-52 | 0.37 | 303 | 25 | 0.87 | 0.65 | 0 | 4972 | 1.1 | <0.00 | 0.01 | <0.051 | <0.00 | 0.14 | 0.07 | 0.50 | <0.00 | 0.04 | 0.25 | <0.0022 | 0.06 | 3.2 |
| MF11Pyr-53 | 0.37 | 19 | 0.22 | 0.64 | 0.80 | <0.0073 | 4799 | 1.5 | <0.00 | <0.00 | <0.035 | 0 | 0.22 | <0.0100 | 0.08 | 0 | <0.00 | <0.199 | <0.00 | <0.0111 | 0.03 |
| MF11Pyr-54 | 0.25 | 21 | 0.40 | 0.99 | 0.90 | <0.0078 | 5346 | 1.5 | <0.0176 | 0 | <0.052 | <0.00 | <0.059 | 0 | 0.07 | <0.0079 | <0.0064 | 0.23 | <0.0041 | <0.0112 | 0.04 |
| MF11Pyr-55 | 0.16 | 19 | 0.38 | 0.68 | 0.68 | <0.0087 | 3998 | 1.9 | <0.0160 | <0.0048 | 0.01 | 0 | 0.15 | <0.0113 | <0.061 | <0.0072 | 0 | 0.32 | 0 | <0.0124 | 0.03 |
| MF11Pyr-56 | 0.29 | 21 | 0.40 | 0.29 | 0.81 | <0.0072 | 4882 | 1.4 | <0.00 | <0.0049 | <0.034 | <0.0017 | <0.046 | <0.0099 | <0.061 | <0.0072 | 0.05 | <0.175 | 0 | 0.02 | 0.01 |
| MF11Pyr-57 | 5.2 | 8748 | 263 | 29 | 2.1 | 0.06 | 15271 | 2.2 | <0.0258 | 0.53 | <0.044 | <0.0031 | 0.78 | 0.49 | 13 | 0.24 | 0.42 | 0.26 | 0.02 | 22 | 38 |
| MF11Pyr-58 | 4.3 | 425 | 36 | 25 | 1.0 | 0.02 | 6092 | 2.7 | <0.00 | 0.64 | <0.00 | 0 | 2.0 | 0.53 | 9.2 | 0.21 | 0.35 | <0.183 | 0.02 | 58 | 24 |
| MF11Pyr-59 | 3.7 | 548 | 65 | 22 | 1.3 | 0.02 | 9082 | 2.1 | <0.00 | 0.80 | 0.01 | 0.01 | 0.48 | 1.4 | 20 | 0.16 | 0.45 | <0.168 | 0.10 | 132 | 64 |
| MF11Pyr-60 | 1.9 | 628 | 65 | 19 | 3.4 | <0.0123 | 9025 | 1.4 | <0.035 | 0.22 | 0.01 | 0.04 | 7.3 | 0.16 | 4.3 | 0.23 | 0.12 | <0.180 | 0.01 | 10 | 8.9 |
| **Mean n=60** | 4.6 | 4841 | 273 | 469 | 6.4 | 3.0 | 11164 | 1.7 | 0.07 | 0.43 | 0 | 2.8 | 320 | 0.57 | 9.5 | 0.23 | 0.52 | 0.26 | 0 | 20 | 28 |
| **S.D** | 8.0 | 7570 | 376 | 2007 | 20 | 9.0 | 8838 | 0.53 | 0.17 | 0.63 | 0.07 | 12 | 1495 | 0.75 | 14 | 0.36 | 1.5 | 0.08 | 0 | 35 | 39 |
| **Min** | 0.11 | 6.5 | 0.09 | 0.20 | 0.29 | 0 | 2.1 | 0.66 | 0.01 | 0 | 0.01 | 0 | 0.06 | 0 | 0.02 | 0 | 0 | 0.15 | 0 | 0.01 | 0 |
| **Max** | 43 | 24514 | 1604 | 12963 | 145 | 40 | 36961 | 2.9 | 0.73 | 2.5 | 0.28 | 74 | 9716 | 3.3 | 58 | 1.4 | 10 | 0.54 | 0.18 | 132 | 152 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF12Pyr-1 | 0.32 | 989 | 274 | <0.36 | 1.3 | 0.01 | 2377 | 0.95 | 0.01 | <0.0072 | <0.036 | 0 | 2.4 | <0.0118 | 0.07 | <0.00 | <0.00 | 1.1 | 0 | <0.0130 | 0.02 |
| MF12Pyr-2 | 0.41 | 2048 | 636 | 4.5 | 0.78 | <0.00 | 4779 | 1.5 | <0.00 | 0 | <0.00 | 0 | 0.99 | 0.02 | 0.51 | 0.01 | <0.0087 | 0.95 | <0.0036 | 0.05 | 4.2 |
| MF12Pyr-3 | 0.42 | 7342 | 437 | <0.169 | 1.1 | <0.0076 | 10312 | 0.78 | <0.035 | 0 | <0.035 | 0.04 | 0.12 | <0.0114 | 0.07 | 0 | 0.01 | 0.54 | <0.00 | 0.02 | 0.08 |
| MF12Pyr-4 | 0.16 | 2449 | 628 | 1.5 | 0.92 | <0.0141 | 4911 | 1.0 | <0.0186 | <0.0053 | <0.053 | <0.0034 | <0.063 | <0.0106 | 0.05 | 0.01 | 0.01 | 0.51 | 0 | 0.04 | 0.04 |
| MF12Pyr-5 | 0.40 | 11787 | 419 | <0.219 | 0.95 | <0.0139 | 12986 | 1.4 | <0.00 | <0.0052 | 0.05 | 0 | 0.19 | <0.0085 | 0.08 | <0.00 | 0.01 | 0.41 | <0.00 | <0.0161 | 0.08 |
| MF12Pyr-6 | 0.15 | 5167 | 548 | 1.4 | 1.3 | <0.0076 | 7816 | 0.94 | 0.01 | <0.0070 | <0.035 | <0.0026 | 0.14 | <0.00 | 0.06 | <0.0108 | <0.0080 | 0.56 | <0.0023 | 0.08 | 0.06 |
| MF12Pyr-7 | 0.79 | 2639 | 199 | 7.7 | 0.78 | <0.0056 | 3183 | 1.2 | 0.01 | 0.05 | <0.036 | <0.0033 | 9.6 | 0.15 | 2.1 | 0.12 | 0.02 | 0.49 | 0 | 14 | 5.2 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF12Pyr-8 | 0.27 | 236 | 43 | 7.8 | 1.1 | <0.0082 | 1477 | 1.1 | <0.0189 | 0.03 | <0.054 | <0.0028 | 2.4 | 0.02 | 0.98 | 0.02 | 0.04 | 0.55 | <0.0035 | 1.4 | 2.7 |
| MF12Pyr-9 | 0.36 | 7891 | 223 | 2.6 | 0.45 | 0.01 | 12207 | 1.1 | <0.00 | 0.01 | <0.046 | 0 | 0.20 | 0.09 | 0.83 | 0.03 | 0.09 | 0.52 | 0 | 0.88 | 3.5 |
| MF12Pyr-10 | 1.9 | 224 | 66 | 1.3 | 1.8 | 0.01 | 4721 | <0.69 | <0.00 | 0.03 | <0.038 | 0 | 0.10 | 0.17 | 18 | <0.00 | 0.07 | 0.42 | 0 | 0.26 | 36 |
| MF12Pyr-11 | 0.51 | 146 | 25 | 1.1 | <0.26 | <0.0054 | 4802 | <0.64 | <0.030 | <0.00 | <0.050 | 0.31 | <0.051 | 0.05 | 1.7 | <0.00 | 0.08 | 0.48 | 0 | 0.12 | 5.0 |
| MF12Pyr-12 | 0.70 | 37 | 12 | 1.7 | 0.61 | 0.02 | 5104 | <0.58 | 0.01 | 0.01 | <0.035 | <0.0026 | <0.053 | 0.04 | 0.26 | 0 | 0.05 | 0.39 | <0.0033 | 0.10 | 3.2 |
| MF12Pyr-13 | 0.12 | 24 | 8.6 | 1.7 | 1.3 | <0.0092 | 4993 | <0.59 | <0.00 | <0.00 | <0.00 | <0.00 | 0.08 | <0.0098 | 0.22 | 0.01 | 0.01 | 0.48 | <0.00 | 0.04 | 0.21 |
| MF12Pyr-14 | 0.47 | 83 | 19 | 1.3 | 0.43 | <0.0138 | 4933 | <0.62 | <0.00 | 0.02 | <0.00 | <0.00 | <0.061 | 0.06 | 21 | <0.00 | 0.03 | 0.31 | 0 | 0.08 | 37 |
| MF12Pyr-15 | 0.53 | 1808 | 79 | 3.0 | 1.0 | <0.0127 | 4172 | 1.0 | <0.0168 | 0.04 | <0.00 | <0.0018 | 0.07 | 0.09 | 0.80 | 0.15 | 0.05 | 0.34 | 0 | 2.8 | 2.3 |
| MF12Pyr-16 | 0.60 | 1169 | 291 | 0.87 | 1.1 | <0.0141 | 3248 | <0.71 | 0.02 | <0.0058 | <0.041 | 0 | <0.058 | 0.02 | 0.17 | <0.0089 | <0.0066 | 0.59 | <0.00 | 0.06 | 0.65 |
| MF12Pyr-17 | 0.67 | 413 | 263 | 11 | 1.1 | 0.01 | 2677 | <0.72 | 0.01 | 0.21 | 0.02 | <0.0031 | 0.46 | 0.50 | 4.5 | 0.09 | 0.14 | 0.49 | 0.03 | 14 | 27 |
| MF12Pyr-18 | <0.087 | 209 | 136 | 2.0 | 1.0 | <0.0139 | 2221 | <0.78 | <0.00 | 0.03 | <0.00 | <0.00 | 0.31 | 0.01 | 0.11 | <0.00 | <0.00 | 0.39 | 0 | 1.8 | 0.34 |
| MF12Pyr-19 | 0.28 | 932 | 571 | 1.5 | 0.40 | <0.0140 | 1810 | <0.69 | <0.00 | 0.09 | <0.041 | <0.0021 | <0.066 | 0.28 | 0.26 | <0.00 | 0.02 | 0.41 | <0.0046 | 18 | 3.5 |
| MF12Pyr-20 | 4.1 | 2118 | 492 | 30 | 4.1 | 0.04 | 3683 | 0.84 | 0.04 | 0.31 | <0.034 | 0.01 | 0.93 | 0.17 | 14 | 0.28 | 0.09 | 0.33 | 0.01 | 4.8 | 32 |
| MF12Pyr-21 | 1.4 | 7740 | 246 | 7.0 | 0.58 | <0.0157 | 10614 | 0.85 | <0.0270 | 0.07 | <0.039 | 0 | 29 | 0.14 | 4.9 | 0 | 0.16 | 0.24 | <0.0044 | 3.4 | 30 |
| MF12Pyr-22 | 0.23 | 515 | 36 | 0.22 | 1.3 | <0.0068 | 857 | 0.94 | <0.00 | 0 | 0.03 | 0.01 | 0.08 | 0.01 | <0.081 | 0 | <0.0073 | 0.50 | <0.00 | 0.04 | 0.39 |
| MF12Pyr-23 | <0.091 | 534 | 36 | 1.4 | 1.1 | <0.0110 | 847 | <0.74 | 0.03 | <0.00 | <0.00 | 0 | 0.56 | <0.0068 | <0.092 | <0.00 | <0.0068 | <0.200 | <0.00 | 0.02 | 0.03 |
| MF12Pyr-24 | 0.39 | 1945 | 102 | 3.7 | 1.3 | 0.13 | 3565 | <0.69 | <0.0197 | 0.06 | <0.056 | 0.02 | 0.71 | 0.16 | 1.4 | 0.05 | 0.03 | 0.30 | 0.01 | 4.7 | 4.8 |
| MF12Pyr-25 | 0.76 | 7171 | 263 | 16 | 1.9 | 0.94 | 10806 | <0.63 | <0.0185 | 0.23 | <0.00 | 0.02 | 8.0 | 0.32 | 4.5 | 0.35 | 0.12 | 0.22 | 0.03 | 5.5 | 21 |
| MF12Pyr-26 | 0.80 | 10568 | 380 | 19 | 1.5 | 0.09 | 13055 | 1.6 | <0.039 | 0.45 | 0.02 | 0.01 | 0.96 | 1.0 | 5.0 | 0.08 | 0.19 | <0.206 | 0.01 | 6.4 | 24 |
| MF12Pyr-27 | 1.8 | 10407 | 605 | 33 | <0.72 | <0.034 | 12795 | 2.5 | 0.02 | 0.71 | <0.00 | <0.0082 | 1.5 | 1.3 | 11 | 0.14 | 0.56 | <0.54 | 0.04 | 15 | 55 |
| MF12Pyr-28 | 0.36 | 1416 | 502 | 8.7 | 1.4 | <0.00 | 2989 | 0.80 | <0.019 | 0.08 | <0.039 | <0.0049 | 7.5 | 0.08 | 1.8 | 0.01 | 0.11 | 0.31 | 0.01 | 2.1 | 16 |
| MF12Pyr-29 | 7.6 | 1536 | 693 | 213 | 2.1 | <0.0111 | 4102 | <0.77 | <0.0206 | 1.0 | <0.042 | 0.06 | 1.3 | 2.1 | 29 | 1.3 | 1.3 | 0.26 | 0.12 | 77 | 128 |
| MF12Pyr-30 | 0.19 | 251 | 52 | 0.99 | 1.3 | <0.0082 | 5002 | 0.88 | <0.019 | <0.0076 | <0.00 | 0.67 | 10 | 0.02 | <0.097 | 0.01 | 0 | 0.27 | 0 | 0.03 | 0.02 |
| MF12Pyr-31 | 1.3 | 543 | 230 | 19 | 2.2 | <0.0148 | 4001 | 1.2 | <0.021 | 0.33 | <0.00 | 0.84 | 12 | 1.8 | 15 | 1.4 | 0.25 | 0.35 | 0.04 | 24 | 25 |
| MF12Pyr-32 | 0.38 | 1055 | 446 | 1.1 | 1.4 | 0.02 | 1494 | <0.81 | <0.032 | 0.02 | <0.00 | 0.01 | 4.9 | 0.02 | 0.56 | 0.11 | 0 | 0.44 | <0.0042 | 0.06 | 0.15 |
| MF12Pyr-33 | 6.9 | 1864 | 101 | 1.7 | 2.4 | 0.10 | 3957 | 0.83 | <0.00 | 0.03 | <0.036 | 2.8 | 533 | 0.36 | 5.2 | 0.03 | 0.58 | 0.47 | 0.01 | 0.68 | 15 |
| MF12Pyr-34 | 30 | 9062 | 396 | 127 | 4617 | 0.40 | 10764 | 1.4 | 0.14 | 0.27 | 0.11 | 0.09 | 30 | 3.1 | 10 | 3.3 | 0.22 | 0.21 | 0.03 | 44 | 19 |
| MF12Pyr-35 | 36 | 10676 | 375 | 140 | 10759 | 0.51 | 12758 | 1.8 | 0.04 | 0.97 | 0.24 | 0.14 | 47 | 8.5 | 16 | 2.6 | 1.2 | 0.35 | 0.07 | 62 | 17 |
| MF12Pyr-36 | 6.4 | 6466 | 296 | 58 | 1874 | 0.06 | 8955 | 1.3 | 0.01 | 0.62 | <0.036 | 0.09 | 41 | 2.6 | 29 | 2.8 | 0.33 | 0.49 | 0.15 | 44 | 34 |
| MF12Pyr-37 | 4.8 | 3531 | 374 | 26 | 3.1 | 0.08 | 7274 | 1.3 | 16 | 0.24 | <0.062 | <0.0026 | 0.46 | 0.62 | 15 | 0.30 | 0.26 | 0.53 | 0.03 | 9.3 | 24 |
| MF12Pyr-38 | 949 | 2422 | 117 | 35 | 3.6 | 0.07 | 10924 | 1.7 | <0.00 | 0.59 | 0.02 | 1.1 | 45 | 0.57 | 17 | 0.69 | 0.47 | 0.44 | 0.01 | 59 | 152 |
| MF12Pyr-39 | 3.6 | 5335 | 672 | 32 | 293 | 0.10 | 7462 | 1.3 | 0.26 | 0.32 | <0.048 | 0.02 | 8.5 | 0.22 | 1.9 | 4.0 | 0.13 | 0.36 | 0.01 | 5.6 | 21 |
| MF12Pyr-40 | 0.60 | 5382 | 1051 | 11 | 2.4 | <0.0135 | 10256 | 1.5 | <0.00 | 0.67 | 0.03 | 0 | 19 | 0.80 | 6.8 | 0.01 | 0.05 | 0.49 | 0.02 | 87 | 29 |
| MF12Pyr-41 | 12 | 2351 | 319 | 10 | 10 | 0.16 | 10306 | 1.4 | 0.01 | 0.05 | 0.07 | 0 | 0.94 | 0.35 | 14 | 0.27 | 0.10 | 0.31 | 0.01 | 5.9 | 51 |
| MF12Pyr-42 | 0.38 | 508 | 281 | 8.4 | 4.9 | 0.01 | 6076 | 1.4 | 0.01 | 0.18 | <0.033 | 0 | 0.19 | 0.07 | 0.79 | 0.12 | 0.06 | 0.57 | 0.02 | 4.7 | 7.4 |
| MF12Pyr-43 | 0.31 | 1575 | 565 | 3.3 | 1.3 | 0.03 | 6618 | 2.5 | <0.00 | <0.0056 | <0.00 | <0.0028 | <0.061 | 0.24 | 0.69 | <0.00 | 0.01 | 0.43 | 0 | 6.8 | 5.3 |
| MF12Pyr-44 | 2.6 | 2537 | 805 | 14 | 1.1 | 0.02 | 8280 | 1.3 | 0.01 | 0.15 | <0.037 | 0.01 | 0.18 | 0.10 | 1.6 | 0.49 | 0.14 | 0.23 | 0.01 | 12 | 12 |
| MF12Pyr-45 | 9 | 2396 | 825 | 2.4 | 4.4 | 0.14 | 7158 | 2.2 | 0.01 | 0.01 | <0.00 | 0.03 | 0.22 | 0.18 | 0.50 | 0.07 | 0.06 | 0.27 | 0.01 | 0.84 | 7.0 |
| MF12Pyr-46 | 1.2 | 2173 | 621 | 1.7 | 0.81 | <0.0086 | 9086 | 1.5 | <0.00 | 0.02 | <0.00 | 0 | 0.15 | 0.07 | 0.33 | 0 | 0.03 | 0.27 | 0 | 3.3 | 3.2 |
| MF12Pyr-47 | 1.1 | 3140 | 766 | 1.2 | 0.75 | <0.0106 | 10355 | 0.72 | <0.00 | 0 | <0.00 | 0.01 | 1.1 | 0.04 | 0.22 | 0.26 | 0.10 | 0.47 | 0 | 0.23 | 2.0 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF12Pyr-48 | 745 | 1284 | 541 | 263 | 255 | 1910 | 3644 | <57.96 | <0.00 | <0.00 | <4.01 | 24 | 6081 | 7.3 | 138 | 1192 | <0.66 | 22 | 49 | 116 | 284 |
| MF12Pyr-49 | 0.34 | 2276 | 603 | 1.3 | 0.87 | 0.27 | 8756 | 1.9 | <0.00 | 0.02 | <0.00 | 0.05 | 3.7 | 0.05 | 0.38 | 0.12 | 0.02 | 0.26 | 0.01 | 8.1 | 0.82 |
| MF12Pyr-50 | 0.34 | 837 | 451 | 1.1 | 0.98 | 0.08 | 8185 | 3.3 | 0.02 | <0.0060 | <0.00 | <0.0022 | 0.23 | <0.0156 | 0.53 | <0.0129 | 0.06 | 0.30 | <0.0047 | 0.09 | 0.07 |
| MF12Pyr-51 | 0.41 | 349 | 217 | 1.4 | 0.60 | 0.01 | 9088 | 1.5 | <0.019 | <0.0095 | 0.01 | 0 | 0.11 | 0.06 | 0.88 | <0.0144 | 0.07 | 0.55 | <0.0043 | 0.09 | 5.1 |
| MF12Pyr-52 | 0.79 | 446 | 237 | 2.6 | 1.3 | 0.03 | 8638 | 2.0 | <0.0183 | 0.02 | <0.00 | 0 | 0.33 | 0.05 | 1.9 | <0.0081 | 0.04 | 0.42 | 0 | 0.17 | 6.7 |
| MF12Pyr-53 | 251 | 1173 | 348 | 2510 | 68 | 185 | 8056 | <8.01 | 0.18 | 0.36 | <0.53 | 5.2 | 1350 | 2.1 | 13 | 274 | 0.19 | 3.6 | 4.7 | 32 | 37 |
| MF12Pyr-54 | 1.6 | 563 | 341 | 3.3 | 0.66 | 0.30 | 8518 | 1.1 | <0.00 | 0.04 | <0.00 | 0.02 | 3.8 | 0.14 | 1.5 | 0.73 | 0.09 | 0.40 | 0.02 | 11 | 6.4 |
| MF12Pyr-55 | 1.6 | 286 | 25 | 15 | 2.1 | 1.1 | 4838 | 1.7 | <0.00 | 0.33 | <0.054 | 0.02 | 5.4 | 0.32 | 4.2 | 0.88 | 0.66 | 0.56 | 0.04 | 16 | 51 |
| MF12Pyr-56 | 26 | 748 | 180 | 369 | 2.5 | 0.12 | 9736 | 5.1 | 0.02 | 9.6 | 0.01 | 0.06 | 1.2 | 6.7 | 304 | 3.6 | 10 | 0.36 | 0.31 | 212 | 560 |
| MF12Pyr-57 | 0.12 | 160 | 80 | 2.2 | 1.5 | <0.0088 | 10860 | 0.92 | 0.01 | 0.01 | <0.033 | 0 | <0.044 | 0.03 | 1.0 | 0 | 0.02 | 0.24 | <0.0022 | 0.33 | 2.0 |
| MF12Pyr-58 | 0.20 | 169 | 76 | 2.9 | 0.86 | <0.0095 | 10357 | 1.4 | <0.00 | 0.01 | <0.00 | <0.0018 | <0.056 | 0.01 | 0.26 | 0 | 0 | 0.26 | 0 | 0.20 | 0.43 |
| MF12Pyr-59 | 0.09 | 164 | 94 | 1.3 | 1.1 | <0.0130 | 11416 | 0.98 | 0.02 | 0 | <0.049 | <0.0025 | 0.11 | <0.0058 | 0.27 | <0.0168 | 0.03 | 0.23 | <0.00 | 0.09 | 0.35 |
| MF12Pyr-60 | 0.28 | 153 | 72 | 1.2 | 0.84 | <0.0101 | 9139 | 1.4 | <0.0162 | <0.0082 | 0.02 | <0.0024 | 0.09 | <0.0078 | 0.11 | 0.01 | 0 | 0.51 | <0.00 | 0.06 | 0.15 |
| **Mean n=60** | 37 | 2657 | 330 | 71 | 310 | 68 | 6900 | 1.5 | 0.73 | 0.40 | 0.05 | 0.87 | 162 | 0.86 | 13 | 33 | 0.35 | 0.85 | 1.3 | 16 | 30 |
| **S.D** | 159 | 3164 | 249 | 336 | 1540 | 344 | 3519 | 0.77 | 3.3 | 1.4 | 0.07 | 3.8 | 869 | 1.8 | 44 | 181 | 1.4 | 2.9 | 7.6 | 35 | 82 |
| **Min** | 0.09 | 24 | 8.6 | 0.22 | 0.40 | 0.01 | 847 | 0.72 | 0.01 | 0 | 0.01 | 0 | 0.07 | 0.01 | 0.05 | 0 | 0 | 0.21 | 0 | 0.02 | 0.02 |
| **Max** | 949 | 11787 | 1051 | 2510 | 10759 | 1910 | 13055 | 5.1 | 16 | 9.6 | 0.24 | 24 | 6081 | 8.5 | 304 | 1192 | 10 | 22 | 49 | 212 | 560 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF13Pyr-1 | 0.30 | 738 | 50 | 0.43 | <0.41 | <0.0135 | 4348 | 0.77 | <0.0271 | 0 | <0.043 | <0.0016 | <0.053 | <0.0086 | <0.068 | <0.00 | 0.02 | 1.2 | <0.00 | 0.02 | <0.0019 |
| MF13Pyr-2 | 0.96 | 77 | 7.2 | 5.6 | <0.37 | <0.0077 | 5512 | 0.81 | 0.01 | 1.1 | <0.00 | <0.00 | 0.08 | 0.41 | 1.3 | 0.02 | 0.07 | 1.2 | 0.02 | 4.1 | 2.2 |
| MF13Pyr-3 | 7.9 | 418 | 27 | 12 | <0.35 | <0.0077 | 6374 | 2.2 | <0.00 | 0.76 | <0.078 | 0 | 0.99 | 0.77 | 1.8 | 0.09 | 0.15 | 0.75 | 0.01 | 12 | 5.7 |
| MF13Pyr-4 | 0.23 | 906 | 132 | 1.8 | 0.47 | <0.0079 | 3633 | 1.5 | 0.01 | 0.40 | 0.03 | 0 | 0.98 | 1.0 | 0.95 | <0.00 | 0.02 | 1.1 | 0.01 | 117 | 8.0 |
| MF13Pyr-5 | 0.42 | 71 | 0.60 | 1.4 | 0.79 | <0.0093 | 5117 | 1.3 | <0.00 | 0.01 | <0.00 | <0.0026 | 0.11 | <0.0056 | 0.22 | <0.00 | 0.07 | 0.90 | <0.0023 | 0.08 | 0 |
| MF13Pyr-6 | 0.29 | 83 | 1.2 | 1.0 | 0.52 | <0.0098 | 6140 | 2.1 | <0.0160 | <0.0044 | <0.045 | <0.0041 | 1.4 | <0.0088 | 0.72 | 0 | 0.23 | 0.88 | <0.0021 | <0.0227 | 0.02 |
| MF13Pyr-7 | 13 | 280 | 6.8 | 17 | 0.47 | <0.0112 | 7904 | 3.0 | <0.00 | 1.1 | 0.04 | 0.01 | 0.26 | 2.6 | 2.5 | <0.0122 | 0.55 | 0.59 | 0.05 | 27 | 6.8 |
| MF13Pyr-8 | 0.28 | 257 | 66 | 1.4 | 0.26 | 0.01 | 7509 | 1.7 | <0.00 | 0.01 | <0.00 | 0 | <0.054 | 0.06 | 0.64 | <0.0098 | 0.47 | 0.60 | 0 | 1.0 | 0.57 |
| MF13Pyr-9 | <0.101 | 713 | 131 | 3.1 | 1.3 | <0.0053 | 7121 | <0.76 | <0.0246 | 0 | <0.048 | <0.0018 | 0.17 | 0.01 | 0.31 | <0.00 | 0.10 | 0.59 | 0 | 0.13 | 0.02 |
| MF13Pyr-10 | 812 | 394 | 25 | 1.4 | 0.44 | <0.0113 | 1754 | 1.1 | <0.0263 | 0.01 | 0.03 | 0 | 0.21 | 0.08 | 0.38 | 0 | 0.02 | 0.58 | <0.0048 | 0.15 | 7.6 |
| MF13Pyr-11 | 39 | 908 | 9.8 | 0.68 | 0.76 | <0.0073 | 3523 | 0.86 | <0.00 | <0.00 | <0.00 | <0.0017 | 0.12 | 0.02 | 0.17 | <0.0103 | 0.07 | 0.65 | <0.00 | 0.03 | 2.0 |
| MF13Pyr-12 | 148 | 19 | 6.5 | 6.1 | 1.8 | <0.0098 | 8966 | 4.3 | 0.01 | 12 | 0.01 | <0.0027 | 0.24 | 1.7 | 9.2 | 0.01 | 1.2 | 0.77 | 0.03 | 48 | 13 |
| MF13Pyr-13 | 37 | 218 | 13 | 42 | 5.3 | 0.06 | 14160 | 0.96 | 0.01 | 3.0 | 0.04 | 0.01 | 1.2 | 4.7 | 6.7 | 0.80 | 1.8 | 0.64 | 0.19 | 89 | 27 |
| MF13Pyr-14 | 31 | 413 | 25 | 14 | 1.2 | <0.0091 | 10746 | 1.0 | <0.00 | 1.1 | 0.02 | 0 | <0.052 | 0.85 | 1.3 | <0.0104 | 0.16 | 0.57 | 0.01 | 11 | 3.4 |
| MF13Pyr-15 | 3.9 | 3.4 | 0.97 | 12 | 0.85 | <0.0112 | 13121 | <0.74 | 0.01 | 1.1 | <0.042 | 0.74 | 23 | 0.86 | 2.9 | <0.00 | 0.10 | 0.57 | 0.05 | 15 | 23 |
| MF13Pyr-16 | 5.9 | 36 | 9.5 | 22 | 2.2 | <0.0103 | 14018 | 3.6 | 0.01 | 1.7 | <0.00 | 0.01 | 0.47 | 2.2 | 3.1 | 0.04 | 0.23 | 0.48 | 0.09 | 77 | 45 |
| MF13Pyr-17 | 1.6 | 0.09 | 0.33 | 0.65 | 1.1 | <0.0078 | 6930 | 10 | <0.0127 | 0 | 0.01 | 0 | 0.07 | 0.01 | 0.11 | 0 | 0.56 | 0.11 | <0.0016 | 0.03 | 0.08 |
| MF13Pyr-18 | <0.159 | 105 | 5.6 | 0.56 | 0.69 | <0.0136 | 7704 | <1.08 | <0.00 | 0 | <0.044 | 0 | 17 | 0.02 | 0.14 | 0.01 | 0.03 | 0.66 | 0 | 0.04 | 0.02 |
| MF13Pyr-19 | 0.44 | 1.0 | 3.6 | 2.4 | 1.8 | <0.0056 | 13186 | 1.1 | 0.01 | 0.01 | <0.00 | <0.0027 | 0.08 | <0.0102 | 0.05 | 0 | 0.02 | 0.65 | <0.00 | <0.0080 | <0.0041 |
| MF13Pyr-20 | 3 | 660 | 78 | 5.8 | 1.1 | <0.0115 | 6376 | <0.83 | <0.00 | 0.56 | 0.02 | 0 | 0.14 | 0.74 | 1.1 | 0.01 | 0.03 | 0.50 | 0.02 | 26 | 8.6 |
| MF13Pyr-21 | 8.5 | 92 | 9.3 | 17 | 0.96 | <0.0131 | 9229 | 1.1 | 0.01 | 1.2 | 0.04 | 0.01 | 0.07 | 1.9 | 3.0 | 0.13 | 0.13 | 0.60 | 0.06 | 69 | 9.5 |
| MF13Pyr-22 | 0.21 | 107 | 3.3 | 0.71 | 0.77 | <0.0096 | 7908 | 2.1 | <0.00 | 0.04 | <0.051 | <0.0018 | 0.14 | 0.03 | 0.19 | <0.00 | 0.03 | 0.55 | <0.0033 | 1.2 | 0.73 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF13Pyr-23 | 0.39 | 1316 | 24 | 1.0 | 0.65 | <0.0119 | 7769 | <0.68 | <0.00 | <0.00 | <0.00 | 0 | <0.059 | <0.0056 | <0.108 | 0 | <0.0076 | 0.41 | <0.0032 | 0.04 | 0.01 |
| MF13Pyr-24 | <0.085 | 281 | 25 | 1.4 | 0.89 | <0.0116 | 6225 | 2.0 | <0.0269 | <0.00 | <0.00 | <0.0034 | 0.09 | <0.0086 | 0.17 | <0.0082 | 0.02 | 0.38 | <0.00 | 0.05 | 0.04 |
| MF13Pyr-25 | 0.21 | 14 | 6.7 | 1.1 | 1.4 | <0.0091 | 3730 | 2.2 | <0.00 | <0.00 | <0.048 | <0.0031 | <0.063 | 0.01 | 0.06 | <0.00 | 0 | 0.53 | <0.00 | <0.0124 | 0.01 |
| MF13Pyr-26 | 0.22 | 157 | 4.6 | 2.2 | 0.86 | <0.0126 | 5629 | 0.76 | <0.0184 | 0.18 | <0.00 | 0 | 0.06 | 0.91 | 0.46 | <0.00 | 0.03 | 0.27 | 0.01 | 13 | 4.0 |
| MF13Pyr-27 | 0.78 | 322 | 38 | 12 | 1.0 | 0.01 | 3997 | <0.63 | <0.0175 | 0.48 | <0.049 | 0 | <0.053 | 0.48 | 0.70 | 0.01 | 0.05 | 0.37 | 0.03 | 7.4 | 5.7 |
| MF13Pyr-28 | 0.16 | 225 | 39 | 0.25 | <0.29 | <0.0137 | 4111 | 0.70 | <0.0258 | 0.01 | <0.036 | <0.0033 | <0.048 | <0.0131 | 0.09 | <0.00 | <0.0057 | 0.48 | <0.0023 | 0.03 | 0.04 |
| MF13Pyr-29 | 0.31 | 57 | 21 | 0.46 | 0.84 | <0.0114 | 2695 | 1.5 | 0.01 | <0.00 | 0.03 | 0 | <0.065 | 0.01 | 0.15 | <0.00 | 0 | 0.33 | <0.0024 | 0.03 | 0.01 |
| MF13Pyr-30 | 32 | 2968 | 52 | 14 | 6.4 | 0.14 | 4980 | 2.4 | 0.03 | 0.37 | 0.05 | 0.02 | 8.1 | 0.34 | 2.1 | 1.3 | 0.03 | 0.36 | 0.01 | 4.7 | 9.9 |
| MF13Pyr-31 | 470 | 67 | 23 | 2.8 | 0.84 | 0.01 | 732 | 2.7 | 0.01 | 0.06 | <0.00 | 0.01 | 0.12 | 0.42 | 0.30 | 0.02 | 0 | 0.35 | 0 | 2.7 | 3.7 |
| MF13Pyr-32 | 16 | 59 | 46 | 3.8 | 1.1 | 0.01 | 1010 | 2.0 | 0.01 | <0.0077 | <0.055 | 0 | 0.10 | 0.03 | 0.19 | 0.01 | <0.0087 | 0.29 | <0.00 | 0.06 | 1.3 |
| MF13Pyr-33 | 1860 | 146 | 62 | 5.4 | 2.1 | <0.0116 | 589 | <1.02 | <0.027 | 0.19 | <0.053 | 0.01 | 0.19 | 0.76 | 3.0 | 0.03 | 0.03 | 0.48 | 0.01 | 10 | 32 |
| MF13Pyr-34 | 1.4 | 324 | 301 | 0.93 | 1.0 | <0.0058 | 1152 | 1.5 | <0.00 | 0.02 | 0.01 | <0.00 | 0.13 | 0.22 | 0.44 | <0.0115 | 0.01 | 0.49 | 0.09 | 19 | 1.3 |
| MF13Pyr-35 | 0.13 | 821 | 58 | 2.0 | 0.52 | 0 | 9817 | 0.92 | <0.0156 | 0.01 | <0.054 | 0 | 0.06 | 0.01 | 0.59 | <0.00 | 0.48 | 0.26 | <0.0020 | 0.02 | 1.3 |
| MF13Pyr-36 | 108 | 159 | 1.9 | 1.6 | 1.0 | <0.0080 | 3729 | 0.72 | <0.0184 | 0.03 | 0.01 | 0.04 | 0.08 | 0.11 | 0.17 | 0.01 | 0.05 | 0.43 | 0 | 1.0 | 13 |
| MF13Pyr-37 | 0.26 | 1.7 | 0.40 | 5.9 | 1.2 | 0.01 | 3053 | 2.2 | <0.0195 | <0.0054 | <0.039 | 0.02 | 5.0 | <0.0063 | 1.6 | 0.01 | 4.4 | 0.47 | 0 | 0.07 | 0.18 |
| MF13Pyr-38 | 0.83 | 4.6 | 0.80 | 9.7 | <0.31 | 0.01 | 3256 | 2.0 | <0.0200 | 0.04 | <0.00 | 1.3 | 0.62 | 0.05 | 1.3 | 0.01 | 6.4 | 0.33 | 0.04 | 1.9 | 0.76 |
| MF13Pyr-39 | 31 | 17 | 3.4 | 29 | 2.0 | 0.23 | 3635 | 1.8 | 0.01 | 2.2 | <0.041 | 0.22 | 41 | 1.8 | 4.6 | <0.0126 | 7.4 | 0.48 | 0.28 | 40 | 24 |
| MF13Pyr-40 | 0.50 | 2.0 | 0.33 | 14 | 0.45 | <0.0099 | 3716 | 1.8 | <0.00 | 0.03 | 0.03 | 0.01 | 9.7 | 0.08 | 1.6 | 0 | 7.9 | 0.45 | 0.01 | 4.0 | 0.51 |
| MF13Pyr-41 | 0.23 | 5.0 | 1.9 | 10 | 1.2 | 0.02 | 2506 | <0.62 | 0.02 | 0.02 | 0.01 | <0.0017 | 13 | 0.06 | 0.53 | <0.00 | 4.6 | 0.29 | <0.00 | 1.1 | 3.1 |
| MF13Pyr-42 | 222 | 172 | 12 | 6.1 | 1.7 | 0.03 | 1680 | 1.6 | <0.0203 | 0.02 | <0.040 | 2.1 | 0.55 | 0.18 | 0.68 | 0.15 | 1.5 | 0.32 | <0.0026 | 2.9 | 6.2 |
| MF13Pyr-43 | 33 | 95 | 33 | 71 | 2.6 | 0.05 | 3657 | 1.4 | 0.01 | 7.1 | <0.00 | 0.12 | 0.22 | 11 | 20 | 0.07 | 9.2 | 0.35 | 0.47 | 258 | 64 |
| MF13Pyr-44 | 248 | 10202 | 398 | 17 | 4.1 | 1.4 | 13113 | 2.6 | 0.15 | 0.51 | <0.063 | 5.4 | 267 | 1.2 | 3.1 | 1.2 | 0.17 | 0.42 | 0.01 | 12 | 41 |
| MF13Pyr-45 | 1365 | 521 | 10 | 14 | 3.3 | 0.13 | 3822 | <0.93 | 0.03 | 0.88 | 0.05 | 2.4 | 245 | 1.4 | 1.4 | 0.14 | 0.26 | 0.48 | 0.04 | 23 | 6.0 |
| MF13Pyr-46 | 249 | 445 | 103 | 2.1 | 0.84 | 0.02 | 5734 | 1.1 | <0.00 | 0.54 | 0.03 | 0.08 | 1.5 | 0.27 | 1.2 | 0.01 | 0.43 | 0.64 | 0 | 45 | 7.3 |
| MF13Pyr-47 | 287 | 665 | 180 | 2.6 | 1.3 | 0.27 | 6302 | 1.3 | <0.0174 | 0.05 | <0.035 | 2.4 | 204 | 0.19 | 0.46 | 0.02 | 0.18 | 0.37 | <0.0045 | 0.45 | 5.6 |
| MF13Pyr-48 | 335 | 37 | 240 | 3.7 | 1.3 | 0.10 | 12194 | <0.61 | <0.00 | 0.01 | <0.048 | 2.7 | 87 | 0.52 | 2.2 | 0.01 | 2.9 | 0.46 | 0 | 0.46 | 21 |
| MF13Pyr-49 | 159 | 1226 | 15 | 46 | 2.1 | 0.14 | 5286 | 0.76 | <0.0226 | 1.4 | <0.00 | 0.37 | 40 | 3.8 | 3.6 | 0.65 | 0.57 | 0.18 | 0.68 | 43 | 15 |
| MF13Pyr-50 | 1.5 | 2408 | 84 | 1.6 | 1.6 | <0.0085 | 11072 | 1.9 | <0.00 | 0.01 | <0.00 | 0.17 | 4.8 | 0.08 | 1.1 | 0 | 0.68 | 0.38 | <0.00 | 0.11 | 3.1 |
| MF13Pyr-51 | 0.19 | 3466 | 492 | <0.23 | 1.7 | <0.0076 | 6643 | 2.2 | <0.0175 | 0.01 | <0.00 | <0.0036 | <0.050 | <0.0114 | 0.10 | <0.00 | 0.01 | 0.50 | 0 | <0.0126 | <0.0039 |
| MF13Pyr-52 | 1.9 | 917 | 344 | 1.2 | 1.7 | 0.13 | 1252 | 0.82 | 0.01 | <0.0068 | 0.02 | 0 | 0.08 | 0.03 | 3.3 | <0.0074 | <0.0109 | 0.54 | 0.01 | 3.9 | 19 |
| MF13Pyr-53 | 0.39 | 932 | 543 | <0.195 | 1.3 | <0.0075 | 1367 | 1.1 | <0.0172 | <0.0068 | <0.034 | <0.0025 | 0.20 | 0.01 | 0.06 | 0.01 | 0.01 | 0.30 | 0 | <0.0119 | 0.17 |
| MF13Pyr-54 | 0.20 | 3955 | 602 | 0.53 | 1.3 | 0.01 | 6494 | 1.5 | <0.00 | 0 | 0.01 | <0.0017 | 28 | <0.0097 | 0.21 | 0 | 0.01 | 0.37 | <0.0022 | <0.0075 | 0.51 |
| MF13Pyr-55 | 14 | 488 | 162 | 3.9 | 1.6 | <0.0071 | 3953 | 2.7 | <0.00 | 0.16 | <0.00 | 0 | 0.24 | 0.03 | 0.53 | 0.05 | 0.05 | 0.39 | 0 | 0.43 | 1.3 |
| MF13Pyr-56 | <0.089 | 1755 | 261 | 1.3 | 0.99 | 0.28 | 4627 | 1.9 | <0.00 | 0.16 | <0.00 | 0.28 | 0.17 | 0.27 | 0.85 | <0.0081 | 0.08 | 0.22 | 0 | 11 | 2.5 |
| MF13Pyr-57 | 1.6 | 6933 | 214 | 9.6 | 283 | 0.02 | 8923 | 2.0 | 0.02 | 0.15 | 0.05 | 0.09 | 47 | 0.55 | 4.7 | 0.19 | 0.07 | <0.127 | 0.01 | 10 | 12 |
| MF13Pyr-58 | 0.40 | 576 | 132 | 0.72 | 1.9 | 0.01 | 4330 | 2.9 | 0.01 | <0.00 | <0.051 | 0 | 0.13 | <0.0059 | 0.28 | <0.0136 | 0.05 | 0.30 | <0.00 | 0.04 | 0.05 |
| MF13Pyr-59 | 0.69 | 2123 | 582 | 1.7 | 3.5 | 0.18 | 3708 | 0.65 | <0.00 | 0.05 | <0.00 | 0 | 15 | 0.30 | 3.5 | <0.00 | 0.04 | 0.31 | 0.01 | 3.6 | 12 |
| MF13Pyr-60 | 0.19 | 1654 | 636 | 3.0 | 0.99 | <0.0106 | 3382 | <0.68 | <0.00 | 0.85 | <0.049 | 0 | 0.06 | 2.3 | 2.4 | <0.0075 | 0.17 | 0.21 | 0.03 | 63 | 16 |
| **Mean n=60** | 117 | 867 | 106 | 8.1 | 6.6 | 0.13 | 5852 | 1.9 | 0 | 0.81 | 0 | 0.4 | 21 | 0.93 | 1.8 | 0.1 | 1.0 | 0.50 | 0.06 | 20 | 8.7 |
| **S.D** | 327 | 1703 | 168 | 12.6 | 38 | 0.28 | 3524 | 1.4 | 0 | 2.0 | 0 | 1.1 | 58 | 1.8 | 3.0 | 0.3 | 2.1 | 0.23 | 0.14 | 42 | 13 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Min** | 0.13 | 0.09 | 0.33 | 0.25 | 0.26 | 0 | 589 | 0.65 | 0.01 | 0 | 0.01 | 0 | 0.06 | 0.01 | 0.05 | 0 | 0 | 0.11 | 0 | 0.02 | 0 |
| **Max** | 1860 | 10202 | 636 | 71 | 283 | 1.4 | 14160 | 10 | 0.15 | 12 | 0.05 | 5.4 | 267 | 11 | 20 | 1.3 | 9.2 | 1.2 | 0.68 | 258 | 64 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF14Pyr-1 | 0.41 | 65 | 18 | 0.83 | 1.6 | <0.021 | 3407 | <1.27 | <0.00 | 0.02 | 0.03 | 0.63 | 4.2 | 0.13 | 1.2 | <0.0237 | 0.04 | <0.38 | <0.00 | 0.78 | 4.7 |
| MF14Pyr-2 | 1.1 | 1572 | 259 | 28 | 1.7 | <0.019 | 4786 | <1.32 | <0.071 | 0.83 | 0.01 | <0.0075 | 0.70 | 2.0 | 29 | 0.03 | 0.87 | <0.36 | 0.03 | 19 | 95 |
| MF14Pyr-3 | 0.24 | 323 | 17 | 9.8 | 1.4 | 0.03 | 1799 | 1.7 | <0.00 | 0.19 | <0.083 | 0 | 0.99 | 0.11 | 1.2 | <0.018 | 0.15 | <0.33 | 0.04 | 12 | 4.2 |
| MF14Pyr-4 | 0.50 | 131 | 23 | 21 | 0.82 | <0.0173 | 1998 | 1.3 | <0.00 | 0.74 | <0.00 | 0.03 | 3.0 | 1.0 | 4.7 | 0.04 | 0.45 | <0.29 | 0.05 | 45 | 17 |
| MF14Pyr-5 | <0.143 | 0.33 | 0.03 | 1.3 | 1.5 | <0.0170 | 10826 | 1.3 | 0.01 | <0.00 | 0.01 | 0 | 0.14 | 0.01 | 0.66 | <0.00 | 1.4 | 0.34 | <0.0046 | 0.05 | 0.03 |
| MF14Pyr-6 | 0.52 | 0.65 | 0.13 | 3.0 | 0.82 | <0.0173 | 10388 | <1.44 | 0.01 | 0.03 | 0.02 | 0 | 0.21 | <0.0193 | 0.57 | 0.01 | 1.7 | <0.30 | 0 | 0.23 | 0.08 |
| MF14Pyr-7 | 0.31 | 1.4 | 0.23 | 6.4 | 1.7 | 0.02 | 10146 | 2.2 | <0.039 | 0.16 | <0.00 | 0 | <0.102 | <0.0140 | 0.55 | 0.01 | 1.8 | <0.29 | <0.0048 | 0.19 | 0.70 |
| MF14Pyr-8 | 3 | 343 | 22 | 17 | 4.0 | 8.0 | 10301 | 2.3 | 0.01 | 0.43 | <0.122 | 0.04 | 7.7 | 1.1 | 5.6 | 2.2 | 1.9 | <0.47 | 0.18 | 35 | 24 |
| MF14Pyr-9 | 0.33 | 8.1 | 7.8 | 6.4 | 1.1 | 0.63 | 10012 | 1.7 | <0.00 | 0.07 | <0.00 | 0.02 | 4.2 | 0.67 | 2.0 | 0.15 | 0.62 | 0.28 | 0.02 | 11 | 6.1 |
| MF14Pyr-10 | 0.24 | 32 | 10 | 7.6 | 0.53 | 0.19 | 10342 | 2.4 | <0.00 | 0.12 | <0.00 | 0.01 | 1.5 | 0.88 | 2.8 | 0.10 | 0.75 | <0.30 | 0.03 | 23 | 9.5 |
| MF14Pyr-11 | <0.198 | 0.08 | 0.21 | 598 | 5.6 | 1.6 | 55 | <1.67 | <0.00 | 0.07 | 0.03 | 2.3 | 498 | 0.25 | 9.3 | <0.029 | 0.06 | <0.35 | <0.0082 | 0.04 | 20 |
| MF14Pyr-12 | 0.54 | 1.6 | 1.6 | 1957 | 15 | 14 | 17 | 2.1 | 0.01 | 0.15 | 0.05 | 7.3 | 1418 | 0.68 | 1.5 | 0 | 0.22 | 0.36 | <0.0077 | 0.13 | 12 |
| MF14Pyr-13 | 0.48 | 0.07 | 0.14 | 123 | 3.5 | 8.4 | 20 | <1.69 | <0.00 | 0.02 | <0.090 | 0.44 | 79 | 0.12 | 10 | <0.0284 | 0.07 | <0.32 | <0.00 | 0.04 | 19 |
| MF14Pyr-14 | 0.19 | 6.7 | 8.3 | 3.3 | 1.1 | 0.04 | 525 | 1.8 | 0.01 | 0.01 | 0.03 | 0.01 | 3.2 | 0.01 | 0.41 | <0.019 | 0.02 | <0.33 | <0.0054 | 0.07 | 1.3 |
| MF14Pyr-15 | 1.1 | 41 | 39 | 42 | 1.3 | 0.09 | 5549 | 1.6 | <0.039 | 0.12 | 0.01 | 0.01 | 1.2 | 0.50 | 4.4 | 0.01 | 0.35 | <0.26 | 0 | 1.8 | 18 |
| MF14Pyr-16 | 0.40 | 383 | 172 | 19 | 1.6 | <0.0215 | 11443 | 1.7 | <0.047 | 0.29 | <0.133 | 0 | 1.0 | 0.34 | 1.3 | <0.021 | 0.82 | 0.44 | <0.0082 | 16 | 9.1 |
| MF14Pyr-17 | 0.25 | 5.5 | 1.8 | 8.6 | 1.2 | <0.0172 | 10424 | 2.1 | 0.01 | 0.16 | <0.075 | <0.0040 | 0.26 | 0.05 | 0.47 | <0.00 | 1.1 | <0.28 | 0 | 1.8 | 1.3 |
| MF14Pyr-18 | 0.15 | 5.1 | 0.84 | 5.7 | 1.1 | <0.0163 | 10111 | 1.3 | 0.01 | 0.19 | <0.00 | 0.01 | <0.092 | 0.05 | 0.72 | <0.0159 | 1.3 | <0.28 | 0.01 | 1.8 | 3.5 |
| MF14Pyr-19 | 0.33 | 13 | 1.7 | 0.68 | 1.9 | 0.02 | 12328 | 1.9 | <0.00 | <0.0194 | <0.152 | <0.00 | <0.139 | <0.016 | 0.36 | 0.01 | 1.3 | 0.32 | <0.00 | 0.12 | 0.06 |
| MF14Pyr-20 | 0.46 | 15 | 5.0 | 8.1 | 2.5 | 3.6 | 11319 | 2.4 | 0.01 | 0.17 | <0.00 | 0.04 | 11 | 0.84 | 1.8 | 0.36 | 1.8 | 0.44 | 0.07 | 17 | 10 |
| MF14Pyr-21 | <0.174 | 17 | 1.9 | <0.60 | 0.76 | 0.01 | 8296 | <1.57 | 0.01 | 0 | <0.00 | <0.00 | <0.090 | <0.0151 | 0.72 | <0.0187 | 0.49 | <0.40 | <0.0051 | 0.03 | <0.0095 |
| MF14Pyr-22 | 0.24 | 21 | 2.0 | <0.34 | 1.1 | 0 | 7341 | <1.30 | <0.00 | <0.0118 | <0.00 | <0.0040 | <0.090 | 0 | 0.52 | <0.00 | 0.49 | <0.32 | <0.0047 | <0.026 | 0.03 |
| MF14Pyr-23 | <0.166 | 31 | 2.4 | 1.1 | 1.3 | <0.0217 | 8455 | <1.37 | 0.01 | 0 | <0.00 | <0.00 | <0.099 | 0 | 0.38 | <0.0173 | 0.81 | <0.29 | <0.0095 | <0.0177 | 0.03 |
| MF14Pyr-24 | 2 | 100 | 15 | 2.9 | 1.6 | 0.10 | 11253 | <1.40 | <0.00 | 0.02 | <0.082 | 0 | <0.097 | 0.15 | 2.4 | <0.00 | 0.24 | <0.32 | 0 | 2.1 | 8.1 |
| MF14Pyr-25 | 0.29 | 17 | 1.0 | 0.92 | 1.4 | <0.0133 | 14196 | <1.46 | 0.01 | <0.0181 | 0.02 | 0 | 0.18 | 0 | <0.115 | <0.00 | 0.03 | 0.43 | 0 | 0.03 | 0.09 |
| MF14Pyr-26 | 0.32 | 21 | 5.5 | 1.1 | 2.3 | <0.0139 | 13230 | <1.47 | <0.00 | 0.11 | <0.00 | <0.0065 | <0.104 | 0.19 | 0.49 | 0.01 | 0.15 | <0.31 | <0.0075 | 19 | 2.0 |
| MF14Pyr-27 | <0.191 | 285 | 30 | 11 | 1.8 | <0.0279 | 11123 | 1.9 | <0.00 | 0.41 | <0.00 | 0 | 12 | 0.18 | 1.1 | 0.02 | 0.55 | <0.31 | 0 | 6.4 | 3.4 |
| MF14Pyr-28 | 6.4 | 153 | 30 | 98 | 0.81 | 0.07 | 11296 | <2.03 | 0.01 | 2.3 | <0.00 | 0.06 | 14 | 1.3 | 12 | 0.23 | 1.5 | <0.38 | 0.28 | 111 | 46 |
| MF14Pyr-29 | 0.58 | 92 | 18 | 22 | 1.5 | 0.03 | 12103 | <1.24 | <0.039 | 0.52 | <0.00 | 0 | 0.36 | 0.27 | 1.6 | 0.02 | 1.0 | <0.29 | 0.06 | 7.0 | 7.2 |
| MF14Pyr-30 | 0.61 | 158 | 42 | 6.4 | 2.2 | 0 | 8623 | 3.0 | <0.052 | 0.17 | <0.00 | <0.0055 | 0.14 | 0.09 | 1.5 | <0.0166 | 2.8 | <0.27 | 0 | 1.6 | 1.0 |
| MF14Pyr-31 | 0.15 | 786 | 495 | 5.9 | 1.5 | <0.0122 | 6748 | <1.43 | 0.02 | 0.25 | 0.02 | 0 | 0.12 | 0.06 | 1.6 | 0.01 | 0.78 | <0.27 | 0 | 3.8 | 3.5 |
| MF14Pyr-32 | <0.144 | 69 | 19 | 0.68 | 0.64 | <0.0174 | 10151 | 1.5 | 0.01 | <0.0118 | <0.00 | 0 | <0.095 | 0 | 0.15 | <0.00 | 0.04 | 0.33 | <0.00 | <0.023 | 0.20 |
| MF14Pyr-33 | 0.19 | 54 | 12 | 0.32 | 1.6 | <0.0165 | 12205 | 1.4 | <0.00 | <0.00 | 0.01 | 0 | <0.077 | 0 | <0.101 | <0.0161 | 0.05 | <0.29 | <0.0076 | <0.0165 | <0.0066 |
| MF14Pyr-34 | 0.20 | 67 | 48 | 8.9 | 1.1 | 0.01 | 7255 | 4.8 | <0.038 | 0.77 | <0.00 | 0 | 0.10 | 1.1 | 2.9 | 0 | 0.24 | <0.27 | 0.05 | 105 | 11 |
| MF14Pyr-35 | 0.34 | 83 | 46 | 2.4 | 0.90 | 1.3 | 7814 | 4.0 | 0.01 | 0.06 | 0.01 | 0.03 | 5.2 | 0.48 | 2.9 | 0.30 | 0.06 | <0.31 | 0.05 | 16 | 9.9 |
| MF14Pyr-36 | 1.4 | 313 | 64 | 15 | 2.3 | 3.8 | 9932 | 3.6 | 0.02 | 0.54 | <0.00 | 0.03 | 8.7 | 1.4 | 13 | 0.87 | 2.7 | <0.35 | 0.17 | 59 | 39 |
| MF14Pyr-37 | 0.46 | 93 | 39 | 26 | 1.7 | <0.0206 | 270 | <1.48 | 0.01 | 1.3 | 0.05 | <0.0083 | 0.58 | 1.3 | 5.2 | 0.03 | 0.84 | 0.37 | 0.12 | 52 | 18 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF14Pyr-38 | 3.4 | 201 | 24 | 28 | 1.5 | 0.02 | 302 | 2.2 | 0.21 | 0.91 | 0.01 | <0.0066 | 0.86 | 0.98 | 10 | 0.08 | 0.51 | <0.35 | 0.07 | 34 | 21 |
| MF14Pyr-39 | 1.4 | 3083 | 164 | 52 | 2.7 | 0.11 | 6600 | 2.3 | 0.01 | 0.73 | <0.00 | 1.5 | 1.5 | 1.1 | 5.0 | 0.24 | 0.73 | <0.43 | 0.03 | 20 | 24 |
| MF14Pyr-40 | 0.34 | 157 | 51 | 3.6 | 1.1 | <0.030 | 6233 | 1.9 | <0.00 | 0.04 | <0.074 | 0.17 | 25 | 0.57 | 4.0 | <0.00 | 0.56 | <0.26 | 0 | 1.7 | 14 |
| MF14Pyr-41 | <0.184 | 96 | 22 | <0.45 | 0.51 | <0.0194 | 8905 | 1.6 | <0.00 | 0 | <0.00 | <0.0063 | <0.118 | <0.0154 | 1.1 | <0.00 | 0.30 | <0.37 | <0.0052 | <0.019 | 0.12 |
| MF14Pyr-42 | 0.17 | 26 | 15 | 0.96 | 1.1 | <0.0185 | 1724 | <1.45 | 0.33 | 0.01 | <0.00 | <0.0043 | 0.14 | 0.02 | 0.11 | 0.01 | 0.03 | <0.35 | <0.00 | 0.05 | 0.66 |
| MF14Pyr-43 | 0.22 | 423 | 626 | 4.7 | 0.86 | <0.030 | 8183 | 2.0 | 2.3 | 0.03 | <0.081 | 0.04 | 2.2 | 0.73 | 2.7 | 7.1 | 0.93 | <0.30 | 0 | 1.2 | 23 |
| MF14Pyr-44 | 0.48 | 659 | 937 | 8.4 | 0.93 | <0.027 | 7401 | 3.1 | 0.04 | 0.09 | <0.082 | 0.01 | 0.55 | 0.34 | 1.7 | 0.64 | 0.22 | 0.36 | 0.01 | 8.0 | 7.0 |
| MF14Pyr-45 | 0.18 | 19 | 16 | 1.4 | 1.6 | <0.0144 | 777 | <1.58 | 0.01 | 0.03 | 0.01 | <0.0066 | 1.7 | 0.12 | 0.29 | 0.03 | 0.02 | <0.32 | 0 | 3.0 | 0.96 |
| MF14Pyr-46 | 0.32 | 87 | 57 | 6.0 | 0.84 | 0.25 | 5464 | 1.8 | 0.02 | 0.08 | 0.02 | 0 | 0.90 | 0.30 | 1.2 | 6.7 | 0.11 | <0.34 | 0.01 | 6.1 | 5.2 |
| MF14Pyr-47 | 0.38 | 36 | 5.3 | 4.2 | 0.73 | 2.0 | 6942 | 1.4 | 0.01 | 0.02 | <0.00 | 0.01 | 1.8 | 0.10 | 0.85 | 0.65 | 0.37 | <0.27 | 0.01 | 4.4 | 3.5 |
| MF14Pyr-48 | 0.70 | 817 | 33 | 2.4 | 1.4 | 0.04 | 2811 | <1.26 | 0.05 | 0.03 | <0.00 | 0 | 0.85 | 0.17 | 2.0 | 0.01 | 0.04 | <0.32 | <0.00 | 0.36 | 10 |
| MF14Pyr-49 | 13 | 5019 | 277 | 33 | 10 | 55 | 4753 | <3.07 | 0.04 | 0.42 | 0.02 | 0.33 | 96 | 2.3 | 13 | 8.4 | 0.20 | <0.69 | 0.55 | 6.4 | 34 |
| MF14Pyr-50 | 1.6 | 992 | 59 | 5.0 | 1.8 | 4.0 | 2108 | <1.74 | 0.05 | 0.15 | <0.093 | 0.05 | 13 | 0.17 | 0.78 | 0.57 | 0.12 | 0.39 | 0.08 | 2.6 | 4.5 |
| MF14Pyr-51 | 0.70 | 1886 | 92 | 5.8 | 1.4 | 0.39 | 2231 | <1.36 | 0.05 | 0.21 | <0.00 | 0 | 0.76 | 0.30 | 3.7 | 0.09 | 0.10 | <0.32 | <0.0050 | 2.8 | 15 |
| MF14Pyr-52 | 0.39 | 132 | 17 | 3.3 | 2.0 | 0.08 | 776 | <1.30 | <0.00 | 0.02 | <0.072 | <0.0055 | 2.3 | 0.14 | 1.8 | 7.4 | 0.03 | <0.25 | <0.0045 | 0.38 | 5.8 |
| MF14Pyr-53 | <0.162 | 561 | 6.5 | 2.8 | 0.92 | 0.15 | 816 | <1.38 | 0.12 | 0.01 | <0.078 | 0 | 0.37 | 0.11 | 0.29 | 3.0 | 0.03 | <0.29 | 0 | 0.16 | 2.7 |
| MF14Pyr-54 | 0.30 | 209 | 36 | 1.2 | 1.3 | 0.04 | 827 | <1.32 | 0.02 | <0.00 | <0.00 | <0.0040 | 0.22 | 0.03 | 0.18 | <0.024 | 0.02 | <0.27 | <0.00 | 0.06 | 1.1 |
| MF14Pyr-55 | 0.44 | 1365 | 24 | 2.3 | 0.78 | 0.23 | 1734 | <1.50 | <0.047 | 0 | <0.00 | 0 | 0.23 | 0.12 | 0.31 | 1.4 | 0.02 | 0.41 | 0 | 0.22 | 3.0 |
| MF14Pyr-56 | 0.86 | 2882 | 179 | 13 | 2.3 | 5.7 | 3332 | <1.73 | <0.00 | 0.20 | <0.00 | 0.05 | 17 | 1.2 | 0.97 | 0.60 | 0.06 | <0.39 | 0.09 | 3.5 | 13 |
| MF14Pyr-57 | 2.2 | 542 | 159 | 1.8 | 1.7 | 0.13 | 7757 | 2.4 | 0.07 | 0.02 | <0.00 | 0 | 1.0 | 0.31 | 10 | 0.07 | 0.11 | <0.28 | 0 | 2.9 | 3.4 |
| MF14Pyr-58 | 1.9 | 6553 | 504 | 12 | 2.3 | 5.9 | 8680 | <1.59 | 0.06 | 0.21 | <0.00 | 0.11 | 22 | 0.88 | 8.1 | 2.3 | 0.11 | <0.31 | 0.09 | 16 | 31 |
| MF14Pyr-59 | 0.43 | 986 | 24 | 1.5 | 1.4 | 0.04 | 1194 | <1.51 | 0.04 | <0.0147 | 0.01 | <0.0049 | 0.30 | 0.12 | 1.1 | 0.05 | 0.07 | <0.34 | <0.0056 | 0.22 | 5.0 |
| MF14Pyr-60 | 0.74 | 7493 | 538 | 1.4 | 0.93 | 0.05 | 8343 | 1.7 | 0.48 | <0.00 | <0.00 | <0.00 | 0.12 | 0.02 | 0.43 | 0.01 | 0 | 0.34 | <0.00 | 0.15 | 2.2 |
| MF14Pyr-61 | 0.23 | 3156 | 101 | 3.9 | 0.83 | 0.94 | 3773 | <1.47 | <0.00 | 0.12 | <0.118 | 0.01 | 3.5 | 0.22 | 0.56 | 7.0 | 0.06 | 0.47 | 0.02 | 1.0 | 1.2 |
| MF14Pyr-62 | 2.4 | 6444 | 1621 | 4.0 | 2.8 | 9.4 | 9969 | 3.7 | <0.046 | 0.15 | 0.03 | 0.01 | 5.2 | 0.27 | 0.77 | 1.2 | 0.05 | <0.36 | 0.06 | 1.0 | 2.1 |
| MF14Pyr-63 | 0.84 | 1309 | 2.3 | 1.6 | 1.1 | <0.031 | 1449 | <1.31 | <0.00 | <0.00 | 0.01 | <0.0058 | 0.30 | <0.00 | 0.05 | 0.12 | 0 | 0.34 | <0.0047 | 0.08 | 0.03 |
| MF14Pyr-64 | 0.17 | 81 | 15 | 12 | 1.3 | 0.47 | 15414 | <1.41 | <0.041 | 0.34 | <0.00 | 0.01 | 0.59 | 0.52 | 1.4 | 3.1 | 0.36 | <0.30 | 0.01 | 19 | 5.4 |
| MF14Pyr-65 | 1.6 | 713 | 368 | 41 | 1.7 | 3.3 | 8823 | 2.7 | 0.02 | 1.4 | <0.00 | 0.06 | 17 | 5.1 | 35 | 0.57 | 2.0 | <0.29 | 0.08 | 42 | 101 |
| MF14Pyr-66 | 0.42 | 267 | 121 | 4.2 | 0.98 | 0.03 | 9124 | 2.4 | 0.01 | 0.19 | <0.135 | 0 | 0.40 | 0.75 | 14 | 0 | 0.79 | <0.28 | <0.0069 | 2.4 | 50 |
| MF14Pyr-67 | 0.83 | 122 | 54 | 1.9 | 1.4 | 0.02 | 8629 | 1.8 | 0.02 | <0.0180 | 0.01 | 0.01 | 0.51 | 0.31 | 5.5 | 0.01 | 0.41 | <0.29 | 0 | 0.43 | 22 |
| MF14Pyr-68 | 2.5 | 163 | 85 | 30 | 3.5 | 9.2 | 5756 | <1.55 | 0.79 | 1.1 | 0.07 | 0.15 | 31 | 4.3 | 27 | 32 | 0.66 | <0.39 | 0.22 | 107 | 75 |
| MF14Pyr-69 | 11 | 551 | 150 | 31 | 8.9 | 204 | 1703 | <7.99 | 0.09 | 0.80 | 0.12 | 0.67 | 171 | 4.5 | 13 | 42 | 0.47 | <1.61 | 0.66 | 12 | 31 |
| MF14Pyr-70 | 4.4 | 278 | 60 | 31 | 4.8 | 22 | 5879 | <2.02 | 0.10 | 0.91 | <0.00 | 0.37 | 29 | 2.8 | 6.6 | 12 | 0.73 | <0.38 | 0.21 | 17 | 14 |
| MF14Pyr-71 | 4.3 | 1017 | 57 | 6.3 | 2.4 | 0.06 | 6907 | 1.7 | <0.042 | 0.20 | <0.082 | 0.02 | 0.34 | 0.34 | 3.4 | 0.03 | 0.74 | 0.34 | 0.01 | 3.1 | 16 |
| MF14Pyr-72 | 1.6 | 1630 | 152 | 13 | 2.1 | 0.02 | 7326 | 1.3 | <0.040 | 0.94 | 0.01 | <0.0073 | 0.42 | 2.1 | 29 | 0.03 | 0.65 | <0.30 | 0.11 | 52 | 66 |
| MF14Pyr-73 | 0.22 | 26 | 0.39 | 1.4 | 1.6 | 0.01 | 11379 | 3.1 | <0.00 | <0.00 | <0.107 | <0.0072 | <0.080 | 0.01 | 2.7 | <0.00 | 2.4 | <0.27 | <0.00 | 0.11 | 0.08 |
| MF14Pyr-74 | 0.31 | 413 | 92 | 0.56 | 1.0 | 0.04 | 5438 | 1.4 | <0.035 | 0.01 | <0.00 | 1.5 | <0.087 | 0.24 | 1.8 | <0.0275 | 3.7 | 0.36 | 0 | <0.022 | 2.4 |
| MF14Pyr-75 | 0.53 | 63 | 41 | 1.2 | 1.6 | 0.01 | 9525 | <1.42 | <0.00 | 0.04 | <0.116 | 0.13 | 53 | 0.13 | 1.1 | 0 | 0.06 | 0.33 | <0.0051 | 0.14 | 6.1 |
| MF14Pyr-76 | 0.74 | 34 | 20 | 4.0 | 1.7 | <0.0234 | 9446 | 1.4 | <0.00 | 0.04 | 0.05 | 0.88 | 9.4 | 0.18 | 2.0 | 0.06 | 0.03 | <0.33 | 0 | 0.31 | 12 |
| MF14Pyr-77 | 0.99 | 1026 | 109 | 8.4 | 1.3 | 1.5 | 7492 | 1.4 | 0.03 | 0.20 | <0.070 | 0.02 | 6.1 | 2.6 | 5.9 | 0.49 | 0.17 | 0.26 | 0.06 | 40 | 33 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF14Pyr-78 | 0.21 | 76 | 13 | 3.0 | 2.2 | <0.025 | 6328 | <1.37 | <0.00 | 0.19 | <0.00 | 0.24 | 8.0 | 0.66 | 4.1 | <0.020 | 0.07 | 0.32 | 0.01 | 12 | 14 |
| MF14Pyr-79 | 0.90 | 976 | 276 | 12 | 1.8 | 0.37 | 13044 | <1.25 | 0.01 | 0.43 | <0.00 | 0.86 | 72 | 0.38 | 3.4 | <0.029 | 0.34 | <0.29 | 0.02 | 22 | 19 |
| MF14Pyr-80 | 0.49 | 5460 | 625 | 17 | 6.2 | 1.8 | 9906 | <1.90 | 0.01 | 0.49 | 0.03 | 3.7 | 722 | 1.0 | 4.1 | 0.06 | 0.63 | <0.37 | 0.01 | 14 | 20 |
| **Mean n=80** | 27 | 839 | 113 | 46 | 5.5 | 6.7 | 6789 | 2.3 | 0 | 0.47 | 0 | 0 | 43 | 0.8 | 4.7 | 2.5 | 0.7 | 0.39 | 0 | 17 | 15 |
| **S.D** | 219 | 1822 | 242 | 231 | 31 | 28 | 4139 | 1.4 | 0 | 1.5 | 0 | 1.2 | 185 | 1.6 | 7.2 | 7.2 | 1.2 | 0.20 | 0 | 37 | 21 |
| **Min** | 0.13 | 0.07 | 0.03 | 0.25 | 0.26 | 0 | 17 | 0.65 | 0.01 | 0 | 0.01 | 0 | 0.06 | 0 | 0.05 | 0 | 0 | 0.11 | 0 | 0.02 | 0 |
| **Max** | 1860 | 10202 | 1621 | 1957 | 283 | 204 | 15414 | 10 | 2.3 | 12 | 0.12 | 7.3 | 1418 | 11 | 35 | 42 | 9.2 | 1.2 | 0.68 | 258 | 101 |

| Sample # | $^{55}$Mn | $^{59}$Co | $^{60}$Ni | $^{65}$Cu | $^{66}$Zn | $^{69}$Ga | $^{75}$As | $^{82}$Se | $^{95}$Mo | $^{107}$Ag | $^{111}$Cd | $^{115}$In | $^{118}$Sn | $^{121}$Sb | $^{125}$Te | $^{184}$W | $^{197}$Au | $^{202}$Hg | $^{205}$Tl | $^{208}$Pb | $^{209}$Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF15Pyr-1 | 1 | 2694 | 51 | 1.1 | 1.3 | 1.0 | 4179 | <1.39 | <0.076 | <0.0115 | 0.03 | 7.2 | 172 | 0.04 | 0.18 | 0.02 | <0.00 | <0.37 | <0.0083 | 0.74 | 0.08 |
| MF15Pyr-2 | 7.6 | 52 | 19 | 5.8 | 2.8 | 0.10 | 3453 | <1.38 | 0.12 | 0.25 | 0.02 | 0.60 | 117 | 0.73 | 3.7 | 0.02 | 0.21 | <0.31 | 0.01 | 7.5 | 22 |
| MF15Pyr-3 | 17 | 1505 | 26 | 6.6 | 1.1 | 0.12 | 4659 | <1.27 | 1.1 | 0.01 | 0.02 | 0.63 | 71 | 0.45 | 1.7 | 0.02 | 0.20 | 0.34 | 0 | 1.7 | 20 |
| MF15Pyr-4 | 11 | 389 | 4.6 | 4.0 | 0.88 | 0.07 | 3955 | <1.22 | 0.30 | 0.01 | <0.079 | 0.62 | 105 | 0.26 | 1.6 | 0.03 | 0.12 | <0.34 | <0.0068 | 0.61 | 9.4 |
| MF15Pyr-5 | 1.8 | 2507 | 17 | 3.5 | 1.2 | 0.04 | 4876 | <1.20 | 0.42 | 0 | <0.075 | 0.30 | 47 | 0.13 | 0.58 | 0.01 | 0.08 | 0.40 | <0.00 | 0.31 | 5.6 |
| MF15Pyr-6 | <0.151 | 701 | 2.2 | 3.4 | 1.5 | 0.27 | 5019 | <1.36 | <0.038 | 0 | <0.00 | 0.37 | 70 | 0.02 | <0.148 | <0.00 | <0.00 | <0.28 | <0.0048 | 0.10 | 0.33 |
| MF15Pyr-7 | 0.18 | 138 | 2.3 | 0.71 | 0.75 | 0.06 | 3331 | <1.26 | <0.052 | 0 | <0.00 | 0.34 | 68 | 0.10 | 0.21 | 0 | 0.01 | 0.31 | 0 | 0.12 | 1.8 |
| MF15Pyr-8 | 0.60 | 84 | 3.8 | 2.3 | 1.1 | 0.05 | 1840 | <1.39 | 0.05 | <0.0206 | <0.114 | 1.0 | 38 | 0.16 | 0.21 | 0.01 | 0.03 | <0.29 | 0 | 0.16 | 2.7 |
| MF15Pyr-9 | 0.18 | 48 | 16 | 0.68 | 1.3 | <0.023 | 2284 | <1.52 | 0.01 | <0.0179 | 0.01 | 0.86 | 87 | 0.06 | <0.200 | 0.01 | 0.01 | <0.35 | 0 | 0.03 | 0.15 |
| MF15Pyr-10 | 0.25 | 612 | 40 | 1.4 | 0.63 | 0.04 | 2838 | <1.31 | <0.038 | <0.00 | <0.00 | 0.37 | 7.8 | 0.06 | 0.07 | 0.02 | <0.0147 | 0.34 | <0.00 | 0.06 | 0.09 |
| MF15Pyr-11 | 0.27 | 2.2 | 0.54 | 1.5 | 1.3 | 0.05 | 1974 | <1.51 | 0.10 | 0 | 0.02 | 1.7 | 55 | 0.19 | 0.18 | 0.77 | 0.03 | <0.37 | <0.00 | 0.16 | 2.5 |
| MF15Pyr-12 | 0.37 | 40 | 2.2 | 0.80 | 1.5 | 0.03 | 2987 | 1.4 | <0.060 | 0 | 0.03 | 0.56 | 34 | 0.06 | 0.32 | 0.69 | 0.05 | <0.34 | 0 | 0.08 | 2.5 |
| MF15Pyr-13 | 47 | 39 | 12 | 2.3 | 1.7 | 0.07 | 2432 | 2.8 | 0.38 | <0.019 | <0.00 | 0.03 | 20 | 0.22 | 0.33 | 0.06 | <0.017 | <0.33 | 0 | 0.20 | 3.7 |
| MF15Pyr-14 | 1 | 66 | 25 | 1.4 | 1.3 | <0.020 | 2770 | <1.79 | 0.01 | 0 | 0.01 | 0.81 | 60 | 0.09 | 0.12 | <0.00 | <0.0172 | <0.33 | <0.00 | 0.02 | 0.40 |
| MF15Pyr-15 | 0.91 | 152 | 15 | 0.47 | 1.3 | 0.09 | 2762 | <1.61 | 0.01 | <0.0138 | <0.00 | 0.28 | 51 | <0.028 | 0.03 | <0.00 | 0 | <0.32 | 0 | 0.09 | 0.59 |
| MF15Pyr-16 | 1.3 | 1071 | 46 | 3.7 | 2.1 | 0.11 | 2505 | <1.42 | 0.12 | 0.62 | 0.48 | 0.02 | 26 | 0.08 | 0.38 | 1.3 | 0.04 | <0.32 | <0.0056 | 2.3 | 4.0 |
| MF15Pyr-17 | 0.55 | 173 | 47 | 1.5 | 3.3 | 0.42 | 961 | <1.62 | <0.00 | 0.01 | 0.01 | 0.23 | 32 | 0.07 | 0.26 | 0.11 | <0.0182 | <0.34 | <0.00 | 0.17 | 1.8 |
| MF15Pyr-18 | 0.58 | 162 | 52 | 3.2 | 1.4 | 0.22 | 573 | <1.52 | 0.01 | 0.01 | <0.00 | 0.05 | 17 | 0.07 | 0.09 | 0.02 | 0.01 | <0.40 | 0.01 | 0.10 | 1.6 |
| MF15Pyr-19 | 0.93 | 147 | 25 | 2.8 | 2.1 | 0.06 | 674 | <1.25 | 0.66 | 0.02 | 0.02 | 0.08 | 16 | 0.32 | 1.1 | 0.05 | <0.0229 | <0.31 | 0 | 3.7 | 11 |
| MF15Pyr-20 | 1 | 550 | 46 | 4.4 | 1.7 | 0.18 | 2353 | 1.5 | 0.24 | 0.02 | <0.00 | 0.10 | 1.3 | <0.0154 | <0.119 | 0.01 | <0.00 | 0.32 | <0.0054 | 1.7 | 2.1 |
| MF15Pyr-21 | 0.32 | 441 | 15 | 2.6 | <0.52 | <0.037 | 1215 | <1.45 | 0.03 | 0 | <0.00 | 0.12 | 5.3 | <0.0167 | <0.225 | <0.030 | 0 | <0.43 | <0.0059 | 0.12 | 0.09 |
| MF15Pyr-22 | 0.52 | 25 | 19 | 5.9 | 1.3 | 1.1 | 1161 | <1.59 | 0.02 | <0.0149 | <0.100 | 0.11 | 32 | 0.09 | 0.20 | 0.17 | 0.01 | <0.40 | 0 | 0.30 | 3.9 |
| MF15Pyr-23 | 0.18 | 105 | 52 | 2.4 | 1.3 | 0.03 | 1095 | <1.46 | 0.03 | <0.0142 | <0.095 | 0.11 | 31 | 0.04 | 0.18 | <0.00 | 0.01 | <0.37 | 0 | 0.13 | 0.27 |
| MF15Pyr-24 | 0.19 | 46 | 14 | 0.91 | 1.1 | 0.11 | 1141 | <1.40 | 0.03 | <0.00 | <0.00 | 0.16 | 32 | <0.0155 | 0.11 | <0.00 | 0.01 | <0.35 | <0.00 | 0.05 | 0.28 |
| MF15Pyr-25 | <0.169 | 27 | 7.0 | <0.42 | 1.6 | <0.024 | 1992 | <1.43 | <0.043 | 0 | 0.01 | 0.09 | 50 | 0.05 | 0.05 | <0.00 | 0.01 | <0.35 | <0.0053 | <0.028 | 0.30 |
| MF15Pyr-26 | <0.178 | 19 | 7.6 | 0.85 | 0.95 | 0.04 | 1792 | <1.31 | <0.00 | <0.00 | <0.085 | 0.24 | 2.2 | 0.01 | 0.07 | 0 | 0 | <0.34 | <0.00 | 0.14 | 0.04 |
| MF15Pyr-27 | 0.30 | 9.8 | 5.0 | 1.1 | 0.87 | <0.029 | 2250 | <1.53 | <0.00 | 0 | 0.03 | <0.0047 | 17 | 0.02 | <0.00 | 0.01 | <0.00 | <0.38 | <0.00 | 0.03 | 0.12 |
| MF15Pyr-28 | 0.34 | 65 | 30 | 0.63 | 0.85 | 0.12 | 3016 | <1.50 | <0.00 | <0.0192 | 0.03 | 0.15 | 27 | 0.14 | <0.123 | <0.00 | <0.00 | <0.33 | <0.0055 | 0.04 | 0.09 |
| MF15Pyr-29 | 0.27 | 142 | 38 | <0.43 | 0.58 | <0.029 | 2723 | 1.7 | <0.063 | <0.00 | 0.03 | 0.06 | 6.6 | <0.0226 | 0.05 | <0.00 | <0.00 | <0.34 | <0.0096 | 0.14 | 0.09 |
| MF15Pyr-30 | 0.59 | 492 | 50 | 1.1 | 0.46 | <0.0134 | 2140 | <1.39 | 0.03 | 0.01 | <0.00 | 0.01 | 25 | <0.021 | 0.18 | 0.01 | <0.00 | <0.31 | 0 | 0.57 | 0.22 |
| MF15Pyr-31 | 1.8 | 543 | 109 | 2.5 | 2.1 | <0.030 | 1872 | <1.63 | <0.067 | 0.04 | <0.096 | 0.30 | 63 | 0.02 | 0.18 | 0 | 0.02 | <0.33 | 0 | 1.4 | 0.32 |
| MF15Pyr-32 | 0.46 | 1328 | 58 | 2.8 | 1.0 | 0.05 | 2680 | <1.49 | <0.063 | 0.01 | 0.03 | 0.58 | 22 | <0.016 | 0.07 | 0 | <0.0176 | <0.35 | <0.0056 | 0.11 | 0.53 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF15Pyr-33 | <0.178 | 1170 | 36 | 3.2 | 0.52 | 0.06 | 2525 | <1.58 | 0.01 | <0.0136 | <0.00 | 0.05 | 47 | 0.03 | <0.00 | <0.00 | <0.00 | <0.33 | <0.00 | 0.19 | 0.01 |
| MF15Pyr-34 | <0.160 | 437 | 63 | 0.85 | 1.4 | 0.05 | 1981 | <1.60 | 0.01 | <0.00 | 0.03 | 0.03 | 22 | <0.0223 | <0.122 | 0.01 | 0 | <0.35 | <0.0134 | <0.028 | 0.02 |
| MF15Pyr-35 | <0.189 | 343 | 81 | 2.9 | 1.5 | <0.027 | 1958 | 1.6 | 0.01 | <0.0146 | 0.01 | 0.08 | 31 | 0 | <0.132 | <0.037 | <0.00 | <0.37 | 0 | 0.44 | 0.03 |
| MF15Pyr-36 | 0.31 | 257 | 112 | 1.1 | 3.6 | 0.55 | 1881 | <1.52 | <0.00 | 0 | <0.089 | 4.8 | 246 | 0.21 | <0.172 | <0.0195 | 0 | 0.40 | <0.00 | 0.24 | 0.23 |
| MF15Pyr-37 | 0.15 | 434 | 23 | 0.82 | 0.85 | 0.36 | 2212 | <1.19 | 0.01 | 0 | 0.01 | 2.2 | 80 | 0.07 | 0.06 | 0.14 | 0 | <0.29 | 0 | 0.18 | 0.25 |
| MF15Pyr-38 | 0.30 | 9.3 | 0.95 | 0.86 | 4.1 | 0.41 | 1852 | <1.29 | 0.02 | <0.0168 | 0.01 | 1.9 | 124 | 0.04 | 0.06 | <0.00 | <0.0152 | <0.29 | 0 | 0.23 | 0.04 |
| MF15Pyr-39 | 0.34 | 737 | 13 | 10 | 1.6 | 0.41 | 3927 | <1.19 | <0.00 | 0 | <0.108 | 3.6 | 1210 | 0.11 | 0.03 | 0 | 0 | 0.35 | <0.0093 | 0.14 | 0.05 |
| MF15Pyr-40 | 0.19 | 202 | 17 | 1.5 | 2.0 | 0.24 | 2493 | <1.40 | <0.037 | <0.0162 | 0.02 | 1.4 | 220 | 0.04 | 0.07 | 0.01 | <0.00 | 0.33 | <0.0066 | 0.10 | 0.01 |
| **Mean n=40** | 2.9 | 449 | 30 | 2.5 | 1.5 | 0.21 | 2458 | 1.8 | 0.16 | 0.04 | 0.04 | 0.82 | 85 | 0.12 | 0.41 | 0.13 | 0.04 | 0.35 | 0 | 0.64 | 2.5 |
| **S.D** | 8.5 | 628 | 27 | 2.0 | 0.81 | 0.27 | 1089 | 0.6 | 0.26 | 0.14 | 0.1 | 1.4 | 191 | 0.15 | 0.75 | 0.30 | 0.06 | 0.03 | 0 | 1.4 | 5.0 |
| **Min** | 0.15 | 2.2 | 0.54 | 0.47 | 0.46 | 0.03 | 573 | 1.4 | 0.01 | 0 | 0.01 | 0.01 | 1.3 | 0 | 0.03 | 0 | 0 | 0.31 | 0 | 0.02 | 0.01 |
| **Max** | 47 | 2694 | 112 | 10 | 4.1 | 1.1 | 5019 | 2.8 | 1.1 | 0.62 | 0.48 | 7.2 | 1210 | 0.73 | 3.7 | 1.3 | 0.21 | 0.40 | 0.01 | 7.5 | 22 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF16Pyr-1 | 0.34 | 749 | 316 | 1.6 | 0.60 | 0.32 | 8207 | 1.5 | 0.05 | 0.01 | <0.00 | 0.04 | 98 | 0.08 | 0.48 | 0.07 | 0.04 | 0.66 | <0.00 | 0.07 | 3.0 |
| MF16Pyr-2 | 0.34 | 743 | 322 | 4.4 | 1.0 | <0.0222 | 6403 | <1.18 | 0.09 | 0 | <0.089 | 0.02 | 20 | 0.13 | 0.67 | <0.0126 | 0.04 | <0.34 | <0.0083 | 0.08 | 5.7 |
| MF16Pyr-3 | 0.54 | 937 | 306 | 4.0 | 1.7 | <0.015 | 4897 | 1.4 | <0.00 | 0.56 | <0.00 | 0 | 13 | 0.39 | 0.88 | 0 | 0.11 | 0.57 | 0 | 13 | 3.1 |
| MF16Pyr-4 | 0.33 | 646 | 308 | 3.3 | 1.7 | 0.01 | 4105 | <1.01 | <0.00 | 0.01 | 0.01 | 0.03 | 1.3 | <0.0123 | 0.06 | 0.06 | <0.0132 | 0.40 | <0.0033 | <0.060 | <0.025 |
| MF16Pyr-5 | 0.22 | 2284 | 239 | 4.8 | 18 | <0.0076 | 8434 | 1.2 | 0.06 | 0.47 | <0.00 | 0.17 | 1.6 | 0.10 | 0.50 | 0.04 | 0.08 | 0.31 | <0.0031 | 9.7 | 1.1 |
| MF16Pyr-6 | <0.116 | 2862 | 235 | 1.7 | 0.95 | 0 | 7683 | <1.03 | 0.01 | 0.01 | <0.075 | 0 | 2.0 | <0.0084 | 0.13 | <0.00 | <0.0155 | 0.56 | 0 | 0.09 | 0.02 |
| MF16Pyr-7 | 0.37 | 726 | 90 | 1.5 | 1.3 | 0.06 | 6674 | 1.4 | 0.01 | 0 | <0.00 | 0.04 | 4.2 | 0.01 | 0.14 | 0.26 | <0.0131 | 0.33 | 0 | 0.58 | 0.41 |
| MF16Pyr-8 | <0.184 | 2415 | 150 | 1.4 | 0.74 | 0.06 | 7936 | 1.6 | <0.00 | <0.00 | 0.04 | 0.03 | 4.6 | 0.01 | 0.02 | 0 | <0.0143 | 0.46 | <0.00 | 0.03 | <0.00 |
| MF16Pyr-9 | 0.30 | 855 | 41 | 4.3 | 0.94 | <0.0184 | 3834 | <1.37 | 0.01 | 0.59 | 0.01 | <0.00 | 0.22 | 0.03 | 0.25 | 0.01 | 0.23 | 0.40 | 0 | 0.12 | 0.97 |
| MF16Pyr-10 | <0.142 | 1260 | 68 | 4.0 | 1.3 | 0.04 | 5497 | <1.24 | <0.00 | 0.35 | <0.084 | 0 | 13 | 0.39 | 3.9 | 0.25 | 0.09 | <0.34 | 0 | 6.9 | 32 |
| MF16Pyr-11 | <0.179 | 2072 | 39 | 1.9 | 1.3 | 0.10 | 3368 | <1.25 | <0.00 | <0.0114 | <0.00 | 0.03 | 2.0 | 0.08 | 0.36 | 0.01 | 0.03 | 0.56 | 0 | 0.05 | 3.7 |
| MF16Pyr-12 | 0.90 | 4603 | 90 | 8.2 | 1.5 | 0.65 | 6444 | 1.4 | 0.07 | 0.28 | 0.01 | 0.11 | 42 | 3.4 | 5.6 | 76 | 0.17 | 0.49 | 0.01 | 3.5 | 21 |
| MF16Pyr-13 | 0.27 | 1637 | 108 | 3.4 | 0.94 | 0.05 | 3881 | <1.32 | 0.01 | 0.01 | <0.00 | 0.80 | 1.4 | 0.16 | 0.63 | 0.36 | 0.06 | <0.32 | <0.00 | 0.09 | 6.1 |
| MF16Pyr-14 | 0.23 | 2495 | 73 | 3.3 | 1.5 | 0.03 | 4010 | <1.31 | <0.039 | 0 | 0.01 | 0.02 | 1.4 | 0.09 | 0.27 | 0.28 | 0.04 | 0.37 | 0 | 0.06 | 2.4 |
| MF16Pyr-15 | <0.190 | 1581 | 64 | 3.3 | 1.3 | 0.05 | 3268 | 2.2 | <0.00 | <0.00 | 0.04 | 0.09 | 9.0 | 0.05 | <0.176 | 0.22 | 0.02 | 0.56 | <0.0084 | 0.05 | 1.3 |
| MF16Pyr-16 | 0.20 | 1594 | 301 | 2.1 | 0.91 | 0.16 | 5905 | <1.36 | 0.02 | 0.02 | 0.01 | <0.0072 | 0.16 | 0.07 | 0.68 | 0.74 | 0 | 0.42 | 0 | 0.21 | 5.8 |
| MF16Pyr-17 | <0.184 | 3961 | 161 | 4.1 | 0.64 | 0.02 | 10398 | <1.45 | <0.00 | 0.06 | 0.01 | 0.01 | 1.6 | 0.55 | 0.66 | 0.03 | <0.021 | 0.42 | 0 | 18 | 2.8 |
| MF16Pyr-18 | 1 | 5865 | 95 | 21 | 257 | 0.06 | 12765 | <1.32 | <0.00 | 0.47 | 0.05 | 0.01 | 5.1 | 1.1 | 1.3 | 0.12 | 0.07 | 0.39 | <0.0069 | 41 | 7.0 |
| MF16Pyr-19 | 1.8 | 2183 | 73 | 21 | 132 | 0.05 | 4329 | <1.27 | 0.03 | 1.1 | 0.04 | 0.01 | 20 | 0.20 | 2.5 | 0.26 | 0.26 | 0.38 | <0.0049 | 1.0 | 10 |
| MF16Pyr-20 | 6.8 | 1127 | 225 | 30 | 47 | 0.06 | 6051 | <1.43 | 0.52 | 0.99 | 0.04 | 0.13 | 6.1 | 0.36 | 2.4 | 0.44 | 0.16 | <0.35 | 0.01 | 8.6 | 13 |
| MF16Pyr-21 | 0.31 | 197 | 29 | 0.80 | 1.0 | 0.06 | 4703 | <1.30 | <0.039 | 0.01 | <0.085 | 0.43 | 47 | <0.024 | 0.11 | 0.13 | 0.01 | <0.40 | <0.0071 | 0.04 | 0.27 |
| MF16Pyr-22 | 0.29 | 51 | 22 | 1.8 | 0.71 | 0.09 | 4285 | 1.2 | 0.01 | <0.00 | <0.00 | 0.63 | 26 | 0.10 | 0.14 | 4.6 | 0.01 | <0.32 | 0 | 0.91 | 1.6 |
| MF16Pyr-23 | 0.64 | 310 | 78 | 3.9 | 1.1 | 0.02 | 5226 | 1.4 | 0.10 | 0.90 | 0.02 | 0.04 | 5.0 | 0.89 | 3.5 | 0.22 | 0.18 | 0.52 | <0.0065 | 1.5 | 11 |
| MF16Pyr-24 | 0.32 | 1838 | 213 | 9.1 | 2.1 | 0.03 | 7533 | <1.37 | <0.041 | 0.77 | 0.01 | 0.15 | 8.3 | 1.1 | 2.0 | 0.08 | 0.18 | 0.35 | 0 | 1.8 | 11 |
| MF16Pyr-25 | 0.34 | 2783 | 130 | 7.1 | 1.2 | 0.23 | 7640 | <1.37 | 0.02 | 0.24 | 0.01 | 0.12 | 5.9 | 1.1 | 1.8 | 0.15 | 0.07 | 0.36 | 0.01 | 3.6 | 7.3 |
| MF16Pyr-26 | 0.30 | 973 | 25 | 2.8 | 1.3 | 0.02 | 4096 | <1.41 | 0.01 | 0 | <0.147 | 0.46 | 13 | 0.04 | 0.13 | 0.05 | <0.0208 | <0.33 | <0.0088 | 0.09 | 0.56 |
| MF16Pyr-27 | <0.147 | 233 | 185 | 7.0 | 0.45 | <0.0113 | 4036 | 2.2 | 0 | 0.30 | <0.00 | 0.01 | 17 | 0.88 | 0.91 | 0.01 | 0.16 | 0.31 | <0.0065 | 5.1 | 4.6 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF16Pyr-28 | <0.183 | 386 | 284 | 1.7 | 1.4 | 0.35 | 2755 | <1.31 | <0.079 | 0.01 | 0.01 | 0.35 | 20 | 0.02 | 0.27 | 0 | 0.01 | <0.33 | <0.00 | 0.07 | 0.04 |
| MF16Pyr-29 | 0.17 | 770 | 48 | 1.4 | 1.7 | 0.06 | 4979 | 1.4 | <0.00 | 0.07 | <0.00 | 0.17 | 39 | 0.14 | 0.39 | 0.02 | 0.06 | 0.52 | <0.0068 | 1.1 | 0.63 |
| MF16Pyr-30 | 0.30 | 201 | 75 | 6.9 | 1.2 | 0.05 | 3779 | <1.40 | <0.00 | 0.29 | 0.01 | 0.87 | 17 | 0.07 | 0.27 | 0.02 | 0.08 | <0.33 | <0.0069 | 0.15 | 0.51 |
| MF16Pyr-31 | 0.40 | 341 | 75 | 2.4 | 1.6 | 0.02 | 4044 | <1.23 | 0.02 | <0.00 | 0.01 | 0.02 | 14 | <0.020 | <0.090 | <0.038 | 0 | 0.34 | 0 | 0.10 | <0.0132 |
| MF16Pyr-32 | 0.26 | 2729 | 143 | 3.5 | 1.1 | 0.06 | 7778 | 1.2 | <0.034 | 0.23 | 0.01 | 0.02 | 16 | 0.22 | 1.2 | 0 | 0.04 | <0.28 | 0.01 | 29 | 3.9 |
| MF16Pyr-33 | 0.58 | 2655 | 87 | 4.3 | 1.1 | <0.0264 | 3991 | <1.39 | 42 | 0.71 | <0.073 | 0.01 | 5.2 | 0.08 | 1.6 | 0.69 | 1.0 | 0.31 | <0.0043 | 2.3 | 7.9 |
| MF16Pyr-34 | 0.79 | 1876 | 43 | 8.1 | 1.1 | 0.22 | 2985 | <1.51 | <0.042 | 0.60 | <0.090 | 0.17 | 91 | 0.18 | 4.0 | 0.25 | 0.20 | 0.49 | 0 | 7.6 | 9.6 |
| MF16Pyr-35 | 0.31 | 830 | 112 | 3.3 | 1.3 | <0.0200 | 3905 | <1.64 | 0.01 | 0 | <0.00 | <0.0066 | 0.15 | <0.0155 | 0.08 | 0.01 | <0.00 | 0.64 | <0.00 | <0.030 | 0.03 |
| MF16Pyr-36 | 0.31 | 502 | 87 | 2.2 | 0.71 | <0.0197 | 2135 | <1.24 | <0.044 | 0.12 | <0.094 | 0 | 0.15 | 0.04 | 0.38 | <0.019 | 0.04 | 0.60 | 0 | 0.03 | 1.7 |
| MF16Pyr-37 | <0.160 | 2726 | 64 | 5.2 | 0.53 | 0.03 | 5008 | <1.43 | <0.00 | 0.80 | <0.086 | 0.03 | 7.7 | 2.3 | 1.6 | 0 | 0.22 | 0.48 | <0.0052 | 3.5 | 10 |
| MF16Pyr-38 | 0.64 | 5101 | 577 | 9.3 | 1.0 | 0.02 | 7408 | 2.8 | 0.02 | 2.8 | <0.00 | 0.01 | 3.7 | 1.3 | 4.9 | <0.0222 | 0.31 | <0.41 | 0.01 | 3.4 | 24 |
| MF16Pyr-39 | 0.28 | 1884 | 50 | 5.7 | 1.4 | <0.026 | 4999 | <1.31 | <0.00 | 0.87 | <0.00 | 0.01 | 4.2 | 0.05 | 1.8 | 0.01 | 0.22 | <0.33 | <0.0090 | 1.1 | 5.7 |
| MF16Pyr-40 | <0.165 | 791 | 111 | 3.7 | 1.4 | 0 | 4460 | <1.22 | <0.00 | 0.01 | <0.079 | 0.01 | 1.1 | 0 | <0.143 | 0 | <0.0240 | 0.61 | <0.0047 | 0.03 | 0.02 |
| MF16Pyr-41 | 0.31 | 6625 | 163 | 2.0 | 0.71 | <0.0215 | 12475 | <1.33 | <0.00 | <0.0100 | <0.00 | 0 | <0.124 | 0.08 | 0.12 | <0.00 | 0.01 | <0.34 | 0 | <0.054 | 0.26 |
| MF16Pyr-42 | 0.26 | 79 | 24 | 4.3 | 1.1 | <0.00 | 5449 | <1.28 | <0.00 | 0.34 | <0.079 | <0.0068 | <0.082 | 2.1 | 1.6 | <0.00 | 0.15 | 0.51 | 0 | 5.0 | 14 |
| MF16Pyr-43 | <0.165 | 188 | 28 | 12 | 5.0 | 0 | 4631 | <1.16 | <0.00 | 0.11 | 0.01 | <0.0036 | 0.60 | 0.07 | 0.69 | 0.14 | 0.05 | <0.31 | <0.00 | 0.19 | 1.5 |
| MF16Pyr-44 | 0.17 | 132 | 46 | 0.99 | 1.9 | <0.0116 | 4481 | 1.6 | <0.036 | 0 | 0.01 | 0 | 0.24 | <0.0127 | <0.222 | <0.032 | <0.0194 | <0.31 | 0 | 0.02 | 0.02 |
| MF16Pyr-45 | <0.164 | 3040 | 210 | 1.8 | 0.86 | <0.0108 | 7720 | <1.17 | <0.00 | <0.0101 | <0.00 | <0.0036 | 0.13 | <0.0119 | 0.17 | 0.01 | 0 | 0.45 | 0 | 0.04 | <0.0129 |
| MF16Pyr-46 | 0.35 | 1279 | 271 | 6.3 | 2.6 | <0.0212 | 4382 | <1.26 | 0.01 | 0.69 | 0.01 | 0.01 | 1.5 | 0.04 | 0.48 | <0.0240 | 0.09 | 0.45 | 0 | 14 | 1.3 |
| MF16Pyr-47 | 0.18 | 808 | 189 | 3.0 | 0.96 | <0.0188 | 5336 | <1.11 | <0.00 | <0.0102 | <0.00 | <0.0051 | 0.11 | <0.0127 | 0.01 | 0 | <0.0129 | 0.40 | <0.0061 | 0.05 | 0.15 |
| MF16Pyr-48 | 0.32 | 1250 | 305 | 3.0 | 1.0 | <0.0210 | 3051 | 1.3 | <0.038 | <0.0113 | 0.01 | <0.0040 | 0.15 | <0.0119 | <0.104 | <0.00 | 0.01 | 0.49 | <0.00 | 0.05 | 0.02 |
| MF16Pyr-49 | 0.26 | 840 | 244 | 3.3 | 0.79 | <0.0155 | 3305 | 1.3 | 0 | 0.23 | 0.03 | <0.00 | 0.18 | 0.07 | 0.46 | 0.03 | 0.05 | 0.42 | 0 | 0.25 | 0.63 |
| MF16Pyr-50 | 0.17 | 1370 | 239 | 2.9 | 0.83 | <0.0177 | 5897 | 1.3 | 0.02 | 0.05 | <0.00 | <0.0041 | <0.090 | 0.39 | 0.36 | <0.00 | 0.03 | <0.32 | 0 | 0.90 | 2.8 |
| MF16Pyr-51 | 0.28 | 712 | 205 | 4.1 | 1.6 | 0 | 6689 | <1.28 | 0 | 0.02 | 0.01 | 0 | 0.11 | 0.03 | 0.23 | <0.00 | <0.00 | 0.37 | <0.00 | 0.13 | 0.40 |
| MF16Pyr-52 | 0.17 | 791 | 369 | 3.9 | 1.2 | <0.0167 | 5087 | <1.28 | <0.00 | 0 | 0.01 | <0.0055 | 0.19 | 0.01 | 0.18 | <0.0163 | <0.0140 | <0.27 | <0.0047 | 0.02 | 0.11 |
| MF16Pyr-53 | 0.26 | 451 | 227 | 2.3 | 0.87 | <0.0105 | 4879 | <1.19 | 0.02 | 0.01 | <0.00 | <0.0035 | 0.39 | 0.02 | 0.25 | <0.0146 | 0.01 | 0.29 | <0.0042 | 0.04 | 1.3 |
| MF16Pyr-54 | 0.34 | 398 | 346 | 5.8 | 4.3 | 0.01 | 5648 | <1.35 | <0.054 | 0.10 | 0.02 | 0.01 | 4.3 | 0.05 | 0.68 | 0.14 | <0.021 | <0.31 | <0.0069 | 1.8 | 8.3 |
| MF16Pyr-55 | <0.176 | 478 | 342 | 3.6 | 1.3 | <0.0221 | 3332 | <1.33 | <0.040 | <0.0169 | <0.00 | 0 | 1.2 | 0.01 | 0.13 | <0.0251 | 0 | 0.50 | <0.0051 | 0.06 | 0.19 |
| MF16Pyr-56 | 0.41 | 2354 | 223 | 3.5 | 1.4 | 0.01 | 5916 | 1.2 | 0.01 | 0.34 | <0.076 | <0.0038 | 0.11 | 0.07 | 1.0 | 0.02 | 0.08 | 0.39 | 0 | 0.74 | 1.2 |
| MF16Pyr-57 | 0.15 | 145 | 59 | 0.79 | 1.3 | <0.0182 | 3732 | <1.11 | 0.02 | <0.00 | 0.02 | <0.00 | <0.074 | <0.0163 | <0.00 | <0.00 | 0.01 | <0.27 | <0.00 | 0.03 | 0 |
| MF16Pyr-58 | <0.162 | 233 | 104 | 2.9 | 0.87 | <0.0206 | 4812 | 1.5 | <0.00 | 0.08 | <0.00 | <0.0055 | 0.13 | <0.0131 | <0.177 | <0.00 | 0.01 | <0.31 | <0.0067 | 0.06 | 0.08 |
| MF16Pyr-59 | 0.20 | 196 | 108 | 2.7 | 1.2 | 0.01 | 4654 | <1.47 | <0.039 | <0.00 | <0.00 | 0.18 | 0.10 | <0.00 | 0.10 | <0.024 | 0 | 0.45 | <0.00 | <0.031 | <0.0073 |
| MF16Pyr-60 | 0.51 | 645 | 400 | 5.1 | 3.0 | <0.0140 | 2370 | <1.43 | 0.01 | 0 | 0.01 | 0.03 | 9.7 | 0.01 | 0.03 | 0.20 | <0.0236 | <0.34 | <0.0097 | 0.49 | 0.02 |
| MF16Pyr-61 | 0.20 | 888 | 157 | <0.54 | 0.91 | <0.0156 | 5893 | 1.5 | 0.01 | 0.01 | <0.00 | <0.0051 | 1.4 | 0.02 | <0.095 | <0.0153 | 0.01 | <0.34 | 0 | 0.02 | 0.60 |
| MF16Pyr-62 | 0.36 | 844 | 157 | 1.9 | 0.61 | <0.0170 | 6109 | 1.5 | 0.01 | 0 | <0.00 | <0.0040 | <0.088 | <0.0230 | <0.179 | <0.00 | <0.00 | 0.48 | <0.00 | 0.08 | 0.01 |
| MF16Pyr-63 | 0.43 | 229 | 240 | 9.9 | 1.5 | 0.57 | 4745 | <1.26 | 26 | 1.3 | <0.00 | 0.01 | 3.5 | 1.2 | 5.3 | 3.5 | 0.21 | <0.32 | 0.03 | 3.1 | 12 |
| MF16Pyr-64 | 0.39 | 218 | 167 | 6.4 | 0.84 | <0.0185 | 2347 | <1.37 | 0.02 | 0.72 | <0.00 | 0 | 0.24 | 0.29 | 3.3 | 0.44 | 0.07 | <0.33 | 0.06 | 0.23 | 4.8 |
| MF16Pyr-65 | <0.142 | 404 | 22 | 2.3 | 0.94 | 0.07 | 1274 | 1.3 | 0.04 | 0.01 | <0.00 | <0.00 | 0.13 | 0.06 | 0.26 | 0.03 | 0 | <0.29 | 0 | 0.09 | 2.8 |
| MF16Pyr-66 | <0.143 | 82 | 23 | 5.6 | 1.5 | 0.59 | 1534 | 1.1 | 0.03 | 0.84 | <0.00 | 0 | 0.34 | 0.10 | 1.6 | 0.04 | 0.23 | 0.38 | <0.0047 | 1.4 | 3.0 |
| MF16Pyr-67 | <0.175 | 1018 | 291 | 1.7 | 1.6 | 0.02 | 2786 | <1.28 | 0.03 | 0.02 | <0.079 | <0.00 | 0.22 | 0.02 | 0.12 | <0.029 | <0.0145 | 0.31 | <0.0068 | <0.044 | 0.05 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF16Pyr-68 | <0.176 | 966 | 273 | 4.4 | 2.4 | <0.023 | 2656 | <1.15 | 0.05 | 0.49 | <0.076 | 0 | 0.19 | 1.2 | 1.6 | 0.03 | 0.12 | <0.28 | 0 | 11 | 6.3 |
| MF16Pyr-69 | 0.23 | 193 | 128 | 1.1 | 1.6 | 0.01 | 3072 | 1.7 | <0.00 | 0.23 | <0.00 | 0 | <0.084 | 1.7 | 2.1 | <0.00 | 0.05 | 0.37 | <0.0043 | 23 | 8.5 |
| MF16Pyr-70 | 1.5 | 145 | 52 | 9.9 | 1.5 | 0.04 | 4626 | 1.4 | 0.01 | 0.78 | 0.02 | 0 | 0.92 | 0.48 | 0.68 | 0.06 | 0.23 | <0.27 | <0.0045 | 19 | 4.6 |
| MF16Pyr-71 | 0.34 | 1327 | 191 | 4.8 | 1.7 | 0.02 | 6380 | <1.41 | 0 | 0.97 | <0.00 | 0.01 | 5.4 | 0.03 | 1.0 | 0.01 | 0.14 | 0.38 | <0.00 | 76 | 1.7 |
| MF16Pyr-72 | 0.33 | 412 | 199 | 1.2 | 1.2 | 0.07 | 2367 | <1.36 | <0.039 | 0 | <0.082 | 0.06 | 26 | 0 | 0.16 | 0.01 | 0.01 | 0.37 | <0.00 | 0.03 | 0.12 |
| MF16Pyr-73 | 0.38 | 1077 | 175 | 8.8 | 2.1 | 0.08 | 6097 | <1.41 | <0.00 | 0.49 | 0.01 | 0.12 | 48 | 0.28 | 1.5 | 0.19 | 0.25 | <0.30 | 0 | 9.6 | 4.1 |
| MF16Pyr-74 | 5.9 | 2623 | 294 | 28 | 3.5 | 0.37 | 4954 | 1.3 | 0.03 | 0.73 | <0.106 | 1.3 | 20 | 0.20 | 0.86 | 0.84 | 0.14 | 0.47 | 0.01 | 11 | 6.0 |
| MF16Pyr-75 | <0.173 | 4012 | 299 | 4.4 | 1.8 | 0.05 | 6101 | <1.26 | <0.00 | 0.04 | <0.00 | 0.07 | 0.47 | <0.0191 | <0.105 | <0.024 | <0.0207 | <0.29 | <0.00 | 0.21 | 1.2 |
| MF16Pyr-76 | 1.2 | 5512 | 467 | 9.0 | 3.6 | 0.51 | 8122 | <4.27 | <0.129 | 2.5 | <0.00 | 0.11 | 43 | 0.93 | 5.9 | 0.27 | 0.19 | <1.02 | <0.023 | 6.9 | 104 |
| MF16Pyr-77 | 0.23 | 2006 | 65 | 1.7 | 0.56 | 0.03 | 4350 | <1.05 | <0.058 | 0.01 | <0.070 | 0.65 | 12 | 0.15 | <0.130 | <0.0149 | <0.00 | 0.26 | 0 | 0.04 | 0.13 |
| MF16Pyr-78 | <0.165 | 273 | 144 | 3.3 | 1.4 | <0.0135 | 2917 | <1.31 | <0.060 | <0.00 | <0.00 | 0.12 | 18 | 0.01 | 0.09 | <0.00 | <0.00 | 0.39 | <0.00 | 0.04 | 0.05 |
| MF16Pyr-79 | 0.20 | 3735 | 179 | 0.44 | 1.4 | 0.01 | 9266 | <1.36 | <0.037 | 0 | 0.01 | 0.16 | 2.1 | <0.00 | 0.05 | <0.00 | <0.0244 | <0.27 | <0.00 | 0.05 | 0.04 |
| MF16Pyr-80 | 0.28 | 2060 | 179 | 2.9 | 0.85 | 0.01 | 6744 | <1.16 | <0.035 | 0 | <0.00 | 0.27 | 30 | 0.01 | <0.170 | <0.00 | 0 | <0.28 | <0.00 | 0.05 | 0.03 |
| **Mean n=80** | 0.60 | 1473 | 169 | 5.1 | 7.0 | 0.11 | 5200 | 1.5 | 1.8 | 0.37 | 0.02 | 0.13 | 11 | 0.39 | 1.1 | 1.7 | 0.11 | 0.44 | 0 | 4.7 | 5.5 |
| **S.D** | 1.1 | 1451 | 116 | 5.3 | 32 | 0.16 | 2190 | 0.37 | 7.8 | 0.53 | 0.01 | 0.25 | 18 | 0.64 | 1.4 | 10.4 | 0.15 | 0.10 | 0.01 | 11.0 | 12.9 |
| **Min** | 0.15 | 51 | 22 | 0.44 | 0.45 | 0 | 1274 | 1.1 | 0 | 0 | 0.01 | 0 | 0.10 | 0 | 0.01 | 0 | 0 | 0.26 | 0 | 0.02 | 0 |
| **Max** | 6.8 | 6625 | 577 | 30 | 257 | 0.65 | 12765 | 2.8 | 42 | 2.8 | 0.05 | 1.3 | 98 | 3.4 | 5.9 | 76 | 1.0 | 0.66 | 0.06 | 76 | 104 |

| Sample # | $^{55}$Mn | $^{59}$Co | $^{60}$Ni | $^{65}$Cu | $^{66}$Zn | $^{69}$Ga | $^{75}$As | $^{82}$Se | $^{95}$Mo | $^{107}$Ag | $^{111}$Cd | $^{115}$In | $^{118}$Sn | $^{121}$Sb | $^{125}$Te | $^{184}$W | $^{197}$Au | $^{202}$Hg | $^{205}$Tl | $^{208}$Pb | $^{209}$Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF17Pyr-1 | <0.56 | 2895 | 185 | <4.14 | <3.55 | <0.117 | 4667 | <6.48 | <0.199 | 0.01 | <0.30 | <0.00 | <0.44 | <0.080 | <0.00 | <0.00 | <0.042 | <0.83 | 0 | <0.078 | 0.03 |
| MF17Pyr-2 | 0.90 | 2725 | 131 | 16 | <2.69 | <0.106 | 4648 | <5.86 | <0.109 | <0.038 | <0.60 | <0.0211 | <0.39 | <0.054 | <0.23 | 0.01 | <0.056 | 0.75 | 0.02 | <0.095 | 0.05 |
| MF17Pyr-3 | <0.57 | 1108 | 97 | <4.35 | <3.02 | <0.122 | 3026 | <6.07 | <0.164 | 0.02 | <0.30 | <0.0112 | <0.47 | <0.057 | <0.49 | <0.00 | <0.0297 | <0.78 | <0.0176 | 0.13 | <0.035 |
| MF17Pyr-4 | <0.53 | 1081 | 124 | <4.19 | 5.3 | <0.076 | 3919 | <5.77 | <0.151 | <0.0261 | <0.28 | <0.0145 | <0.41 | <0.068 | <0.32 | <0.042 | <0.00 | <0.72 | <0.0115 | <0.107 | <0.0113 |
| MF17Pyr-5 | 0.68 | 1026 | 96 | 8.7 | 3.2 | <0.073 | 1335 | <5.90 | <0.111 | 0.02 | <0.46 | 0.01 | <0.39 | <0.055 | 0.13 | <0.087 | <0.0286 | <0.75 | <0.0120 | 0.10 | 0.01 |
| MF17Pyr-6 | 0.60 | 1934 | 114 | 4.2 | <2.24 | <0.073 | 5083 | <6.47 | 0.06 | 0.01 | 0.06 | 0 | <0.44 | <0.071 | <0.24 | <0.00 | 0.01 | <0.77 | <0.0171 | <0.102 | 0.01 |
| MF17Pyr-7 | <0.63 | 953 | 102 | <4.12 | 3.3 | <0.057 | 5609 | <6.03 | 0.03 | <0.039 | <0.42 | <0.0154 | <0.38 | <0.072 | <0.42 | 0.37 | <0.0291 | <0.76 | <0.0172 | <0.084 | 0.54 |
| MF17Pyr-8 | 0.69 | 5811 | 35 | 10 | <2.31 | <0.064 | 6127 | <5.83 | <0.153 | 0.44 | <0.35 | 0.01 | <0.37 | 0.18 | 5.6 | 0.08 | 0.09 | <0.70 | <0.017 | 8.5 | 34 |
| MF17Pyr-9 | <0.73 | 1415 | 23 | <5.02 | <2.72 | <0.057 | 3989 | <7.40 | <0.00 | <0.00 | <0.253 | <0.0230 | <0.50 | 0.15 | <0.00 | <0.054 | 0.01 | <0.89 | <0.0148 | <0.132 | 1.4 |
| MF17Pyr-10 | <0.53 | 7464 | 35 | 9.9 | <2.34 | <0.104 | 7353 | <6.80 | <0.126 | 0.02 | <0.00 | 0.66 | <0.40 | <0.102 | <0.00 | <0.069 | 0.04 | <0.83 | <0.0235 | <0.114 | 0.04 |
| MF17Pyr-11 | <0.68 | 369 | 52 | <4.73 | <2.45 | <0.054 | 1417 | <6.80 | 0.07 | 0.02 | <0.41 | <0.0178 | <0.42 | <0.091 | <0.00 | 0.03 | <0.034 | <0.83 | <0.024 | 0.09 | <0.020 |
| MF17Pyr-12 | 0.99 | 354 | 64 | <5.23 | <2.68 | 0.07 | 2227 | <7.22 | 0.04 | <0.033 | <0.00 | <0.022 | <0.49 | <0.107 | 0.08 | <0.052 | <0.034 | <0.88 | <0.00 | 0.19 | <0.0141 |
| MF17Pyr-13 | 0.72 | 524 | 5.5 | <5.39 | <2.67 | <0.109 | 1318 | <7.42 | <0.140 | 0.02 | 0.30 | <0.00 | <0.53 | <0.106 | 0.17 | <0.055 | <0.00 | <0.93 | <0.0151 | <0.130 | <0.021 |
| MF17Pyr-14 | <0.52 | 2061 | 32 | <4.47 | <2.10 | <0.074 | 4716 | <5.84 | <0.225 | <0.00 | <0.00 | <0.0154 | <0.42 | <0.046 | 0.14 | <0.00 | <0.058 | <0.77 | <0.00 | <0.061 | <0.0207 |
| MF17Pyr-15 | <0.67 | 218 | 2.5 | 5.0 | 2.3 | <0.081 | 2491 | <6.57 | <0.175 | <0.0304 | <0.39 | <0.0239 | <0.46 | <0.117 | 0.39 | <0.00 | <0.00 | <0.79 | <0.0231 | <0.100 | <0.026 |
| MF17Pyr-16 | 0.90 | 203 | 1.3 | <5.00 | 2.1 | <0.083 | 5616 | <6.91 | <0.126 | <0.044 | <0.23 | <0.00 | <0.44 | <0.135 | 0.46 | 0.01 | <0.046 | <0.88 | 0 | <0.108 | 0.02 |
| MF17Pyr-17 | 0.67 | 473 | 1.5 | 8.3 | <2.11 | <0.069 | 5910 | <7.35 | <0.00 | <0.047 | <0.35 | <0.0132 | <0.49 | 0.06 | 0.50 | 0.02 | 0.02 | <0.93 | <0.030 | <0.105 | <0.0145 |
| MF17Pyr-18 | 2.1 | 356 | 1.0 | <5.69 | 4.1 | <0.140 | 6260 | <8.10 | <0.00 | <0.055 | <0.00 | 0.01 | <0.60 | 0.04 | 0.37 | <0.062 | 0.01 | <1.01 | <0.0172 | <0.096 | <0.017 |
| MF17Pyr-19 | <0.57 | 724 | 15 | 6.4 | <1.49 | <0.055 | 6378 | <5.55 | <0.189 | <0.00 | <0.45 | 0 | <0.42 | <0.077 | <0.33 | <0.042 | <0.040 | <0.71 | <0.0167 | <0.093 | <0.023 |
| MF17Pyr-20 | <0.71 | 1057 | 20 | <5.37 | <2.69 | <0.096 | 8286 | <7.08 | <0.232 | <0.033 | <0.245 | <0.0184 | <0.49 | <0.094 | <0.29 | <0.00 | 0.05 | <0.89 | <0.00 | <0.117 | 0.28 |
| MF17Pyr-21 | <0.64 | 286 | 391 | <5.22 | <2.50 | 0.11 | 3271 | <7.21 | 0.08 | <0.00 | <0.35 | 0.07 | <0.44 | <0.054 | 0.34 | <0.00 | <0.035 | <0.93 | <0.032 | 0.30 | 0.03 |
| MF17Pyr-22 | <0.64 | 609 | 533 | <4.84 | 4.8 | <0.082 | 3065 | <6.62 | <0.125 | <0.031 | 0.19 | <0.0211 | <0.43 | <0.062 | <0.00 | <0.069 | <0.046 | <0.86 | 0.01 | <0.105 | 0.13 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF17Pyr-23 | <0.61 | 661 | 576 | <4.41 | <1.78 | <0.035 | 4760 | <6.58 | <0.170 | <0.073 | <0.22 | <0.0117 | <0.43 | <0.060 | <0.37 | <0.00 | 0.01 | <0.79 | 0.02 | <0.088 | 0.10 |
| MF17Pyr-24 | <0.76 | 1371 | 525 | 9.5 | <2.16 | 0.10 | 5170 | <7.41 | <0.00 | <0.00 | <0.246 | 0.01 | <0.45 | <0.103 | <0.00 | 0.05 | <0.00 | <0.87 | <0.00 | <0.102 | 0.10 |
| MF17Pyr-25 | <0.65 | 1314 | 520 | <4.12 | <1.79 | <0.070 | 4065 | <5.94 | 0.07 | <0.00 | <0.31 | <0.0164 | 0.64 | <0.034 | <0.00 | 0.03 | 0.02 | <0.79 | <0.00 | <0.062 | 0.06 |
| MF17Pyr-26 | 0.86 | 1019 | 233 | 12 | <2.00 | <0.037 | 5002 | <6.64 | 0.07 | 1.7 | <0.00 | <0.0243 | 0.91 | 0.59 | 5.4 | 0.22 | 0.35 | <0.83 | 0.07 | 8.2 | 44 |
| MF17Pyr-27 | <0.56 | 347 | 137 | 4.9 | <2.15 | <0.088 | 5246 | <6.35 | <0.00 | 0.22 | <0.00 | 0 | <0.39 | 0.13 | 0.37 | 0.01 | 0.07 | <0.83 | <0.0229 | 11 | 2.8 |
| MF17Pyr-28 | 0.74 | 244 | 122 | 4.7 | 2.6 | <0.073 | 4935 | <6.84 | <0.124 | <0.0306 | <0.50 | <0.00 | <0.44 | <0.113 | 0.64 | <0.00 | 0.16 | <0.81 | <0.0135 | <0.122 | 8.3 |
| MF17Pyr-29 | 1.8 | 267 | 106 | <4.37 | 3.4 | 0.08 | 5801 | <6.93 | <0.185 | <0.046 | 0.34 | <0.028 | <0.51 | <0.075 | 0.32 | 0.03 | <0.048 | <0.86 | <0.0201 | <0.129 | <0.028 |
| MF17Pyr-30 | <0.51 | 1140 | 230 | <3.67 | 2.8 | <0.090 | 4595 | <5.44 | <0.108 | <0.00 | <0.00 | 0.01 | <0.33 | <0.076 | 0.28 | <0.042 | 0.03 | <0.72 | <0.0118 | <0.091 | 0.08 |
| MF17Pyr-31 | 0.62 | 197 | 37 | <4.72 | <2.19 | <0.089 | 3775 | <7.25 | <0.00 | <0.048 | <0.00 | <0.027 | <0.49 | <0.118 | <0.295 | <0.053 | 0.03 | <0.86 | 0.01 | <0.137 | <0.015 |
| MF17Pyr-32 | 0.64 | 97 | 9.1 | <3.74 | <1.43 | <0.00 | 2875 | <6.36 | <0.158 | 0.02 | 0.06 | <0.0154 | <0.37 | <0.064 | <0.00 | 0.03 | 0.04 | <0.73 | <0.0172 | <0.116 | 0.13 |
| MF17Pyr-33 | <0.68 | 15 | 4.3 | 20 | 3.1 | <0.075 | 2064 | <6.57 | <0.00 | 0.62 | <0.33 | <0.0176 | <0.45 | 0.99 | 8.3 | 0.03 | 0.24 | <0.85 | <0.014 | 13 | 138 |
| MF17Pyr-34 | 1.3 | 8.6 | 1.8 | 5.4 | 313 | <0.085 | 1773 | <5.97 | <0.236 | 0.16 | <0.21 | 0.01 | 2.5 | 0.28 | 0.95 | 0.09 | <0.031 | <0.80 | 0.01 | 2.2 | 6.2 |
| MF17Pyr-35 | <0.60 | 1931 | 237 | 14 | <1.79 | <0.084 | 2152 | <6.05 | <0.116 | <0.0288 | <0.30 | <0.0114 | <0.37 | <0.095 | 0.07 | <0.064 | 0.02 | <0.75 | <0.0127 | <0.117 | 0.03 |
| MF17Pyr-36 | 1.1 | 756 | 621 | <4.47 | <2.16 | <0.055 | 5641 | <7.32 | <0.00 | 0.03 | <0.239 | <0.0223 | <0.50 | <0.054 | <0.50 | 0.07 | 0.06 | <0.91 | 0 | <0.133 | 0.05 |
| MF17Pyr-37 | 123 | 328 | 79 | 4.7 | <1.65 | <0.074 | 3268 | <7.08 | <0.00 | 0.03 | <0.228 | <0.0123 | <0.42 | 0.28 | 0.87 | 0.08 | 0.11 | <0.83 | <0.00 | 0.44 | 15 |
| MF17Pyr-38 | 1901 | 65 | 8.4 | <6.39 | 13 | <0.112 | 1421 | <9.41 | 0.11 | 0.07 | <0.49 | <0.032 | 1.0 | 1.0 | 1.9 | 0.82 | <0.071 | <1.29 | <0.029 | 1.8 | 31 |
| MF17Pyr-39 | 0.77 | 7476 | 180 | 5.6 | 1.9 | <0.046 | 10123 | <5.97 | <0.00 | <0.039 | <0.28 | <0.0152 | <0.38 | <0.095 | 1.4 | <0.043 | 0.06 | <0.75 | <0.0120 | <0.086 | 3.2 |
| MF17Pyr-40 | <0.54 | 2428 | 138 | 4.5 | <1.46 | <0.053 | 6527 | <5.36 | <0.104 | <0.026 | <0.19 | <0.0102 | <0.36 | <0.054 | <0.39 | <0.057 | <0.039 | <0.69 | <0.0114 | 0.19 | 0.02 |
| MF17Pyr-41 | 1.9 | 5466 | 239 | <3.95 | 4.2 | <0.081 | 6140 | <5.61 | 0.07 | 0.29 | <0.203 | <0.0156 | <0.52 | 0.20 | 2.9 | <0.061 | 0.06 | 1.2 | <0.0123 | 1.5 | 5.0 |
| MF17Pyr-42 | 0.87 | 48 | 0.78 | 14 | <1.51 | <0.056 | 239 | <5.84 | 0.06 | 0.04 | <0.34 | <0.0215 | <0.42 | 0.05 | <0.42 | <0.00 | <0.050 | <0.77 | <0.00 | 0.14 | 0.86 |
| MF17Pyr-43 | <0.68 | 555 | 224 | 5.2 | 4.4 | <0.097 | 3690 | <6.62 | <0.124 | 0.39 | <0.225 | <0.00 | <0.49 | 2.6 | 2.8 | <0.00 | 0.09 | <0.84 | <0.0137 | 4.1 | 21 |
| MF17Pyr-44 | 4.4 | 316 | 161 | 46 | <2.82 | 0.11 | 1833 | <10.03 | <0.28 | 3.3 | <0.35 | 0.03 | 3.8 | 1.6 | 33 | 0.59 | 1.5 | <1.21 | 0.12 | 46 | 154 |
| MF17Pyr-45 | <0.61 | 666 | 27 | <3.92 | 3.9 | <0.063 | 3168 | <6.60 | 0.04 | 0.39 | 0.06 | <0.0211 | 2.2 | 0.24 | 3.5 | <0.068 | 0.15 | <0.85 | <0.0136 | 6.9 | 21 |
| MF17Pyr-46 | <0.55 | 83 | 105 | 4.1 | 1.7 | <0.053 | 3437 | <5.49 | <0.104 | <0.00 | <0.00 | <0.00 | <0.40 | <0.043 | <0.23 | 0.02 | <0.028 | <0.72 | <0.0198 | <0.129 | 0.02 |
| MF17Pyr-47 | 1606 | 2621 | 55 | 30 | 12 | <0.116 | 2954 | <11.62 | <0.32 | 0.08 | 0.12 | 0.01 | 1.9 | 2.8 | 3.8 | 0.35 | <0.105 | <1.59 | 0.04 | 23 | 52 |
| MF17Pyr-48 | <0.64 | 95 | 11 | <3.30 | <1.60 | <0.095 | 3200 | <6.77 | <0.121 | <0.00 | 0.06 | <0.0168 | <0.41 | <0.061 | <0.60 | <0.066 | <0.032 | <0.80 | 0 | <0.127 | 0.69 |
| MF17Pyr-49 | 4.6 | 1780 | 43 | <3.56 | 3.0 | <0.051 | 2282 | <6.34 | 0.07 | <0.043 | <0.22 | <0.0171 | 1.2 | 0.01 | 0.31 | <0.048 | <0.057 | <0.84 | 0 | <0.145 | 0.72 |
| MF17Pyr-50 | <0.63 | 1027 | 110 | <3.89 | 1.8 | <0.118 | 4537 | <6.46 | <0.00 | <0.033 | <0.240 | <0.0185 | <0.44 | <0.087 | 0.17 | <0.051 | <0.00 | <0.92 | <0.0147 | <0.138 | <0.014 |
| MF17Pyr-51 | 281 | 311 | 4.6 | 4.1 | <1.81 | <0.063 | 1216 | 7.2 | <0.123 | 0.02 | <0.22 | <0.00 | <0.43 | 0.09 | <0.38 | 0.10 | 0.08 | <0.83 | <0.019 | 0.59 | 6.6 |
| MF17Pyr-52 | 235 | 6.3 | 6.5 | <4.01 | <1.77 | <0.095 | 911 | <7.56 | <0.00 | <0.051 | <0.45 | <0.0200 | <0.47 | 0.18 | 0.77 | 0.02 | 0.02 | <1.00 | <0.0224 | <0.144 | 9.5 |
| MF17Pyr-53 | 3409 | 2.2 | 10 | 75 | <5.18 | <0.23 | 780 | <17.81 | <0.32 | <0.140 | <0.00 | <0.064 | 1.7 | 0.77 | <1.01 | 0.07 | 0.07 | <2.27 | 0.04 | 2.7 | 28 |
| MF17Pyr-54 | <0.54 | 4.8 | 1.1 | <3.12 | <1.49 | 0.06 | 1237 | <5.68 | 0.03 | <0.039 | <0.00 | <0.0187 | <0.45 | <0.055 | 0.15 | <0.042 | 0.03 | <0.80 | 0 | <0.100 | 0.12 |
| MF17Pyr-55 | 18 | 4.5 | 2.3 | 5.5 | 2.1 | <0.051 | 1058 | <6.35 | <0.00 | <0.0303 | <0.22 | <0.0169 | <0.44 | 0.17 | <0.54 | 0.01 | <0.00 | <0.83 | <0.0134 | <0.126 | 2.8 |
| MF17Pyr-56 | <0.58 | 403 | 117 | 3.2 | <1.51 | <0.080 | 1049 | <5.80 | <0.00 | <0.039 | <0.00 | <0.024 | <0.35 | <0.046 | 0.92 | <0.00 | 0.03 | <0.75 | <0.0246 | <0.106 | 1.9 |
| MF17Pyr-57 | 2.2 | 1006 | 125 | 32 | 2.1 | <0.107 | 2397 | <6.80 | <0.129 | 1.5 | 0.07 | <0.0219 | 3.0 | 0.66 | 6.3 | 0.06 | 0.65 | <0.86 | 0.02 | 57 | 91 |
| MF17Pyr-58 | 0.53 | 258 | 41 | 3.5 | <1.07 | <0.046 | 3244 | <5.21 | 0.03 | 0.20 | <0.196 | 0.01 | <0.40 | <0.085 | 2.0 | <0.00 | <0.041 | <0.75 | <0.00 | 2.2 | 18 |
| MF17Pyr-59 | 62 | 12 | 3.5 | 4.7 | <2.10 | <0.055 | 454 | <7.57 | 0.04 | <0.033 | <0.33 | <0.00 | <0.43 | <0.086 | 0.25 | <0.051 | 0.04 | <0.88 | <0.0145 | <0.115 | 3.5 |
| MF17Pyr-60 | 7.7 | 399 | 109 | <3.03 | <1.92 | <0.095 | 1137 | <6.14 | <0.172 | <0.043 | <0.31 | <0.00 | <0.44 | 0.09 | <0.27 | <0.081 | <0.00 | <0.86 | <0.00 | <0.130 | 0.85 |
| MF17Pyr-61 | 1.1 | 9001 | 168 | 6.2 | <1.45 | <0.089 | 11942 | <5.96 | <0.00 | 0.01 | <0.289 | <0.016 | <0.39 | <0.067 | 0.58 | 0.03 | <0.031 | <0.83 | <0.0126 | <0.091 | 0.48 |
| MF17Pyr-62 | 0.92 | 2043 | 26 | <2.89 | <1.59 | <0.052 | 5863 | <6.38 | 0.04 | <0.00 | <0.32 | <0.0214 | <0.45 | 0.08 | <0.39 | <0.00 | <0.00 | <0.83 | <0.00 | <0.081 | 0.15 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF17Pyr-63 | <0.65 | 819 | 2.6 | 13 | 2.0 | <0.073 | 4897 | <5.86 | <0.123 | <0.031 | <0.22 | <0.00 | <0.42 | <0.072 | 0.16 | <0.00 | <0.057 | <0.87 | <0.00 | <0.092 | 0.02 |
| MF17Pyr-64 | <0.53 | 160 | 0.72 | <2.38 | <1.25 | <0.069 | 5430 | <5.04 | <0.00 | <0.0261 | <0.264 | <0.0206 | 0.64 | <0.068 | <0.33 | <0.040 | 0.02 | <0.75 | 0.01 | <0.101 | 0.11 |
| MF17Pyr-65 | <0.53 | 229 | <0.30 | <2.50 | 3.4 | <0.081 | 6085 | <5.59 | <0.158 | 0.01 | <0.00 | 0.02 | <0.37 | <0.073 | <0.249 | <0.043 | <0.052 | <0.76 | <0.0175 | <0.084 | 0.06 |
| MF17Pyr-66 | <0.62 | 183 | 0.80 | <2.76 | 2.6 | <0.092 | 8379 | <6.42 | 0.08 | <0.00 | 0.13 | <0.022 | <0.44 | <0.105 | <0.28 | <0.00 | 0.02 | <0.89 | <0.0140 | 0.23 | 0.97 |
| MF17Pyr-67 | <0.63 | 3277 | 111 | <2.57 | 1.9 | <0.071 | 4070 | <6.62 | <0.169 | 0.03 | 0.12 | 0 | 0.59 | 0.12 | 0.47 | <0.065 | 0.08 | <0.78 | <0.0133 | 0.48 | 1.2 |
| MF17Pyr-68 | 2.1 | 10764 | 15 | 16 | <1.30 | <0.069 | 11545 | 8.2 | <0.00 | 0.97 | 0.09 | <0.0195 | 0.44 | 0.39 | 6.9 | 0.04 | 0.19 | <0.62 | <0.020 | 7.4 | 20 |
| MF17Pyr-69 | <0.52 | 1124 | 103 | <2.39 | 2.7 | <0.033 | 2477 | <5.85 | <0.00 | 0.04 | <0.00 | <0.0110 | <0.38 | 0.06 | 0.50 | <0.060 | 0.06 | <0.79 | <0.00 | <0.102 | 1.3 |
| MF17Pyr-70 | 1.2 | 50 | 15 | 2.6 | 1.3 | <0.139 | 1616 | <6.12 | <0.117 | <0.029 | <0.00 | <0.0116 | <0.38 | <0.060 | 0.15 | <0.00 | <0.032 | <0.83 | <0.0184 | <0.091 | 0.04 |
| MF17Pyr-71 | <0.55 | 163 | 105 | 9.4 | <1.56 | 0.07 | 1040 | <6.38 | <0.00 | 0.43 | <0.00 | <0.0200 | <0.36 | <0.048 | 0.37 | <0.00 | 0.06 | <0.80 | <0.00 | 0.85 | 0.92 |
| MF17Pyr-72 | 4.2 | 21 | 8.6 | <2.53 | <1.70 | <0.079 | 1653 | <6.04 | <0.206 | 0.03 | <0.212 | <0.017 | 0.61 | 0.06 | <0.27 | <0.065 | <0.032 | <0.80 | <0.0230 | <0.071 | 0.94 |
| MF17Pyr-73 | <0.61 | 82 | 62 | 3.1 | <1.64 | <0.123 | 1342 | 7.5 | <0.120 | <0.0301 | <0.214 | 0.04 | 5.8 | 0.22 | <0.27 | <0.046 | 0.03 | <0.82 | <0.00 | 2.5 | 1.2 |
| MF17Pyr-74 | <0.54 | 3376 | 364 | <2.29 | <1.09 | <0.097 | 6742 | <5.71 | 0.07 | <0.00 | <0.290 | <0.0162 | <0.36 | <0.048 | 0.29 | <0.044 | 0.02 | <0.85 | <0.00 | <0.072 | 0.53 |
| MF17Pyr-75 | <0.52 | 3889 | 367 | <2.41 | <1.32 | <0.088 | 7254 | <5.99 | 0.03 | <0.040 | 0.11 | <0.0158 | <0.39 | <0.047 | 0.14 | <0.043 | <0.0305 | <0.80 | <0.0251 | <0.095 | 0.04 |
| MF17Pyr-76 | <0.53 | 3670 | 365 | 11 | <1.61 | <0.046 | 8101 | <5.91 | 0.06 | <0.028 | <0.00 | <0.0155 | 0.50 | 0.03 | <0.35 | <0.042 | <0.030 | <0.76 | <0.0174 | 0.16 | <0.00 |
| MF17Pyr-77 | 1.3 | 1362 | 109 | <1.94 | 3.0 | <0.074 | 5079 | <5.37 | <0.00 | <0.028 | <0.00 | <0.0110 | <0.34 | <0.057 | 0.07 | <0.043 | <0.0302 | <0.78 | <0.0176 | <0.091 | <0.0208 |
| MF17Pyr-78 | 0.95 | 1418 | 101 | 2.7 | <0.89 | <0.049 | 2587 | <6.26 | <0.00 | <0.0297 | <0.210 | 0 | 0.95 | <0.060 | 0.08 | <0.078 | <0.032 | <0.83 | <0.0132 | <0.074 | <0.013 |
| MF17Pyr-79 | <0.65 | 1193 | 298 | <2.42 | <1.63 | <0.066 | 1937 | 7.2 | 0.04 | 0.58 | 0.13 | <0.0127 | <0.44 | <0.053 | 0.33 | <0.00 | 0.13 | <0.91 | <0.0202 | 4.8 | 3.0 |
| MF17Pyr-80 | 1.3 | 14565 | 25 | 15 | <1.58 | <0.061 | 19617 | 7.8 | <0.00 | 0.57 | <0.36 | 0 | <0.39 | 0.39 | 11 | 0.05 | 0.31 | <0.82 | <0.023 | 5.4 | 44 |
| **Mean n=80** | 192 | 1572 | 120 | 12 | 14 | 0.09 | 4232 | 7.6 | 0.06 | 0.36 | 0.13 | 0.05 | 1.7 | 0.47 | 2.3 | 0.12 | 0.12 | 1.0 | 0.02 | 6.8 | 12 |
| **S.D** | 650 | 2547 | 149 | 14 | 57 | 0.02 | 3037 | 0.43 | 0.02 | 0.66 | 0.09 | 0.15 | 1.4 | 0.70 | 5.2 | 0.19 | 0.25 | 0.32 | 0.03 | 13 | 29 |
| **Min** | 0.53 | 2.2 | 0.72 | 2.6 | 1.3 | 0.06 | 239 | 7.2 | 0.03 | 0.01 | 0.06 | 0 | 0.44 | 0.01 | 0.07 | 0.01 | 0.01 | 0.75 | 0 | 0.09 | 0.01 |
| **Max** | 3409 | 14565 | 621 | 75 | 313 | 0.11 | 19617 | 8.2 | 0.11 | 3.3 | 0.34 | 0.66 | 5.8 | 2.8 | 33 | 0.82 | 1.5 | 1.2 | 0.12 | 57 | 154 |

| Sample # | $^{55}$Mn | $^{59}$Co | $^{60}$Ni | $^{65}$Cu | $^{66}$Zn | $^{69}$Ga | $^{75}$As | $^{82}$Se | $^{95}$Mo | $^{107}$Ag | $^{111}$Cd | $^{115}$In | $^{118}$Sn | $^{121}$Sb | $^{125}$Te | $^{184}$W | $^{197}$Au | $^{202}$Hg | $^{205}$Tl | $^{208}$Pb | $^{209}$Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF18Pyr-1 | <0.86 | 1311 | 1984 | 11 | <1.99 | <0.080 | 6772 | <7.67 | <0.220 | 0.43 | 0.24 | 0.01 | <0.50 | 1.0 | 2.5 | 0.03 | 0.15 | <1.15 | <0.025 | 9.5 | 4.1 |
| MF18Pyr-2 | 78 | 1783 | 1358 | 2.9 | 301 | 48 | 4088 | <7.90 | 0.04 | 0.17 | <0.61 | 0 | <0.59 | 0.39 | 0.69 | 0.03 | 0.01 | <1.07 | 0.32 | 60 | 1.3 |
| MF18Pyr-3 | 1.5 | 1107 | 1810 | <3.05 | <1.97 | 0.06 | 3804 | <12.78 | <0.23 | 0.08 | <0.00 | <0.0229 | <0.54 | 0.29 | 2.0 | <0.108 | 0.04 | <1.11 | <0.018 | 0.72 | 5.9 |
| MF18Pyr-4 | <0.78 | 1890 | 1324 | 3.2 | 3.0 | <0.099 | 5008 | <7.75 | 0.04 | 0.01 | <0.00 | 0.01 | 0.51 | <0.140 | 1.9 | <0.081 | <0.058 | <1.08 | 0.01 | 0.20 | 1.7 |
| MF18Pyr-5 | 0.74 | 1428 | 722 | <2.63 | <1.83 | <0.127 | 2653 | <7.56 | <0.00 | 0.36 | <0.51 | <0.0142 | 0.77 | 0.48 | <0.56 | 0.02 | <0.039 | <0.99 | 0.02 | 47 | 4.9 |
| MF18Pyr-6 | <0.86 | 1887 | 1051 | <3.02 | <2.27 | 0.08 | 3655 | 10 | <0.25 | 0.01 | <0.44 | 0.02 | <0.68 | 0.90 | 2.0 | <0.00 | <0.049 | <1.29 | 0.06 | 11 | 7.8 |
| MF18Pyr-7 | <0.54 | 1424 | 729 | <1.92 | <1.28 | 0.10 | 2770 | <5.53 | <0.00 | 0.12 | <0.198 | <0.0193 | <0.34 | 0.32 | 6.0 | <0.043 | <0.043 | <0.81 | <0.0177 | 1.8 | 17 |
| MF18Pyr-8 | <0.76 | 601 | 1546 | 153 | <1.69 | <0.087 | 5824 | <8.05 | <0.00 | 0.51 | <0.00 | 0.05 | 2.0 | 1.3 | 3.0 | <0.056 | <0.070 | <1.05 | 0.04 | 12 | 3.1 |
| MF18Pyr-9 | 357 | 920 | 1676 | 30 | 4.7 | 0.21 | 3972 | <10.03 | 0.05 | 0.59 | <0.34 | 0.11 | <0.62 | 6.2 | 4.6 | <0.00 | <0.091 | <1.33 | 0.08 | 66 | 19 |
| MF18Pyr-10 | 3.8 | 545 | 871 | 81279 | 9.4 | 0.42 | 2320 | <10.41 | 0.06 | 4.0 | <0.35 | 1.2 | 39 | 12 | 2.3 | <0.077 | 0.27 | <1.47 | 0.49 | 55 | 9.5 |
| MF18Pyr-11 | <0.88 | 871 | 979 | <2.77 | <2.26 | 0.69 | 2353 | <8.69 | <0.00 | <0.045 | <0.44 | 0.06 | <0.64 | 0.74 | <0.57 | 0.06 | 0.07 | <1.32 | 0.02 | 8.1 | 2.2 |
| MF18Pyr-12 | <0.78 | 665 | 1667 | <2.89 | <1.99 | <0.084 | 3885 | <8.42 | <0.00 | <0.00 | <0.00 | <0.00 | <0.58 | <0.119 | 0.54 | <0.00 | <0.045 | <1.19 | <0.0184 | 0.32 | 0.10 |
| MF18Pyr-13 | <0.74 | 671 | 1547 | <2.64 | <1.87 | <0.046 | 5303 | <8.41 | 0.04 | <0.039 | <0.00 | <0.0217 | <0.48 | 1.7 | 2.0 | <0.059 | 0.05 | <1.07 | <0.046 | 1.2 | 0.22 |
| MF18Pyr-14 | <0.82 | 785 | 1424 | <2.41 | <1.87 | 0.07 | 6502 | <8.20 | <0.00 | 0.02 | <0.28 | <0.0157 | <0.48 | <0.081 | 1.7 | <0.060 | 0.01 | <1.12 | <0.0178 | 0.10 | <0.030 |
| MF18Pyr-15 | <0.89 | 873 | 1401 | 28859 | 22 | 0.47 | 6355 | <10.11 | <0.267 | 3.9 | <0.33 | 1.6 | 103 | 11 | 3.1 | <0.102 | 0.43 | <1.40 | 0.22 | 36 | 11 |
| MF18Pyr-16 | <0.84 | 800 | 1954 | 5.5 | <1.45 | <0.100 | 5082 | <8.23 | 0.05 | <0.074 | <0.42 | <0.017 | <0.55 | <0.100 | <0.38 | 0.02 | 0.05 | <1.21 | 0.01 | <0.111 | <0.026 |
| MF18Pyr-17 | <0.66 | 909 | 1152 | <2.70 | <1.73 | <0.087 | 2885 | <7.66 | <0.206 | <0.00 | 0.07 | 0 | <0.52 | 0.03 | <0.33 | <0.079 | <0.090 | <1.01 | 0.01 | <0.130 | <0.032 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF18Pyr-18 | <0.74 | 939 | 1956 | <2.38 | <2.17 | <0.076 | 4078 | <8.06 | <0.00 | <0.00 | <0.00 | 0.01 | 1.1 | <0.100 | <0.34 | <0.080 | <0.00 | <1.07 | <0.0237 | <0.085 | <0.023 |
| MF18Pyr-19 | <0.53 | 965 | 962 | 2.9 | <1.34 | <0.060 | 3070 | <5.56 | 0.07 | 0.20 | <0.35 | <0.0164 | <0.41 | 4.2 | 0.71 | 0.03 | 0.09 | <0.92 | <0.013 | 28 | 2.8 |
| MF18Pyr-20 | <0.69 | 1111 | 1695 | 6.5 | 2.2 | <0.057 | 6437 | <6.82 | <0.191 | 0.72 | <0.00 | 0 | <0.51 | 2.8 | 3.3 | <0.052 | 0.10 | <1.02 | 0.08 | 57 | 5.1 |
| MF18Pyr-21 | <0.59 | 183 | 28 | 5.8 | 1.6 | <0.097 | 8837 | <6.13 | <0.123 | 0.31 | <0.216 | <0.00 | <0.44 | 6.2 | 1.1 | 0.03 | 0.03 | <0.92 | 0.07 | 50 | 4.1 |
| MF18Pyr-22 | <0.64 | 75 | 293 | <1.76 | <1.71 | <0.134 | 7147 | <6.62 | 0.04 | <0.00 | <0.32 | <0.00 | <0.43 | <0.067 | <0.42 | <0.049 | <0.036 | <0.97 | <0.0147 | <0.108 | <0.024 |
| MF18Pyr-23 | <0.60 | 49 | 3.1 | <1.68 | 2.1 | <0.070 | 7688 | <6.41 | <0.118 | 0.03 | 0.12 | <0.0167 | <0.39 | 0.54 | <0.38 | <0.045 | 0.01 | <0.88 | <0.00 | 4.9 | 0.31 |
| MF18Pyr-24 | <0.70 | 38 | 7.2 | <1.88 | <1.59 | 0.11 | 8656 | <6.88 | <0.134 | 0.13 | <0.00 | <0.00 | <0.46 | 0.55 | 0.74 | <0.051 | <0.037 | <1.05 | 0.01 | 13 | 4.0 |
| MF18Pyr-25 | 0.99 | 60 | 147 | 301 | <1.26 | <0.041 | 3040 | <6.72 | 1.2 | 1.8 | <0.00 | <0.0138 | 0.60 | 0.35 | 11 | <0.074 | 1.6 | <1.03 | 0.01 | 6.9 | 32 |
| MF18Pyr-26 | <0.57 | 61 | 8.3 | <1.96 | 1.9 | <0.055 | 9671 | 9.3 | 0.04 | <0.033 | <0.32 | 0.01 | <0.43 | <0.103 | 0.09 | <0.131 | <0.036 | <0.98 | <0.0148 | <0.103 | <0.0142 |
| MF18Pyr-27 | 2 | 135 | 29 | 9.4 | 3.2 | 0.11 | 5622 | 9.4 | <0.228 | 0.03 | <0.23 | <0.0132 | <0.45 | 0.23 | 17 | <0.00 | 2.6 | <1.01 | <0.021 | 0.29 | 8.3 |
| MF18Pyr-28 | 1.7 | 680 | 525 | <2.15 | <0.98 | <0.101 | 2448 | <6.33 | <0.00 | <0.033 | <0.00 | 0.01 | <0.45 | 0.17 | 1.2 | <0.00 | <0.062 | 1.1 | <0.0145 | <0.098 | 4.4 |
| MF18Pyr-29 | <0.54 | 325 | 612 | <1.75 | 2.5 | 0.32 | 3987 | 6.3 | <0.123 | <0.00 | <0.00 | 0 | <0.40 | 0.11 | 1.5 | <0.094 | 0.24 | <0.88 | <0.00 | 0.58 | 4.1 |
| MF18Pyr-30 | 63 | 296 | 419 | 6.4 | 8.9 | <0.072 | 4007 | <6.88 | <0.281 | 0.06 | <0.25 | 0.01 | 0.90 | 0.43 | 0.74 | <0.00 | 0.20 | <1.03 | 0.01 | 1.6 | 2.6 |
| MF18Pyr-31 | 7.7 | 173 | 312 | <2.19 | <1.83 | 0.03 | 4790 | 7.8 | 0.04 | 0.13 | <0.00 | <0.0132 | <0.50 | 0.50 | 1.2 | <0.080 | 0.22 | <1.12 | 0.02 | 22 | 3.4 |
| MF18Pyr-32 | <0.62 | 348 | 485 | <1.59 | <1.43 | <0.097 | 4880 | <6.52 | <0.00 | <0.00 | <0.31 | 0.01 | <0.36 | <0.074 | 0.74 | <0.066 | 0.27 | <0.91 | 0 | 0.43 | <0.0190 |
| MF18Pyr-33 | <0.73 | 200 | 406 | 6.2 | 3.2 | 0.37 | 5705 | <6.68 | <0.00 | <0.035 | <0.00 | 0.02 | 5.2 | 1.1 | 1.7 | <0.053 | 0.56 | <1.02 | <0.0273 | 18 | 2.1 |
| MF18Pyr-34 | <0.60 | 205 | 254 | 19 | <1.13 | <0.073 | 4310 | <6.19 | <0.00 | 0.06 | <0.00 | <0.021 | <0.43 | 0.30 | 0.51 | 0.01 | 0.58 | <0.89 | <0.024 | 14 | 1.0 |
| MF18Pyr-35 | 248 | 629 | 47 | 85 | 13 | <0.072 | 4995 | <8.91 | 0.29 | 1.2 | 0.17 | 0.03 | 1.3 | 8.7 | 8.3 | 0.61 | 0.78 | <1.24 | 0.15 | 93 | 12 |
| MF18Pyr-36 | <0.70 | 158 | 68 | 5.0 | <1.92 | <0.082 | 7467 | <7.11 | 0.04 | 0.07 | <0.242 | <0.024 | 1.6 | 0.15 | 24 | 0.03 | 5.0 | <1.02 | 0.02 | 4.0 | 0.93 |
| MF18Pyr-37 | 1.6 | 232 | 247 | 2.4 | <1.65 | <0.124 | 5504 | <7.35 | <0.00 | 0.39 | <0.24 | 0.01 | 0.71 | 0.26 | 1.0 | 0.02 | 1.2 | <1.04 | 0.01 | 8.3 | 1.3 |
| MF18Pyr-38 | 15 | 365 | 190 | 5593 | 16 | <0.094 | 5632 | <8.14 | 0.13 | 0.33 | <0.00 | 0.46 | 25 | 1.7 | 1.1 | <0.085 | 0.99 | <1.24 | 0.03 | 12 | 2.8 |
| MF18Pyr-39 | <0.66 | 219 | 314 | <1.91 | <1.38 | <0.074 | 5475 | <7.60 | <0.00 | <0.052 | <0.250 | <0.0144 | <0.54 | <0.096 | 1.5 | <0.055 | 1.6 | 1.1 | <0.00 | <0.100 | 0.04 |
| MF18Pyr-40 | 218 | 134 | 143 | 16 | 2.9 | 0.06 | 7287 | 9.4 | 0.05 | 0.11 | <0.00 | <0.026 | 2.2 | 0.36 | 5.0 | 0.35 | 2.5 | <1.31 | 0.03 | 8.0 | 3.4 |
| MF18Pyr-41 | 640 | 830 | 502 | 17 | 6.9 | <0.104 | 3882 | <8.52 | <0.246 | 0.80 | <0.30 | <0.030 | 0.93 | 3.7 | 3.6 | <0.066 | 0.22 | <1.34 | 0.05 | 74 | 21 |
| MF18Pyr-42 | <0.62 | 459 | 330 | <1.93 | <1.43 | <0.097 | 5183 | 8.4 | <0.123 | <0.0316 | 0.12 | 0.02 | <0.41 | <0.064 | 0.08 | <0.047 | 0.03 | <0.93 | 0 | 1.1 | 0.26 |
| MF18Pyr-43 | <0.53 | 303 | 393 | <1.44 | 2.3 | <0.075 | 2869 | 9.2 | <0.00 | 0.01 | <0.276 | 0.02 | <0.44 | 0.16 | 0.37 | <0.00 | 0.01 | <0.86 | <0.0128 | 7.2 | 1.4 |
| MF18Pyr-44 | 175 | 730 | 102 | 4.7 | <1.82 | 0.11 | 1740 | <7.69 | <0.148 | 0.14 | <0.26 | <0.0258 | 1.0 | 1.2 | 5.7 | <0.056 | 0.06 | <1.10 | 0.03 | 6.6 | 10 |
| MF18Pyr-45 | 1 | 163 | 749 | <1.95 | <1.87 | <0.111 | 1710 | 10 | <0.00 | 0.04 | <0.264 | <0.0217 | 0.48 | 0.55 | <0.50 | <0.00 | 0.04 | <1.12 | <0.0174 | 5.5 | 2.2 |
| MF18Pyr-46 | 0.79 | 331 | 283 | 36 | 2.7 | <0.063 | 5857 | 10 | <0.211 | 1.8 | <0.00 | <0.021 | <0.46 | 4.8 | 1.6 | <0.057 | 0.23 | <1.16 | 0.10 | 42 | 11 |
| MF18Pyr-47 | 727 | 261 | 221 | 59 | 9.5 | <0.148 | 4741 | 11 | 0.05 | 1.1 | <0.61 | 0.07 | 0.94 | 6.3 | 3.5 | 0.89 | 0.29 | <1.40 | 0.11 | 185 | 26 |
| MF18Pyr-48 | 8.9 | 672 | 687 | 2.3 | <1.79 | <0.143 | 4149 | 9.7 | 0.04 | 0.03 | <0.00 | <0.0259 | 0.44 | 0.21 | 2.0 | <0.00 | 0.06 | <0.97 | 0.02 | 3.8 | 1.1 |
| MF18Pyr-49 | 0.86 | 752 | 502 | <1.47 | 2.6 | <0.071 | 4395 | <6.31 | <0.00 | 0.02 | <0.36 | <0.0120 | <0.39 | <0.051 | <0.00 | <0.045 | 0.05 | <0.90 | <0.00 | <0.077 | 0 |
| MF18Pyr-50 | 1985 | 307 | 172 | 31 | 9.3 | 0.10 | 8239 | 12 | <0.00 | 0.82 | <0.37 | 0.09 | 3.7 | 7.3 | 4.2 | 1.1 | 0.17 | <1.64 | 0.18 | 103 | 42 |
| MF18Pyr-51 | <0.67 | 341 | 164 | 6.3 | 2.7 | <0.066 | 6699 | 7.5 | <0.182 | 0.57 | <0.00 | 0.02 | <0.46 | 2.4 | 7.5 | <0.049 | 0.18 | <0.98 | 0.03 | 42 | 16 |
| MF18Pyr-52 | 2.5 | 562 | 113 | <1.57 | <1.72 | <0.059 | 1766 | <6.90 | <0.277 | 0.03 | <0.00 | <0.0243 | <0.42 | <0.073 | <0.00 | <0.075 | <0.00 | <1.01 | <0.00 | <0.094 | <0.00 |
| MF18Pyr-53 | 112 | 207 | 184 | <1.76 | <1.63 | 0.37 | 2762 | <7.32 | <0.00 | <0.00 | <0.42 | <0.0141 | <0.43 | 0.23 | 0.47 | <0.00 | <0.040 | <1.12 | 0.02 | 4.5 | 5.6 |
| MF18Pyr-54 | <0.63 | 746 | 298 | <1.32 | <1.26 | <0.074 | 1225 | 6.5 | 0.03 | 0.02 | <0.00 | <0.020 | 0.45 | <0.075 | 0.07 | <0.00 | <0.045 | <0.87 | <0.0181 | 0.84 | 0.18 |
| MF18Pyr-55 | <0.53 | 210 | 567 | <1.32 | 1.9 | <0.083 | 3783 | <5.52 | <0.149 | <0.00 | <0.258 | 0.02 | <0.34 | <0.055 | 1.1 | <0.040 | <0.042 | <0.80 | <0.00 | <0.068 | <0.0115 |
| MF18Pyr-56 | <0.53 | 501 | 833 | <1.57 | 2.8 | 0.03 | 4397 | <6.62 | <0.00 | 0.16 | <0.31 | <0.018 | 0.46 | 0.23 | 2.0 | 0.01 | 0.01 | <0.93 | <0.0203 | 59 | 3.3 |
| MF18Pyr-57 | <0.61 | 525 | 1052 | 11 | <1.36 | <0.067 | 5438 | <6.66 | 0.04 | 0.55 | 0.13 | 0.02 | <0.43 | 9.1 | 2.6 | <0.049 | 0.59 | <0.95 | 0.26 | 63 | 16 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF18Pyr-58 | <0.62 | 534 | 1012 | 1.6 | <1.22 | <0.119 | 5741 | 12 | <0.00 | <0.065 | <0.00 | <0.013 | <0.43 | 0.09 | 4.5 | <0.067 | <0.051 | <0.96 | 0.02 | 2.1 | 0.74 |
| MF18Pyr-59 | 21 | 391 | 364 | 24 | <1.52 | 0.18 | 6855 | <6.13 | <0.00 | 0.65 | 0.12 | <0.022 | 0.60 | 3.2 | 4.8 | 0.03 | 0.28 | <0.97 | 0.06 | 81 | 15 |
| MF18Pyr-60 | 3.6 | 262 | 240 | 29 | 5.9 | 0.31 | 11883 | <6.64 | <0.178 | 0.68 | <0.38 | <0.029 | 1.7 | 4.3 | 3.0 | <0.00 | 0.45 | <0.93 | 0.07 | 101 | 29 |
| MF18Pyr-61 | <0.94 | 262 | 15 | 6.2 | <2.81 | <0.133 | 144 | <9.30 | <0.26 | 0.03 | <0.31 | <0.018 | 0.77 | <0.146 | 0.12 | <0.119 | <0.052 | <1.51 | <0.036 | <0.24 | <0.034 |
| MF18Pyr-62 | 1.7 | 2096 | 1410 | 4.4 | <2.32 | <0.122 | 6631 | <9.30 | <0.182 | 0.04 | <0.44 | <0.026 | <0.62 | 0.77 | 0.49 | <0.069 | 0.10 | <1.40 | <0.036 | 5.6 | 2.2 |
| MF18Pyr-63 | <0.77 | 500 | 449 | <1.91 | <2.03 | 0.04 | 11567 | <8.74 | <0.173 | 1.5 | 0.42 | <0.0176 | <0.59 | 1.2 | 2.2 | <0.066 | 0.08 | <1.37 | 0.01 | 196 | 13 |
| MF18Pyr-64 | 4 | 715 | 420 | 14 | 4.1 | <0.101 | 9971 | <7.71 | <0.00 | 0.16 | 0.15 | <0.022 | <0.62 | 0.72 | <0.51 | <0.128 | <0.043 | <1.18 | 0.03 | 6.6 | 0.56 |
| MF18Pyr-65 | <0.69 | 825 | 642 | 3.2 | <1.39 | <0.147 | 3556 | <6.67 | 0.08 | 0.26 | <0.33 | <0.0240 | 0.46 | 1.5 | 1.2 | 0.03 | <0.055 | <1.06 | <0.022 | 8.2 | 3.1 |
| MF18Pyr-66 | <0.82 | 1465 | 809 | <2.44 | <1.68 | <0.103 | 2780 | <8.20 | 0.10 | <0.045 | <0.00 | <0.00 | <0.63 | <0.105 | <0.82 | <0.065 | 0.01 | <1.38 | 0.01 | <0.194 | <0.033 |
| MF18Pyr-67 | <0.51 | 763 | 575 | 901 | <1.19 | <0.051 | 1746 | <4.88 | 0.03 | 0.19 | 0.05 | <0.0100 | 0.33 | 0.50 | 1.7 | 0.01 | 0.02 | <0.72 | <0.00 | 1.3 | 2.8 |
| MF18Pyr-68 | 7.1 | 166 | 87 | 14 | <2.11 | 0.09 | 152 | 13 | <0.00 | 0.49 | <0.39 | <0.028 | 0.54 | 2.4 | <0.76 | <0.105 | 0.05 | <1.27 | 0.06 | 23 | 6.6 |
| MF18Pyr-69 | 9.6 | 1551 | 1169 | 35 | <1.96 | <0.121 | 3190 | <7.83 | <0.00 | 1.1 | <0.26 | <0.0156 | 0.76 | 8.1 | 8.1 | 0.05 | 0.41 | <1.20 | 0.11 | 126 | 34 |
| MF18Pyr-70 | <0.67 | 558 | 465 | <1.62 | 1.9 | <0.088 | 6508 | <6.50 | <0.00 | <0.048 | <0.00 | <0.0189 | <0.42 | <0.057 | 0.89 | 0.01 | <0.076 | <1.05 | <0.0153 | <0.153 | 1.1 |
| MF18Pyr-71 | 2.7 | 688 | 421 | 15 | <1.59 | <0.108 | 9460 | <6.07 | 0.04 | 0.36 | 0.12 | <0.0130 | <0.46 | 3.1 | 2.8 | <0.048 | 0.27 | <1.02 | 0.04 | 88 | 19 |
| MF18Pyr-72 | <0.61 | 919 | 1237 | <1.46 | <1.01 | <0.076 | 4542 | <5.72 | <0.00 | 0.02 | <0.196 | 0.02 | <0.39 | <0.070 | 1.5 | 0.01 | <0.066 | <0.91 | <0.0187 | 0.52 | 0.20 |
| MF18Pyr-73 | <0.68 | 1452 | 1384 | 14 | <1.28 | <0.075 | 3602 | <7.12 | <0.205 | 0.47 | <0.249 | <0.015 | 1.5 | 4.3 | 0.92 | <0.095 | 0.13 | <1.16 | 0.08 | 29 | 4.6 |
| MF18Pyr-74 | <0.67 | 1374 | 1703 | <1.65 | 2.5 | <0.102 | 5896 | <7.23 | <0.00 | <0.051 | <0.240 | 0.01 | <0.44 | 0.05 | 0.95 | <0.00 | <0.070 | <1.13 | <0.0162 | 0.26 | 0.12 |
| MF18Pyr-75 | 1.7 | 194 | 63 | <2.06 | 4.4 | 1.6 | 175 | <7.66 | <0.167 | <0.087 | <0.00 | 0.01 | <0.54 | 1.6 | 0.96 | 0.07 | 0.10 | <1.28 | <0.019 | 17 | 11 |
| MF18Pyr-76 | <0.68 | 1323 | 881 | 4.9 | 2.5 | 0.07 | 3838 | 12 | <0.00 | 0.12 | <0.25 | <0.034 | <0.50 | 0.45 | 2.6 | 0.08 | 0.04 | <1.16 | <0.00 | 5.1 | 18 |
| MF18Pyr-77 | 1.8 | 1110 | 881 | 2.9 | <2.05 | 0.13 | 4315 | 8.9 | <0.00 | 0.19 | 0.21 | <0.0145 | <0.46 | 1.0 | 13 | <0.054 | 0.28 | <1.12 | <0.023 | 6.3 | 32 |
| MF18Pyr-78 | 3.7 | 1421 | 1039 | 4.9 | 5.7 | 0.20 | 5128 | <8.61 | <0.00 | 0.88 | <0.00 | <0.028 | <0.54 | 2.0 | 35 | <0.060 | 0.74 | <1.17 | 0.03 | 14 | 155 |
| MF18Pyr-79 | 7.6 | 1305 | 1193 | <1.84 | 3.0 | 0.44 | 4159 | <8.56 | <0.00 | 0.05 | 0.08 | <0.030 | <0.58 | 0.27 | 10 | <0.063 | 0.07 | <1.31 | <0.034 | 5.9 | 25 |
| MF18Pyr-80 | 353 | 1570 | 1656 | 16 | 2.3 | <0.101 | 6599 | <9.25 | <0.00 | 0.10 | <0.33 | 0.04 | <0.59 | 0.92 | 8.8 | <0.073 | 0.37 | <1.52 | 0.04 | 13 | 40 |
| **Mean n=80** | 141 | 692 | 720 | 2615 | 14 | 2.0 | 4890 | 9.6 | 0.11 | 0.49 | 0.15 | 0.12 | 6.6 | 2.2 | 3.8 | 0.15 | 0.45 | 1.1 | 0.07 | 30 | 11 |
| **S.D** | 362 | 509 | 576 | 12760 | 51 | 9.0 | 2399 | 1.9 | 0.24 | 0.79 | 0.10 | 0.35 | 20 | 2.9 | 5.7 | 0.30 | 0.83 | 0 | 0.09 | 42 | 20 |
| **Min** | 0.74 | 38 | 3.1 | 1.6 | 1.6 | 0.03 | 144 | 6.3 | 0.03 | 0.01 | 0.05 | 0 | 0.33 | 0.03 | 0.07 | 0.01 | 0.01 | 1.1 | 0 | 0.1 | 0 |
| **Max** | 1985 | 2096 | 1984 | 81279 | 301 | 48 | 11883 | 13 | 1.2 | 4.0 | 0.42 | 1.6 | 103 | 12 | 35 | 1.1 | 5.0 | 1.1 | 0.49 | 196 | 155 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF19Pyr-1 | <0.193 | 595 | 69 | 0.56 | <0.41 | <0.0194 | 8264 | 4.4 | <0.00 | <0.0141 | <0.00 | <0.0087 | 0.51 | <0.026 | 5.8 | <0.015 | 0.28 | 0.31 | <0.0056 | <0.044 | 0 |
| MF19Pyr-2 | 0.42 | 210 | 44 | 1.5 | 0.63 | <0.0219 | 6352 | <1.62 | <0.00 | 0.10 | <0.058 | <0.0054 | <0.121 | 1.2 | 3.2 | 0.01 | 0.33 | <0.27 | 0.01 | 7.5 | 1.7 |
| MF19Pyr-3 | 12 | 3683 | 358 | 21 | 2.3 | <0.034 | 4189 | 2.2 | 0.02 | 0.15 | <0.070 | <0.0053 | 0.49 | 0.52 | 3.4 | 0.07 | 0.58 | <0.32 | 0.10 | 19 | 13 |
| MF19Pyr-4 | 2.3 | 1801 | 428 | 14 | 1.4 | 0.07 | 3904 | <2.05 | 0.03 | 0.23 | <0.00 | <0.0091 | 0.25 | 0.70 | 19 | <0.022 | 1.3 | 0.37 | 0.02 | 14 | 22 |
| MF19Pyr-5 | 0.59 | 1796 | 101 | 7.9 | 0.75 | <0.020 | 5191 | 2.2 | <0.039 | 0.08 | <0.00 | 0 | 0.24 | 0.56 | 1.9 | 0.02 | 0.38 | <0.31 | 0.10 | 6.6 | 4.3 |
| MF19Pyr-6 | 0.57 | 3190 | 156 | 2.1 | 1.2 | <0.030 | 6906 | 2.5 | <0.00 | <0.0168 | 0.02 | 0 | 1.4 | 0.04 | 7.0 | <0.0174 | 0.28 | <0.34 | <0.00 | 0.11 | 2.4 |
| MF19Pyr-7 | 3.2 | 859 | 71 | 2.7 | 1.6 | 0.07 | 4957 | 3.4 | <0.077 | 0.05 | <0.079 | <0.0073 | <0.143 | 0.73 | 3.7 | <0.0175 | 1.1 | <0.35 | <0.0095 | 0.99 | 16 |
| MF19Pyr-8 | 1.6 | 945 | 208 | 68 | 1.8 | 1.3 | 10307 | <1.70 | 0.03 | 0.56 | <0.058 | 0.02 | 4.4 | 1.6 | 13 | 0.12 | 0.45 | 0.26 | 0.09 | 18 | 19 |
| MF19Pyr-9 | 2.4 | 889 | 268 | 4019 | 5.4 | <0.032 | 8631 | 4.1 | <0.00 | 0.52 | 0.04 | 0.16 | 8.3 | 0.85 | 1.0 | <0.024 | 0.16 | <0.35 | 0.01 | 4.8 | 6.9 |
| MF19Pyr-10 | 3.9 | 2103 | 236 | 1053 | 2.1 | 0.68 | 10175 | 2.8 | <0.00 | 0.12 | 0.08 | 0.02 | 5.0 | 0.95 | 4.3 | 0.05 | 0.88 | <0.32 | 0.02 | 6.0 | 17 |
| MF19Pyr-11 | 86 | 2214 | 289 | 26 | 3.2 | 0.63 | 7920 | 5.3 | 0.03 | 0.24 | <0.00 | 0.01 | 1.8 | 1.4 | 9.5 | 0.10 | 1.4 | 0.39 | 0.04 | 16 | 45 |
| MF19Pyr-12 | 4 | 925 | 243 | 0.89 | 4.0 | 0.08 | 12862 | <2.27 | <0.045 | 0.04 | <0.079 | <0.0043 | 0.38 | 0.34 | 2.8 | <0.0176 | 0.21 | <0.35 | 0.02 | 4.6 | 19 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF19Pyr-13 | 915 | 4002 | 174 | 192 | 3.1 | 0.05 | 7130 | <2.23 | 0.04 | 0.45 | <0.119 | 0.01 | 0.66 | 1.3 | 6.7 | <0.0186 | 1.6 | <0.36 | 0.02 | 9.3 | 39 |
| MF19Pyr-14 | 2.9 | 878 | 250 | 1.8 | 1.8 | <0.034 | 7467 | 3.0 | <0.00 | 0.07 | <0.116 | <0.0088 | <0.177 | 0.23 | 3.7 | 0.03 | 0.48 | <0.37 | 0.01 | 0.74 | 17 |
| MF19Pyr-15 | 4.8 | 816 | 255 | 1.6 | 2.1 | 0.04 | 6947 | 2.6 | <0.051 | 0.02 | <0.090 | <0.0049 | 0.16 | 0.06 | 3.6 | <0.0142 | 0.62 | <0.27 | 0 | 0.06 | 4.9 |
| MF19Pyr-16 | 4.9 | 847 | 171 | 0.77 | 1.7 | 0.02 | 11576 | <1.74 | <0.034 | <0.018 | 0.03 | 0.01 | 0.16 | 0.04 | 0.48 | <0.0187 | 0.16 | <0.26 | <0.0051 | 0.06 | 2.7 |
| MF19Pyr-17 | 1.9 | 1541 | 295 | 2.6 | 0.96 | <0.020 | 13205 | 2.7 | <0.039 | 0.06 | <0.069 | <0.0090 | 0.25 | 0.16 | 1.2 | 0.01 | 0.29 | <0.31 | <0.0041 | 0.53 | 9.5 |
| MF19Pyr-18 | 2.7 | 2969 | 70 | 61756 | 73 | 6.6 | 3197 | 3.0 | <0.00 | 13 | 0.18 | 2.3 | 21 | 0.34 | 7.8 | 0.13 | 36 | <0.38 | 0 | 1.3 | 25 |
| MF19Pyr-19 | 0.85 | 4055 | 151 | 16 | 1.3 | 0.04 | 9977 | 3.6 | <0.00 | 0.09 | <0.115 | <0.0075 | 0.20 | 0.28 | 2.6 | 0.03 | 0.47 | <0.37 | <0.00 | 0.26 | 14 |
| MF19Pyr-20 | 1 | 2327 | 352 | 0.60 | 2.0 | <0.030 | 5349 | <2.23 | <0.00 | <0.00 | <0.079 | 0 | <0.147 | <0.00 | 0.77 | 0.02 | 0.15 | <0.35 | <0.0048 | <0.077 | 0.46 |
| MF19Pyr-21 | 0.54 | 2844 | 60 | 0.60 | <0.53 | <0.028 | 6312 | 3.1 | 0.01 | 0.01 | 0.05 | <0.0040 | <0.145 | <0.0260 | 0.97 | <0.00 | 0.03 | <0.35 | 0 | 0.12 | <0.0106 |
| MF19Pyr-22 | 0.34 | 1425 | 102 | 0.43 | 0.70 | <0.0181 | 5621 | <2.25 | <0.043 | <0.00 | 0.02 | 0 | <0.133 | <0.0229 | 2.0 | 0.01 | 0.09 | <0.34 | <0.0064 | <0.063 | 0 |
| MF19Pyr-23 | 0.24 | 858 | 21 | 0.61 | 0.35 | <0.026 | 3800 | 1.7 | <0.00 | 0 | 0.02 | 0 | <0.132 | <0.0218 | 3.0 | <0.00 | 0.28 | <0.29 | 0.01 | 0.04 | 0.11 |
| MF19Pyr-24 | <0.200 | 1692 | 132 | <0.44 | 1.1 | <0.025 | 6244 | <2.12 | <0.042 | <0.0160 | <0.00 | 0 | 0.26 | 0 | 0.35 | <0.00 | 0.06 | <0.33 | <0.00 | 0.28 | 0.16 |
| MF19Pyr-25 | <0.24 | 974 | 58 | <0.62 | <0.48 | 0.19 | 3384 | 2.5 | 0.01 | 0.01 | <0.086 | <0.0091 | 0.21 | <0.0149 | 0.62 | <0.00 | 0.03 | <0.37 | 0 | 0.17 | 0.03 |
| MF19Pyr-26 | 2.9 | 557 | 8.8 | 2.2 | 3.9 | <0.029 | 5274 | 2.2 | <0.051 | 0.09 | 0.02 | 0 | 0.58 | 0.71 | 2.4 | <0.0200 | 0.71 | <0.29 | 0.01 | 7.2 | 15 |
| MF19Pyr-27 | 13 | 277 | 2.4 | 2.9 | 4.1 | 0.13 | 4958 | 4.3 | <0.00 | 0.04 | <0.135 | <0.0072 | 0.24 | 0.32 | 9.8 | <0.030 | 0.55 | 0.41 | 0.01 | 0.60 | 11 |
| MF19Pyr-28 | 130 | 4291 | 243 | 52 | 1.9 | <0.022 | 9686 | <2.10 | 0.01 | 0.39 | <0.108 | 0.01 | 0.37 | 1.1 | 5.6 | 0.03 | 0.85 | <0.35 | 0.03 | 46 | 24 |
| MF19Pyr-29 | 1467 | 1097 | 72 | 146 | 10 | 0.13 | 4807 | <2.88 | 0.05 | 0.46 | 0.03 | 0.05 | 0.31 | 1.6 | 14 | 0.09 | 0.34 | <0.45 | 0.08 | 94 | 37 |
| MF19Pyr-30 | 963 | 4660 | 105 | 459 | 36 | 0.07 | 7665 | 3.3 | 0.20 | 1.1 | 0.07 | 0.05 | 2.8 | 3.9 | 22 | 0.14 | 0.95 | <0.36 | 0.08 | 134 | 62 |
| MF19Pyr-31 | 8.7 | 10963 | 26 | 101 | 0.56 | <0.0202 | 18001 | <1.64 | 0.01 | 0.15 | <0.00 | 0 | 0.47 | 0.45 | 2.9 | <0.00 | 0.11 | <0.27 | 0.05 | 19 | 11 |
| MF19Pyr-32 | 3.5 | 1407 | 53 | 225 | 1.5 | 0.02 | 9745 | <2.15 | 0.04 | 0.31 | <0.00 | 0.02 | 0.56 | 0.98 | 4.6 | 0.01 | 0.62 | <0.32 | 0.08 | 21 | 19 |
| MF19Pyr-33 | 274 | 4544 | 41 | 2000 | 8.0 | <0.024 | 5204 | <2.31 | 0.03 | 1.0 | 0.05 | 0.10 | 7.9 | 2.8 | 18 | 0.14 | 4.7 | <0.35 | 0.11 | 118 | 59 |
| MF19Pyr-34 | 989 | 7430 | 24 | 114 | 5.1 | <0.039 | 10587 | <3.23 | 0.07 | 0.80 | <0.115 | 0.02 | 0.77 | 3.2 | **** | 0.39 | 0.39 | <0.50 | 0.13 | 94 | 38 |
| MF19Pyr-35 | 6.4 | 2188 | 181 | 9.1 | 1.3 | <0.018 | 12827 | 2.7 | <0.059 | 0.15 | <0.00 | <0.0057 | 0.58 | 0.15 | 1.9 | <0.00 | 0.04 | <0.32 | 0.01 | 9.0 | 3.5 |
| MF19Pyr-36 | 265 | 4580 | 14 | 61 | 7.6 | 16 | 4076 | <2.82 | 0.08 | 0.23 | 0.06 | 0.15 | 47 | 1.4 | 6.2 | 1.4 | 0.13 | <0.47 | 0.33 | 63 | 41 |
| MF19Pyr-37 | 1.7 | 8125 | 35 | 16 | 0.57 | 0.17 | 8275 | 2.1 | 0.02 | 0.15 | <0.00 | <0.0050 | 0.34 | 0.27 | 2.9 | 0.02 | 0.02 | <0.29 | 0.01 | 9.3 | 5.9 |
| MF19Pyr-38 | 1714 | 12994 | 57 | 131 | 17 | 0.20 | 15626 | 2.7 | 0.27 | 1.0 | 0.03 | 0.06 | 1.4 | 4.9 | 20 | 3.7 | 0.42 | <0.44 | 0.31 | 205 | 76 |
| MF19Pyr-39 | 502 | 17206 | 29 | 111 | 5.9 | 16 | 16792 | 3.4 | 0.11 | 1.0 | <0.098 | 0.10 | 29 | 3.0 | 27 | 0.73 | 0.64 | 0.43 | 0.40 | 135 | 64 |
| MF19Pyr-40 | 419 | 16243 | 38 | 51 | 4.8 | 7.4 | 18976 | 4.3 | 0.06 | 0.77 | <0.091 | 0.04 | 9.2 | 1.3 | 14 | 0.22 | 0.26 | <0.40 | 0.20 | 28 | 20 |
| MF19Pyr-41 | 0.31 | 99 | 477 | 1.5 | 0.67 | <0.020 | 7506 | <1.83 | 0.02 | <0.00 | <0.00 | <0.0054 | 0.13 | <0.0146 | 5.7 | <0.0183 | 1.2 | <0.28 | <0.0050 | 0.03 | 0.04 |
| MF19Pyr-42 | 21 | 230 | 544 | 61 | 11 | <0.027 | 8253 | 3.2 | <0.037 | 0.72 | 0.08 | 0.02 | 5.7 | 0.40 | 16 | 1.4 | 1.6 | <0.31 | 0.05 | 25 | 12 |
| MF19Pyr-43 | 5.9 | 162 | 899 | 77 | 3.4 | 0.08 | 7163 | <2.02 | 0.06 | 0.98 | <0.00 | <0.0053 | <0.146 | 1.1 | 19 | <0.022 | 1.1 | <0.30 | 0.44 | 72 | 47 |
| MF19Pyr-44 | 0.61 | 149 | 55 | 5.5 | 1.2 | 0.03 | 386 | <2.18 | 0.04 | 0.04 | <0.00 | 0 | 0.18 | 0.21 | 17 | 0.02 | 0.50 | <0.37 | 0.03 | 1.9 | 14 |
| MF19Pyr-45 | 2.1 | 77 | 27 | 13 | 2.0 | <0.022 | 11366 | <2.16 | <0.059 | 0.16 | <0.00 | 0 | 0.88 | 0.39 | 4.1 | <0.0234 | 0.12 | <0.36 | 0.05 | 7.5 | 12 |
| MF19Pyr-46 | 11 | 828 | 63 | 106 | 1.2 | 0.62 | 11327 | 2.3 | <0.042 | 1.1 | <0.00 | 0.02 | 3.3 | 2.3 | 24 | 0.14 | 2.1 | <0.33 | 0.06 | 52 | 88 |
| MF19Pyr-47 | 6.4 | 5881 | 56 | 1610 | 3.2 | 2.1 | 5444 | 2.4 | 0.04 | 2.5 | 0.04 | 0.06 | 6.9 | 2.7 | 49 | 0.30 | 2.4 | <0.28 | 0.15 | 78 | 125 |
| MF19Pyr-48 | 13 | 2640 | 141 | 244 | 2.4 | 4.2 | 8013 | <2.34 | 0.08 | 3.9 | <0.00 | 0.05 | 12 | 4.8 | 70 | 0.25 | 4.4 | 0.37 | 0.28 | 113 | 195 |
| MF19Pyr-49 | 6.1 | 1138 | 296 | 1864 | 2.9 | 1.3 | 9524 | 3.4 | 0.02 | 1.3 | <0.080 | 0.17 | 7.5 | 2.3 | 26 | 0.10 | 1.4 | 0.39 | 0.12 | 29 | 75 |
| MF19Pyr-50 | 15 | 3388 | 145 | 53 | 5.0 | 5.0 | 5341 | <1.78 | <0.035 | 1.1 | 0.04 | 0.03 | 13 | 2.3 | 21 | 0.38 | 3.7 | <0.29 | 0.10 | 32 | 79 |
| MF19Pyr-51 | 0.42 | 9765 | 16 | 3.7 | 1.1 | <0.022 | 9312 | 2.5 | <0.00 | <0.0099 | 0.04 | <0.0035 | <0.124 | <0.0115 | 0.10 | 0 | 0.01 | <0.28 | <0.0068 | <0.030 | 0.49 |
| MF19Pyr-52 | 0.41 | 7127 | 173 | 2.9 | 1.5 | <0.020 | 8228 | 3.1 | <0.046 | <0.00 | <0.00 | <0.0063 | 0.21 | 0.04 | 3.5 | <0.018 | 0.07 | <0.38 | <0.00 | <0.065 | 6.2 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF19Pyr-53 | 3 | 2093 | 370 | 1.1 | 0.57 | <0.023 | 3435 | 2.3 | <0.033 | 0.01 | <0.00 | <0.0032( | 0.12 | 0.11 | 0.88 | <0.0131 | 0.07 | <0.28 | <0.0062 | <0.037 | 4.4 |
| MF19Pyr-54 | 1.3 | 1367 | 1064 | 3.1 | 1.7 | 0.04 | 6892 | <2.33 | 0.01 | <0.0175 | <0.00 | <0.0061 | 0.25 | 0.13 | 7.5 | <0.036 | 0.58 | <0.36 | <0.0098 | 1.9 | 9.4 |
| MF19Pyr-55 | 2.1 | 2430 | 1064 | 18 | 2.0 | <0.028 | 5197 | <1.68 | 0.01 | 0.09 | <0.059 | <0.0031 | 0.32 | 0.25 | 4.5 | <0.00 | 0.23 | <0.27 | 0.01 | 18 | 11 |
| MF19Pyr-56 | <0.195 | 517 | 62 | 1.4 | 1.7 | <0.020 | 4279 | <1.96 | <0.039 | <0.0105 | <0.070 | <0.0037 | 0.23 | 0.02 | 0.64 | 0 | 0.23 | <0.30 | 0 | 0.20 | 1.4 |
| MF19Pyr-57 | 0.28 | 1550 | 537 | 11 | 1.2 | <0.026 | 4860 | <2.32 | 0.01 | 0.28 | <0.112 | <0.00 | <0.140 | 0.30 | 0.61 | <0.00 | 0.17 | <0.34 | 0.02 | 8.5 | 0.29 |
| MF19Pyr-58 | 4.6 | 1666 | 546 | 41 | 1.4 | <0.027 | 5724 | 3.4 | 0.03 | 0.28 | <0.00 | <0.0060 | 0.20 | 0.93 | 8.3 | <0.030 | 0.28 | <0.37 | 0.06 | 38 | 26 |
| MF19Pyr-59 | 807 | 1046 | 214 | 9.7 | 2.8 | <0.044 | 4376 | <2.85 | <0.054 | 0.26 | 0.03 | <0.0052 | 0.25 | 0.19 | 1.3 | <0.030 | 0.30 | <0.43 | 0.02 | 5.3 | 13 |
| MF19Pyr-60 | 82 | 1143 | 155 | 170 | 2.6 | <0.033 | 12653 | <2.09 | <0.00 | 0.29 | 0.06 | 0.02 | 0.74 | 0.72 | 6.2 | 0.07 | 0.31 | <0.33 | 0.03 | 35 | 25 |
| MF19Pyr-61 | 4.9 | 18030 | 8.2 | 55 | 1.6 | 0.06 | 14649 | 2.6 | 0.11 | 0.51 | <0.071 | <0.0091 | <0.24 | 2.5 | 9.4 | <0.026 | 0.18 | <0.34 | 0.39 | 56 | 33 |
| MF19Pyr-62 | 243 | 12946 | 25 | 248 | 5.4 | 0.03 | 4865 | 2.4 | 0.03 | 0.85 | 0.05 | 0.03 | 0.43 | 2.8 | 14 | 0.06 | 0.81 | <0.40 | 0.07 | 75 | 57 |
| MF19Pyr-63 | 3.6 | 10369 | 4.9 | 391 | 2.6 | 0.03 | 1407 | <2.18 | 0.03 | 0.40 | <0.079 | 0.01 | 0.69 | 0.96 | 6.3 | <0.017 | 0.17 | <0.36 | 0.17 | 21 | 22 |
| MF19Pyr-64 | 2.5 | 12369 | 4.8 | 13 | 0.93 | 0.03 | 1178 | <2.00 | <0.040 | 0.04 | <0.073 | 0 | 0.46 | 0.39 | 2.8 | 0 | 0.12 | <0.33 | 0.02 | 10 | 11 |
| MF19Pyr-65 | 3.9 | 10169 | 31 | 4247 | 3.1 | 0.04 | 1308 | <1.91 | <0.079 | 2.0 | <0.072 | 0.17 | 4.8 | 4.3 | 27 | <0.0155 | 1.5 | <0.33 | 0.29 | 92 | 68 |
| MF19Pyr-66 | 1 | 10666 | 7.5 | 43 | 3.2 | <0.025 | 1900 | 3.4 | 0.96 | 0.36 | <0.00 | <0.0045 | 0.28 | 0.82 | 4.6 | 0.15 | 0.16 | <0.37 | 0.05 | 32 | 23 |
| MF19Pyr-67 | 0.34 | 12386 | 2.1 | 2.1 | 0.57 | 0.02 | 714 | 2.5 | <0.00 | 0.04 | <0.078 | 0.01 | 0.22 | 0.09 | 0.45 | <0.033 | 0.01 | <0.36 | 0.29 | 2.1 | 1.5 |
| MF19Pyr-68 | 0.22 | 14285 | 3.1 | 18 | 1.3 | 0.20 | 752 | 2.2 | 0.05 | 0.25 | <0.00 | 0.01 | 0.84 | 1.1 | 4.0 | 0.01 | 0.09 | <0.33 | 0.03 | 9.3 | 12 |
| MF19Pyr-69 | <0.192 | 10252 | 2.3 | 8.5 | 1.4 | 0.08 | 994 | 3.3 | <0.00 | 0.14 | <0.00 | <0.0090 | 0.80 | 0.29 | 2.9 | <0.023 | 0.11 | <0.34 | 0.06 | 11 | 16 |
| MF19Pyr-70 | 39 | 11298 | 2.5 | 2.3 | 12 | 0.53 | 460 | <2.38 | <0.048 | <0.0131 | <0.088 | 0.05 | 0.14 | 0.02 | 0.19 | 0.02 | 0.01 | <0.37 | 0.02 | 1.3 | 3.1 |
| MF19Pyr-71 | <0.21 | 14613 | 5.4 | 2.8 | 2.2 | 0.08 | 517 | <2.23 | <0.00 | 0.17 | <0.00 | <0.0071 | 0.20 | 0.41 | 0.51 | <0.0237 | 0 | <0.34 | 0.01 | 8.0 | 7.3 |
| MF19Pyr-72 | 2 | 10309 | 7.0 | 56 | 2.1 | 0.03 | 281 | 2.8 | 0.04 | 0.26 | <0.00 | 0.01 | 0.78 | 3.5 | 5.2 | <0.0163 | 0.12 | <0.35 | 0.27 | 63 | 30 |
| MF19Pyr-73 | 365 | 11638 | 23 | 3165 | 9.0 | 0.12 | 967 | <2.20 | 0.05 | 1.5 | <0.00 | 0.15 | 5.8 | 5.6 | 22 | 0.87 | 0.56 | <0.36 | 0.17 | 150 | 96 |
| MF19Pyr-74 | 3.1 | 15138 | 5.4 | 9.3 | 2.4 | 0.03 | 805 | <2.31 | <0.043 | 0.07 | <0.00 | 0.14 | 0.40 | 0.22 | 6.2 | 0.01 | 1.0 | <0.34 | <0.0046 | 0.93 | 17 |
| MF19Pyr-75 | 9.6 | 11861 | 33 | 97 | 19 | 0.14 | 3180 | 2.0 | 0.06 | 1.8 | <0.00 | 0.01 | 0.90 | 5.5 | 44 | 0.40 | 3.4 | <0.28 | 0.12 | 89 | 105 |
| MF19Pyr-76 | 7.6 | 12085 | 5.5 | 8.2 | 1.9 | 0.09 | 1025 | <2.27 | <0.00 | 0.20 | 0.05 | <0.0074 | 0.18 | 0.36 | 3.3 | <0.017 | 0.38 | <0.38 | <0.0068 | 1.5 | 23 |
| MF19Pyr-77 | 12 | 12171 | 7.3 | 38 | 2.2 | 0.07 | 1023 | <2.30 | <0.063 | 0.28 | 0.02 | <0.0061 | 0.53 | 0.95 | 5.3 | 0.08 | 0.27 | <0.38 | 0.03 | 15 | 24 |
| MF19Pyr-78 | 9.5 | 11921 | 5.6 | 16 | 3.4 | 0.07 | 941 | 4.9 | <0.060 | 0.10 | <0.00 | 0 | 0.12 | 0.70 | 2.7 | 0.03 | 0.33 | <0.35 | 0.02 | 5.6 | 23 |
| MF19Pyr-79 | 11 | 11012 | 6.0 | 48 | 2.6 | 0.46 | 842 | 2.0 | <0.065 | 0.56 | <0.00 | 0.01 | 3.6 | 1.5 | 9.0 | 0.08 | 0.33 | <0.32 | 0.09 | 25 | 61 |
| MF19Pyr-80 | 23 | 10833 | 23 | 120 | 5.9 | 0.06 | 1194 | <2.83 | 1.0 | 1.0 | <0.142 | 0.01 | 5.0 | 3.1 | 17 | 59 | 0.54 | <0.44 | 0.12 | 57 | 55 |
| **Mean n=80** | 129 | 5358 | 158 | 1071 | 4.6 | 1.4 | 6383 | 3.0 | 0.10 | 0.69 | 0.05 | 0.09 | 3.3 | 1.3 | 9.3 | 1.6 | 1.1 | 0.37 | 0.09 | 32 | 28 |
| **S.D** | 332 | 5222 | 220 | 7007 | 9.4 | 3.5 | 4445 | 0.82 | 0.22 | 1.7 | 0.03 | 0.33 | 7.3 | 1.4 | 12 | 8.8 | 4.1 | 0.06 | 0.11 | 43 | 33 |
| **Min** | 0.22 | 77 | 2.1 | 0.43 | 0.35 | 0.02 | 281 | 1.7 | 0.01 | 0 | 0.02 | 0 | 0.12 | 0 | 0.1 | 0 | 0 | 0.26 | 0 | 0.03 | 0 |
| **Max** | 1714 | 18030 | 1064 | 61756 | 73 | 16 | 18976 | 5.3 | 1 | 13 | 0.18 | 2.3 | 47 | 5.6 | 70 | 59 | 36 | 0.43 | 0.44 | 205 | 195 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF20Pyr-1 | 1.5 | 1303 | 647 | 10 | 5.5 | <0.032 | 1750 | <3.48 | <0.051 | 0.14 | <0.148 | <0.0087 | <0.173 | 0.26 | 8.6 | 0.01 | 0.54 | <0.46 | <0.0058 | 0.17 | 26 |
| MF20Pyr-2 | 0.41 | 1449 | 513 | 3.7 | 1.2 | <0.024 | 1302 | <3.53 | <0.055 | 0.09 | <0.00 | <0.0054 | <0.165 | <0.018 | 0.29 | <0.0223 | 0 | <0.50 | <0.0108 | <0.048 | 0.10 |
| MF20Pyr-3 | 0.44 | 573 | 283 | 2.1 | 1.0 | 0.01 | 1584 | 4.2 | <0.053 | 0.06 | <0.00 | <0.0052 | <0.174 | 0.12 | 12 | <0.037 | 0.50 | <0.46 | <0.0134 | <0.054 | 3.1 |
| MF20Pyr-4 | 0.34 | 2543 | 486 | 13 | 1.9 | <0.022 | 1559 | 5.1 | <0.00 | 2.8 | <0.00 | 0 | <0.183 | 0.09 | 18 | 0.02 | 0.05 | <0.44 | 0.01 | 15 | 9.2 |
| MF20Pyr-5 | <0.28 | 966 | 733 | 2.0 | 0.48 | <0.038 | 1586 | <3.03 | <0.065 | 0.08 | <0.094 | <0.0045 | 0.19 | <0.0266 | 1.0 | 0.01 | <0.0141 | <0.39 | <0.00 | 0.08 | <0.0251 |
| MF20Pyr-6 | 0.38 | 695 | 1149 | 2.3 | 0.99 | <0.039 | 1844 | <2.92 | <0.078 | 0.04 | <0.00 | <0.0044 | 0.14 | <0.015 | 2.9 | <0.0256 | <0.014 | <0.40 | <0.00 | <0.044 | <0.0135 |
| MF20Pyr-7 | 1.1 | 7277 | 224 | 13 | 1.9 | <0.044 | 8221 | <3.79 | <0.058 | 1.2 | <0.00 | <0.0099 | 0.28 | 0.16 | 3.8 | 0.01 | 0.04 | <0.52 | <0.0093 | 17 | 5.3 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF20Pyr-8 | 0.58 | 7507 | 162 | 23 | 1.2 | <0.0260 | 8382 | <2.99 | <0.048 | 2.8 | <0.00 | <0.0067 | <0.159 | 0.51 | 18 | <0.039 | 0.03 | <0.42 | 0.20 | 36 | 46 |
| MF20Pyr-9 | 0.89 | 6717 | 78 | 54 | 2.4 | <0.0196 | 7326 | <2.67 | <0.00 | 9.5 | <0.00 | 0 | 0.35 | 0.68 | 77 | 1.0 | 0.20 | <0.38 | 0.09 | 58 | 53 |
| MF20Pyr-10 | 2.7 | 1472 | 274 | 139 | 2.1 | 0.01 | 2303 | <3.03 | <0.00 | 31 | <0.00 | 0.01 | 0.99 | 5.1 | 108 | 0.05 | 0.89 | <0.41 | 0.31 | 194 | 458 |
| MF20Pyr-11 | <0.29 | 4442 | 65 | 4.6 | 2.0 | <0.026 | 3444 | <2.86 | <0.00 | 0.13 | <0.100 | 0.01 | 0.93 | 0.17 | 3.9 | 37 | 0.07 | <0.41 | 0 | 1.4 | 7.8 |
| MF20Pyr-12 | 0.57 | 8532 | 45 | 20 | 2.8 | <0.0176 | 10407 | <3.41 | <0.00 | 1.7 | <0.116 | 0.01 | 0.42 | 0.19 | 19 | 0.96 | 0.10 | <0.50 | 0.01 | 13 | 47 |
| MF20Pyr-13 | 0.85 | 8658 | 75 | 44 | 20 | <0.016 | 10760 | <3.44 | <0.052 | 1.4 | 0.03 | 0 | 0.42 | 0.43 | 55 | 8.0 | 0.14 | <0.45 | 0.02 | 43 | 268 |
| MF20Pyr-14 | 7.2 | 2720 | 184 | 72 | 2.6 | <0.042 | 3615 | 3.5 | <0.048 | 8.4 | <0.098 | <0.0094 | 0.19 | 2.0 | 476 | 0.14 | 0.94 | <0.41 | 0.32 | 307 | 479 |
| MF20Pyr-15 | 0.71 | 3912 | 86 | 32 | 1.7 | 1.2 | 2792 | 3.9 | 0.02 | 3.5 | <0.111 | <0.0092 | <0.161 | 1.3 | 8.8 | 0.05 | 0.12 | 0.52 | 0.09 | 36 | 46 |
| MF20Pyr-16 | 0.45 | 3145 | 117 | 2.1 | <0.53 | 0.02 | 3207 | <2.60 | <0.042 | 0.05 | <0.00 | <0.0041 | <0.143 | <0.028 | 0.33 | <0.00 | <0.0225 | <0.37 | <0.0117 | 0.03 | 0.69 |
| MF20Pyr-17 | 0.49 | 4151 | 87 | 3.5 | <0.58 | <0.042 | 2367 | <3.04 | <0.00 | 0.09 | <0.00 | <0.0095 | <0.159 | <0.0278 | <0.00 | <0.00 | <0.0257 | <0.42 | <0.0094 | <0.027 | 0.06 |
| MF20Pyr-18 | 0.44 | 12170 | 85 | 1.9 | 0.93 | <0.023 | 13640 | <2.70 | <0.073 | 0.07 | 0.05 | <0.00 | <0.139 | 0.03 | 0.33 | 1.3 | 0.09 | <0.36 | <0.0068 | <0.055 | 0.80 |
| MF20Pyr-19 | 0.50 | 11255 | 218 | 3.7 | 1.4 | <0.027 | 12009 | 3.8 | 0.03 | 0.06 | 0.03 | <0.00 | <0.140 | <0.015 | 0.32 | <0.00 | 0.09 | <0.39 | <0.0112 | 0.12 | 0.70 |
| MF20Pyr-20 | 0.57 | 16594 | 18 | 6.7 | 2.2 | <0.0195 | 20234 | 2.8 | <0.045 | 0.03 | <0.00 | <0.0076 | <0.140 | <0.021 | <0.120 | <0.025 | <0.014 | <0.41 | <0.0087 | <0.023 | 0.33 |
| MF20Pyr-21 | 0.69 | 17037 | 15 | 3.6 | 1.0 | <0.033 | 19948 | 3.6 | <0.044 | 0.21 | 0.03 | 0 | <0.140 | 0.04 | <0.205 | <0.0177 | 0.04 | <0.41 | <0.0099 | 0.14 | 1.2 |
| MF20Pyr-22 | 4.8 | 6284 | 102 | 2.4 | 0.74 | 0.07 | 5734 | <3.16 | 0.03 | 0.09 | <0.102 | 0 | <0.137 | 0.12 | 0.67 | 0.01 | <0.022 | <0.45 | <0.0056 | 0.08 | 5.8 |
| MF20Pyr-23 | 2.6 | 3906 | 329 | 113 | 2.9 | 0.01 | 7849 | <3.53 | 0.02 | 77 | <0.116 | 0.01 | 0.36 | 1.3 | 875 | 0.08 | 0.78 | <0.47 | 0.27 | 1564 | 389 |
| MF20Pyr-24 | 2.4 | 7440 | 454 | 137 | 2.5 | <0.034 | 7464 | <3.04 | <0.049 | 43 | <0.140 | 0.01 | 0.52 | 2.6 | 554 | 0.12 | 1.1 | <0.42 | 0.31 | 556 | 696 |
| MF20Pyr-25 | 17 | 5800 | 394 | 17 | 3.8 | 0.15 | 6314 | 5.2 | <0.00 | 3.7 | 0.03 | <0.0074 | <0.170 | 2.1 | 357 | 0.03 | 1.0 | <0.49 | 0.21 | 1677 | 564 |
| MF20Pyr-26 | <0.31 | 6356 | 250 | 9.5 | 1.0 | 0.11 | 7256 | <3.14 | <0.051 | 8.9 | <0.104 | 0.01 | 0.27 | 0.10 | 95 | 0.04 | 0.07 | <0.45 | 0.01 | 166 | 25 |
| MF20Pyr-27 | <0.38 | 4209 | 191 | 12 | 1.7 | <0.048 | 4262 | <3.89 | <0.063 | 1.2 | 0.04 | <0.0087 | <0.189 | 0.08 | 0.90 | 0.01 | 0.07 | <0.56 | 0.01 | 3.1 | 3.8 |
| MF20Pyr-28 | 6.1 | 5665 | 128 | 85 | 8.8 | 6.6 | 4975 | <5.56 | 0.02 | 12 | <0.245 | 0.08 | 19 | 5.4 | 47 | 4.1 | 1.2 | <0.74 | 0.26 | 171 | 55 |
| MF20Pyr-29 | 2.2 | 14607 | 99 | 2572 | 4.8 | 0.09 | 16045 | <3.87 | <0.091 | 4.8 | <0.185 | 0.83 | 29 | 2.9 | 8.8 | 0.05 | 0.29 | <0.58 | 0.22 | 34 | 42 |
| MF20Pyr-30 | 2.1 | 5659 | 698 | 5.3 | 1.3 | <0.038 | 10421 | 7.1 | 0.03 | 0.05 | <0.111 | 0 | <0.174 | 0.14 | 1.2 | <0.031 | 0.11 | <0.51 | 0 | 0.11 | 5.8 |
| MF20Pyr-31 | 2.8 | 588 | 494 | 1668 | 4.3 | 10 | 6859 | 4.8 | <0.054 | 0.21 | 0.03 | 0.09 | 4.0 | 0.27 | 1.6 | 0.10 | 0.20 | <0.49 | <0.0105 | 0.35 | 15 |
| MF20Pyr-32 | 0.78 | 6059 | 124 | 4.5 | 2.8 | <0.040 | 6829 | 4.8 | <0.00 | 0.14 | <0.117 | 0.01 | 0.23 | 0.18 | 2.9 | 0.27 | 0.06 | <0.52 | <0.0145 | <0.086 | 8.9 |
| MF20Pyr-33 | 0.93 | 323 | 11 | 22 | <0.76 | 0.17 | 8961 | 4.9 | <0.059 | 3.1 | 0.03 | <0.0115 | 0.89 | 1.1 | 16 | 0.07 | 0.85 | <0.53 | 0.04 | 38 | 8.2 |
| MF20Pyr-34 | 0.56 | 2193 | 745 | 22 | <0.63 | 0.09 | 6932 | <3.88 | <0.092 | 3.8 | 0.08 | <0.0090 | 0.74 | 0.48 | 7.2 | 0.08 | 1.2 | <0.58 | 0.10 | 39 | 6.3 |
| MF20Pyr-35 | 1.3 | 1843 | 886 | 3883 | 9.4 | 2.7 | 4347 | 3.9 | <0.00 | 0.47 | <0.120 | 0.34 | 28 | 0.39 | 1.9 | 0.04 | 0.53 | <0.51 | <0.0066 | 0.77 | 11 |
| MF20Pyr-36 | 1.4 | 9344 | 34 | 8.3 | 1.9 | <0.038 | 11977 | <3.41 | <0.00 | 0.16 | <0.00 | <0.0060 | <0.198 | <0.054 | 1.2 | <0.025 | 0.87 | <0.53 | 0 | 0.15 | 4.7 |
| MF20Pyr-37 | 0.46 | 195 | 54 | 11 | 1.4 | <0.061 | 8119 | 6.8 | 0.02 | 0.05 | <0.00 | <0.00 | <0.173 | 0.03 | 8.5 | 0.03 | 0.36 | <0.51 | 0.01 | <0.061 | 0.20 |
| MF20Pyr-38 | 8.1 | 101 | 242 | 6134 | 7.6 | 0.54 | 1256 | 7.2 | 0.03 | 0.48 | <0.00 | 1.3 | 108 | 0.33 | 6.3 | 0.10 | 0.55 | <0.56 | <0.0096 | 0.26 | 16 |
| MF20Pyr-39 | 3.3 | 266 | 433 | 2081 | 2.7 | 2.8 | 5108 | 3.9 | <0.00 | 0.46 | <0.103 | 0.10 | 4.7 | 0.64 | 5.2 | <0.00 | 0.74 | <0.44 | <0.0169 | 2.8 | 14 |
| MF20Pyr-40 | 49 | 3880 | 57 | 45 | 2.6 | 1.6 | 7664 | <3.41 | 0.03 | 19 | <0.00 | 0.06 | 3.4 | 0.62 | 2.6 | 7.2 | 0.09 | <0.50 | 0.07 | 164 | 427 |
| MF20Pyr-41 | 1.5 | 810 | 496 | 30 | 3.8 | <0.067 | 2850 | 12 | 0.02 | 10 | <0.00 | 0.02 | 4.7 | 0.98 | 67 | 0.54 | 0.54 | <0.82 | 0.07 | 87 | 37 |
| MF20Pyr-42 | <0.46 | 724 | 638 | 11 | 2.4 | <0.034 | 2912 | <4.96 | <0.078 | 1.1 | <0.00 | 0.01 | 37 | 1.1 | 5.5 | 0.02 | 0.20 | <0.72 | <0.00 | 8.6 | 31 |
| MF20Pyr-43 | 0.68 | 2790 | 169 | 954 | 3.1 | 0.33 | 3158 | <4.22 | <0.097 | 1.5 | <0.00 | 0.04 | 1.7 | 0.49 | 4.8 | <0.039 | 0.76 | <0.64 | 0 | 4.9 | 28 |
| MF20Pyr-44 | <0.44 | 6314 | 23 | 12 | <0.65 | <0.029 | 4663 | <4.06 | <0.00 | 0.52 | <0.193 | <0.0066 | <0.199 | 0.04 | 13 | 0.02 | <0.021 | <0.59 | 0 | 3.7 | 0.51 |
| MF20Pyr-45 | <0.43 | 15726 | 23 | 3.4 | 2.5 | <0.051 | 17998 | <4.20 | 0.02 | 0.14 | 0.04 | <0.0094 | 0.29 | 0.37 | 2.3 | <0.00 | 0.08 | <0.61 | 0.01 | 0.07 | 11 |
| MF20Pyr-46 | <0.40 | 12952 | 18 | 14 | 16 | <0.019 | 16639 | <4.05 | <0.00 | 0.03 | 0.04 | <0.0086 | 2.2 | <0.042 | 0.14 | 0.01 | 0.03 | <0.53 | <0.0070 | <0.084 | 0.36 |
| MF20Pyr-47 | 0.70 | 5912 | 154 | 4.4 | <0.88 | <0.031 | 4523 | <4.39 | 0.02 | 0.02 | <0.00 | <0.0154 | 0.23 | 0.01 | 0.05 | <0.028 | <0.00 | <0.62 | 0 | <0.082 | 0.09 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF20Pyr-48 | 0.85 | 4490 | 190 | 6.9 | <0.79 | <0.035 | 3516 | <4.14 | <0.092 | 1.2 | <0.00 | <0.0128 | <0.21 | 0.30 | 41 | 0.02 | <0.00 | <0.58 | <0.0127 | 12 | 5.4 |
| MF20Pyr-49 | <0.42 | 3894 | 523 | 11 | 1.6 | <0.052 | 6860 | <4.49 | <0.00 | 2.7 | <0.00 | 0.07 | <0.21 | 0.15 | 34 | <0.043 | 0.11 | <0.65 | <0.0119 | 7.3 | 6.1 |
| MF20Pyr-50 | <0.36 | 4069 | 384 | 7.0 | <0.78 | <0.041 | 5277 | <3.98 | <0.095 | 2.8 | <0.00 | 0.01 | 0.29 | 0.74 | 109 | <0.027 | 0.03 | <0.61 | 0.07 | 36 | 15 |
| MF20Pyr-51 | 3.4 | 4959 | 93 | 26 | 7.1 | <0.040 | 2192 | <3.78 | 0.25 | 4.4 | 0.18 | 0.03 | 3.8 | 0.45 | 8.7 | 0.07 | 0.22 | <0.56 | 0.01 | 46 | 51 |
| MF20Pyr-52 | 86 | 6964 | 47 | 294 | 8.8 | 0.72 | 9539 | <4.00 | 4.4 | 3.2 | 0.04 | 0.01 | 3.4 | 0.36 | 9.1 | 18 | 0.08 | <0.61 | 0.03 | 44 | 42 |
| MF20Pyr-53 | 0.78 | 830 | 497 | 11 | 2.6 | <0.027 | 1978 | <3.72 | <0.00 | 1.7 | 0.04 | 0 | 1.1 | 0.13 | 11 | 0.07 | 0.04 | <0.55 | 0.01 | 8.1 | 23 |
| MF20Pyr-54 | 40 | 1650 | 481 | 19 | 8.5 | 0.40 | 2987 | <3.36 | 0.06 | 6.1 | 0.07 | <0.0111 | 0.65 | 1.0 | 36 | 0.16 | 0.39 | <0.51 | 0.02 | 238 | 89 |
| MF20Pyr-55 | 40 | 10624 | 127 | 54 | 15 | 0.54 | 13335 | <3.30 | 0.02 | 12 | 0.03 | 0.01 | 0.61 | 0.48 | 68 | 0.12 | 0.08 | <0.47 | 0.05 | 291 | 63 |
| MF20Pyr-56 | 3.7 | 3610 | 396 | 66 | 4.2 | <0.018 | 4034 | 3.7 | 0.05 | 35 | 0.20 | 0.01 | 0.89 | 2.9 | 298 | 0.35 | 0.95 | 0.67 | 0.12 | 822 | 949 |
| MF20Pyr-57 | 3.6 | 5665 | 325 | 37 | 2.9 | 0.04 | 6443 | <4.81 | 0.21 | 26 | 0.15 | 0.01 | 0.77 | 1.3 | 185 | 0.19 | 0.63 | <0.70 | 0.12 | 376 | 289 |
| MF20Pyr-58 | 139 | 1637 | 597 | 353 | 90 | 0.52 | 3212 | 4.7 | 4.0 | 81 | 0.27 | 0.07 | 2.3 | 3.7 | 1159 | 1.7 | 1.4 | <0.58 | 1.5 | 2475 | 1672 |
| MF20Pyr-59 | 229 | 4642 | 218 | 1261 | 19 | 1.3 | 4520 | 6.7 | 14 | 50 | 0.45 | 0.09 | 5.2 | 1.7 | 255 | 1.1 | 0.29 | <0.79 | 0.10 | 1143 | 613 |
| MF20Pyr-60 | 25 | 5079 | 397 | 1053 | 6.0 | 0.13 | 5513 | 3.8 | 0.07 | 82 | <0.138 | 0.06 | 2.0 | 5.4 | 745 | 1.1 | 4.0 | <0.58 | 0.21 | 1269 | 923 |
| MF20Pyr-61 | 0.46 | 4189 | 261 | 131 | 0.53 | <0.030 | 4647 | <3.00 | <0.049 | 0.21 | <0.00 | <0.0068 | <0.177 | 0 | 0.68 | <0.028 | 0.07 | <0.51 | <0.0078 | 0.09 | 2.0 |
| MF20Pyr-62 | 1.5 | 5026 | 403 | 12 | 3.3 | 0.05 | 3720 | <6.37 | 0.15 | 3.0 | <0.296 | 0.01 | 0.43 | 0.99 | 14 | 0.21 | <0.046 | <1.00 | <0.00 | 30 | 9.4 |
| MF20Pyr-63 | 39 | 2499 | 527 | 217 | 11 | 0.12 | 4825 | 4.9 | <0.065 | 69 | 0.12 | 0.11 | 1.2 | 12 | 404 | 1.2 | 4.4 | <0.61 | 0.24 | 1634 | 5973 |
| MF20Pyr-64 | 15 | 6070 | 280 | 29 | 26 | 0.17 | 5100 | <3.01 | <0.00 | 3.6 | <0.173 | <0.0083 | 0.28 | 3.7 | 62 | 0.09 | 5.4 | <0.45 | 0.08 | 208 | 285 |
| MF20Pyr-65 | 15 | 2719 | 635 | 226 | 6.7 | 0.11 | 3853 | <4.11 | 2.0 | 82 | <0.198 | 0.02 | 1.1 | 3.0 | 755 | 0.25 | 2.6 | <0.61 | 0.21 | 1547 | 469 |
| MF20Pyr-66 | 16 | 4034 | 769 | 162 | 12 | 0.17 | 4750 | 4.0 | <0.00 | 32 | 0.27 | 0.02 | 1.2 | 7.0 | 205 | 4.7 | 8.1 | <0.47 | 0.09 | 325 | 397 |
| MF20Pyr-67 | 1.7 | 3909 | 415 | 71 | 3.5 | <0.048 | 5938 | <3.11 | <0.00 | 19 | <0.158 | 0.01 | 0.48 | 3.2 | 61 | 0.11 | 1.1 | <0.51 | 0.14 | 283 | 542 |
| MF20Pyr-68 | 2 | 20961 | 62 | 88 | 3.0 | <0.024 | 24622 | <2.82 | <0.064 | 42 | 0.29 | 0.01 | 0.76 | 2.5 | 131 | 0.18 | 1.1 | <0.41 | 0.11 | 272 | 126 |
| MF20Pyr-69 | 1.4 | 100 | 169 | 52 | 6.9 | <0.023 | 2103 | 4.5 | 0.02 | 16 | <0.149 | 0.01 | 1.1 | 1.1 | 71 | 0.09 | 0.46 | <0.65 | 0.11 | 233 | 90 |
| MF20Pyr-70 | 3 | 231 | 193 | 131 | 3.9 | <0.031 | 2756 | 4.5 | 0.05 | 53 | 0.07 | 0.01 | 0.66 | 7.7 | 235 | 0.32 | 3.9 | <0.52 | 0.53 | 818 | 1270 |
| MF20Pyr-71 | 1.3 | 89 | 102 | 33 | 1.5 | <0.0232 | 2030 | <3.32 | <0.00 | 5.6 | 0.03 | <0.0116 | 0.32 | 0.64 | 30 | 0.09 | 0.27 | <0.52 | 0.10 | 59 | 47 |
| MF20Pyr-72 | 3.4 | 2330 | 59 | 53 | 3.9 | 0.07 | 3985 | <3.31 | 0.03 | 23 | <0.120 | 0.02 | 4.5 | 3.2 | 65 | 40 | 0.55 | <0.53 | 0.23 | 163 | 124 |
| MF20Pyr-73 | 1.5 | 5629 | 72 | 8.1 | 0.98 | <0.0239 | 5661 | <2.71 | <0.00 | 27 | 0.05 | 0.01 | <0.149 | 0.19 | 25 | 0.06 | 0.18 | <0.41 | <0.0071 | 81 | 38 |
| MF20Pyr-74 | 19 | 6285 | 140 | 43 | 15 | 0.08 | 4723 | <8.78 | 0.04 | 18 | <0.29 | 0.06 | 4.1 | 1.8 | 54 | 2.0 | 0.80 | <1.32 | 0.03 | 423 | 2013 |
| MF20Pyr-75 | 12 | 8216 | 376 | 12 | 2.1 | 0.07 | 9409 | <5.24 | 0.05 | 11 | <0.00 | <0.0088 | 0.69 | 0.28 | 19 | 0.17 | 0.17 | 0.86 | 0.03 | 48 | 18 |
| MF20Pyr-76 | 2.3 | 4424 | 391 | 50 | 2.4 | 0.05 | 5013 | <3.32 | <0.078 | 17 | 0.06 | <0.0076 | 0.51 | 2.7 | 62 | 0.10 | 0.83 | <0.53 | 0.15 | 236 | 365 |
| MF20Pyr-77 | <0.40 | 2757 | 296 | 26 | 2.7 | <0.051 | 3963 | <3.79 | <0.00 | 14 | <0.00 | <0.00 | 1.0 | 1.2 | 35 | 0.10 | 0.42 | <0.57 | 0.05 | 68 | 60 |
| MF20Pyr-78 | 1.4 | 2603 | 14 | 28 | <0.81 | <0.041 | 10362 | <4.11 | 0.02 | 5.5 | 0.07 | <0.0065 | 0.41 | 0.63 | 19 | 0.05 | 0.17 | <0.59 | 0.04 | 77 | 63 |
| MF20Pyr-79 | 0.76 | 50 | 18 | 6.9 | 2.0 | 0.04 | 2694 | 7.6 | <0.00 | 1.1 | <0.00 | <0.0112 | 0.43 | <0.033 | 12 | 0.07 | 0.08 | <0.54 | <0.0064 | 4.7 | 3.4 |
| MF20Pyr-80 | 28 | 109 | 150 | 184 | 78 | 0.45 | 3038 | 6.6 | 0.82 | 6.6 | 1.5 | 0.07 | 15 | 3.3 | 20 | 18 | 1.2 | <0.46 | 0.12 | 81 | 42 |
| **Mean n=80** | 13 | 4918 | 280 | 288 | 6.9 | 0.88 | 6400 | 5.1 | 0.88 | 13 | 0.15 | 0.08 | 5.3 | 1.5 | 106 | 2.5 | 0.79 | 0.68 | 0.13 | 266 | 263 |
| **S.D** | 34 | 4352 | 241 | 899 | 14.2 | 2.0 | 4773 | 1.9 | 2.7 | 21 | 0.28 | 0.22 | 16 | 2.1 | 217 | 7.5 | 1.4 | 0.17 | 0.22 | 500 | 752 |
| **Min** | 0.34 | 50 | 11 | 1.9 | 0.48 | 0.01 | 1256 | 2.8 | 0.02 | 0.02 | 0.03 | 0 | 0.14 | 0 | 0.05 | 0.01 | 0 | 0.52 | 0 | 0.03 | 0.06 |
| **Max** | 229 | 20961 | 1149 | 6134 | 90 | 10 | 24622 | 12 | 14 | 82 | 1.5 | 1.3 | 108 | 12 | 1159 | 40 | 8.1 | 0.86 | 1.5 | 2475 | 5973 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF21Pyr-1 | <0.149 | 349 | 388 | <0.29 | 1.1 | <0.028 | 7994 | <1.61 | <0.0285 | 0.02 | 0.02 | 0.01 | <0.27 | <0.0130 | <0.071 | <0.0112 | 0.01 | <0.25 | <0.0044 | <0.0210 | 0.01 |
| MF21Pyr-2 | 0.18 | 1852 | 333 | 0.84 | 1.0 | <0.034 | 9212 | 3.7 | <0.00 | 0 | <0.00 | <0.0062 | 0.13 | 0 | <0.093 | <0.0207 | <0.0163 | 0.34 | 0 | <0.028 | 0.03 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF21Pyr-3 | 1.3 | 1184 | 430 | 1319 | 2.2 | <0.031 | 10251 | <2.31 | <0.070 | 2.1 | 0.02 | 0.04 | 0.49 | 1.4 | 1.1 | <0.023 | 0.18 | <0.35 | 0.14 | 16 | 5.2 |
| MF21Pyr-4 | <0.22 | 2479 | 402 | 562 | 1.3 | 0.03 | 12556 | <2.42 | <0.067 | 1.6 | 0.05 | 0.04 | 0.62 | 0.94 | 1.1 | <0.0186 | 0.10 | <0.37 | 0.05 | 21 | 7.0 |
| MF21Pyr-5 | <0.185 | 3332 | 334 | 1.3 | 2.4 | <0.0206 | 10887 | 3.4 | 0.01 | 0.02 | <0.00 | <0.0053 | 0.17 | 0.10 | 0.03 | <0.027 | 0.02 | <0.31 | <0.0042 | 0.64 | 0.53 |
| MF21Pyr-6 | 682 | 528 | 512 | 1673 | 125 | 1.5 | 10744 | 4.8 | 0.96 | 5.4 | 0.04 | 0.52 | 106 | 10 | 12 | 18 | 1.2 | <0.76 | 0.64 | 103 | 51 |
| MF21Pyr-7 | 688 | 1754 | 780 | 157 | 15 | 0.05 | 10669 | 7.7 | 0.11 | 1.9 | 0.06 | 0.26 | 8.8 | 5.5 | 1.9 | 0.62 | 0.20 | <0.45 | 0.13 | 41 | 19 |
| MF21Pyr-8 | 631 | 1146 | 759 | 83 | 6.9 | <0.031 | 6038 | 7.3 | 0.04 | 0.52 | <0.076 | 0.09 | 0.52 | 2.2 | 1.1 | 0.08 | 0.26 | 0.43 | 0.07 | 24 | 10 |
| MF21Pyr-9 | 5.2 | 2819 | 469 | 178 | 6.1 | 0.03 | 13693 | 2.8 | 0.03 | 1.6 | <0.116 | 0.01 | 5.3 | 3.3 | 2.1 | 0.02 | 0.20 | 0.39 | 0.16 | 19 | 12 |
| MF21Pyr-10 | 3.4 | 3976 | 705 | 1214 | 4.4 | <0.022 | 12344 | 4.0 | 0.04 | 4.0 | 0.07 | 0.12 | 1.8 | 5.4 | 2.7 | 0.04 | 0.25 | 0.49 | 0.24 | 57 | 26 |
| MF21Pyr-11 | 53 | 4979 | 223 | 67 | 5.3 | 0.05 | 12217 | 4.4 | <0.069 | 0.46 | <0.074 | 0.04 | 0.55 | 1.3 | 0.51 | 0.24 | 0.06 | 0.42 | 0.05 | 10 | 4.8 |
| MF21Pyr-12 | 5.5 | 5521 | 335 | 148 | 2.2 | <0.025 | 11625 | 2.8 | 0.05 | 0.66 | <0.00 | 0.01 | 0.31 | 1.4 | 1.3 | 0 | 0.05 | <0.36 | 0.08 | 17 | 5.6 |
| MF21Pyr-13 | 2.5 | 1171 | 405 | 16 | 3.2 | <0.0192 | 10567 | 3.3 | 0.02 | 0.08 | <0.068 | <0.0049 | 0.34 | 0.50 | 0.26 | <0.0201 | 0.04 | <0.30 | 0.03 | 1.9 | 1.1 |
| MF21Pyr-14 | 1.2 | 6115 | 218 | 782 | 2.2 | 0.09 | 11348 | 5.3 | 0.03 | 0.82 | <0.153 | 0.09 | 96 | 0.95 | 0.84 | 179 | 0.05 | <0.46 | 0.04 | 12 | 2.9 |
| MF21Pyr-15 | 8.4 | 5584 | 169 | 88 | 6.7 | 0.26 | 5610 | 4.4 | 0.11 | 1.6 | <0.084 | 0.03 | 0.32 | 2.9 | 2.5 | 0.14 | 0.22 | <0.35 | 0.11 | 16 | 11 |
| MF21Pyr-16 | 23 | 6192 | 130 | 258 | 11 | 0.12 | 5381 | 2.6 | 0.05 | 2.0 | <0.067 | 0.03 | 4.8 | 2.2 | 2.8 | 0.93 | 0.21 | 0.30 | 0.13 | 30 | 13 |
| MF21Pyr-17 | 127 | 4408 | 243 | 1634 | 7.9 | <0.025 | 6274 | 2.5 | 0.13 | 3.6 | 0.02 | 0.16 | 1.2 | 5.6 | 5.6 | 0.33 | 0.41 | <0.34 | 0.18 | 60 | 33 |
| MF21Pyr-18 | 1.3 | 5004 | 238 | 516 | 2.4 | <0.014 | 7633 | 3.4 | 0.03 | 1.1 | 0.02 | 0.05 | 1.3 | 1.0 | 1.1 | <0.025 | 0.12 | <0.38 | 0.03 | 20 | 9.3 |
| MF21Pyr-19 | 16 | 5512 | 118 | 241 | 5.2 | <0.020 | 3917 | 2.6 | <0.064 | 1.0 | 0.07 | 0.03 | 0.44 | 2.3 | 2.8 | <0.018 | 0.17 | 0.40 | 0.10 | 16 | 9.8 |
| MF21Pyr-20 | 114 | 3398 | 185 | 62 | 55 | <0.048 | 509 | 4.9 | 0.18 | 0.31 | <0.00 | 0.14 | 29 | 1.5 | 16 | 1.3 | 0.39 | <0.40 | 0.08 | 8.0 | 6.2 |
| MF21Pyr-21 | 1.3 | 232 | 1023 | 35 | 1.2 | <0.017 | 9311 | 7.4 | 0.01 | 2.4 | <0.061 | <0.0062 | 0.13 | 2.2 | 1.1 | <0.0127 | 0.12 | <0.30 | 0.04 | 23 | 8.9 |
| MF21Pyr-22 | <0.185 | 235 | 1059 | 2.3 | 1.1 | <0.0250 | 9074 | 6.0 | <0.00 | <0.0143 | <0.097 | <0.0070 | 0.71 | 0.05 | 0.24 | 0 | 0.02 | <0.30 | <0.0040 | 0.12 | 0.04 |
| MF21Pyr-23 | 115 | 525 | 1177 | 30192 | 15 | 0.08 | 9561 | 7.0 | 0.26 | 35 | <0.080 | 2.1 | 85 | 14 | 19 | 0.19 | 3.2 | <0.35 | 0.81 | 231 | 74 |
| MF21Pyr-24 | 14 | 673 | 946 | 5820 | 7.8 | 0.04 | 3508 | 2.3 | 0.09 | 13 | <0.00 | 0.34 | 11 | 3.3 | 3.1 | 0.26 | 0.55 | <0.29 | 0.16 | 26 | 8.4 |
| MF21Pyr-25 | 0.18 | 1454 | 109 | 1439 | 6.2 | 0.55 | 104 | 3.8 | <0.046 | 0.54 | 0.04 | 6.6 | 977 | 0.42 | 4.6 | <0.0183 | 0.08 | 0.27 | <0.0036 | 2.1 | 3.6 |
| MF21Pyr-26 | 42 | 6294 | 349 | 18034 | 8.5 | 0.19 | 12687 | 2.0 | 0.17 | 10 | 0.09 | 2.0 | 70 | 7.8 | 3.9 | 0.23 | 0.90 | <0.28 | 0.51 | 78 | 27 |
| MF21Pyr-27 | 3.1 | 10493 | 69 | 23964 | 3.5 | 0.03 | 12059 | 3.1 | 0.10 | 4.5 | <0.109 | 1.5 | 28 | 2.0 | 5.3 | 0.11 | 0.31 | <0.28 | 0.10 | 50 | 17 |
| MF21Pyr-28 | 2.6 | 686 | 1146 | 905 | 0.83 | <0.025 | 3871 | 2.5 | 0.02 | 4.2 | <0.088 | 0.05 | 2.6 | 0.76 | 4.5 | 0.16 | 0.30 | <0.30 | 0.06 | 41 | 9.9 |
| MF21Pyr-29 | 302 | 1630 | 722 | 52867 | 10 | 0.16 | 5563 | 3.7 | <0.059 | 15 | 0.04 | 3.2 | 88 | 8.3 | 5.9 | 0.03 | 1.1 | <0.35 | 0.54 | 83 | 29 |
| MF21Pyr-30 | 112 | 1149 | 1089 | 51476 | 6.4 | 0.20 | 3990 | 2.1 | 0.06 | 13 | <0.073 | 3.5 | 69 | 4.8 | 16 | 0.07 | 0.82 | <0.31 | 0.36 | 74 | 46 |
| MF21Pyr-31 | 8.1 | 1657 | 689 | 83524 | 9.7 | 0.31 | 4521 | 2.8 | 0.15 | 4.7 | <0.115 | 5.6 | 88 | 3.0 | 4.9 | 0.21 | 0.56 | <0.35 | 0.11 | 15 | 7.7 |
| MF21Pyr-32 | 1.8 | 444 | 1197 | 14021 | 2.6 | 0.10 | 4574 | <1.68 | <0.0303 | 5.8 | 0.02 | 1.1 | 29 | 3.1 | 3.9 | 0.33 | 0.45 | <0.24 | 0.21 | 21 | 13 |
| MF21Pyr-33 | 9.1 | 2689 | 436 | 2E+05 | 20 | 0.59 | 4281 | 3.9 | 0.05 | 18 | 0.26 | 11 | 240 | 8.0 | 6.3 | 0.11 | 0.80 | <0.38 | 0.76 | 54 | 40 |
| MF21Pyr-34 | 7.1 | 2056 | 261 | 77150 | 8.8 | 0.42 | 3073 | 5.0 | <0.042 | 15 | 0.23 | 5.3 | 112 | 11 | 10 | 0.15 | 0.84 | 0.43 | 0.48 | 63 | 35 |
| MF21Pyr-35 | 15 | 1658 | 126 | 1E+05 | 22 | 0.48 | 2035 | 3.0 | 0.10 | 19 | 0.21 | 8.5 | 183 | 11 | 6.0 | 0.04 | 0.98 | <0.37 | 0.88 | 87 | 30 |
| MF21Pyr-36 | 0.70 | 1317 | 71 | 2E+05 | 34 | 1.1 | 1528 | <2.50 | <0.061 | 13 | 0.21 | 16 | 275 | 4.3 | 6.5 | 0.07 | 0.50 | <0.34 | 0.15 | 46 | 19 |
| MF21Pyr-37 | 0.25 | 1896 | 224 | 2E+05 | 25 | 1.4 | 3157 | 2.7 | 0.01 | 18 | 0.48 | 13 | 299 | 4.6 | 5.7 | 0.06 | 0.79 | 0.49 | 0.46 | 49 | 21 |
| MF21Pyr-38 | 1.2 | 808 | 574 | 23740 | 3.0 | 0.11 | 9456 | 3.8 | <0.034 | 9.0 | <0.00 | 1.6 | 31 | 4.3 | 12 | 0.12 | 0.87 | <0.28 | 0.29 | 30 | 24 |
| MF21Pyr-39 | 0.81 | 824 | 641 | 1E+05 | 9.7 | 0.59 | 5770 | 4.1 | 0.02 | 15 | 0.08 | 9.9 | 181 | 5.4 | 6.6 | 0.05 | 0.93 | <0.35 | 0.30 | 48 | 27 |
| MF21Pyr-40 | 2 | 766 | 1051 | 23543 | 6.7 | 0.35 | 9433 | 4.5 | 0.02 | 9.1 | <0.00 | 2.3 | 42 | 4.4 | 8.9 | 0.10 | 1.2 | <0.35 | 0.21 | 49 | 45 |
| MF21Pyr-41 | 2.6 | 6326 | 241 | 28533 | 5.4 | <0.0100 | 9923 | 2.4 | 0.13 | 22 | <0.088 | 2.0 | 34 | 6.5 | 13 | 0.06 | 1.9 | <0.29 | 0.92 | 80 | 51 |
| MF21Pyr-42 | 0.81 | 3920 | 330 | 1E+05 | 7.1 | 0.16 | 4765 | 4.1 | 0.03 | 29 | 0.14 | 5.3 | 108 | 9.4 | 12 | 0.03 | 2.3 | <0.32 | 0.83 | 128 | 52 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF21Pyr-43 | 11 | 2392 | 318 | 3E+05 | 31 | 0.81 | 3978 | 2.8 | <0.053 | 46 | 0.32 | 15 | 323 | 16 | 8.7 | 0.11 | 2.1 | <0.45 | 1.4 | 185 | 78 |
| MF21Pyr-44 | 17 | 3200 | 429 | 2E+05 | 22 | 0.55 | 4331 | 2.2 | <0.055 | 31 | <0.075 | 9.6 | 164 | 11 | 9.9 | 0.82 | 2.2 | 0.33 | 1.0 | 134 | 74 |
| MF21Pyr-45 | 1.5 | 3390 | 553 | 2E+05 | 16 | 0.44 | 4764 | 2.2 | 0.04 | 51 | <0.090 | 6.5 | 153 | 23 | 22 | <0.0131 | 4.7 | <0.29 | 0.71 | 281 | 141 |
| MF21Pyr-46 | 1.6 | 4741 | 348 | 40567 | 5.0 | 0.14 | 6170 | 2.8 | <0.045 | 12 | 0.07 | 2.1 | 45 | 5.3 | 6.7 | <0.025 | 1.4 | <0.26 | 0.26 | 87 | 35 |
| MF21Pyr-47 | 7.6 | 6131 | 394 | 41935 | 5.9 | 0.14 | 7562 | 2.9 | 0.03 | 39 | 0.10 | 2.6 | 60 | 19 | 26 | 0.21 | 3.7 | <0.33 | 0.77 | 233 | 141 |
| MF21Pyr-48 | 0.49 | 2184 | 559 | 10553 | 4.1 | 0.44 | 5363 | 2.3 | <0.030 | 16 | 0.12 | 0.60 | 48 | 6.3 | 12 | 0.02 | 1.8 | <0.25 | 0.12 | 139 | 73 |
| MF21Pyr-49 | 1170 | 1638 | 270 | 3E+05 | 55 | 1.1 | 2692 | <4.02 | 0.29 | 47 | 0.11 | 15 | 521 | 35 | 10 | 9.6 | 3.6 | <0.57 | 1.5 | 314 | 268 |
| MF21Pyr-50 | 94 | 5930 | 1249 | 81010 | 13 | 0.25 | 11971 | 3.9 | 0.04 | 70 | 0.15 | 5.8 | 98 | 36 | 42 | 0.63 | 7.3 | <0.38 | 2.8 | 348 | 225 |
| MF21Pyr-51 | 36 | 6241 | 324 | 90098 | 11 | 0.33 | 5056 | <1.91 | 0.01 | 41 | 0.19 | 5.1 | 112 | 21 | 17 | 0.59 | 3.8 | <0.29 | 1.6 | 174 | 99 |
| MF21Pyr-52 | 281 | 6008 | 521 | 1E+05 | 11 | 0.59 | 5526 | <2.46 | 0.14 | 37 | 0.24 | 6.3 | 132 | 22 | 13 | 0.18 | 3.9 | <0.36 | 1.6 | 203 | 234 |
| MF21Pyr-53 | 10 | 6687 | 457 | 3331 | 2.3 | 0.03 | 6893 | 2.2 | 0.02 | 4.7 | <0.128 | 0.43 | 6.4 | 3.5 | 3.9 | 0.19 | 0.52 | <0.31 | 0.33 | 79 | 37 |
| MF21Pyr-54 | 6.4 | 3230 | 330 | 2117 | 1.1 | 0.13 | 4795 | 3.1 | <0.00 | 2.8 | <0.061 | 0.30 | 50 | 1.9 | 1.9 | <0.018 | 0.28 | <0.26 | 0.10 | 39 | 12 |
| MF21Pyr-55 | 3.1 | 342 | 647 | 8951 | 1.2 | <0.031 | 7145 | 3.1 | 0.02 | 8.8 | <0.00 | 0.47 | 8.4 | 3.1 | 4.7 | 0.11 | 0.52 | <0.26 | 0.30 | 54 | 23 |
| MF21Pyr-56 | 7.7 | 555 | 816 | 686 | 1.8 | 0.04 | 6039 | 2.2 | 0.07 | 3.2 | <0.091 | 0.22 | 5.0 | 1.6 | 1.9 | <0.0131 | 0.15 | <0.29 | 0.13 | 34 | 13 |
| MF21Pyr-57 | 2 | 790 | 1113 | 5781 | 1.6 | 0.04 | 4033 | 2.8 | <0.050 | 2.5 | 0.04 | 0.29 | 6.7 | 1.1 | 1.6 | <0.0241 | 0.23 | 0.29 | 0.07 | 5.8 | 6.5 |
| MF21Pyr-58 | 7.2 | 414 | 1008 | 11565 | 1.8 | 0.14 | 7908 | 2.5 | <0.067 | 8.6 | 0.02 | 0.63 | 19 | 6.2 | 9.7 | <0.0154 | 0.37 | <0.35 | 0.35 | 32 | 14 |
| MF21Pyr-59 | 0.36 | 368 | 1059 | 3271 | 2.2 | 0.03 | 9781 | 3.1 | <0.00 | 9.6 | <0.114 | 0.18 | 3.7 | 2.2 | 6.2 | 0.02 | 0.56 | <0.34 | 0.27 | 34 | 16 |
| MF21Pyr-60 | 672 | 801 | 463 | 5265 | 2.7 | <0.027 | 3152 | <2.08 | 0.04 | 1.3 | <0.00 | 0.40 | 6.6 | 2.1 | 1.2 | 0.05 | 0.08 | <0.33 | 0.07 | 42 | 10 |
| MF21Pyr-61 | 0.34 | 405 | 593 | 9.2 | 1.5 | 0.12 | 12476 | <2.38 | 0.04 | 0.76 | 0.02 | 0.02 | 30 | 0.70 | <0.15 | 0.01 | 0.01 | <0.36 | 0.02 | 4.2 | 2.7 |
| MF21Pyr-62 | 12 | 331 | 437 | 28330 | 15 | 0.07 | 13446 | 4.0 | 0.08 | 9.0 | <0.153 | 1.7 | 33 | 8.2 | 4.2 | 2.5 | 0.43 | <0.40 | 0.31 | 48 | 45 |
| MF21Pyr-63 | <0.195 | 386 | 398 | 221 | 1.6 | <0.027 | 14678 | 2.5 | <0.00 | 0.56 | <0.00 | <0.0073 | 0.30 | 0.53 | 9.4 | <0.034 | 0.12 | <0.37 | 0 | 8.1 | 27 |
| MF21Pyr-64 | <0.23 | 379 | 394 | 2141 | 1.4 | <0.021 | 14886 | <2.55 | <0.047 | 2.5 | <0.00 | 0.19 | 1.9 | 0.74 | 2.3 | <0.019 | 0.35 | <0.40 | 0.05 | 19 | 12 |
| MF21Pyr-65 | <0.213 | 848 | 343 | 1769 | <0.60 | 0.03 | 12643 | 2.3 | <0.058 | 1.3 | <0.080 | 0.13 | 2.5 | 0.82 | 1.3 | <0.00 | 0.23 | <0.35 | 0.04 | 21 | 9.9 |
| MF21Pyr-66 | 2434 | 2345 | 443 | 3710 | 6.4 | <0.062 | 11362 | <4.61 | 0.05 | 5.6 | <0.17 | 1.3 | 3.2 | 6.4 | 7.0 | 1.0 | 0.29 | <0.75 | 0.11 | 113 | 45 |
| MF21Pyr-67 | 256 | 1077 | 400 | 5357 | 1.8 | 0.11 | 11212 | 3.0 | <0.040 | 6.7 | <0.077 | 0.59 | 6.5 | 6.5 | 4.6 | 0.03 | 0.37 | <0.34 | 0.23 | 107 | 43 |
| MF21Pyr-68 | 5.1 | 829 | 878 | 2612 | 1.6 | <0.032 | 9597 | 5.7 | <0.064 | 3.9 | 0.02 | 0.21 | 3.1 | 3.3 | 3.7 | 0.15 | 0.27 | <0.37 | 0.13 | 42 | 19 |
| MF21Pyr-69 | 803 | 389 | 530 | 28750 | 5.2 | 0.15 | 4739 | <2.91 | 0.16 | 17 | 0.14 | 2.1 | 34 | 10 | 8.6 | 0.13 | 0.77 | <0.46 | 0.40 | 134 | 44 |
| MF21Pyr-70 | 18 | 776 | 514 | 53871 | 5.9 | 0.14 | 4879 | 3.1 | 0.27 | 58 | <0.126 | 3.7 | 42 | 24 | 39 | 0.13 | 3.3 | <0.33 | 1.3 | 224 | 121 |
| MF21Pyr-71 | 9.3 | 1043 | 605 | 4396 | 6.0 | 0.14 | 11084 | 4.5 | 0.06 | 16 | 0.11 | 0.24 | 4.5 | 6.0 | 11 | 0.34 | 0.87 | <0.36 | 0.48 | 74 | 32 |
| MF21Pyr-72 | 26 | 634 | 845 | 5703 | 2.0 | <0.027 | 8723 | 2.9 | <0.00 | 8.2 | <0.130 | 0.42 | 5.1 | 2.0 | 7.5 | <0.021 | 0.58 | <0.33 | 0.13 | 57 | 28 |
| MF21Pyr-73 | 36 | 3812 | 382 | 30917 | 12 | 0.09 | 7941 | <2.15 | 0.15 | 54 | 0.09 | 2.0 | 78 | 17 | 45 | 0.84 | 3.9 | <0.34 | 1.1 | 180 | 104 |
| MF21Pyr-74 | 6.7 | 2791 | 434 | 14618 | 1.9 | 0.06 | 9667 | 2.8 | 0.18 | 50 | 0.09 | 1.0 | 14 | 17 | 51 | 0.04 | 3.5 | <0.29 | 1.1 | 165 | 111 |
| MF21Pyr-75 | 136 | 3627 | 502 | 14149 | 4.1 | <0.029 | 12910 | 4.5 | 0.15 | 42 | <0.075 | 1.0 | 14 | 15 | 34 | <0.021 | 2.5 | <0.34 | 0.79 | 198 | 98 |
| MF21Pyr-76 | 302 | 2799 | 538 | 5501 | 14 | 0.07 | 14879 | 4.2 | 0.08 | 22 | 0.06 | 0.51 | 7.1 | 8.1 | 19 | 1.3 | 1.7 | <0.47 | 0.43 | 157 | 63 |
| MF21Pyr-77 | 389 | 1514 | 602 | 22540 | 5.8 | 0.17 | 9554 | 3.2 | 0.19 | 62 | 0.14 | 1.6 | 21 | 27 | 49 | 0.03 | 3.6 | <0.37 | 1.4 | 349 | 158 |
| MF21Pyr-78 | 501 | 1522 | 599 | 2701 | 17 | 0.09 | 9129 | 3.2 | 0.03 | 7.2 | 0.10 | 0.27 | 1.8 | 6.8 | 13 | 0.09 | 0.75 | <0.40 | 0.14 | 115 | 63 |
| MF21Pyr-79 | 152 | 569 | 914 | 3541 | 2.5 | <0.028 | 9783 | 5.7 | <0.044 | 9.7 | <0.122 | 0.30 | 3.5 | 5.8 | 12 | 0.30 | 0.56 | <0.39 | 0.24 | 100 | 56 |
| MF21Pyr-80 | 1462 | 1596 | 464 | 1211 | 114 | 0.11 | 12501 | 6.7 | 0.10 | 8.0 | <0.232 | 0.43 | 20 | 9.3 | 8.5 | 2.6 | 0.78 | <0.76 | 0.24 | 135 | 48 |
| **Mean n=80** | 163 | 2472 | 532 | 36326 | 11 | 0.28 | 7937 | 3.7 | 0.10 | 14.2 | 0.11 | 2.6 | 67 | 7.1 | 9.7 | 3.8 | 1.1 | 0.38 | 0.43 | 82 | 43 |
| **S.D** | 387 | 2172 | 302 | 63736 | 20 | 0.34 | 3699 | 1.4 | 0.14 | 17.3 | 0.10 | 3.9 | 137 | 7.8 | 11 | 23 | 1.4 | 0.08 | 0.51 | 83 | 53 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Min** | 0.18 | 232 | 69 | 0.84 | 0.83 | 0.03 | 104 | 2.0 | 0.01 | 0 | 0.02 | 0.01 | 0.13 | 0 | 0.03 | 0 | 0.01 | 0.27 | 0 | 0.12 | 0.01 |
| **Max** | 2434 | 10493 | 1249 | 3E+05 | 125 | 1.5 | 14886 | 7.7 | 0.96 | 70 | 0.48 | 16 | 977 | 36 | 51 | 179 | 7.3 | 0.49 | 2.8 | 349 | 268 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF22Pyr-1 | <1.29 | 853 | 563 | 171 | <3.26 | <0.191 | 5746 | <13.33 | <0.00 | 1.7 | <0.00 | <0.00 | <0.83 | <0.283 | 1.1 | <0.00 | <0.00 | <2.03 | 0.04 | 38 | 8.8 |
| MF22Pyr-2 | 0.26 | 803 | 441 | 15 | 1.1 | 0.01 | 10938 | <2.26 | <0.066 | 0.37 | <0.00 | 0.03 | <0.131 | 0.83 | 0.03 | 0.01 | <0.0127 | <0.32 | 0.05 | 12.00 | 0.80 |
| MF22Pyr-3 | 0.46 | 766 | 400 | 25 | 2.4 | <0.027 | 10695 | 3.0 | <0.00 | 0.14 | 0.16 | <0.0100 | 0.19 | 0.55 | 0.09 | 0.01 | <0.0179 | <0.31 | 0.04 | 3.7 | 2.1 |
| MF22Pyr-4 | 1.4 | 173 | 120 | 143 | 2.2 | <0.017 | 5118 | 2.1 | 0.02 | 1.6 | 0.06 | 0.04 | <0.148 | 5.2 | 0.06 | 0.26 | 0.04 | <0.32 | 2.6 | 30 | 5.3 |
| MF22Pyr-5 | 0.51 | 243 | 225 | 173 | 1.1 | 0.01 | 5494 | <1.78 | <0.032 | 1.5 | 0.08 | 0.05 | 0.18 | 9.4 | 0.50 | 0.87 | 0.08 | <0.27 | 8.2 | 20 | 5.9 |
| MF22Pyr-6 | 0.33 | 384 | 388 | 77 | 1.2 | <0.022 | 7269 | <1.99 | 0.03 | 1.5 | 0.02 | 0.04 | 0.19 | 7.5 | 0.27 | 0.35 | 0.03 | <0.29 | 6.8 | 16 | 2.8 |
| MF22Pyr-7 | 0.44 | 891 | 409 | 34 | 0.58 | <0.027 | 12461 | 2.2 | <0.00 | 0.76 | <0.075 | <0.0066 | <0.144 | 0.50 | 0.37 | <0.016 | 0.02 | <0.32 | 1.3 | 35 | 8.7 |
| MF22Pyr-8 | 1.1 | 408 | 389 | 272 | 2.7 | <0.0179 | 7421 | <1.83 | 0.14 | 7.3 | 0.08 | 0.14 | 0.29 | 18 | 1.5 | 0.51 | 0.09 | <0.27 | 17 | 70 | 16 |
| MF22Pyr-9 | 0.46 | 752 | 761 | 86 | 1.5 | 0.01 | 7216 | 2.6 | 0.02 | 2.9 | <0.061 | 0.09 | <0.098 | 6.1 | 0.67 | 0.33 | 0.03 | 0.30 | 4.7 | 21 | 5.9 |
| MF22Pyr-10 | 0.44 | 1134 | 746 | 85 | 1.6 | <0.041 | 10544 | 2.5 | <0.041 | 3.8 | 0.08 | 0.09 | <0.137 | 3.8 | 0.13 | <0.024 | 0.02 | <0.35 | 3.3 | 23 | 3.3 |
| MF22Pyr-11 | <0.154 | 468 | 530 | 195 | 1.1 | 0.01 | 8625 | 2.9 | <0.00 | 8.2 | 0.02 | 0.11 | <0.113 | 7.9 | 1.8 | 0.17 | 0.12 | <0.26 | 9.5 | 50 | 15 |
| MF22Pyr-12 | <0.163 | 537 | 517 | 65 | 1.3 | <0.0240 | 10109 | <2.06 | <0.034 | 5.1 | 0.02 | 0.04 | <0.116 | 3.1 | 0.53 | <0.020 | 0.07 | <0.29 | 3.5 | 24 | 5.1 |
| MF22Pyr-13 | <0.174 | 619 | 1088 | 215 | 1.7 | <0.022 | 8778 | 2.7 | <0.051 | 7.4 | <0.099 | 0.16 | 0.16 | 6.6 | 0.41 | 0.04 | 0.11 | <0.28 | 9.9 | 51 | 5.5 |
| MF22Pyr-14 | 0.99 | 732 | 953 | 55 | 1.7 | <0.027 | 9724 | 3.6 | 0.02 | 2.8 | 0.15 | 0.06 | <0.125 | 0.74 | 2.2 | 0.01 | 0.09 | <0.30 | 1.4 | 25 | 28 |
| MF22Pyr-15 | 0.36 | 944 | 1413 | 49 | 1.8 | <0.0121 | 11690 | 4.3 | <0.067 | 1.4 | <0.076 | 0.01 | <0.121 | 1.7 | 0.75 | 0.17 | 0.04 | 0.34 | 0.53 | 19 | 4.5 |
| MF22Pyr-16 | 0.25 | 982 | 1373 | 41 | 0.95 | <0.0214 | 11068 | 5.3 | <0.00 | 1.9 | <0.077 | 0.08 | <0.124 | 0.44 | 3.3 | <0.0164 | 0.09 | <0.30 | 0.23 | 12 | 12 |
| MF22Pyr-17 | 1.4 | 839 | 1039 | 253 | 0.85 | 0.02 | 9055 | 3.3 | 0.01 | 6.7 | 0.02 | 0.12 | 2.2 | 6.8 | 9.4 | 0.44 | 0.23 | <0.28 | 4.7 | 71 | 56 |
| MF22Pyr-18 | 0.21 | 843 | 896 | 235 | 1.3 | <0.029 | 5904 | <2.24 | 0.01 | 0.10 | 0.05 | 0.02 | 0.45 | 0.09 | 7.1 | 0 | 0.09 | <0.30 | 0.01 | 1.3 | 11 |
| MF22Pyr-19 | 57 | 988 | 1469 | 308 | 21 | 0.06 | 10404 | 4.0 | 0.08 | 7.3 | 0.14 | 0.06 | 0.46 | 5.0 | 3.0 | 11 | 0.15 | <0.28 | 4.7 | 100 | 82 |
| MF22Pyr-20 | 27 | 497 | 746 | 655 | 10 | <0.039 | 5692 | <2.03 | 0.09 | 42 | 0.66 | 0.59 | 0.92 | 40 | 4.9 | 12 | 1.6 | <0.29 | 37 | 341 | 62 |
| MF22Pyr-21 | 0.47 | 1192 | 675 | 16 | <0.37 | <0.026 | 4717 | <1.60 | <0.00 | 0.82 | <0.00 | 0.01 | <0.104 | 0.10 | 0.65 | 0.01 | 0.04 | <0.25 | 0.07 | 6.3 | 9.0 |
| MF22Pyr-22 | 1.4 | 1645 | 834 | 19 | 2.3 | <0.025 | 6308 | <2.11 | <0.039 | 0.69 | 0.09 | 0.01 | <0.110 | 0.76 | 1.6 | 0.03 | 0.37 | 0.70 | 0.28 | 3.4 | 16 |
| MF22Pyr-23 | 2.7 | 1354 | 522 | 21 | 9.3 | 0.03 | 6070 | <1.94 | 0.06 | 1.6 | 0.18 | 0.02 | 0.52 | 2.7 | 2.5 | 0.24 | 0.24 | <0.30 | 1.4 | 11 | 14 |
| MF22Pyr-24 | 0.32 | 892 | 398 | 30 | 1.5 | <0.0217 | 4841 | 2.5 | <0.054 | 1.9 | <0.00 | 0.02 | <0.093 | 3.1 | 0.60 | 0.09 | 0.03 | 0.30 | 2.2 | 14 | 5.9 |
| MF22Pyr-25 | 0.42 | 1124 | 504 | 27 | 2.6 | <0.0185 | 5082 | 2.4 | 0.07 | 1.4 | <0.095 | 0.01 | <0.097 | 2.6 | 0.82 | 0.25 | 0.03 | <0.27 | 1.5 | 12 | 4.4 |
| MF22Pyr-26 | 0.34 | 589 | 403 | 34 | 1.4 | <0.024 | 4537 | <1.57 | 0.03 | 1.8 | <0.057 | 0.01 | <0.090 | 3.4 | 1.2 | 0.07 | 0.21 | <0.23 | 1.9 | 16 | 8.4 |
| MF22Pyr-27 | 8.7 | 951 | 484 | 60 | 5.7 | <0.0208 | 5074 | <2.01 | 0.01 | 4.1 | 0.24 | 0.03 | 0.17 | 3.4 | 3.2 | 0.13 | 0.32 | <0.27 | 2.7 | 28 | 20 |
| MF22Pyr-28 | 0.45 | 936 | 417 | 34 | 0.79 | <0.0143 | 4169 | <1.67 | 0.02 | 2.0 | 0.08 | 0.02 | <0.104 | 4.1 | 1.1 | 0.08 | 0.11 | <0.25 | 2.0 | 18 | 6.3 |
| MF22Pyr-29 | 0.22 | 1009 | 633 | 32 | 1.7 | <0.0154 | 7640 | 3.0 | <0.035 | 2.8 | 0.02 | 0.01 | <0.107 | 1.1 | 1.3 | 0.01 | 0.10 | <0.27 | 0.45 | 16 | 12 |
| MF22Pyr-30 | 0.59 | 661 | 562 | 168 | 1.2 | <0.026 | 6724 | 2.4 | 0.02 | 3.2 | 0.05 | 0.01 | <0.105 | 3.8 | 0.97 | 0.27 | 0.02 | <0.24 | 3.1 | 32 | 16 |
| MF22Pyr-31 | <0.171 | 583 | 323 | 72 | 2.1 | <0.0147 | 6110 | <1.80 | <0.00 | 3.0 | <0.065 | 0.03 | <0.083 | 5.5 | 1.1 | 0.11 | 0.06 | 0.32 | 4.0 | 28 | 10 |
| MF22Pyr-32 | 3.9 | 615 | 375 | 191 | 2.0 | <0.031 | 5927 | 1.7 | 0.02 | 6.9 | <0.128 | 0.09 | <0.106 | 6.9 | 2.6 | 1.8 | 0.15 | <0.26 | 7.2 | 59 | 27 |
| MF22Pyr-33 | <0.148 | 1121 | 713 | 103 | 1.2 | 0.01 | 8297 | 2.3 | <0.00 | 3.2 | 0.02 | 0.01 | <0.112 | 5.8 | 8.0 | 0.04 | 0.21 | 0.30 | 3.0 | 37 | 44 |
| MF22Pyr-34 | 4.3 | 901 | 818 | 92 | 20 | 0.07 | 8837 | <1.99 | 0.18 | 2.0 | 0.54 | 0.03 | 2.3 | 2.2 | 1.1 | 6.1 | <0.020 | <0.27 | 1.5 | 18 | 4.8 |
| MF22Pyr-35 | 6.5 | 557 | 543 | 80 | 2.6 | <0.029 | 6216 | <1.64 | <0.070 | 10 | 0.05 | 0.07 | 0.11 | 6.4 | 5.9 | 8.9 | 0.13 | <0.24 | 3.4 | 82 | 20 |
| MF22Pyr-36 | 0.32 | 1017 | 889 | 9.5 | <0.42 | <0.0116 | 10145 | 3.0 | <0.052 | 0.79 | 0.02 | 0 | <0.106 | 1.4 | 0.34 | <0.027 | <0.0175 | <0.31 | 1.0 | 8.3 | 1.5 |
| MF22Pyr-37 | 7.1 | 822 | 601 | 73 | 14 | 0.05 | 7221 | 1.9 | 0.05 | 3.7 | 0.29 | 0.01 | 0.87 | 3.0 | 0.47 | 0.47 | 0.11 | <0.25 | 1.7 | 32 | 6.0 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF22Pyr-38 | 18 | 831 | 765 | 325 | 5.6 | 0.10 | 8166 | 4.2 | 0.98 | 5.9 | 0.02 | 0.03 | 0.35 | 6.3 | 2.3 | 0.11 | 0.14 | <0.30 | 2.3 | 50 | 28 |
| MF22Pyr-39 | 0.50 | 1288 | 739 | 74 | 0.99 | <0.024 | 8047 | 5.5 | <0.038 | 1.1 | 0.02 | 0.01 | <0.110 | 1.2 | 0.49 | 0.05 | 0 | <0.30 | 0.93 | 5.6 | 4.3 |
| MF22Pyr-40 | 0.29 | 612 | 412 | 26 | 0.82 | <0.0127 | 4970 | <1.31 | 0.01 | 0.41 | 0.03 | 0 | <0.067 | 0.71 | 0.20 | 0 | 0.01 | 0.19 | 0.63 | 5.0 | 2.0 |
| MF22Pyr-41 | 0.20 | 1316 | 719 | 3.6 | 2.1 | <0.0180 | 4989 | 2.7 | <0.00 | 0.18 | <0.00 | <0.0047 | <0.111 | 0.12 | 0.20 | <0.0138 | 0.02 | <0.29 | 0.03 | 0.95 | 0.18 |
| MF22Pyr-42 | 6.7 | 1382 | 1365 | 300 | 3.8 | <0.0231 | 5361 | 3.3 | 0.05 | 54 | 0.13 | 0.11 | 0.45 | 44 | 2.9 | 1.4 | 5.0 | <0.27 | 17 | 524 | 15 |
| MF22Pyr-43 | 2.6 | 1655 | 1718 | 303 | 3.0 | <0.0105 | 4783 | 2.1 | <0.082 | 71 | <0.094 | 0.21 | 1.0 | 48 | 0.87 | 1.3 | 6.8 | <0.27 | 17 | 651 | 8.4 |
| MF22Pyr-44 | 2.6 | 1163 | 1136 | 269 | 4.0 | 0.02 | 5097 | 2.9 | 0.09 | 30 | 0.07 | 0.07 | 0.20 | 33 | 1.6 | 0.70 | 2.9 | <0.25 | 9.5 | 326 | 14 |
| MF22Pyr-45 | 4.7 | 1084 | 1180 | 372 | 2.8 | <0.0231 | 4945 | 2.3 | <0.00 | 28 | 0.13 | 0.08 | 0.28 | 38 | 2.6 | 0.76 | 2.2 | <0.25 | 12 | 367 | 27 |
| MF22Pyr-46 | 0.74 | 1322 | 932 | 153 | 1.9 | 0.01 | 5560 | <2.00 | <0.063 | 4.7 | 0.08 | 0.03 | 0.13 | 10 | 0.62 | 0.14 | 0.16 | 0.31 | 4.6 | 100 | 7.7 |
| MF22Pyr-47 | 2.1 | 1227 | 1106 | 298 | 4.3 | <0.025 | 4857 | 1.8 | 0.04 | 28 | 0.11 | 0.08 | 0.38 | 32 | 3.3 | 0.58 | 2.2 | 0.39 | 13 | 282 | 27 |
| MF22Pyr-48 | 3.8 | 1129 | 1472 | 383 | 6.2 | <0.0215 | 5646 | 1.7 | <0.034 | 47 | 0.33 | 0.12 | 0.42 | 56 | 0.94 | 0.80 | 4.4 | 0.29 | 29 | 620 | 7.3 |
| MF22Pyr-49 | 4.6 | 1194 | 1483 | 477 | 5.3 | <0.0222 | 5133 | <1.64 | 0.02 | 50 | 0.39 | 0.11 | 0.33 | 64 | 0.62 | 0.66 | 3.4 | <0.26 | 44 | 692 | 4.4 |
| MF22Pyr-50 | 1.1 | 1232 | 912 | 223 | 2.2 | <0.0126 | 3649 | <1.56 | <0.040 | 33 | 0.22 | 0.08 | 0.30 | 39 | 0.90 | 0.46 | 2.5 | <0.222 | 26 | 270 | 9.8 |
| MF22Pyr-51 | 1.3 | 314 | 208 | 56 | 10 | 0.04 | 4264 | <1.56 | 0.39 | 3.7 | 0.30 | 0.03 | 0.42 | 5.7 | 0.49 | 0.16 | <0.0140 | <0.23 | 4.6 | 45 | 2.5 |
| MF22Pyr-52 | 1.5 | 471 | 243 | 536 | 2.2 | <0.0135 | 4646 | <1.60 | <0.053 | 9.1 | 0.12 | 0.05 | <0.089 | 17 | 0.02 | 0.14 | 0.02 | 0.27 | 11 | 113 | 4.1 |
| MF22Pyr-53 | 0.18 | 1429 | 465 | 15 | 1.3 | <0.0100 | 3526 | <1.65 | <0.032 | 0.55 | <0.00 | 0.01 | <0.095 | 1.2 | 0.12 | 0.01 | <0.0107 | <0.26 | 0.65 | 8.6 | 0.36 |
| MF22Pyr-54 | <0.127 | 829 | 257 | 126 | 0.98 | 0.01 | 3769 | 1.6 | <0.060 | 7.0 | 0.03 | 0.04 | 0.08 | 14 | 0.15 | 0.13 | 0.02 | <0.23 | 8.8 | 94 | 3.3 |
| MF22Pyr-55 | 2 | 691 | 329 | 82 | 2.2 | 0.01 | 4742 | <1.78 | 0.50 | 3.9 | 0.04 | 0.03 | 0.11 | 6.6 | 2.4 | 0.09 | 3.1 | <0.25 | 3.7 | 35 | 10 |
| MF22Pyr-56 | 3.6 | 933 | 456 | 107 | 2.4 | <0.0187 | 3821 | <1.73 | <0.049 | 6.2 | <0.096 | 0.03 | 0.16 | 15 | 0.38 | 0.09 | 0.07 | <0.26 | 8.1 | 92 | 3.5 |
| MF22Pyr-57 | 0.84 | 304 | 195 | 171 | 3.1 | <0.0090 | 4370 | <1.56 | 0.03 | 14 | 0.11 | 0.08 | 0.08 | 27 | 0.42 | 0.15 | 0.05 | <0.22 | 17 | 193 | 4.5 |
| MF22Pyr-58 | 1.6 | 478 | 254 | 98 | 6.0 | <0.0211 | 2954 | <1.58 | 0.03 | 7.3 | 0.15 | 0.07 | 2.1 | 15 | 0.94 | 0.14 | 0.12 | <0.27 | 12 | 125 | 13 |
| MF22Pyr-59 | 0.17 | 1695 | 614 | 42 | 1.1 | <0.0179 | 3647 | 2.2 | <0.00 | 1.8 | 0.02 | 0.12 | <0.100 | 1.6 | <0.151 | 0.01 | 0.02 | <0.27 | 0.49 | 20.00 | 0.50 |
| MF22Pyr-60 | 0.32 | 1435 | 565 | 92 | 2.1 | <0.0223 | 3651 | 1.9 | <0.036 | 5.1 | 0.08 | 0.05 | <0.105 | 6.9 | 0.54 | 0.04 | 0.07 | 0.36 | 5.1 | 73 | 8.4 |
| MF22Pyr-61 | 0.21 | 1758 | 609 | 29 | 1.9 | 0.01 | 4255 | 3.0 | <0.00 | 8.5 | <0.00 | <0.0059 | <0.107 | 0.28 | 11 | <0.0143 | 0.04 | <0.30 | 0.15 | 7.8 | 28 |
| MF22Pyr-62 | <0.150 | 1120 | 511 | 27 | 0.85 | <0.0095 | 3304 | <1.62 | <0.043 | 1.5 | <0.104 | 0.01 | <0.084 | 0.37 | 2.7 | <0.018 | 0.23 | <0.25 | 0.23 | 12 | 18 |
| MF22Pyr-63 | 1.6 | 1475 | 742 | 198 | 1.1 | <0.026 | 4612 | <2.01 | 0.02 | 0.17 | <0.074 | <0.0052 | <0.125 | 0.07 | 0.32 | <0.0218 | 0.55 | 0.33 | <0.0044 | 0.20 | 3.8 |
| MF22Pyr-64 | 38 | 1336 | 1057 | 233 | 9.4 | 0.03 | 5359 | 6.5 | <0.070 | 4.9 | 0.06 | 0.09 | 0.28 | 6.5 | 4.9 | 0.19 | 0.43 | <0.41 | 1.7 | 151 | 30 |
| MF22Pyr-65 | 28 | 1678 | 714 | 200 | 28 | 0.34 | 4053 | 2.7 | 0.14 | 4.3 | 1.7 | 1.0 | 185 | 3.2 | 9.4 | 0.33 | 0.35 | <0.29 | 0.82 | 110 | 58 |
| MF22Pyr-66 | 0.59 | 1285 | 561 | 17 | 0.94 | <0.0166 | 4051 | 2.6 | <0.0307 | 0.26 | <0.00 | <0.0043 | 0.16 | 0.46 | 0.86 | <0.0180 | 0.13 | <0.25 | 0.12 | 4.8 | 9.8 |
| MF22Pyr-67 | 18 | 1416 | 579 | 75 | 5.6 | <0.0162 | 3740 | 2.4 | 0.03 | 0.92 | <0.073 | 0.02 | 0.32 | 2.5 | 2.1 | 0.25 | 0.18 | <0.29 | 0.57 | 42 | 16 |
| MF22Pyr-68 | <0.163 | 1503 | 620 | 19 | 1.2 | <0.019 | 3904 | <1.76 | 0.01 | 0.32 | <0.069 | <0.0049 | <0.105 | 0.16 | 0.67 | 0 | 0.10 | <0.28 | 0.03 | 6.0 | 6.1 |
| MF22Pyr-69 | 0.76 | 1517 | 756 | 10 | 1.8 | <0.0257 | 4201 | 3.5 | 0.04 | 0.22 | 0.04 | 0.01 | 0.13 | 0.22 | 0.32 | 0.02 | 0.06 | <0.29 | 0.28 | 1.9 | 1.3 |
| MF22Pyr-70 | 2.4 | 1479 | 705 | 104 | 3.7 | 0.03 | 4264 | 2.4 | <0.035 | 1.3 | 0.02 | 0.19 | 11 | 2.2 | 2.9 | 0.06 | 0.14 | <0.27 | 0.38 | 22 | 19 |
| MF22Pyr-71 | <0.174 | 1688 | 611 | 9.8 | 1.3 | <0.021 | 3807 | <2.04 | <0.076 | 0.27 | <0.00 | <0.0076 | <0.113 | 0.07 | 0.40 | 0.06 | 0.49 | <0.30 | 0.98 | 2.6 | 1.9 |
| MF22Pyr-72 | 9.9 | 1569 | 713 | 178 | 6.6 | <0.031 | 3810 | 6.2 | <0.00 | 2.5 | 0.03 | 0.02 | 0.54 | 3.5 | 3.8 | 0.17 | 2.3 | 0.47 | 1.1 | 60 | 27 |
| MF22Pyr-73 | 3.1 | 1756 | 392 | 80 | 3.1 | 0.02 | 3130 | <1.68 | <0.00 | 1.5 | 0.06 | 0.04 | 0.25 | 0.94 | 3.5 | 0.04 | 0.58 | <0.25 | 0.11 | 28 | 33 |
| MF22Pyr-74 | 13 | 1921 | 531 | 230 | 4.4 | <0.025 | 3295 | <2.19 | 0.01 | 4.6 | 0.07 | 0.06 | 0.28 | 6.8 | 5.0 | 0.26 | 3.1 | 0.38 | 1.6 | 72 | 45 |
| MF22Pyr-75 | 8.3 | 1806 | 469 | 222 | 4.2 | <0.023 | 3267 | 4.5 | <0.061 | 6.2 | 0.02 | 0.09 | 0.18 | 6.1 | 3.2 | 0.34 | 0.37 | <0.34 | 1.8 | 94 | 26 |
| MF22Pyr-76 | 8.7 | 1804 | 508 | 217 | 14 | <0.037 | 3323 | 2.6 | 0.01 | 6.4 | 0.05 | 0.07 | <0.173 | 3.1 | 1.4 | 0.40 | 0.32 | <0.33 | 1.2 | 82 | 17 |
| MF22Pyr-77 | 4.9 | 1708 | 427 | 173 | 6.4 | 0.02 | 3261 | 2.2 | <0.038 | 4.5 | 0.21 | 0.05 | 0.23 | 2.9 | 3.9 | 0.16 | 0.48 | <0.30 | 1.7 | 68 | 35 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF22Pyr-78 | 11 | 553 | 236 | 202 | 4.9 | <0.017 | 2290 | <2.03 | 0.02 | 9.1 | 0.09 | 0.22 | 0.35 | 9.8 | 4.1 | 0.31 | 0.55 | <0.30 | 2.4 | 160 | 46 |
| MF22Pyr-79 | 11 | 694 | 191 | 144 | 4.7 | <0.019 | 2428 | <1.75 | <0.00 | 2.4 | <0.137 | 0.07 | 0.43 | 7.0 | 1.6 | 0.10 | 0.11 | <0.27 | 1.2 | 63 | 20 |
| MF22Pyr-80 | 18 | 1259 | 256 | 174 | 3.4 | <0.027 | 3614 | 3.2 | <0.00 | 5.6 | 0.12 | 0.03 | 0.36 | 5.2 | 5.8 | 0.12 | 0.09 | <0.36 | 1.1 | 27 | 13 |
| MF22Pyr-81 | 18 | 942 | 1035 | 83 | 1.6 | <0.0167 | 8843 | 2.7 | <0.038 | 2.2 | 0.10 | 0.04 | 0.44 | 2.7 | 3.1 | 0.07 | 0.03 | <0.32 | 4.2 | 27 | 14 |
| MF22Pyr-82 | 11 | 719 | 901 | 382 | 1.2 | <0.0239 | 7487 | 2.2 | 0.01 | 1.7 | <0.00 | 0.09 | 1.6 | 4.1 | 0.75 | 0.08 | 0.06 | 0.40 | 3.6 | 20 | 4.3 |
| MF22Pyr-83 | 4.7 | 334 | 244 | 115 | 3.4 | <0.0095 | 5136 | 2.0 | <0.031 | 0.55 | <0.105 | 0.04 | 0.24 | 4.2 | 0.67 | 0.25 | 0.02 | <0.25 | 3.4 | 6.5 | 6.4 |
| MF22Pyr-84 | 48 | 321 | 152 | 124 | 2.8 | <0.019 | 4274 | <1.51 | 0.04 | 6.7 | 0.12 | 0.09 | 0.19 | 14 | 3.9 | 0.30 | 0.09 | 0.47 | 26 | 24 | 17 |
| MF22Pyr-85 | 0.61 | 214 | 44 | 3.1 | 4.8 | <0.0224 | 500 | 2.7 | <0.036 | <0.015 | <0.071 | 0 | 0.11 | <0.0169 | 0.16 | 0.05 | <0.00 | 0.28 | 0.01 | 0.03 | 0.04 |
| MF22Pyr-86 | 0.28 | 288 | 80 | 2.7 | 1.2 | <0.022 | 718 | 3.4 | <0.00 | 0.01 | <0.097 | <0.0049 | <0.096 | <0.0163 | 0.13 | <0.0143 | <0.0259 | <0.28 | 0 | <0.030 | 0.02 |
| MF22Pyr-87 | 0.51 | 1188 | 1197 | 4.0 | 1.0 | <0.0164 | 5530 | 2.2 | <0.037 | 0.02 | <0.128 | 0 | <0.100 | <0.0124 | 0.30 | 0.02 | <0.0216 | 0.29 | <0.00 | 0.12 | 0.02 |
| MF22Pyr-88 | 18 | 492 | 383 | 177 | 1.2 | 0.02 | 4029 | 1.6 | 0.04 | 6.6 | 0.11 | 0.04 | 0.24 | 15 | 1.4 | 0.14 | 0.13 | <0.24 | 36 | 20 | 15 |
| MF22Pyr-89 | 8.3 | 1327 | 769 | 73 | 2.1 | 0.10 | 4412 | 2.0 | <0.00 | 3.5 | 0.12 | 0.04 | 0.81 | 8.5 | 1.4 | 0.11 | 0.07 | <0.24 | 17 | 14 | 13 |
| MF22Pyr-90 | 343 | 386 | 321 | 170 | 50 | 4.5 | 3995 | <2.52 | 0.19 | 12 | 0.41 | 0.46 | 35 | 25 | 2.0 | 4.0 | 0.21 | <0.40 | 29 | 66 | 29 |
| MF22Pyr-91 | 5.8 | 589 | 541 | 103 | 7.1 | 0.53 | 6032 | 2.8 | 0.03 | 2.4 | 0.14 | 0.04 | 2.4 | 7.2 | 0.56 | 0.65 | 0.04 | <0.29 | 15 | 8.5 | 6.5 |
| MF22Pyr-92 | 9 | 351 | 262 | 167 | 2.6 | 0.06 | 4366 | <1.64 | <0.00 | 6.1 | 0.16 | 0.07 | 0.16 | 15 | 1.2 | 0.33 | 0.10 | 0.39 | 34 | 22 | 15 |
| MF22Pyr-93 | 6.3 | 652 | 216 | 70 | 2.6 | <0.019 | 3267 | <1.56 | 0.02 | 5.8 | 0.31 | 0.04 | 0.23 | 12 | 3.2 | 0.24 | 0.20 | <0.24 | 28 | 25 | 21 |
| MF22Pyr-94 | 44 | 634 | 590 | 138 | 15 | 0.05 | 4048 | <1.71 | 0.24 | 6.1 | 0.46 | 0.09 | 2.5 | 12 | 2.0 | 1.2 | 0.20 | <0.27 | 29 | 56 | 19 |
| MF22Pyr-95 | 349 | 686 | 454 | 234 | 7.5 | 0.10 | 4001 | <1.89 | 0.01 | 11 | 0.38 | 0.24 | 1.1 | 28 | 2.9 | 0.49 | 0.38 | <0.30 | 55 | 68 | 43 |
| MF22Pyr-96 | 36 | 663 | 320 | 167 | 4.4 | 0.12 | 2893 | <1.51 | 0.03 | 10 | 0.32 | 0.07 | 0.42 | 21 | 2.4 | 0.30 | 0.21 | <0.23 | 43 | 33 | 21 |
| MF22Pyr-97 | 67 | 1277 | 430 | 200 | 4.7 | 0.11 | 3375 | 2.0 | <0.00 | 6.0 | 0.36 | 0.05 | 0.29 | 11 | 0.71 | 0.60 | 0.09 | <0.30 | 22 | 19 | 7.8 |
| MF22Pyr-98 | 0.90 | 960 | 897 | 29 | 1.8 | 0.01 | 5657 | 2.1 | <0.050 | 1.6 | 0.03 | 0.01 | <0.089 | 2.6 | 0.68 | 0.07 | 0.04 | <0.22 | 5.7 | 6.0 | 4.3 |
| MF22Pyr-99 | 81 | 457 | 486 | 151 | 2.8 | 0.09 | 3695 | <1.81 | <0.037 | 7.5 | 0.30 | 0.09 | 0.31 | 14 | 2.2 | 0.31 | 0.12 | <0.29 | 31 | 31 | 18 |
| MF22Pyr-100 | 6.1 | 690 | 456 | 263 | 1.4 | 0.10 | 3586 | <1.73 | 0.01 | 7.0 | 0.22 | 0.05 | 0.11 | 16 | 0.69 | 0.21 | 0.09 | <0.28 | 32 | 30 | 10 |
| MF22Pyr-101 | 4 | 473 | 294 | 402 | 1.8 | <0.023 | 10904 | 3.1 | <0.037 | 1.7 | 0.02 | 0.01 | 0.26 | 0.96 | 1.2 | 0.16 | 0.18 | <0.33 | 0.59 | 15 | 8.8 |
| MF22Pyr-102 | 10 | 535 | 302 | 396 | 2.4 | <0.0120 | 12919 | 2.4 | <0.00 | 1.2 | <0.133 | 0.01 | 0.20 | 0.97 | 1.1 | 0.03 | 0.16 | <0.33 | 0.37 | 17 | 11 |
| MF22Pyr-103 | 7.8 | 466 | 347 | 260 | 1.8 | <0.026 | 10682 | <1.65 | 0.05 | 2.9 | <0.067 | 0.72 | 13 | 3.3 | 1.8 | 0.02 | 0.16 | <0.27 | 1.1 | 33 | 11 |
| MF22Pyr-104 | 1.6 | 484 | 310 | 39 | 1.7 | 0.01 | 9250 | <1.71 | 0.01 | 0.18 | <0.061 | 0 | <0.081 | 0.15 | <0.082 | <0.0178 | 0.01 | <0.25 | 0.04 | 0.68 | 1.0 |
| MF22Pyr-105 | 0.45 | 142 | 19 | 2.0 | 0.69 | <0.023 | 146 | <1.91 | <0.00 | 0.04 | <0.074 | 0 | <0.110 | 0.01 | <0.141 | <0.00 | 0.02 | <0.30 | 0 | <0.025 | 0.07 |
| MF22Pyr-106 | 26 | 243 | 139 | 306 | 5.4 | <0.035 | 1780 | 3.8 | 0.07 | 3.1 | <0.199 | 0.02 | 0.36 | 2.6 | 1.9 | 0.09 | 0.12 | <0.40 | 0.98 | 40 | 25 |
| MF22Pyr-107 | <0.191 | 544 | 292 | 2.7 | 0.55 | <0.0122 | 12551 | <2.09 | 0.02 | 0.03 | <0.00 | <0.0039 | <0.098 | 0.02 | <0.21 | 0.01 | 0.02 | <0.29 | <0.0045 | 0.79 | 0.95 |
| MF22Pyr-108 | 0.20 | 514 | 273 | 44 | 0.82 | <0.0225 | 11627 | 2.6 | <0.00 | 0.15 | 0.02 | <0.0036 | <0.105 | 0.05 | 0.16 | <0.0211 | <0.00 | 0.27 | 0.05 | 0.41 | 1.1 |
| MF22Pyr-109 | 2 | 563 | 343 | 203 | 1.4 | <0.018 | 12529 | 2.2 | 0.03 | 3.8 | <0.00 | 0.01 | <0.123 | 0.91 | 2.0 | <0.0165 | 0.13 | <0.30 | 0.63 | 17 | 15 |
| MF22Pyr-110 | <0.168 | 695 | 455 | 5.7 | 1.1 | <0.0231 | 10422 | <1.85 | 0.02 | 0.09 | <0.00 | <0.00 | <0.110 | 0.03 | 0.22 | 0.01 | 0.10 | <0.28 | 0.01 | 1.7 | 2.3 |
| MF22Pyr-111 | 0.98 | 534 | 390 | 12 | 1.5 | <0.0089 | 8466 | <1.41 | <0.0285 | 0.17 | <0.057 | <0.0028 | <0.094 | 0.13 | <0.077 | 0.02 | 0.03 | <0.23 | 0.03 | 1.6 | 1.4 |
| MF22Pyr-112 | 17 | 651 | 531 | 525 | 4.9 | <0.0246 | 11541 | 2.3 | 0.01 | 2.8 | 0.11 | 0.03 | 0.72 | 2.4 | 0.28 | <0.023 | 0.16 | <0.33 | 1.1 | 42 | 15 |
| MF22Pyr-113 | 28 | 723 | 657 | 670 | 7.2 | <0.018 | 9177 | 3.2 | <0.040 | 8.1 | 0.11 | 0.07 | 0.84 | 5.3 | 5.3 | 0.10 | 0.86 | <0.33 | 2.9 | 112 | 65 |
| MF22Pyr-114 | 23 | 583 | 513 | 452 | 4.6 | 0.03 | 12174 | <2.14 | 0.08 | 5.8 | 0.09 | 0.07 | 0.55 | 4.1 | 2.3 | 0.11 | 0.51 | <0.32 | 2.2 | 74 | 41 |
| MF22Pyr-115 | 8.3 | 483 | 278 | 163 | 3.3 | 0.03 | 8884 | 1.7 | 0.01 | 3.4 | <0.064 | 0.02 | 0.34 | 2.2 | 6.5 | 0.02 | 0.46 | <0.25 | 0.83 | 47 | 52 |
| MF22Pyr-116 | 40 | 266 | 151 | 245 | 5.2 | <0.0252 | 737 | 3.8 | <0.051 | 10 | 0.22 | 0.02 | 1.4 | 1.4 | 3.1 | 0.05 | 0.32 | 0.40 | 0.88 | 32 | 22 |
| MF22Pyr-117 | 17 | 330 | 271 | 240 | 6.8 | <0.027 | 3709 | 4.4 | <0.060 | 2.7 | 0.19 | 0.05 | 0.66 | 2.0 | 2.1 | 1.4 | 0.25 | <0.34 | 1.4 | 42 | 29 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF22Pyr-118 | 3.9 | 369 | 206 | 157 | 1.4 | <0.0226 | 5158 | 3.9 | 0.80 | 1.3 | <0.103 | 0.03 | 0.17 | 0.72 | 0.78 | 0.01 | 0.06 | <0.29 | 0.22 | 12 | 6.6 |
| MF22Pyr-119 | 9.5 | 136 | 183 | 803 | 3.5 | <0.0183 | 773 | <2.07 | <0.00 | 2.5 | <0.083 | 0.04 | 0.16 | 2.9 | 0.99 | 0.07 | 0.11 | <0.31 | 2.2 | 39 | 18 |
| MF22Pyr-120 | 10 | 114 | 110 | 97 | 2.1 | <0.026 | 192 | <1.89 | 0.04 | 0.46 | <0.105 | 0.01 | 0.24 | 0.58 | 0.11 | 0.04 | <0.0124 | <0.29 | 0.15 | 31 | 2.4 |
| **Mean n=120** | 15.1 | 877 | 573 | 158 | 4.1 | 0.18 | 5882 | 2.9 | 0.09 | 6.5 | 0.16 | 0.08 | 3.8 | 8.3 | 1.9 | 0.65 | 0.51 | 0.35 | 7.2 | 69 | 15 |
| **S.D** | 47.9 | 455 | 347 | 151 | 6.0 | 0.74 | 3019 | 1.1 | 0.18 | 11 | 0.22 | 0.14 | 22 | 12 | 2.1 | 1.9 | 1.1 | 0.10 | 11 | 124 | 15 |
| **Min** | 0.17 | 114 | 19 | 2.0 | 0.55 | 0.01 | 146 | 1.6 | 0.01 | 0.01 | 0.02 | 0 | 0.08 | 0.01 | 0.02 | 0 | 0 | 0.19 | 0 | 0.03 | 0.02 |
| **Max** | 349 | 1921 | 1718 | 803 | 50 | 4.5 | 12919 | 6.5 | 0.98 | 71 | 1.7 | 1.0 | 185 | 64 | 11 | 12 | 6.8 | 0.70 | 55 | 692 | 82 |

| Sample # | $^{55}$Mn | $^{59}$Co | $^{60}$Ni | $^{65}$Cu | $^{66}$Zn | $^{69}$Ga | $^{75}$As | $^{82}$Se | $^{95}$Mo | $^{107}$Ag | $^{111}$Cd | $^{115}$In | $^{118}$Sn | $^{121}$Sb | $^{125}$Te | $^{184}$W | $^{197}$Au | $^{202}$Hg | $^{205}$Tl | $^{208}$Pb | $^{209}$Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF23Pyr-1 | 1.3 | 3879 | 849 | 24 | 1.7 | <0.0199 | 6580 | <2.81 | <0.064 | 0.50 | <0.132 | 0 | 3.3 | 0.72 | 31 | <0.026 | 0.07 | <0.43 | 0.05 | 41 | 123 |
| MF23Pyr-2 | 3 | 7011 | 401 | 7842 | 2.7 | 0.06 | 5180 | 4.2 | <0.00 | 3.0 | <0.00 | 0.20 | 8.9 | 2.6 | 30 | 0.72 | 0.51 | <0.44 | 0.25 | 59 | 73 |
| MF23Pyr-3 | 0.36 | 6745 | 59 | 3430 | 4.8 | <0.024 | 5620 | 4.2 | <0.00 | 0.46 | <0.094 | 0.15 | 20 | 0.21 | 1.6 | 0.59 | 0.11 | <0.39 | 0.10 | 8.7 | 11 |
| MF23Pyr-4 | 1.1 | 5768 | 33 | 172 | <0.57 | 0.05 | 4818 | 3.9 | <0.039 | 0.40 | <0.079 | 0.01 | <0.20 | 0.55 | 5.9 | 0.17 | 0.08 | <0.35 | 0.03 | 22 | 20 |
| MF23Pyr-5 | 3.8 | 3424 | 114 | 12483 | 3.0 | 0.06 | 2979 | 3.3 | 0.15 | 4.6 | <0.100 | 0.34 | 28 | 6.6 | 17 | 0.10 | 0.55 | <0.43 | 0.36 | 107 | 72 |
| MF23Pyr-6 | 4.3 | 4478 | 41 | 2440 | 3.6 | 24 | 2901 | <4.11 | <0.00 | 0.85 | <0.123 | 0.09 | 3.2 | 0.73 | 4.6 | 0.01 | 0.11 | <0.49 | <0.015 | 21 | 20 |
| MF23Pyr-7 | <0.31 | 3236 | 60 | 41 | 2.4 | 0.04 | 4306 | 4.3 | <0.075 | 0.66 | 0.18 | 0.01 | 4.2 | 1.3 | 39 | 0.51 | 0.34 | <0.45 | 0.10 | 27 | 52 |
| MF23Pyr-8 | 0.85 | 6857 | 49 | 11546 | 6.3 | 0.70 | 4327 | <3.23 | 0.15 | 2.9 | 0.03 | 0.45 | 17 | 3.2 | 21 | 3.3 | 0.54 | <0.39 | 0.19 | 44 | 73 |
| MF23Pyr-9 | <0.27 | 6667 | 34 | 1280 | 2.6 | 0.01 | 5569 | <2.96 | <0.059 | 0.37 | <0.00 | 0.02 | 0.97 | 0.41 | 5.1 | <0.00 | 0.09 | <0.34 | 0.02 | 11 | 14 |
| MF23Pyr-10 | 0.32 | 4457 | 329 | 974 | 2.4 | 0.03 | 4696 | 4.2 | <0.092 | 0.27 | <0.00 | 0.05 | 4.8 | 0.29 | 2.1 | 1.6 | 0.08 | <0.35 | 0.01 | 1.7 | 7.7 |
| MF23Pyr-11 | <0.31 | 5141 | 385 | 4121 | 2.6 | 0.23 | 5681 | <3.34 | <0.084 | 1.5 | 0.03 | 0.20 | 11 | 2.0 | 10 | 0.43 | 0.19 | 0.53 | 0.07 | 26 | 30 |
| MF23Pyr-12 | 1.2 | 737 | 2123 | 2123 | 2.2 | <0.022 | 4080 | 5.8 | <0.103 | 1.5 | <0.00 | 0.09 | 2.1 | 1.9 | 20 | 0.01 | 0.30 | <0.42 | 0.25 | 56 | 93 |
| MF23Pyr-13 | 1.6 | 832 | 2452 | 117 | <0.66 | 1.3 | 5647 | <4.44 | 0.02 | 0.40 | <0.127 | 0.02 | 0.94 | 0.76 | 10 | 0.05 | 0.17 | <0.53 | 0.02 | 26 | 65 |
| MF23Pyr-14 | 2.1 | 546 | 2640 | 198 | 5.5 | 0.07 | 4769 | <3.57 | 0.03 | 0.78 | 0.03 | 0.11 | 20 | 0.59 | 21 | 0.08 | 0.17 | <0.43 | 0.04 | 18 | 16 |
| MF23Pyr-15 | 0.37 | 1032 | 550 | 5.3 | <0.57 | <0.039 | 3362 | <3.28 | <0.048 | <0.026 | <0.218 | <0.0094 | 0.40 | <0.044 | <0.18 | 0.01 | <0.0196 | <0.39 | <0.0144 | <0.046 | 0.14 |
| MF23Pyr-16 | 0.85 | 1772 | 2541 | 104 | 1.6 | 0.02 | 11566 | <3.62 | <0.050 | 0.54 | <0.102 | 0 | <0.28 | 0.54 | 15 | 0.01 | 0.18 | <0.41 | 0.06 | 19 | 37 |
| MF23Pyr-17 | 2.1 | 4956 | 206 | 50 | 2.9 | <0.0137 | 4109 | <2.81 | <0.044 | 0.59 | <0.00 | 0.01 | 0.62 | 0.36 | 18 | 0.34 | 0.08 | 0.38 | 0.08 | 35 | 47 |
| MF23Pyr-18 | 0.69 | 8080 | 55 | 2.7 | 4.2 | <0.031 | 4463 | 3.2 | <0.072 | 0.01 | <0.00 | 0.01 | 2.2 | 0.06 | <0.191 | 0.52 | <0.0148 | 0.44 | <0.0082 | <0.070 | 0.62 |
| MF23Pyr-19 | 0.46 | 1923 | 39 | 8.5 | 2.1 | <0.0207 | 1250 | <3.20 | <0.00 | 0.03 | 0.06 | 0.01 | 2.1 | <0.044 | 0.21 | <0.0191 | 0.01 | 0.38 | <0.0143 | <0.082 | 0.15 |
| MF23Pyr-20 | <0.32 | 1403 | 27 | 3.4 | 4.1 | <0.0153 | 980 | <3.35 | <0.00 | 0.03 | <0.00 | 0.02 | 6.8 | 0.06 | <0.23 | 0.83 | <0.025 | <0.42 | 0 | <0.048 | 0.87 |
| MF23Pyr-21 | 1 | 4457 | 506 | 7.7 | 3.0 | 3.8 | 5847 | <2.80 | <0.044 | 0.21 | <0.090 | 0.01 | 1.5 | 0.16 | 1.8 | 0.02 | 0.03 | <0.41 | 0.02 | 3.3 | 5.6 |
| MF23Pyr-22 | 0.47 | 6445 | 3067 | 26 | 4.7 | 2.0 | 17330 | <3.25 | <0.00 | 0.33 | <0.143 | 0.04 | 12 | 0.10 | 0.89 | 0.27 | 0.05 | <0.43 | 0.06 | 2.7 | 1.4 |
| MF23Pyr-23 | 0.60 | 6867 | 2144 | 10 | 3.0 | 0.36 | 12579 | <3.06 | <0.00 | 0.11 | <0.00 | <0.0094 | 2.8 | 0.21 | 1.5 | 0.06 | <0.0139 | <0.42 | <0.0054 | 0.67 | 0.66 |
| MF23Pyr-24 | <0.25 | 10821 | 1373 | 0.71 | 1.5 | 0.02 | 15582 | <2.99 | <0.00 | 0.05 | <0.00 | 0.01 | 1.2 | <0.021 | <0.20 | 0.57 | <0.0226 | 0.37 | <0.0072 | <0.063 | 0.53 |
| MF23Pyr-25 | 0.42 | 12092 | 1253 | 26 | 2.3 | <0.0290 | 16754 | <2.71 | <0.038 | 0.44 | <0.00 | 0 | 1.8 | 0.24 | 7.5 | 0.04 | 0.11 | <0.32 | <0.0087 | 8.7 | 6.7 |
| MF23Pyr-26 | 3.5 | 7242 | 26 | 18 | 3.4 | 0.92 | 5891 | <3.45 | 0.15 | 0.15 | <0.104 | 0.01 | 1.7 | 0.16 | 5.6 | 0.85 | 0.22 | <0.43 | 0.02 | 4.1 | 13 |
| MF23Pyr-27 | 7.6 | 112 | 70 | 3242 | 2.9 | 45 | 3811 | 9.1 | 0.02 | 1.7 | 0.04 | 0.09 | 5.3 | 1.4 | 14 | 0.02 | 0.85 | <0.52 | 0.05 | 59 | 37 |
| MF23Pyr-28 | 5103 | 546 | 18 | 132 | 5.0 | 0.19 | 636 | <9.43 | <0.142 | 0.32 | <0.00 | <0.0094 | 1.3 | 0.45 | 8.4 | <0.057 | 0.27 | <1.16 | 0.05 | 43 | 69 |
| MF23Pyr-29 | 2.3 | 1138 | 19 | 62 | 1.1 | 0.06 | 2732 | <2.86 | <0.061 | 0.53 | <0.00 | 0.01 | 1.3 | 0.59 | 21 | 0 | 0.32 | <0.37 | 0.17 | 28 | 59 |
| MF23Pyr-30 | 0.52 | 62 | 208 | 28 | 2.2 | <0.0206 | 5661 | 4.8 | <0.066 | 0.24 | <0.00 | 0.02 | 4.9 | 0.17 | 9.9 | <0.0189 | 2.2 | <0.42 | 0.03 | 6.0 | 12 |
| MF23Pyr-31 | <0.29 | 153 | 99 | 34 | 1.1 | <0.0146 | 9820 | 8.2 | <0.00 | 0.10 | 0.03 | 0.01 | 0.61 | 0.04 | 1.7 | 0.02 | 2.9 | <0.41 | <0.0131 | 1.70 | 0.80 |
| MF23Pyr-32 | 0.48 | 2553 | 37 | 41 | 0.67 | <0.027 | 1674 | <3.50 | 0.03 | 0.22 | <0.00 | 0.07 | <0.160 | 0.37 | 5.4 | <0.029 | 0.04 | <0.42 | <0.0116 | 10 | 9.5 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF23Pyr-33 | <0.27 | 2660 | 50 | 1926 | 2.6 | <0.036 | 1794 | <2.83 | 0.01 | 1.7 | <0.00 | 0.10 | 2.4 | 1.7 | 15 | 0.01 | 0.33 | <0.37 | 0.17 | 23 | 37 |
| MF23Pyr-34 | 3.7 | 5554 | 856 | 1670 | 2.3 | 0.52 | 6884 | 3.2 | <0.047 | 2.3 | 0.09 | 0.09 | 7.0 | 2.2 | 12 | 0.10 | 0.28 | <0.40 | 0.14 | 39 | 72 |
| MF23Pyr-35 | 1.5 | 5983 | 710 | 1343 | 2.2 | 4.5 | 7376 | <4.17 | <0.057 | 0.63 | <0.00 | 0.04 | 2.5 | 0.57 | 5.6 | 0.76 | <0.029 | <0.48 | 0.08 | 25 | 89 |
| MF23Pyr-36 | <0.33 | 4562 | 127 | 3.0 | 2.7 | <0.045 | 2354 | <3.81 | <0.00 | 0.03 | <0.00 | <0.0054 | 0.20 | <0.031 | <0.206 | <0.022 | <0.023 | 0.48 | <0.0124 | <0.094 | <0.082 |
| MF23Pyr-37 | 33 | 8407 | 459 | 276 | 4.4 | 10 | 7053 | <3.60 | 0.13 | 3.8 | <0.105 | 0.15 | 29 | 6.7 | 100 | 1.1 | 1.4 | <0.44 | 0.36 | 152 | 132 |
| MF23Pyr-38 | 6.6 | 6999 | 415 | 2542 | 1.6 | 3.6 | 4910 | <3.10 | 0.10 | 5.9 | 0.11 | 0.14 | 11 | 4.5 | 88 | 0.30 | 1.7 | <0.41 | 0.26 | 62 | 57 |
| MF23Pyr-39 | 14 | 5115 | 1207 | 685 | 8.4 | 84 | 8963 | <6.54 | 0.12 | 6.0 | <0.210 | 0.10 | 22 | 6.6 | 97 | 2.3 | 2.4 | <0.84 | 0.39 | 132 | 126 |
| MF23Pyr-40 | 14 | 5887 | 676 | 15 | 0.73 | <0.038 | 6497 | <3.00 | 0.01 | 0.11 | 0.06 | <0.0080 | 0.20 | 0.36 | 2.6 | 0.06 | 0.04 | <0.39 | <0.0076 | 7.7 | 17 |
| MF23Pyr-41 | <0.30 | 6907 | 109 | 2.8 | 1.7 | <0.020 | 3486 | 4.4 | <0.045 | 0.04 | <0.093 | <0.0063 | 0.18 | <0.021 | <0.121 | <0.0183 | 0.01 | <0.44 | <0.0052 | <0.078 | 0.02 |
| MF23Pyr-42 | <0.27 | 7105 | 32 | 4.7 | 1.8 | <0.036 | 4477 | <3.10 | 0.03 | 0.09 | <0.00 | 0 | 0.56 | 0.06 | 0.22 | 5.6 | <0.0201 | <0.40 | <0.0077 | <0.055 | 2.1 |
| MF23Pyr-43 | <0.31 | 6336 | 33 | 2.8 | <0.50 | <0.0322 | 3352 | 4.7 | <0.00 | 0.10 | <0.095 | <0.0065 | 0.30 | 0.07 | <0.215 | 0.01 | <0.0240 | <0.39 | <0.0092 | <0.064 | 0.02 |
| MF23Pyr-44 | 0.84 | 5285 | 62 | 2.9 | 2.0 | 2.7 | 3111 | 5.0 | <0.00 | 0.02 | <0.167 | <0.0080 | 0.47 | 0.04 | 0.83 | <0.0233 | <0.00 | <0.50 | 0 | <0.111 | <0.164 |
| MF23Pyr-45 | 0.46 | 8008 | 27 | 4.1 | 2.6 | <0.036 | 4960 | 3.6 | <0.052 | 0.08 | <0.106 | 0.01 | 0.37 | <0.045 | 0.63 | 3.2 | 0.02 | <0.43 | <0.0102 | 0.99 | 2.3 |
| MF23Pyr-46 | <0.26 | 8969 | 24 | 6.7 | 1.5 | 0.69 | 7336 | <2.76 | 0.03 | 0.05 | 0.05 | <0.0126 | 0.37 | 0.05 | 0.27 | 1.8 | 0.02 | <0.35 | 0.01 | 0.60 | 1.7 |
| MF23Pyr-47 | 4.6 | 7223 | 20 | 129 | 84 | 81 | 2265 | <36.68 | 0.50 | 0.51 | 0.68 | 0.12 | 106 | 0.56 | 3.7 | 6.3 | <0.182 | <5.16 | <0.00 | 9.7 | 29 |
| MF23Pyr-48 | 1.6 | 5208 | 33 | 23 | 2.6 | 4.9 | 4502 | <5.26 | 0.05 | 0.33 | 0.05 | 0 | 2.0 | 0.35 | 1.3 | 2.1 | <0.036 | <0.72 | <0.0096 | 4.4 | 11 |
| MF23Pyr-49 | 0.54 | 8705 | 19 | 4.7 | 1.4 | 2.9 | 6980 | <3.72 | <0.057 | 0.02 | <0.117 | 0.27 | 94 | 2.3 | 1.2 | 68 | 0.04 | <0.47 | <0.0065 | <0.142 | 11 |
| MF23Pyr-50 | 0.57 | 8708 | 393 | 2.5 | 0.75 | <0.031 | 7762 | <3.07 | <0.00 | 0.02 | <0.00 | <0.0086 | 0.33 | <0.034 | <0.23 | 0.20 | 0.01 | <0.42 | 0 | <0.050 | 0.07 |
| MF23Pyr-51 | 1.5 | 486 | 2144 | 3.7 | 2.9 | 0.04 | 4202 | <3.09 | <0.00 | 0.12 | <0.137 | <0.0046 | <0.126 | 0.65 | 3.2 | <0.027 | 0.10 | <0.40 | <0.0107 | 1.4 | 14 |
| MF23Pyr-52 | 0.41 | 152 | 2842 | 1E+05 | 29 | 0.38 | 5094 | 5.3 | 0.01 | 1.7 | 0.03 | 2.4 | 96 | 1.3 | 18 | <0.0197 | 0.18 | <0.43 | 0.05 | 14 | 12 |
| MF23Pyr-53 | 0.78 | 84 | 3046 | 36 | 1.8 | 2.2 | 5142 | <2.65 | <0.058 | 0.12 | <0.00 | 0.04 | 12 | 0.13 | 6.4 | 0.17 | 0.07 | <0.34 | 0.02 | 5.7 | 12 |
| MF23Pyr-54 | 0.80 | 4360 | 1335 | 25 | 4.2 | 0.21 | 9538 | <3.07 | <0.049 | 0.16 | <0.101 | 0.01 | 0.81 | 0.28 | 6.1 | 1.0 | 0.09 | <0.42 | 0.04 | 7.1 | 4.7 |
| MF23Pyr-55 | 1.3 | 8648 | 2112 | 66 | 4.7 | 11 | 16787 | <3.12 | 0.01 | 0.71 | <0.00 | 0.11 | 30 | 1.2 | 31 | 0.62 | 0.21 | <0.41 | 0.16 | 13 | 25 |
| MF23Pyr-56 | 4.6 | 7905 | 962 | 12 | 0.93 | 7.4 | 9491 | 4.3 | <0.045 | 0.09 | <0.131 | <0.0117 | 2.5 | 0.11 | 2.1 | 3.2 | 0.03 | 0.58 | 0.07 | 32 | 294 |
| MF23Pyr-57 | 0.59 | 8924 | 711 | 24 | 4.4 | 0.05 | 9481 | <2.98 | <0.046 | 0.77 | 0.12 | <0.0045 | 0.39 | 0.85 | 27 | 0.06 | 0.10 | <0.39 | 0.01 | 23 | 51 |
| MF23Pyr-58 | 0.67 | 7691 | 67 | 3.7 | 1.3 | 0.05 | 6474 | <2.89 | 0.18 | 0.05 | <0.00 | <0.0065 | 0.34 | 0.14 | 0.28 | 7.0 | 0.02 | <0.39 | 0.01 | 0.30 | 2.2 |
| MF23Pyr-59 | 4.4 | 195 | 185 | 19 | 2.2 | 11 | 4562 | 10 | <0.141 | 0.09 | <0.166 | 0.02 | 9.1 | 0.16 | 10 | 1.8 | 0.27 | <0.71 | 0.05 | 4.3 | 6.1 |
| MF23Pyr-60 | 0.84 | 33 | 79 | 19 | 0.85 | 0.02 | 10815 | 11 | <0.00 | 0.12 | <0.00 | 0.01 | 0.20 | 0.33 | 8.8 | <0.00 | 4.7 | <0.34 | <0.0155 | 4.0 | 5.7 |
| MF23Pyr-61 | <0.28 | 1605 | 37 | 2.5 | 0.81 | <0.032 | 1032 | <3.00 | <0.046 | 0.06 | <0.00 | 0 | 0.17 | <0.022 | <0.25 | 0.19 | <0.028 | <0.43 | 0 | 0.04 | 0.31 |
| MF23Pyr-62 | 4.7 | 1282 | 17 | 49 | 1.1 | 25 | 4038 | 4.4 | <0.00 | 0.44 | <0.217 | <0.0104 | 1.0 | 0.48 | 9.8 | 1.7 | 0.41 | <0.52 | 0.05 | 17 | 58 |
| MF23Pyr-63 | 0.56 | 7767 | 24 | 4.3 | 2.3 | 0.26 | 6713 | 3.1 | <0.045 | 0.11 | 0.03 | <0.0044 | <0.146 | 0.05 | 0.51 | 0.09 | 0.03 | <0.39 | 0.01 | 1.1 | 1.0 |
| MF23Pyr-64 | 1.1 | 4278 | 62 | 36 | 2.3 | 9.4 | 3403 | <5.77 | 0.03 | 0.69 | <0.00 | <0.0132 | 0.94 | 0.61 | 30 | 0.09 | 0.23 | 0.91 | 0.02 | 5.0 | 3.1 |
| MF23Pyr-65 | 0.83 | 409 | 27 | 9.0 | 0.76 | 5.0 | 5827 | 4.5 | <0.078 | 0.06 | 0.03 | <0.00 | 0.90 | <0.045 | 15 | 0.01 | 1.6 | 0.47 | 0.01 | 0.59 | 1.3 |
| MF23Pyr-66 | 13 | 2691 | 90 | 54 | 5.8 | 109 | 5526 | <6.88 | <0.00 | 1.1 | 0.07 | 0.08 | 10 | 0.44 | 14 | 0.17 | 3.5 | <0.93 | 0.04 | 19 | 27 |
| MF23Pyr-67 | 1.2 | 83 | 58 | 27 | 4.4 | 0.90 | 6689 | <3.44 | <0.00 | 0.67 | <0.00 | <0.0053 | 1.3 | 0.46 | 11 | 0.03 | 6.5 | <0.44 | 0.07 | 23 | 63 |
| MF23Pyr-68 | 0.53 | 197 | 224 | 7.6 | <0.74 | <0.045 | 7079 | <3.62 | <0.00 | <0.017 | <0.00 | <0.0082 | 0.32 | 0.24 | 4.1 | 0.01 | 5.6 | <0.49 | 0 | 1.2 | 6.6 |
| MF23Pyr-69 | <0.40 | 70 | 125 | 19 | 3.8 | 1.2 | 9232 | <4.15 | 0.02 | 0.34 | <0.126 | 0.04 | 5.4 | 0.43 | 9.4 | 0.24 | 12 | <0.51 | 0.03 | 79 | 11 |
| MF23Pyr-70 | 3.4 | 1120 | 23 | 72 | 9.3 | 36 | 5254 | <4.36 | <0.065 | 0.99 | 0.12 | 0.23 | 79 | 0.40 | 20 | 2.5 | 0.29 | <0.56 | 0.14 | 32 | 81 |
| MF23Pyr-71 | 2.7 | 4302 | 280 | 21 | 4.6 | 8.2 | 4658 | <3.66 | 0.05 | 0.55 | <0.00 | <0.0054 | 1.6 | 0.31 | 9.2 | 0.03 | 0.12 | <0.46 | 0.02 | 12 | 19 |
| MF23Pyr-72 | 1.3 | 4377 | 395 | 94 | 2.0 | 0.06 | 3251 | 3.0 | <0.00 | 0.28 | <0.141 | <0.0048 | 0.32 | 0.25 | 3.8 | <0.056 | 0.04 | <0.41 | 0.02 | 9.1 | 8.8 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF23Pyr-73 | 1.4 | 1065 | 583 | 44 | 2.4 | 0.60 | 2104 | <3.75 | <0.054 | 0.72 | <0.111 | <0.0075 | 1.7 | 0.49 | 15 | 0.08 | 0.16 | <0.44 | 0.02 | 17 | 36 |
| MF23Pyr-74 | 5.4 | 7704 | 1275 | 7467 | 8.3 | 5.6 | 12047 | <3.62 | 0.21 | 2.7 | <0.168 | 0.31 | 25 | 1.9 | 50 | 0.70 | 0.39 | <0.46 | 0.17 | 59 | 158 |
| MF23Pyr-75 | 2.3 | 8064 | 1405 | 1848 | 2.0 | 3.4 | 14522 | 4.8 | <0.078 | 2.8 | <0.113 | 0.14 | 16 | 1.3 | 37 | 0.27 | 0.33 | 0.52 | 0.19 | 44 | 110 |
| MF23Pyr-76 | <0.32 | 5782 | 982 | 6.6 | 1.0 | <0.028 | 8325 | <3.37 | <0.051 | 0 | <0.00 | <0.0088 | <0.164 | 0.05 | 1.3 | <0.0294 | <0.022 | <0.44 | <0.0082 | <0.075 | 2.9 |
| MF23Pyr-77 | 0.58 | 4749 | 1410 | 17 | 3.3 | <0.039 | 9722 | <3.46 | <0.00 | 0.07 | 0.03 | <0.0055 | <0.168 | 0.04 | 1.3 | <0.0320 | <0.034 | 0.52 | 0.01 | 0.09 | 2.6 |
| MF23Pyr-78 | 3.8 | 8075 | 1104 | 72 | 5.5 | 8.7 | 11403 | <3.50 | 0.06 | 1.2 | <0.00 | 0.05 | 13 | 0.58 | 29 | 0.52 | 0.03 | <0.47 | 0.09 | 33 | 89 |
| MF23Pyr-79 | 1 | 5347 | 1689 | 26 | 3.2 | 1.7 | 10292 | 3.5 | <0.052 | 0.83 | <0.00 | 0.02 | 8.0 | 1.0 | 12 | 0.16 | 0.05 | <0.42 | 0.04 | 30 | 25 |
| MF23Pyr-80 | 0.89 | 3941 | 53 | 12 | 1.3 | 1.2 | 1674 | <3.36 | 0.02 | 0.14 | <0.00 | 0.01 | 3.8 | 0.11 | 3.0 | 0.14 | 0.06 | <0.44 | <0.0085 | 4.6 | 12 |
| **Mean n=80** | 81 | 4505 | 630 | 2370 | 4.3 | 9.3 | 6245 | 5.0 | 0.08 | 0.81 | 0.09 | 0.12 | 11 | 0.95 | 15 | 1.9 | 0.83 | 0.51 | 0.08 | 24 | 35 |
| **S.D** | 633 | 3112 | 843 | 13543 | 10 | 22 | 3768 | 2.1 | 0.11 | 1.2 | 0.14 | 0.33 | 22 | 1.5 | 20 | 8.5 | 1.9 | 0.15 | 0.10 | 30 | 48 |
| **Min** | 0.32 | 33 | 17 | 0.71 | 0.67 | 0.01 | 636 | 3.0 | 0.01 | 0 | 0.03 | 0 | 0.17 | 0.04 | 0.21 | 0 | 0.01 | 0.37 | 0 | 0.04 | 0.02 |
| **Max** | 5103 | 12092 | 3067 | ##### | 84 | 109 | 17330 | 11 | 0.50 | 6.00 | 0.68 | 2.4 | 106 | 6.7 | 100 | 68 | 12 | 0.91 | 0.39 | 152 | 294 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF28Pyr-1 | 0.98 | 157 | 2285 | 37 | 5.8 | 4.3 | 8185 | 21 | 0.14 | 0.48 | <0.106 | 0.01 | 2.9 | 1.2 | 3.5 | 0.48 | <0.22 | <0.34 | 0.06 | 14 | 57 |
| MF28Pyr-2 | 16 | 1345 | 5798 | 126 | 34 | 2.7 | 25933 | 19 | <0.124 | 5.7 | <0.156 | <0.021 | <1.15 | 0.65 | 6.1 | <0.95 | 32.54 | <0.36 | 0.07 | <0.64 | 31 |
| MF28Pyr-3 | 0.99 | 618 | 3536 | 6.6 | 92 | 2.3 | 15043 | 17 | 0.117 | 0.07 | 0.067 | 0.011 | 1.96 | 0.63 | 0.67 | 0.729 | <0.21 | <0.27 | 0.04 | 1.51 | 13 |
| MF28Pyr-4 | 0.5 | 91 | 1951 | 54 | <0.19 | <0.032 | 7999 | 21 | <0.123 | <0.073 | <0.075 | <0.0078 | 0.97 | <0.107 | 0.95 | <0.075 | <0.39 | 0.36 | <0.0090 | <0.150 | 2.5 |
| MF28Pyr-5 | 18 | 213 | 3335 | 38 | 50.37 | 30.76 | 10879 | 27 | 12.74 | 4.66 | <0.18 | 0.1 | 21.5 | 3.69 | 14 | 6.49 | 1.79 | <0.69 | 0.415 | 66.05 | 83 |
| MF28Pyr-6 | 1.7 | 217 | 1740 | 7.2 | 10.07 | 7.39 | 6413 | 22 | <0.173 | 2.29 | 0.041 | 0.025 | 8.44 | 0.92 | 6.2 | 0.496 | <0.46 | <0.35 | 0.149 | 20.32 | 42 |
| MF28Pyr-7 | 1.1 | 335 | 1432 | 26 | 1.54 | 1.63 | 8058 | 30 | 0.147 | 1.36 | <0.058 | 0.037 | 11.02 | 0.453 | 6.4 | 0.131 | <0.24 | <0.31 | 0.037 | 35.79 | 36 |
| MF28Pyr-8 | 2.3 | 558 | 1303 | 6.8 | 1.37 | 0.662 | 6614 | 24 | 0.129 | 1.195 | <0.00 | 0.036 | 12.11 | 0.457 | 4.6 | <0.108 | <0.23 | <0.29 | 0.041 | 45.66 | 27 |
| MF28Pyr-9 | 198 | 571 | 861 | 1.5 | 3.15 | 3.85 | 4893 | 19 | <0.164 | 0.491 | <0.093 | 0.029 | 6.21 | 0.64 | 3.3 | 0.75 | <0.22 | <0.31 | 0.082 | 104.4 | 35 |
| MF28Pyr-10 | 274 | 312 | 3744 | 14 | 3.9 | 5.9 | 13520 | 22 | 0.18 | 0.42 | <0.104 | 0.04 | 3.3 | 1 | 7.2 | 0.36 | <0.23 | <0.41 | 0.06 | 13 | 88 |
| **Mean n=10** | 51 | 442 | 2599 | 32 | 22 | 7 | 10754 | 22 | 2 | 2 | 0 | 0 | 8 | 1 | 5 | 1 | 17 | 0 | 0 | 38 | 41 |
| **S.D** | 99 | 367 | 1501 | 37 | 31 | 9 | 6221 | 4 | 5 | 2 | 0 | 0 | 7 | 1 | 4 | 2 | 22 | na | 0 | 34 | 28 |
| **Min** | 0.50 | 91 | 861 | 1.50 | 1.37 | 0.66 | 4893 | 17 | 0.12 | 0.07 | 0.04 | 0.01 | 0.97 | 0.45 | 0.67 | 0.13 | 1.79 | 0.36 | 0.04 | 1.5 | 2.5 |
| **Max** | 274 | 1345 | 5798 | 126 | 92 | 31 | 25933 | 30 | 13 | 6 | 0 | 0 | 22 | 4 | 14 | 6 | 33 | 0 | 0 | 104 | 88 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF29Pyr-1 | 1462 | 576 | 1056 | 2 | 150.1 | 2.32 | 6884 | 23 | <0.209 | <0.153 | <0.17 | <0.0143 | <0.44 | 0.33 | 3.1 | <0.28 | <0.47 | <0.47 | 0.034 | 3.27 | 41 |
| MF29Pyr-2 | 200 | 156 | 421 | 3.4 | 3.13 | 0.533 | 4593 | 25 | <0.177 | <0.179 | <0.191 | <0.0148 | <0.48 | 0.285 | 2.5 | <0.072 | <0.56 | <0.53 | <0.0162 | 2.44 | 33 |
| MF29Pyr-3 | 1551 | 438 | 775 | 3.3 | 11.53 | 6.31 | 7422 | 18 | <0.193 | <0.150 | <0.163 | 0.049 | <0.49 | 0.72 | 3.6 | 0.85 | <0.52 | 0.46 | 0.092 | 2.68 | 51 |
| MF29Pyr-4 | 814 | 1345 | 2131 | 3.1 | 69.9 | 2.1 | 11823 | 20 | <0.20 | <0.081 | <0.095 | <0.0162 | <0.45 | 0.42 | 3 | 7.83 | <0.48 | 0.48 | <0.023 | 2.18 | 38 |
| MF29Pyr-5 | 18 | 1469 | 2779 | 3.1 | 3.04 | 4.97 | 15052 | 23 | <0.31 | 0.158 | 0.034 | 0.018 | <0.69 | 0.74 | 5.1 | 9.31 | <0.60 | <0.56 | 0.05 | 5.49 | 45 |
| MF29Pyr-6 | 50 | 1071 | 1208 | 189 | 0.96 | 0.675 | 6931 | 15 | 1.49 | <0.097 | <0.188 | <0.0128 | <0.39 | 0.183 | 2.9 | 0.089 | <0.115 | <0.47 | <0.0138 | 6.13 | 42 |
| MF29Pyr-7 | 2.3 | 53 | 1947 | 4796 | 6.21 | 9.45 | 9000 | 27 | <0.210 | 1.13 | <0.170 | 0.598 | 1.5 | 1.9 | 3.4 | 0.63 | <0.165 | <0.47 | 0.109 | 4.52 | 83 |
| MF29Pyr-8 | 16 | 50 | 6697 | 579 | 1.76 | 1.62 | 12810 | 30 | <0.21 | 0.084 | <0.088 | 0.06 | <0.46 | 1.23 | 12 | 0.187 | <0.33 | <0.47 | 0.007 | <0.24 | 52 |
| MF29Pyr-9 | 0.47 | 40 | 8029 | 4.5 | 0.35 | 0.034 | 4187 | 26 | <0.205 | <0.072 | <0.180 | <0.0144 | <0.28 | 0.77 | 10 | <0.040 | <0.082 | <0.39 | <0.0153 | 0.17 | 15 |
| MF29Pyr-10 | 2 | 63 | 2573 | 797 | 2.95 | 1.84 | 5976 | 25 | <0.217 | 1.04 | <0.087 | 0.06 | 2.98 | 0.244 | 3.2 | <0.129 | <0.28 | <0.42 | 0.02 | 1.51 | 13 |
| MF29Pyr-11 | 1.4 | 818 | 2070 | <1.09 | 80.2 | 0.563 | 8119 | 17 | <0.210 | <0.113 | <0.122 | <0.0141 | <0.37 | 0.85 | <0.79 | 0.243 | <0.139 | <0.55 | 0.022 | 0.227 | 22 |
| MF29Pyr-12 | 4.1 | 5.2 | 394 | 2.78 | 3.57 | 9.43 | 2001 | 29 | <0.27 | <0.078 | 0.055 | <0.0112 | 0.45 | 1.05 | 7.66 | 0.7 | <0.203 | <0.52 | 0.097 | 0.66 | 28 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF29Pyr-13 | 2.6 | 27 | 2944 | 6136 | 7.53 | 4.31 | 12393 | 29 | <0.177 | 0.536 | 0.103 | 0.692 | 34.96 | 3.16 | 6.92 | 0.584 | <0.190 | <0.43 | 0.059 | 2.04 | 66 |
| MF29Pyr-14 | 5.2 | 48 | 5010 | 29805 | 48.95 | 6.96 | 18209 | 36 | <0.199 | 3.11 | <0.26 | 3.26 | 104.8 | 2.86 | 11.61 | 0.275 | <0.27 | <0.48 | 0.074 | 1.44 | 79 |
| MF29Pyr-15 | 2.4 | 67 | 298 | 74.64 | 9.12 | 21.2 | 4509 | 15 | <0.23 | 0.359 | <0.172 | <0.027 | <0.72 | 1.29 | 6.58 | 0.74 | <0.23 | <0.59 | 0.22 | 3.82 | 92 |
| MF29Pyr-16 | 1.8 | 62 | 200 | 54.79 | 2.86 | 9.77 | 2276 | 14 | <0.24 | <0.122 | <0.105 | 0.022 | <0.48 | 1.21 | 3.04 | 0.91 | <0.170 | <0.53 | 0.11 | 3.9 | 50 |
| MF29Pyr-17 | 15 | 6.5 | 275 | 45.08 | 2.84 | 3.12 | 2436 | 19 | 0.187 | <0.051 | <0.00 | <0.0090 | 0.47 | 0.77 | 1.34 | 0.186 | <0.172 | <0.43 | 0.035 | 0.467 | 21 |
| MF29Pyr-18 | 0.94 | 372 | 679 | 22.95 | 1.43 | 0.743 | 6504 | 31 | <0.211 | <0.138 | <0.180 | <0.02 | 0.97 | 0.242 | <0.81 | 0.116 | 1.03 | <0.45 | <0.0076 | 0.222 | 7.5 |
| MF29Pyr-19 | 3.9 | 150 | 763 | 16.26 | 1.87 | 3.64 | 5677 | 27 | <0.20 | <0.069 | <0.090 | 0.012 | 1.25 | 0.81 | 3.48 | 0.413 | <0.210 | <0.41 | 0.032 | 0.636 | 33 |
| MF29Pyr-20 | 1.5 | 29 | 347 | 15.36 | 1.41 | 3.99 | 8865 | 32 | <0.180 | <0.102 | <0.131 | <0.0106 | 1.36 | 1.01 | 1.27 | 0.339 | <0.207 | <0.45 | 0.037 | 0.617 | 28 |
| **Mean n=20** | 208 | 342 | 2030 | 2240 | 20 | 5 | 7783 | 24 | 1 | 1 | 0 | 1 | 17 | 1 | 5 | 1 | 1 | 0 | 0 | 2 | 42 |
| **S.D** | 480 | 469 | 2207 | 6891 | 39 | 5 | 4379 | 6 | 1 | 1 | 0 | 1 | 35 | 1 | 3 | 3 | na | 0 | 0 | 2 | 24 |
| **Min** | 0.47 | 5.20 | 200 | 2.00 | 0.35 | 0.03 | 2001 | 14.00 | 0.19 | 0.08 | 0.03 | 0.01 | 0.45 | 0.18 | 1.27 | 0.09 | 1.03 | 0.46 | 0.01 | 0.17 | 7.50 |
| **Max** | 1551 | 1469 | 8029 | 29805 | 150 | 21 | 18209 | 36 | 1 | 3 | 0 | 3 | 105 | 3 | 12 | 9 | 1 | 0 | 0 | 6 | 92 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF30Pyr-1 | 11 | 15 | 2165 | 1414 | 2.91 | 0.097 | 1050 | 32 | <0.160 | 3.84 | <0.100 | 0.146 | 3.05 | 0.233 | 4.6 | <0.053 | <0.127 | <0.44 | <0.0147 | 3.18 | 22 |
| MF30Pyr-2 | 0.73 | 6.6 | 1317 | 1851 | 2.33 | 0.428 | 5878 | 21 | 0.241 | <0.109 | <0.070 | 0.161 | <0.75 | 1.02 | 1.94 | <0.049 | <0.173 | <0.35 | 0.007 | 0.524 | 29 |
| MF30Pyr-3 | 0.16 | 7.7 | 1615 | 811.7 | 5.05 | 0.074 | 7968 | 22 | <0.164 | <0.049 | <0.099 | 0.202 | 4.38 | 0.272 | 1.03 | 0.039 | <0.169 | <0.35 | <0.020 | 0.076 | 5.7 |
| MF30Pyr-4 | 1.9 | 14 | 3585 | 1452 | 3.79 | 0.206 | 13797 | 26 | <0.169 | <0.094 | <0.072 | 0.195 | 6.23 | 0.552 | <0.58 | 1.15 | <0.184 | <0.35 | <0.0161 | 0.554 | 15 |
| MF30Pyr-5 | 17 | 15 | 1638 | 4396 | 8.92 | 1.186 | 6519 | 21 | <0.205 | 0.699 | 0.061 | 0.696 | 27.83 | 0.786 | 1.33 | 0.289 | <0.149 | 0.33 | <0.0129 | 1.35 | 29 |
| MF30Pyr-6 | 6.9 | 11 | 1250 | 515.3 | 2.49 | 0.193 | 6503 | 21 | 0.51 | 0.145 | <0.072 | 0.059 | 1.5 | 0.31 | 5.35 | 0.242 | <0.21 | <0.34 | 0.011 | 2.95 | 17 |
| MF30Pyr-7 | 0.61 | 5.5 | 735 | 96.73 | 1.2 | 0.172 | 1533 | 24 | 0.137 | <0.064 | 0.087 | <0.0106 | 1.71 | 0.401 | <0.65 | <0.042 | <0.124 | <0.36 | <0.0107 | 0.122 | 9.2 |
| MF30Pyr-8 | 0.37 | 4.3 | 729 | 435.2 | 1.67 | 0.043 | 562 | 24 | <0.171 | <0.117 | <0.073 | 0.052 | 3 | <0.108 | 0.48 | <0.042 | <0.165 | <0.31 | <0.0124 | <0.052 | 2.4 |
| MF30Pyr-9 | 0.2 | 4.4 | 778 | 417.4 | 0.87 | <0.030 | 852 | 22 | <0.151 | <0.060 | <0.125 | <0.0083 | 0.93 | <0.095 | <0.64 | <0.055 | <0.159 | <0.33 | 0.008 | <0.076 | <0.130 |
| MF30Pyr-10 | 0.31 | 4.9 | 662 | 1370 | 1.93 | 0.057 | 860 | 21 | <0.163 | <0.113 | <0.158 | 0.095 | 4.6 | <0.112 | <0.49 | <0.035 | <0.170 | <0.32 | <0.0104 | <0.043 | 2.29 |
| MF30Pyr-11 | 0.19 | 4.6 | 1016 | 10.85 | 1.14 | <0.032 | 922 | 23 | <0.165 | <0.059 | <0.124 | 0.011 | 1.87 | <0.098 | <0.50 | <0.041 | <0.141 | <0.32 | <0.0136 | <0.050 | <0.125 |
| MF30Pyr-12 | 0.34 | 4.5 | 1133 | 88.4 | 7.09 | <0.024 | 486 | 22 | <0.174 | <0.064 | <0.171 | 0.014 | 1.43 | <0.092 | <0.66 | <0.040 | <0.163 | <0.29 | <0.0132 | <0.051 | 1.261 |
| MF30Pyr-13 | 0.2 | 4.3 | 1617 | 5.45 | 0.76 | 0.028 | 2258 | 27 | <0.188 | <0.063 | <0.123 | 0.01 | 1.33 | <0.092 | <0.60 | <0.00 | <0.145 | 0.36 | <0.0104 | <0.051 | 0.582 |
| MF30Pyr-14 | 8.8 | 475 | 577 | 11.15 | 1.33 | 4.69 | 4864 | 22 | 1.19 | <0.158 | <0.124 | <0.0142 | 0.98 | 0.53 | 8.35 | 0.76 | <0.35 | <0.56 | 0.034 | 0.96 | 21.89 |
| MF30Pyr-15 | 91 | 346 | 437 | 1.16 | 1.76 | 0.796 | 3910 | 19 | 0.76 | <0.150 | <0.157 | <0.0105 | <0.33 | 0.54 | 6.99 | 0.562 | <0.29 | 0.38 | <0.020 | 3.19 | 28.61 |
| MF30Pyr-16 | 0.6 | 57 | 446 | 0.85 | 0.96 | 0.497 | 2603 | 20 | <0.149 | <0.084 | <0.088 | <0.0120 | 0.31 | 0.167 | 6.36 | <0.076 | <0.32 | <0.37 | 0.019 | 0.105 | 7.92 |
| MF30Pyr-17 | 1.3 | 59 | 768 | 164.1 | 2.17 | 0.79 | 4825 | 18 | <0.21 | <0.084 | <0.077 | <0.0069 | 0.67 | 0.307 | 2.01 | 0.062 | <0.23 | <0.33 | 0.019 | 0.492 | 9.93 |
| MF30Pyr-18 | 4.5 | 88 | 656 | 92.55 | 2.45 | 1.132 | 3404 | 17 | 0.67 | <0.086 | <0.167 | <0.0094 | <0.33 | 0.628 | 2.18 | 0.154 | <0.199 | <0.31 | <0.0126 | 0.361 | 15.58 |
| MF30Pyr-19 | 4.5 | 49 | 848 | 2.32 | 1.99 | 0.332 | 9183 | 14 | <0.19 | <0.128 | <0.128 | <0.0104 | 0.62 | 0.77 | 1.63 | 0.97 | <0.27 | <0.38 | <0.0077 | 0.285 | 18.14 |
| MF30Pyr-20 | 1.4 | 255 | 326 | 1.7 | 2.49 | 2.74 | 2489 | 17 | <0.182 | <0.042 | <0.00 | <0.0105 | 1.07 | 0.35 | 1.15 | 0.164 | <0.27 | 0.56 | 0.022 | 0.896 | 19.63 |
| **Mean n=20** | 8 | 72 | 1115 | 657 | 3 | 1 | 4023 | 22 | 1 | 2 | 0 | 0 | 4 | 0 | 3 | 0 | - | 0 | 0 | 1 | 14 |
| **S.D** | 20 | 131 | 757 | 1062 | 2 | 1 | 3494 | 4 | 0 | 2 | 0 | 0 | 6 | 0 | 3 | 0 | - | 0 | 0 | 1 | 10 |
| **Min** | 0.16 | 4.30 | 326 | 0.85 | 0.76 | 0.03 | 486 | 14.00 | 0.14 | 0.15 | 0.06 | 0.01 | 0.31 | 0.17 | 0.48 | 0.04 | 0 | 0.33 | 0.01 | 0.08 | 0.58 |
| **Max** | 91 | 475 | 3585 | 4396 | 9 | 5 | 13797 | 32 | 1 | 4 | 0 | 1 | 28 | 1 | 8 | 1 | 0 | 1 | 0 | 3 | 29 |

| Sample # | $^{55}$Mn | $^{59}$Co | $^{60}$Ni | $^{65}$Cu | $^{66}$Zn | $^{69}$Ga | $^{75}$As | $^{82}$Se | $^{95}$Mo | $^{107}$Ag | $^{111}$Cd | $^{115}$In | $^{118}$Sn | $^{121}$Sb | $^{125}$Te | $^{184}$W | $^{197}$Au | $^{202}$Hg | $^{205}$Tl | $^{208}$Pb | $^{209}$Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF31Pyr-1 | <0.209 | 40 | 2.6 | <0.60 | 0.59 | <0.058 | 5304 | <2.99 | <0.100 | <0.021 | <0.092 | <0.0089 | <0.28 | <0.207 | <0.60 | <0.205 | <0.056 | <0.86 | <0.0151 | <0.110 | 0.334 |
| MF31Pyr-2 | 1.62 | 526 | 98 | 14.49 | 1.04 | <0.044 | 8706 | <2.45 | <0.084 | <0.021 | <0.154 | <0.0110 | <0.30 | <0.210 | 7.25 | 0.713 | 0.033 | <0.65 | <0.0093 | 0.404 | 9.4 |
| MF31Pyr-3 | 0.344 | 1055 | 378 | 0.48 | 38.03 | <0.038 | 9348 | <2.37 | <0.058 | <0.0145 | <0.00 | <0.0094 | <0.26 | <0.202 | <0.68 | <0.036 | 0.044 | <0.64 | <0.0159 | <0.115 | <0.122 |
| MF31Pyr-4 | 0.395 | 1349 | 371 | 0.4 | 1.29 | 0.027 | 11607 | <2.09 | <0.074 | 0.031 | <0.122 | <0.0107 | 0.3 | <0.205 | 0.59 | 0.156 | <0.031 | <0.57 | <0.0090 | <0.126 | 1.09 |
| MF31Pyr-5 | 0.308 | 435 | 83 | 1.52 | <0.50 | <0.037 | 15699 | <2.09 | <0.112 | <0.027 | <0.125 | 0.009 | <0.25 | <0.190 | <0.64 | <0.051 | <0.018 | <0.58 | <0.0195 | <0.120 | <0.111 |
| MF31Pyr-6 | 0.38 | 567 | 80 | <0.41 | <0.43 | <0.038 | 12311 | <2.13 | <0.085 | <0.018 | <0.157 | 0.013 | <0.28 | <0.196 | <0.63 | 0.148 | <0.0264 | <0.63 | <0.0164 | <0.117 | <0.133 |
| MF31Pyr-7 | 0.724 | 1408 | 236 | 2.07 | 1.88 | 1.13 | 14727 | <2.14 | <0.116 | <0.0214 | <0.091 | <0.0097 | <0.28 | 0.266 | <0.83 | 1.64 | 0.038 | <0.60 | <0.0213 | <0.095 | 5.54 |
| MF31Pyr-8 | 0.526 | 414 | 46 | <0.37 | 0.91 | <0.046 | 10057 | <2.12 | <0.110 | <0.0106 | 0.054 | <0.0118 | <0.26 | <0.175 | <0.55 | <0.043 | <0.045 | <0.55 | <0.0067 | <0.106 | 0.163 |
| MF31Pyr-9 | 41.54 | 1203 | 424 | <0.36 | 2.02 | <0.04 | 5433 | 2.14 | <0.100 | <0.027 | <0.130 | <0.0120 | <0.26 | <0.182 | <0.67 | <0.038 | <0.033 | <0.56 | <0.0118 | <0.107 | 2.22 |
| MF31Pyr-10 | 0.638 | 3336 | 917 | 0.41 | 1.43 | <0.041 | 13742 | 2.52 | <0.132 | <0.0241 | <0.092 | 0.008 | <0.24 | <0.168 | <0.63 | 0.007 | <0.038 | <0.59 | <0.0117 | <0.136 | 0.588 |
| MF31Pyr-11 | <0.137 | 686 | 56 | 0.96 | 0.73 | <0.044 | 9733 | <2.10 | <0.141 | <0.019 | <0.164 | <0.0058 | <0.27 | <0.174 | <0.61 | <0.032 | <0.028 | <0.54 | <0.0099 | <0.097 | <0.106 |
| MF31Pyr-12 | <0.151 | 1642 | 577 | 3.54 | 0.91 | <0.044 | 14559 | <2.21 | <0.122 | 0.1 | <0.165 | <0.0072 | <0.28 | 0.76 | 1.88 | 0.19 | 0.195 | <0.51 | 0.004 | 4.65 | 14.2 |
| MF31Pyr-13 | 0.311 | 957 | 573 | <0.32 | <0.43 | <0.038 | 12071 | <1.99 | <0.130 | <0.0156 | <0.094 | <0.0058 | <0.25 | <0.167 | <0.65 | 0.096 | <0.033 | <0.55 | <0.0120 | <0.111 | 0.333 |
| MF31Pyr-14 | 0.386 | 508 | 108 | 5.04 | 0.88 | 0.046 | 13481 | <2.14 | <0.164 | <0.027 | <0.191 | <0.0102 | <0.27 | 0.16 | <0.53 | <0.032 | 0.141 | <0.55 | <0.0158 | <0.200 | 0.274 |
| MF31Pyr-15 | 0.392 | 729 | 38 | <0.31 | 2.06 | <0.038 | 4798 | <2.03 | <0.106 | <0.035 | <0.098 | <0.0095 | <0.29 | <0.170 | <0.63 | 3.16 | <0.045 | <0.56 | <0.0145 | <0.101 | 1.09 |
| MF31Pyr-16 | 0.672 | 1057 | 216 | 0.45 | 1.17 | <0.051 | 11555 | <2.15 | <0.160 | 0.014 | <0.096 | <0.0093 | <0.27 | <0.156 | <0.65 | 0.385 | 0.036 | <0.56 | <0.0100 | <0.100 | 1.28 |
| MF31Pyr-17 | <0.149 | 2265 | 542 | 0.79 | 1.27 | <0.044 | 8746 | <2.02 | <0.107 | <0.0201 | <0.098 | <0.0096 | <0.31 | <0.142 | <0.66 | <0.033 | <0.029 | <0.56 | <0.0163 | <0.104 | <0.125 |
| MF31Pyr-18 | 0.203 | 1830 | 461 | <0.28 | 0.55 | <0.031 | 7622 | <2.08 | <0.118 | <0.0162 | 0.029 | <0.0127 | <0.24 | <0.162 | <0.70 | 0.05 | <0.040 | <0.56 | <0.0144 | <0.110 | 0.414 |
| MF31Pyr-19 | 0.329 | 370 | 137 | 1.19 | 0.64 | <0.045 | 10559 | <2.10 | <0.169 | 0.022 | <0.103 | <0.0090 | <0.32 | 0.322 | <0.70 | 0.8 | 0.1 | <0.64 | 0.018 | 9.38 | 3.37 |
| MF31Pyr-20 | 0.97 | 329 | 82 | 2.06 | 1.07 | <0.044 | 16019 | <2.15 | <0.155 | 0.033 | 0.15 | <0.0093 | <0.24 | 0.197 | 2.52 | 0.159 | 0.055 | <0.55 | <0.0255 | 1.16 | 10.36 |
| MF31Pyr-21 | 0.453 | 44 | 1.4 | 2.98 | 2.49 | 0.04 | 10584 | <2.06 | <0.15 | <0.0235 | 0.029 | <0.0122 | <0.28 | <0.162 | <0.66 | <0.0236 | <0.020 | <0.91 | <0.0147 | <0.093 | 0.111 |
| MF31Pyr-22 | <0.148 | 419 | 202 | 9.38 | 5.68 | <0.028 | 7837 | <2.36 | <0.174 | 0.094 | <0.143 | <0.0117 | <0.27 | 0.151 | 0.81 | <0.054 | 0.218 | <0.71 | <0.018 | 11.37 | 3.41 |
| MF31Pyr-23 | 1.84 | 738 | 203 | 0.85 | 38.6 | <0.041 | 7533 | 2.27 | <0.150 | <0.0164 | <0.138 | 0.021 | <0.27 | <0.138 | <0.66 | <0.102 | <0.049 | <0.66 | <0.0204 | <0.095 | 0.411 |
| MF31Pyr-24 | 0.25 | 1413 | 315 | 4.4 | 0.52 | 0.23 | 8734 | <2.23 | <0.173 | <0.029 | <0.225 | <0.0098 | <0.30 | <0.145 | 1.06 | 0.407 | <0.042 | <0.68 | <0.0167 | <0.109 | 3.82 |
| MF31Pyr-25 | 0.773 | 828 | 80 | 2.12 | 1.07 | 0.128 | 9657 | <1.99 | 0.156 | <0.026 | <0.140 | <0.0086 | <0.28 | 0.181 | 0.87 | 2.52 | 0.085 | <0.65 | <0.0127 | <0.087 | 6.18 |
| MF31Pyr-26 | 0.383 | 5879 | 870 | 5.53 | 1.26 | <0.030 | 18989 | <2.02 | 0.138 | <0.0170 | <0.143 | <0.0098 | <0.28 | <0.126 | <0.59 | 2.28 | 0.051 | <0.63 | <0.0150 | 0.131 | 1.58 |
| MF31Pyr-27 | 0.391 | 220 | 95 | <0.43 | <0.44 | <0.047 | 7980 | <1.96 | <0.180 | <0.023 | <0.170 | <0.0060 | <0.22 | <0.135 | <0.67 | 0.417 | <0.035 | <0.56 | <0.0103 | 0.052 | 0.87 |
| MF31Pyr-28 | 0.409 | 1518 | 483 | 1.97 | 255.3 | <0.054 | 15031 | <2.19 | <0.152 | <0.034 | <0.205 | <0.0089 | <0.28 | <0.141 | <0.63 | <0.196 | <0.030 | <0.62 | <0.0107 | <0.098 | 0.359 |
| MF31Pyr-29 | 0.364 | 982 | 177 | 0.57 | 2.35 | 0.087 | 6916 | <2.05 | 0.141 | <0.017 | <0.226 | <0.0146 | <0.30 | <0.128 | <0.70 | <0.054 | <0.055 | <0.55 | <0.0130 | <0.109 | 2.15 |
| MF31Pyr-30 | 0.244 | 177 | 326 | 0.43 | <0.40 | <0.038 | 9186 | <2.03 | <0.172 | <0.0117 | <0.219 | <0.0095 | <0.24 | <0.125 | <0.74 | 0.247 | <0.035 | <0.58 | <0.0205 | <0.131 | 0.417 |
| MF31Pyr-31 | 0.338 | 489 | 277 | 1.38 | <0.49 | <0.036 | 7725 | <2.15 | <0.129 | <0.034 | 0.121 | <0.0108 | <0.28 | <0.137 | <0.76 | <0.048 | <0.030 | <0.59 | <0.0212 | <0.090 | 0.259 |
| MF31Pyr-32 | 2.56 | 269 | 33 | 6.43 | 0.66 | <0.039 | 10919 | 2.33 | <0.157 | 0.117 | <0.137 | 0.008 | <0.27 | 0.164 | 0.74 | <0.057 | 0.056 | <0.52 | 0.042 | 0.626 | 8.17 |
| MF31Pyr-33 | 0.488 | 620 | 133 | 1.01 | 0.75 | <0.044 | 7475 | 7.54 | <0.143 | <0.029 | 0.03 | <0.0044 | <0.27 | <0.11 | 0.65 | 0.175 | <0.041 | <0.59 | <0.0196 | <0.088 | 0.477 |
| MF31Pyr-34 | 0.244 | 2129 | 877 | <0.34 | 0.96 | <0.038 | 11917 | <2.14 | <0.205 | <0.025 | <0.230 | <0.0045 | <0.27 | <0.106 | <0.72 | <0.070 | 0.067 | <0.47 | 0.017 | <0.085 | 0.156 |
| MF31Pyr-35 | 0.366 | 2504 | 1027 | <0.34 | 1.61 | <0.038 | 15073 | <2.02 | <0.184 | <0.026 | <0.138 | <0.0095 | <0.26 | <0.116 | <0.60 | 0.84 | <0.029 | <0.57 | <0.0218 | <0.088 | 1.05 |
| MF31Pyr-36 | 3.96 | 1470 | 380 | 14713 | 0.94 | 0.079 | 13438 | 4.45 | <0.205 | 0.207 | <0.244 | <0.0106 | <0.46 | 0.264 | 1.11 | 1.44 | 0.35 | <0.61 | 0.161 | 9.3 | 27.91 |
| MF31Pyr-37 | 0.511 | 753 | 176 | 20 | <0.37 | <0.047 | 13913 | 2.31 | <0.149 | <0.030 | <0.104 | <0.0091 | <0.28 | <0.118 | 0.57 | <0.061 | 0.14 | <0.62 | <0.0134 | <0.115 | 0.261 |
| MF31Pyr-38 | 0.367 | 322 | 50 | 93.64 | 0.92 | <0.048 | 6369 | <2.08 | <0.154 | <0.025 | <0.147 | 0.015 | <0.25 | <0.139 | <0.81 | <0.043 | <0.022 | <0.55 | <0.0154 | <0.107 | 0.127 |
| MF31Pyr-39 | 8.2 | 1696 | 498 | 9.46 | 2.67 | 0.389 | 14010 | <2.29 | <0.160 | <0.0177 | 0.093 | <0.0112 | 0.32 | <0.125 | <0.73 | 0.85 | <0.048 | <0.57 | <0.022 | 0.356 | 2.17 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF31Pyr-40 | 0.46 | 64 | 241 | 3.99 | 0.77 | <0.036 | 6125 | <2.08 | <0.175 | <0.0168 | <0.099 | <0.0106 | <0.22 | <0.114 | <0.77 | <0.048 | <0.021 | <0.55 | <0.0148 | <0.107 | 2.46 |
| MF31Pyr-41 | 8 | 1573 | 179 | 27932 | 1.34 | <0.060 | 15258 | 5.36 | <0.165 | 2.38 | <0.239 | 0.01 | <0.34 | 0.233 | 2.5 | 6.72 | 0.85 | <1.05 | 0.555 | 42.82 | 61.68 |
| MF31Pyr-42 | 117.1 | 163 | 27 | 27876 | 2.53 | 0.11 | 13112 | 4.34 | <0.185 | 1.6 | <0.25 | <0.0109 | <0.36 | 0.228 | 2.61 | 8.49 | 0.58 | <0.80 | 0.391 | 50.87 | 45.08 |
| MF31Pyr-43 | 6.13 | 205 | 28 | 4792 | 1.81 | <0.057 | 8999 | <2.16 | <0.188 | 0.383 | <0.107 | <0.0081 | <0.24 | <0.112 | 1.49 | 3.56 | 0.148 | <0.70 | 0.071 | 14.48 | 14.97 |
| MF31Pyr-44 | 397.5 | 1022 | 190 | 37195 | 323 | 1.53 | 5661 | 5.45 | 1.31 | 6.63 | 0.81 | 0.213 | 69.78 | 0.86 | 4.69 | 132.1 | 32.39 | 1.58 | 1 | 176.5 | 64.47 |
| MF31Pyr-45 | 2463 | 230 | 52 | 6731 | 37.68 | 0.049 | 5670 | <2.19 | <0.209 | 0.431 | 0.28 | <0.0088 | <0.33 | <0.128 | 2.01 | 8.01 | 0.41 | <0.73 | 0.064 | 39.2 | 23.67 |
| MF31Pyr-46 | 45.34 | 24 | 9.6 | 37.14 | 2.36 | <0.059 | 5232 | <2.26 | <0.204 | <0.040 | <0.111 | <0.0119 | <0.30 | <0.124 | 1.57 | <0.092 | 0.074 | <0.65 | <0.0202 | 1.6 | 12.13 |
| MF31Pyr-47 | 0.558 | 25 | 4.2 | 1.46 | 0.96 | <0.047 | 9326 | <2.22 | <0.170 | 0.015 | 0.032 | 0.017 | <0.31 | <0.119 | <0.73 | <0.058 | <0.071 | <0.66 | <0.0139 | <0.081 | <0.108 |
| MF31Pyr-48 | 5.81 | 513 | 233 | 1561 | 7.16 | 0.756 | 5536 | <2.32 | <0.165 | 0.18 | <0.158 | <0.0207 | 1.31 | <0.129 | 2.37 | 4.76 | 1.24 | <0.61 | 0.054 | 8.83 | 26.63 |
| MF31Pyr-49 | 0.253 | 1427 | 311 | 0.96 | <0.45 | <0.049 | 9717 | 2.72 | <0.161 | <0.0220 | <0.149 | <0.0092 | <0.30 | <0.096 | <0.65 | <0.036 | <0.044 | <0.59 | 0.116 | <0.084 | <0.100 |
| MF31Pyr-50 | 701.4 | 729 | 165 | 1562 | 15.07 | 2.97 | 1684 | 2.82 | 0.18 | 2.57 | <0.00 | 0.015 | 1.95 | <0.122 | 49.97 | 8.07 | 0.185 | <0.72 | 0.076 | 9.3 | 82.73 |
| MF31Pyr-51 | 20.94 | 60 | 23 | 11951 | 2.4 | 0.136 | 3996 | 3.05 | <0.195 | 0.92 | <0.17 | <0.0114 | <0.30 | 0.141 | 5.53 | 13.62 | 0.199 | <0.76 | 0.179 | 31.5 | 41.63 |
| MF31Pyr-52 | 143.4 | 132 | 33 | 12983 | 5.9 | 0.135 | 7080 | 4.05 | <0.191 | 1.21 | <0.210 | <0.0118 | <0.39 | 0.162 | 8.67 | 11.89 | 0.329 | <0.78 | 0.379 | 36.43 | 52.22 |
| MF31Pyr-53 | 0.784 | 155 | 21 | 2.49 | 1.33 | <0.050 | 8243 | <2.11 | <0.170 | <0.0226 | <0.152 | <0.0133 | 0.65 | 0.356 | 0.91 | 10.32 | 0.183 | <0.66 | <0.0212 | 0.166 | 11.41 |
| MF31Pyr-54 | 0.206 | 52 | 4.2 | <0.55 | 0.87 | <0.036 | 10975 | <2.08 | <0.198 | <0.0130 | <0.00 | <0.0115 | <0.26 | <0.116 | 0.69 | 0.97 | 0.104 | <0.67 | <0.0160 | <0.078 | 0.99 |
| MF31Pyr-55 | 1.85 | 4171 | 617 | 4843 | <0.45 | 0.052 | 11244 | <2.19 | <0.187 | 0.408 | <0.189 | 0.012 | <0.31 | 0.261 | 0.89 | 0.48 | 0.107 | <0.57 | 0.131 | 6.79 | 9.82 |
| MF31Pyr-56 | 0.461 | 1472 | 152 | 1.41 | 0.45 | <0.039 | 7944 | <2.01 | <0.178 | <0.0188 | <0.110 | <0.0083 | <0.34 | <0.119 | <0.89 | <0.079 | <0.023 | 0.78 | <0.027 | <0.109 | 0.472 |
| MF31Pyr-57 | 2.33 | 246 | 20 | <0.47 | 1.98 | <0.044 | 3694 | <2.00 | <0.189 | <0.023 | <0.152 | <0.0081 | <0.30 | <0.114 | <0.75 | <0.045 | <0.055 | <0.55 | <0.0113 | <0.078 | 0.698 |
| MF31Pyr-58 | 8.82 | 1751 | 483 | 15245 | 2.61 | 0.113 | 5542 | 3.92 | <0.202 | 1.67 | <0.26 | <0.0067 | <0.44 | <0.135 | 4.63 | 7.19 | 0.37 | <0.82 | 0.38 | 22.69 | 36.64 |
| MF31Pyr-59 | 4.48 | 567 | 129 | 11133 | 2.92 | <0.049 | 9245 | 3.13 | 0.181 | 0.71 | <0.186 | <0.0094 | <0.31 | <0.110 | 1.87 | <0.093 | 0.44 | <0.59 | 0.199 | 12.64 | 28.66 |
| MF31Pyr-60 | 0.716 | 199 | 105 | 4182 | 2.57 | <0.055 | 11168 | <1.94 | <0.207 | 0.494 | <0.217 | <0.0116 | <0.28 | <0.121 | <0.83 | 1.39 | 0.232 | <0.61 | 0.152 | 8.83 | 14.84 |
| MF31Pyr-61 | 0.288 | 283 | 113 | <0.84 | 1.73 | <0.048 | 1748 | <1.90 | <0.196 | <0.040 | <0.110 | <0.0117 | <0.27 | <0.112 | <0.75 | 0.149 | 0.029 | <1.01 | <0.0115 | <0.080 | 0.12 |
| MF31Pyr-62 | 1.24 | 139 | 36 | 5181 | 17.75 | 0.074 | 2077 | <1.95 | <0.143 | 0.539 | 0.064 | <0.0170 | 0.85 | 0.148 | <0.71 | 0.51 | 0.331 | <0.81 | 0.075 | 11.05 | 15.2 |
| MF31Pyr-63 | 16.62 | 29 | 19 | 1020 | 10.5 | 0.056 | 4453 | <2.18 | <0.212 | 0.42 | 1.21 | <0.0114 | <0.28 | 0.384 | 4.73 | <0.081 | 0.173 | <0.70 | <0.0159 | 8.87 | 28.87 |
| MF31Pyr-64 | 0.89 | 167 | 21 | 4.29 | 4.4 | 0.048 | 7321 | <2.09 | <0.190 | <0.022 | <0.150 | 0.011 | <0.28 | 0.155 | 0.88 | <0.044 | 0.42 | <0.70 | <0.0112 | 0.93 | 7.91 |
| MF31Pyr-65 | 1.72 | 49 | 15 | 1.25 | 0.71 | <0.044 | 9882 | <2.26 | <0.165 | 0.038 | <0.188 | 0.011 | <0.29 | 0.126 | 1.79 | <0.058 | 0.47 | <0.75 | <0.0114 | 2.46 | 12.64 |
| MF31Pyr-66 | 0.726 | 10 | 2.1 | <0.42 | <0.48 | 0.04 | 9383 | <2.12 | <0.153 | <0.0131 | <0.152 | <0.0105 | <0.30 | <0.102 | <0.79 | <0.045 | <0.055 | <0.64 | <0.0160 | <0.105 | 1.08 |
| MF31Pyr-67 | 2.98 | 39 | 15 | 2284 | 2.47 | 1.71 | 4533 | <2.16 | <0.200 | 0.275 | <0.25 | <0.0084 | <0.32 | 0.234 | 1.15 | 0.81 | 0.136 | <0.76 | 0.029 | 15.31 | 18.14 |
| MF31Pyr-68 | 0.233 | 188 | 80 | 1.24 | 0.9 | <0.05 | 5522 | <2.02 | <0.165 | <0.0132 | 0.064 | <0.0106 | <0.28 | <0.096 | <0.83 | <0.045 | <0.068 | <0.73 | <0.0140 | 1.33 | <0.091 |
| MF31Pyr-69 | 0.661 | 23 | 4.3 | <0.39 | 0.97 | <0.041 | 8883 | 2.09 | <0.182 | <0.033 | <0.155 | <0.0135 | <0.29 | <0.108 | <0.52 | <0.045 | <0.023 | <0.70 | <0.0200 | <0.091 | 0.162 |
| MF31Pyr-70 | 0.279 | 12 | 3.3 | 0.42 | 0.83 | <0.050 | 6361 | <1.99 | 0.205 | <0.0233 | <0.110 | <0.0096 | <0.30 | <0.078 | <0.81 | <0.053 | <0.032 | <0.67 | <0.0116 | <0.109 | 0.102 |
| MF31Pyr-71 | 0.379 | 718 | 237 | 1.29 | <0.49 | <0.037 | 10587 | <2.04 | <0.140 | <0.019 | <0.110 | <0.0096 | <0.31 | <0.126 | 0.67 | 0.047 | 0.152 | <0.64 | <0.0184 | 1.07 | 0.591 |
| MF31Pyr-72 | 39.63 | 2326 | 681 | <0.42 | 0.58 | <0.035 | 12657 | <2.39 | <0.158 | <0.023 | 0.16 | <0.0097 | <0.31 | <0.094 | 1.24 | <0.110 | 0.164 | <0.67 | <0.0165 | <0.113 | 6.52 |
| MF31Pyr-73 | 83.65 | 2714 | 1093 | 2.39 | 47.71 | 2.13 | 11933 | 2.53 | 0.154 | 0.028 | <0.162 | <0.0100 | <0.36 | 0.191 | <0.76 | 2.6 | 0.064 | <0.66 | 0.058 | 5.05 | 8.63 |
| MF31Pyr-74 | 1.56 | 4686 | 1287 | 0.89 | 1.53 | <0.041 | 21430 | 2.48 | 0.2 | <0.0201 | <0.232 | <0.0072 | <0.30 | <0.082 | <0.78 | <0.084 | <0.0243 | <0.68 | <0.0193 | <0.156 | <0.153 |
| MF31Pyr-75 | 11.21 | 1970 | 946 | 4289 | 11 | 0.111 | 10101 | 2.33 | 0.33 | 0.93 | <0.245 | 0.03 | 5.09 | 0.113 | 2.05 | 30.25 | 9.3 | <0.66 | 0.058 | 3.45 | 24.52 |
| MF31Pyr-76 | 0.247 | 1788 | 547 | <0.45 | <0.53 | <0.052 | 10495 | 2.37 | <0.182 | <0.0201 | <0.116 | <0.0143 | <0.28 | <0.107 | <0.78 | <0.074 | <0.034 | <0.67 | <0.0086 | <0.086 | 0.098 |
| MF31Pyr-77 | 0.27 | 246 | 173 | 106.6 | <0.62 | <0.054 | 4383 | <2.17 | <0.211 | <0.035 | <0.115 | <0.0133 | <0.27 | <0.106 | <0.75 | 0.233 | <0.042 | <0.67 | <0.0211 | 0.223 | 1.47 |
| MF31Pyr-78 | 2.96 | 1178 | 156 | 1.31 | <0.39 | 1.73 | 4851 | <2.27 | <0.211 | <0.036 | <0.30 | <0.0075 | <0.28 | 0.311 | 2.1 | 0.5 | <0.057 | <0.75 | <0.0156 | <0.102 | 34.19 |
| MF31Pyr-79 | 0.27 | 96 | 9.4 | 0.35 | 0.49 | <0.043 | 8047 | <2.16 | <0.182 | <0.028 | <0.116 | <0.0087 | <0.27 | <0.109 | <0.77 | <0.028 | <0.024 | <0.67 | <0.0211 | <0.085 | <0.090 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF31Pyr-80 | 1.05 | 2056 | 1764 | 0.52 | <0.47 | 0.264 | 14898 | <2.24 | <0.232 | 0.013 | <0.162 | 0.012 | <0.32 | <0.099 | <0.72 | 0.63 | <0.059 | <0.64 | <0.0148 | 0.238 | 4.55 |
| **Mean n=80** | 56 | 958 | 273 | 3108 | 14 | 1 | 9429 | 3 | 0 | 1 | 0 | 0 | 10 | 0 | 4 | 6 | 1 | 1 | 0 | 15 | 12 |
| **S.D** | 297 | 1102 | 339 | 7385 | 51 | 1 | 3927 | 1 | 0 | 1 | 0 | 0 | 24 | 0 | 8 | 20 | 5 | 1 | 0 | 31 | 18 |
| **Min** | 0.20 | 10 | 1.40 | 0.35 | 0.45 | 0.03 | 1684 | 2.09 | 0.14 | 0.01 | 0.03 | 0.01 | 0.30 | 0.11 | 0.57 | 0.01 | 0.03 | 0.78 | 0.00 | 0.05 | 0.10 |
| **Max** | 2463 | 5879 | 1764 | 37195 | 323 | 3 | 21430 | 8 | 1 | 7 | 1 | 0 | 70 | 1 | 50 | 132 | 32 | 2 | 1 | 176 | 83 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF32Pyr-1 | 0.672 | 42 | 8.8 | 3.83 | <0.71 | 0.076 | 9751 | 3.05 | <0.19 | 0.107 | <0.215 | <0.0094 | <0.39 | <0.112 | <0.97 | 0.261 | <0.064 | <1.11 | <0.025 | 0.269 | 2.36 |
| MF32Pyr-2 | 12.47 | 205 | 56 | 182 | <0.58 | 5.35 | 8880 | <2.55 | <0.179 | 0.525 | <0.26 | 0.066 | 6.94 | 0.316 | 25.74 | 13.64 | 0.89 | <1.09 | 0.083 | 20.53 | 106.9 |
| MF32Pyr-3 | 0.214 | 19 | 8.3 | 9.07 | <0.59 | <0.056 | 8596 | <2.52 | <0.179 | 0.013 | <0.121 | <0.0092 | <0.30 | <0.102 | <0.84 | 1.47 | <0.044 | <0.85 | <0.024 | <0.098 | 1.36 |
| MF32Pyr-4 | 0.609 | 193 | 150 | 0.54 | 4.97 | 0.045 | 2982 | <2.33 | <0.19 | <0.026 | 0.073 | <0.0142 | <0.33 | 0.23 | <0.79 | 3.14 | <0.063 | <0.86 | <0.024 | <0.126 | 3.04 |
| MF32Pyr-5 | 0.339 | 7.6 | 4.9 | 3.51 | 0.64 | <0.054 | 8458 | <2.29 | <0.151 | 0.013 | <0.120 | <0.0138 | <0.33 | <0.114 | <0.83 | <0.104 | <0.043 | <0.81 | <0.0155 | <0.120 | 0.371 |
| MF32Pyr-6 | 0.561 | 157 | 52 | 14568 | 16.49 | 1.18 | 4519 | <2.05 | <0.17 | 0.95 | <0.00 | 0.698 | 9.24 | 0.413 | 2.33 | 0.043 | <0.105 | <0.82 | <0.0084 | <0.121 | 7.55 |
| MF32Pyr-7 | 0.561 | 38 | 12 | <0.54 | 0.84 | <0.039 | 8109 | <2.17 | <0.098 | <0.0201 | <0.115 | <0.0133 | <0.31 | <0.080 | <0.80 | <0.055 | <0.034 | <0.74 | 0.013 | <0.090 | <0.097 |
| MF32Pyr-8 | 16.86 | 226 | 87 | 189.2 | 2.04 | 0.427 | 8932 | <2.71 | <0.185 | 0.275 | <0.130 | 0.026 | 1.96 | 0.348 | 7.21 | 17.2 | 1.65 | <0.91 | <0.029 | 13.12 | 69.49 |
| MF32Pyr-9 | 1.7 | 30 | 6.2 | 35.63 | 3.19 | <0.049 | 5929 | 2.49 | <0.166 | 0.155 | <0.121 | 0.012 | 0.35 | 0.25 | 1.89 | 0.82 | 0.92 | <0.82 | <0.0090 | 13.69 | 27.71 |
| MF32Pyr-10 | 20.64 | 89 | 48 | 201.4 | 5.84 | 0.421 | 8040 | <2.31 | <0.240 | 0.269 | <0.168 | 0.016 | 3.66 | 0.258 | 7.12 | 22.55 | 0.85 | <0.77 | 0.021 | 11.73 | 110.5 |
| MF32Pyr-11 | 5.49 | 35 | 13 | 15.26 | 3.19 | 0.143 | 9195 | <2.14 | <0.204 | 0.047 | <0.158 | <0.0084 | <0.27 | 0.142 | 0.98 | 1.36 | 0.134 | <0.67 | <0.0186 | 1.73 | 19.21 |
| MF32Pyr-12 | 2.31 | 84 | 7.9 | 30.14 | 2.15 | 0.102 | 295 | <2.27 | <0.170 | 0.163 | <0.207 | <0.0090 | 0.35 | 0.52 | 1.99 | <0.057 | 0.38 | <0.75 | 0.018 | 8.13 | 18.58 |
| MF32Pyr-13 | 2.76 | 109 | 54 | 7.04 | 2.56 | 0.065 | 5388 | <2.31 | <0.193 | 0.073 | <0.169 | <0.0157 | <0.50 | <0.123 | <0.69 | <0.153 | 0.39 | <0.77 | <0.024 | 11.27 | 7.45 |
| MF32Pyr-14 | <0.170 | 8.6 | 1.2 | 6.97 | 0.47 | 0.049 | 6927 | <2.24 | <0.201 | 0.072 | <0.162 | <0.0133 | <0.29 | 0.261 | <0.68 | <0.039 | 0.275 | <0.68 | <0.0121 | 8.11 | 4.29 |
| MF32Pyr-15 | 0.495 | 0.98 | 0.64 | 1019 | 4.08 | 2.97 | 38 | <2.36 | <0.197 | 0.033 | <0.28 | 1.36 | 450.5 | <0.101 | <0.84 | 0.009 | <0.059 | <0.90 | <0.0132 | <0.097 | 1.54 |
| MF32Pyr-16 | 0.65 | 169 | 5.8 | 17.1 | 1.86 | <0.040 | 269 | <2.38 | <0.161 | 0.07 | <0.220 | <0.0124 | 0.76 | 0.17 | <0.91 | <0.075 | 0.187 | <0.84 | 0.027 | 12.35 | 6.73 |
| MF32Pyr-17 | 0.426 | 5.2 | 0.52 | 2.71 | 2.44 | <0.045 | 424 | <2.17 | <0.160 | 0.027 | <0.210 | <0.0053 | <0.29 | <0.111 | 0.88 | <0.065 | <0.057 | <0.66 | <0.022 | 4.77 | 1.15 |
| MF32Pyr-18 | 0.289 | 206 | 2.3 | 2.5 | <1.56 | <0.051 | 4455 | <2.30 | <0.162 | <0.0147 | <0.00 | <0.0103 | <0.30 | <0.100 | <0.69 | <0.070 | <0.050 | <0.70 | <0.0176 | <0.100 | 0.127 |
| MF32Pyr-19 | 1.29 | 206 | 7.7 | 33.79 | 4.57 | <0.052 | 4374 | <2.33 | <0.187 | 0.155 | <0.213 | 0.008 | <0.31 | <0.089 | <0.82 | 0.9 | <0.037 | <0.71 | <0.024 | 1 | 11.79 |
| MF32Pyr-20 | 0.82 | 129 | 160 | 12.85 | 6.49 | <0.033 | 8720 | <2.22 | <0.18 | 0.05 | 0.141 | <0.0104 | <0.31 | 0.089 | 0.7 | 0.232 | 0.39 | <0.76 | <0.0177 | 1.11 | 4.56 |
| MF32Pyr-21 | 0.226 | 6.4 | 3.8 | <0.85 | 277.9 | <0.046 | 7691 | <2.26 | <0.226 | <0.026 | <0.168 | <0.0104 | <0.27 | <0.116 | <0.82 | 0.362 | 0.079 | <1.20 | <0.0235 | <0.101 | 1.1 |
| MF32Pyr-22 | 0.53 | 27 | 4.3 | 3.6 | 1.47 | 0.078 | 6512 | <2.37 | <0.200 | 0.079 | <0.00 | <0.0151 | <0.29 | 1.11 | 0.79 | 0.58 | <0.034 | <0.94 | <0.023 | 13.11 | 8.05 |
| MF32Pyr-23 | 4.2 | 72 | 19 | 58.35 | 1.91 | 0.057 | 8573 | <2.60 | <0.21 | 0.057 | <0.142 | <0.0108 | 1.45 | <0.143 | <0.89 | 2.45 | 0.133 | <1.11 | <0.0107 | 3.11 | 28.38 |
| MF32Pyr-24 | 0.177 | 73 | 11 | 458.6 | 0.5 | 0.94 | 7476 | <2.23 | <0.176 | <0.0145 | <0.116 | 0.012 | 1.15 | <0.098 | <0.69 | 0.402 | <0.060 | <0.90 | <0.0122 | 1.11 | 5.39 |
| MF32Pyr-25 | 24.34 | 286 | 53 | 4E+05 | 4.69 | 0.744 | 9715 | 3.23 | 0.29 | 27.4 | 0.28 | 1.06 | 9.53 | 0.183 | 3.16 | 5.14 | 1.48 | <0.92 | 1.36 | 145.8 | 616.9 |
| MF32Pyr-26 | 6.73 | 156 | 74 | 167.2 | 2.69 | 0.055 | 5092 | 3.31 | <0.180 | 0.11 | <0.118 | 0.011 | 0.6 | 0.195 | <0.93 | 5.03 | 0.32 | <0.82 | 0.017 | 11.88 | 27.87 |
| MF32Pyr-27 | 0.317 | 59 | 5.3 | <0.69 | <0.43 | <0.035 | 702 | 2.4 | <0.214 | <0.022 | <0.126 | <0.0078 | <0.31 | <0.103 | <0.86 | <0.0304 | <0.038 | <0.87 | <0.0211 | <0.114 | <0.106 |
| MF32Pyr-28 | <0.147 | 3.7 | 0.39 | 0.98 | <0.48 | <0.038 | 236 | <2.32 | <0.163 | <0.021 | <0.168 | <0.0127 | <0.31 | <0.115 | <0.70 | <0.070 | <0.061 | <0.82 | <0.0199 | <0.118 | <0.102 |
| MF32Pyr-29 | 6.1 | 95 | 40 | 243.6 | 0.74 | 0.067 | 4037 | 2.36 | <0.183 | 0.038 | 0.072 | 0.011 | <0.36 | <0.113 | <0.69 | 2.2 | 0.074 | <0.77 | <0.0201 | 0.93 | 9.22 |
| MF32Pyr-30 | 0.228 | 11 | 5.6 | 0.69 | 1.99 | <0.051 | 6350 | <2.04 | <0.242 | <0.00 | <0.116 | 0.014 | <0.28 | <0.094 | <0.64 | <0.00 | <0.043 | <0.73 | <0.0087 | <0.094 | <0.095 |
| MF32Pyr-31 | 1.3 | 29 | 11 | 3155 | 3.62 | 1.24 | 2838 | <2.02 | <0.119 | 0.178 | <0.192 | 0.379 | 25.67 | 0.238 | 1.21 | 1.04 | 0.066 | <0.70 | <0.0166 | <0.099 | 11.94 |
| MF32Pyr-32 | 0.775 | 205 | 92 | 0.94 | 1 | <0.047 | 13766 | 1.97 | <0.184 | <0.0241 | <0.111 | <0.0119 | <0.22 | <0.082 | <0.75 | 0.155 | 0.39 | <0.76 | <0.0144 | <0.113 | 0.588 |
| MF32Pyr-33 | 0.8 | 8.5 | 11 | 3891 | 2.08 | 4.94 | 4848 | 2.68 | <0.165 | 0.235 | 0.108 | 0.291 | 14.03 | 0.381 | <0.96 | 1.05 | 0.46 | <0.79 | <0.018 | <0.136 | 17.3 |
| MF32Pyr-34 | 0.418 | 5.2 | 0.95 | 1.87 | 1.5 | <0.022 | 5905 | <2.04 | <0.170 | 0.004 | <0.115 | <0.0101 | <0.30 | <0.104 | <0.81 | <0.048 | <0.034 | <0.78 | 0.005 | <0.122 | <0.087 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF32Pyr-35 | 16.42 | 144 | 63 | 1.42 | 7.76 | 0.227 | 5084 | <2.30 | <0.176 | <0.0261 | <0.239 | <0.0117 | <0.31 | 0.133 | 1.25 | <0.058 | 0.088 | <0.87 | <0.0155 | 1.06 | 8.88 |
| MF32Pyr-36 | 0.353 | 50 | 26 | 1.01 | 1.08 | <0.048 | 4097 | <2.20 | <0.186 | <0.032 | <0.200 | 0.008 | <0.25 | 0.109 | <0.60 | <0.048 | <0.049 | <0.73 | <0.0150 | <0.076 | 0.127 |
| MF32Pyr-37 | 14.04 | 48 | 14 | 327 | 2.97 | 0.095 | 3607 | <2.05 | <0.155 | 0.116 | <0.217 | <0.0095 | <0.34 | 0.344 | 3.07 | 4.78 | 1.17 | <0.67 | <0.018 | 2.62 | 35.57 |
| MF32Pyr-38 | 0.542 | 18 | 6.1 | 1.3 | 1.38 | 0.114 | 3190 | <2.15 | <0.178 | 0.041 | 0.22 | <0.0115 | 0.39 | 0.5 | <0.75 | 2.79 | 0.155 | <0.80 | 0.017 | 2.41 | 8.17 |
| MF32Pyr-39 | 0.196 | 124 | 41 | <0.44 | 1.4 | <0.041 | 3052 | <2.10 | <0.144 | <0.014 | <0.11 | <0.0123 | <0.30 | 0.132 | <0.67 | 0.89 | <0.059 | <0.71 | <0.0192 | <0.139 | 1.54 |
| MF32Pyr-40 | 1.81 | 15 | 4 | 2.6 | 1.46 | 0.042 | 7973 | <2.02 | <0.157 | <0.031 | <0.111 | <0.0084 | <0.26 | <0.100 | <0.74 | <0.110 | 0.116 | <0.64 | <0.0117 | 0.098 | 5.58 |
| MF32Pyr-41 | 2.61 | 16 | 12 | <0.99 | 4.73 | 0.056 | 2807 | <2.08 | <0.22 | <0.022 | <0.211 | 0.014 | <0.34 | 0.208 | 0.83 | 0.91 | <0.058 | <1.26 | <0.029 | 2 | 3.7 |
| MF32Pyr-42 | <0.165 | 17 | 8 | 16.71 | 143.3 | <0.037 | 5039 | <2.22 | 0.139 | <0.036 | <0.232 | <0.0124 | <0.30 | <0.099 | <0.79 | <0.056 | <0.043 | <0.98 | <0.0230 | <0.108 | <0.102 |
| MF32Pyr-43 | 3.53 | 75 | 34 | 1.67 | 0.69 | 0.059 | 7009 | <2.30 | <0.148 | <0.025 | <0.112 | <0.0121 | <0.32 | 0.1 | <0.71 | <0.027 | 0.114 | <0.90 | <0.022 | 0.363 | 4.26 |
| MF32Pyr-44 | 0.333 | 176 | 57 | 4.38 | 1.06 | <0.032 | 9944 | 3.26 | <0.201 | <0.025 | <0.164 | <0.0072 | <0.26 | 0.175 | <0.72 | <0.084 | 0.146 | <0.82 | <0.0087 | 4.33 | 1.64 |
| MF32Pyr-45 | 5.47 | 126 | 40 | <0.43 | 20.37 | <0.049 | 9843 | <2.06 | <0.176 | <0.025 | <0.116 | <0.0152 | <0.27 | <0.103 | <0.81 | 0.279 | 0.07 | <0.81 | <0.0123 | <0.117 | 1.41 |
| MF32Pyr-46 | 0.465 | 14 | 6.8 | <0.59 | <0.29 | <0.038 | 5294 | <2.20 | <0.181 | <0.0151 | <0.119 | <0.0117 | <0.28 | <0.098 | <0.82 | <0.087 | <0.062 | <0.84 | 0.066 | <0.094 | 0.131 |
| MF32Pyr-47 | 0.362 | 16 | 6.6 | 2.23 | 12.6 | <0.044 | 6222 | <2.02 | <0.192 | <0.029 | <0.160 | <0.0121 | <0.26 | 0.57 | <0.90 | <0.073 | 0.214 | <0.75 | 0.013 | 3.3 | 4.98 |
| MF32Pyr-48 | 0.212 | 11 | 4.6 | 0.41 | 2.08 | <0.039 | 6169 | <2.01 | <0.169 | 0.013 | <0.162 | <0.0133 | <0.28 | <0.084 | <0.88 | <0.068 | <0.024 | <0.74 | <0.017 | <0.087 | <0.090 |
| MF32Pyr-49 | 0.337 | 11 | 2.3 | 7.56 | 1.03 | <0.038 | 6024 | <1.96 | <0.121 | <0.032 | <0.113 | <0.0099 | <0.32 | <0.096 | <0.84 | <0.196 | 0.081 | <0.73 | <0.0146 | 2.33 | 1.23 |
| MF32Pyr-50 | <0.163 | 169 | 31 | 0.49 | 0.63 | <0.039 | 17308 | <2.23 | <0.185 | <0.036 | <0.115 | 0.01 | 0.43 | <0.096 | <0.76 | 0.008 | <0.042 | <0.70 | <0.0212 | <0.109 | 0.397 |
| MF32Pyr-51 | 0.428 | 242 | 68 | <0.42 | 1.51 | <0.046 | 10522 | <2.10 | <0.161 | <0.0144 | <0.226 | <0.0111 | <0.29 | <0.099 | <0.66 | 0.023 | 0.028 | 0.7 | <0.0120 | <0.116 | <0.088 |
| MF32Pyr-52 | 0.803 | 57 | 13 | 0.39 | 0.57 | <0.057 | 8562 | <2.02 | <0.140 | <0.035 | <0.157 | <0.0154 | <0.28 | 0.072 | <0.53 | 0.378 | <0.058 | <0.73 | 0.01 | <0.107 | 1.79 |
| MF32Pyr-53 | 0.54 | 21 | 8.6 | 6.49 | 1.81 | <0.042 | 6067 | <2.04 | <0.208 | 0.206 | <0.159 | <0.0110 | <0.25 | 0.282 | <0.76 | 0.64 | 0.125 | <0.77 | <0.0168 | 1.22 | 40.95 |
| MF32Pyr-54 | 1.96 | 118 | 40 | 0.89 | 0.76 | <0.042 | 9120 | <2.10 | <0.148 | <0.020 | <0.159 | 0.004 | <0.22 | 0.145 | <0.83 | <0.061 | 0.223 | <0.74 | 0.008 | <0.125 | 5.47 |
| MF32Pyr-55 | 0.527 | 5.6 | 0.91 | 0.97 | 0.67 | 0.04 | 7116 | <2.02 | <0.166 | <0.0249 | <0.113 | <0.0049 | <0.28 | <0.076 | <0.80 | <0.055 | 0.117 | <0.75 | <0.0170 | <0.104 | 0.61 |
| MF32Pyr-56 | 11.37 | 33 | 7.1 | 4.12 | 15.08 | 0.146 | 6289 | <2.20 | <0.192 | 0.037 | <0.164 | <0.0124 | 0.41 | <0.107 | <0.78 | <0.028 | <0.070 | <0.75 | 0.013 | 0.362 | 4.22 |
| MF32Pyr-57 | 0.222 | 951 | 27 | 0.5 | <0.45 | <0.028 | 1258 | <1.93 | <0.122 | 0.018 | <0.160 | <0.0131 | <0.34 | <0.086 | 0.92 | <0.027 | 0.265 | 0.85 | <0.0148 | <0.108 | 2.53 |
| MF32Pyr-58 | <0.158 | 5.9 | 4.5 | 0.64 | 1.23 | <0.048 | 4281 | <2.02 | <0.169 | 0.009 | <0.00 | <0.0116 | <0.24 | <0.081 | <0.71 | 0.96 | <0.051 | <0.78 | <0.0219 | <0.122 | 1.03 |
| MF32Pyr-59 | 0.73 | 19 | 2.1 | 2.68 | 0.7 | <0.055 | 6969 | <2.01 | <0.160 | <0.0250 | <0.113 | 0.013 | <0.33 | 0.081 | 1.09 | <0.207 | 0.054 | <0.70 | <0.0170 | <0.120 | 2.95 |
| MF32Pyr-60 | 1.92 | 9.5 | 4.4 | 1.28 | 1.37 | 0.039 | 3813 | <2.05 | <0.187 | <0.036 | <0.201 | <0.0088 | 0.36 | 0.157 | 1.07 | 1.32 | 0.083 | <0.82 | <0.0175 | 0.098 | 7.06 |
| MF32Pyr-61 | 0.201 | 0.27 | <0.170 | <0.70 | 0.53 | <0.046 | 7723 | <2.04 | <0.123 | <0.036 | <0.229 | <0.0071 | <0.28 | <0.104 | <0.59 | <0.039 | 0.068 | <1.24 | <0.0228 | <0.091 | 0.119 |
| MF32Pyr-62 | <0.152 | 18 | 10.87 | <0.67 | 1.92 | <0.046 | 5455 | <2.16 | <0.131 | 0.025 | <0.190 | 0.007 | <0.28 | <0.093 | <0.83 | <0.027 | <0.047 | <0.99 | <0.0116 | <0.101 | <0.084 |
| MF32Pyr-63 | 0.164 | 6.2 | 6.34 | 0.62 | <0.71 | 0.035 | 4447 | <2.07 | <0.191 | <0.0200 | <0.110 | <0.0083 | <0.30 | <0.077 | <0.85 | <0.038 | <0.023 | <0.92 | <0.0219 | <0.109 | <0.082 |
| MF32Pyr-64 | 0.343 | 132 | 51.68 | 1.53 | 1.3 | <0.040 | 4273 | <2.07 | <0.185 | <0.014 | <0.30 | <0.0163 | <0.31 | 0.075 | <0.75 | 0.173 | <0.041 | <0.89 | <0.0119 | <0.090 | 0.185 |
| MF32Pyr-65 | 0.314 | 186 | 97.89 | <0.49 | 0.66 | <0.039 | 3058 | 2.23 | <0.169 | <0.0257 | 0.034 | <0.0071 | <0.28 | <0.115 | <0.81 | <0.040 | <0.0246 | <0.89 | <0.0173 | <0.113 | <0.087 |
| MF32Pyr-66 | 0.399 | 15 | 12.96 | 7.46 | 35.91 | <0.047 | 6194 | <2.10 | <0.201 | <0.0149 | <0.200 | <0.0101 | <0.29 | <0.081 | <0.65 | 0.017 | 0.037 | <0.85 | <0.0123 | <0.123 | <0.084 |
| MF32Pyr-67 | 0.665 | 32 | 9.65 | 0.7 | 38.75 | <0.044 | 7869 | <1.85 | <0.134 | <0.023 | <0.144 | 0.011 | <0.23 | <0.076 | <0.51 | 1.5 | 0.061 | <0.75 | <0.0133 | <0.079 | 1.95 |
| MF32Pyr-68 | 0.2 | 136 | 47.74 | 4.98 | 0.6 | <0.040 | 9224 | <1.81 | <0.155 | <0.00 | 0.03 | <0.0110 | <0.24 | <0.090 | <0.68 | <0.035 | <0.049 | <0.72 | <0.0109 | <0.081 | 0.22 |
| MF32Pyr-69 | 0.136 | 289 | 147.9 | 1.05 | 0.58 | <0.033 | 2719 | <1.76 | <0.185 | <0.0269 | <0.18 | <0.0102 | <0.23 | <0.084 | <0.82 | 0.291 | <0.031 | <0.73 | <0.0136 | <0.064 | 0.62 |
| MF32Pyr-70 | 1.46 | 130 | 50.77 | 22.54 | 2.45 | 0.096 | 10626 | <2.27 | <0.220 | 0.174 | <0.127 | <0.0147 | <0.63 | 0.174 | <0.86 | 3.08 | 0.074 | <0.98 | <0.0165 | 0.54 | 13.76 |
| MF32Pyr-71 | 0.333 | 39 | 15.06 | <0.36 | 0.49 | <0.041 | 6352 | <2.02 | <0.187 | <0.0142 | 0.099 | <0.0097 | <0.25 | <0.079 | <0.63 | <0.060 | <0.062 | <0.78 | <0.0144 | <0.112 | <0.089 |
| MF32Pyr-72 | 0.636 | 3 | 1.61 | 1.72 | 68.68 | <0.047 | 6055 | 1.9 | <0.154 | <0.028 | <0.189 | <0.0107 | <0.22 | 0.244 | 0.9 | 0.208 | 0.05 | <0.80 | <0.0142 | <0.108 | 5.85 |
| MF32Pyr-73 | 0.518 | 8.1 | 6.61 | 4.16 | 3.01 | 0.041 | 6296 | 1.88 | <0.117 | 0.008 | <0.109 | <0.0083 | 0.74 | 0.28 | 0.84 | 2.9 | 0.086 | <0.80 | <0.0116 | <0.108 | 9.21 |
| MF32Pyr-74 | 1.96 | 190 | 71.37 | 174.1 | 1.12 | 0.101 | 9182 | <2.09 | <0.22 | 0.046 | 0.068 | 0.014 | <0.35 | <0.089 | 1.2 | 0.57 | 0.054 | <0.76 | <0.0122 | 0.223 | 3.56 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF32Pyr-75 | 0.412 | 39 | 17.16 | 0.84 | 0.52 | <0.038 | 5042 | 2.91 | <0.175 | <0.029 | <0.112 | 0.025 | <0.29 | 0.098 | 1.44 | 0.032 | 0.129 | <0.77 | <0.0169 | <0.093 | 5.07 |
| MF32Pyr-76 | <0.158 | 33 | 19.68 | <0.38 | 0.73 | <0.032 | 5375 | <1.90 | <0.165 | <0.020 | 0.033 | <0.0083 | <0.23 | <0.072 | 0.62 | <0.065 | <0.033 | <0.75 | <0.0142 | <0.105 | <0.090 |
| MF32Pyr-77 | 0.417 | 29 | 7.73 | 1.55 | 0.99 | 0.047 | 6823 | <2.08 | 0.37 | <0.040 | 0.069 | 0.011 | 1.65 | 0.51 | <0.75 | 7.97 | 0.076 | <0.88 | <0.0088 | 0.333 | 8.56 |
| MF32Pyr-78 | 0.272 | 483 | 87.49 | 0.79 | 0.9 | <0.039 | 5988 | <1.89 | 0.23 | <0.038 | <0.00 | <0.0107 | <0.31 | <0.097 | <0.74 | 0.231 | 0.073 | <0.75 | <0.0185 | <0.107 | 3.69 |
| MF32Pyr-79 | <0.164 | 114 | 40.03 | 0.9 | 0.71 | <0.036 | 9087 | <2.10 | 0.182 | <0.021 | 0.1 | <0.0069 | <0.22 | 0.098 | 0.67 | <0.047 | <0.042 | <0.76 | <0.0223 | <0.129 | 1.93 |
| MF32Pyr-80 | 0.471 | 7.6 | 13.1 | <0.54 | 3.23 | <0.049 | 5523 | <2.00 | <0.212 | <0.035 | <0.173 | <0.0076 | <0.29 | <0.078 | <0.70 | 0.152 | <0.037 | <0.81 | 0.003 | <0.113 | 0.91 |
| **Mean n=80** | 3 | 92 | 29 | 6157 | 11 | 1 | 6150 | 3 | 0 | 1 | 0 | 0 | 27 | 0 | 3 | 2 | 0 | 1 | 0 | 9 | 20 |
| **S.D** | 5 | 132 | 35 | 46941 | 38 | 1 | 3055 | 1 | 0 | 5 | 0 | 0 | 100 | 0 | 5 | 5 | 0 | 0 | 0 | 25 | 77 |
| **Min** | 0.14 | 0.27 | 0.39 | 0.39 | 0.47 | 0.04 | 38.00 | 1.88 | 0.14 | 0.00 | 0.03 | 0.00 | 0.35 | 0.07 | 0.62 | 0.01 | 0.03 | 0.70 | 0.00 | 0.10 | 0.12 |
| **Max** | 24 | 951 | 160 | 381430 | 278 | 5 | 17308 | 3 | 0 | 27 | 0 | 1 | 450 | 1 | 26 | 23 | 2 | 1 | 1 | 146 | 617 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF33Pyr-1 | 3.08 | 1126 | 547.2 | 7.2 | 0.96 | 0.308 | 6747 | 3.82 | <0.23 | 0.162 | <0.261 | <0.0147 | <0.28 | 0.71 | 6.11 | <0.052 | 0.8 | <1.83 | 0.042 | 3.5 | 37.86 |
| MF33Pyr-2 | 0.61 | 1847 | 1016 | 94.38 | 1.48 | 0.125 | 8835 | 2.98 | <0.22 | 0.384 | 0.46 | 0.011 | <0.33 | 1.21 | 4.9 | <0.132 | 0.87 | <1.36 | 0.089 | 30.52 | 35.15 |
| MF33Pyr-3 | 0.236 | 2238 | 639 | 26.33 | 1.02 | 0.177 | 7106 | 2.55 | <0.229 | 0.163 | <0.253 | <0.0111 | 0.37 | 0.51 | 2.47 | <0.043 | 0.41 | <1.14 | 0.026 | 18.04 | 20.72 |
| MF33Pyr-4 | 0.7 | 1779 | 482.7 | 2.47 | 0.57 | 0.051 | 7139 | 4.82 | <0.217 | 0.047 | <0.00 | 0.007 | 0.53 | 0.229 | 1.93 | <0.077 | 0.139 | <1.12 | <0.0127 | 6.46 | 12.57 |
| MF33Pyr-5 | 1.65 | 1267 | 446.3 | 1.77 | 0.97 | <0.039 | 8340 | 3.59 | <0.152 | 0.032 | <0.116 | <0.0125 | 1.04 | 0.184 | 4.46 | 0.052 | 0.18 | <0.98 | <0.0152 | 0.51 | 19.34 |
| MF33Pyr-6 | 0.87 | 1362 | 422.3 | 3.45 | 0.97 | <0.055 | 9338 | 2.97 | <0.203 | 0.131 | <0.158 | <0.0085 | 1.82 | 0.57 | 3.34 | <0.081 | 0.266 | <0.84 | 0.024 | 10.31 | 22.22 |
| MF33Pyr-7 | 0.608 | 906 | 432.5 | 1.36 | 4.07 | <0.026 | 8560 | <2.25 | <0.183 | 0.023 | 0.035 | <0.0089 | 1.7 | 0.255 | 1.1 | <0.064 | 0.08 | <0.92 | <0.0154 | <0.27 | 7.28 |
| MF33Pyr-8 | <0.165 | 1077 | 670.4 | 44.32 | <0.29 | <0.046 | 9630 | <1.98 | <0.161 | <0.0203 | 0.066 | <0.0084 | 2.35 | 0.07 | 0.67 | <0.038 | <0.058 | <0.87 | <0.0166 | 0.333 | 2.88 |
| MF33Pyr-9 | 0.326 | 1303 | 826.9 | 1.01 | 1.23 | 0.11 | 9857 | 1.98 | <0.124 | <0.020 | <0.110 | 0.02 | 1.26 | 2.19 | <0.83 | <0.046 | <0.047 | <0.86 | <0.0143 | 1.23 | 94.93 |
| MF33Pyr-10 | 0.465 | 1741 | 1128 | 3.2 | 1.41 | 0.042 | 10836 | 2.74 | <0.172 | <0.024 | <0.107 | <0.0105 | 1.67 | 0.227 | 1.36 | <0.037 | 0.203 | <0.82 | <0.0256 | 2.36 | 10.51 |
| MF33Pyr-11 | 0.342 | 1497 | 945.9 | 5.11 | 0.56 | <0.043 | 9834 | 4.25 | <0.167 | 0.076 | <0.156 | <0.0108 | 1.71 | 0.204 | <0.81 | <0.047 | 0.263 | <0.84 | 0.021 | 6.86 | 8.36 |
| MF33Pyr-12 | 8.61 | 1861 | 965.7 | 0.93 | 3.98 | 0.175 | 9225 | 3.35 | <0.155 | <0.025 | 0.033 | 0.01 | 2.85 | 0.243 | 2.21 | <0.070 | 0.45 | <0.85 | <0.0165 | 0.41 | 18.61 |
| MF33Pyr-13 | 0.535 | 1650 | 878.9 | 1.5 | 0.55 | <0.031 | 8975 | 4.24 | <0.134 | <0.029 | <0.251 | <0.0110 | 2.79 | 0.109 | <0.76 | <0.102 | <0.042 | <0.78 | <0.0190 | <0.213 | 5.05 |
| MF33Pyr-14 | 0.292 | 2495 | 1473 | 1.79 | 1.07 | 0.025 | 8988 | 3.08 | 0.107 | 0.073 | <0.118 | <0.0037 | 0.95 | 0.359 | 2.5 | <0.050 | 0.09 | <0.57 | <0.0126 | 3.18 | 17.69 |
| MF33Pyr-15 | 0.33 | 2849 | 1886 | 0.37 | 0.92 | <0.022 | 10972 | 3.5 | <0.094 | <0.0115 | <0.00 | <0.0054 | 0.42 | 0.078 | <0.67 | <0.043 | 0.024 | <0.68 | <0.0198 | <0.195 | 1.7 |
| MF33Pyr-16 | 0.313 | 2914 | 1867 | 0.31 | 0.85 | <0.032 | 12209 | 2.32 | <0.126 | <0.0165 | <0.25 | <0.0117 | <0.20 | <0.062 | <0.62 | <0.031 | <0.033 | <0.64 | <0.0134 | <0.157 | 0.73 |
| MF33Pyr-17 | 0.413 | 2566 | 1302 | 2.4 | 0.46 | <0.032 | 9150 | 2.68 | <0.151 | 0.026 | <0.155 | 0.014 | 0.25 | <0.050 | <0.56 | <0.072 | <0.069 | <0.63 | <0.0191 | <0.158 | 1.3 |
| MF33Pyr-18 | 2 | 2359 | 1323 | 13.93 | 2.17 | 0.024 | 8910 | 2.66 | <0.136 | 0.313 | <0.128 | <0.0105 | 0.49 | 0.091 | 1.18 | <0.049 | 0.123 | <0.69 | 0.019 | 1.32 | 6.53 |
| MF33Pyr-19 | 2.01 | 2788 | 1465 | 24.34 | 0.72 | 0.041 | 8975 | 3.9 | <0.120 | 0.5 | <0.191 | 0.008 | 2.33 | 0.77 | 1.78 | <0.140 | 0.47 | <0.66 | 0.082 | 24.36 | 19.58 |
| MF33Pyr-20 | 2.04 | 2903 | 1517 | 28.09 | 0.63 | <0.034 | 9193 | 3.69 | <0.109 | 0.312 | 0.114 | <0.0111 | 2.27 | 0.39 | 2.26 | <0.090 | 0.51 | <0.64 | 0.074 | 14.42 | 12.95 |
| MF33Pyr-21 | 5.4 | 102 | 52.92 | 451.58 | 10.99 | 0.117 | 6591 | 1.92 | <0.169 | 0.9 | <0.096 | <0.0111 | <0.49 | 0.286 | 2.12 | <0.34 | 0.19 | <1.16 | <0.0161 | <0.35 | 13.3 |
| MF33Pyr-22 | 3.29 | 721 | 337.7 | 25.25 | 12.26 | 0.046 | 6766 | 2.83 | <0.142 | 0.74 | <0.133 | <0.0124 | 0.79 | 0.31 | 2.54 | 2.19 | 1.1 | <0.93 | <0.020 | 2.49 | 17.8 |
| MF33Pyr-23 | 5.87 | 250 | 168 | 1.85 | 3.29 | 0.068 | 5322 | 3.21 | <0.121 | 0.023 | <0.161 | <0.0108 | <0.27 | 0.246 | 1.62 | <0.30 | <0.106 | <0.84 | 0.011 | 0.37 | 12.53 |
| MF33Pyr-24 | 4.04 | 270 | 169.2 | 2.16 | 2.27 | 0.081 | 5412 | 2.78 | <0.152 | <0.017 | <0.184 | <0.0057 | <0.216 | 0.267 | 2.02 | <0.103 | 0.247 | <0.76 | <0.0099 | 0.308 | 22.48 |
| MF33Pyr-25 | 2.54 | 194 | 118.5 | 6.46 | 2.57 | 0.085 | 5040 | 2.45 | <0.142 | 0.191 | <0.087 | <0.0093 | 0.96 | 0.364 | 1.85 | 0.42 | 1.72 | <0.75 | 0.049 | <0.217 | 16.62 |
| MF33Pyr-26 | 0.93 | 107 | 63.84 | 1.38 | 0.81 | <0.039 | 5457 | 2.93 | <0.130 | <0.070 | <0.130 | <0.0090 | 0.28 | <0.080 | <0.62 | <0.071 | <0.28 | <0.76 | <0.0171 | 0.309 | 5.59 |
| MF33Pyr-27 | 2.73 | 108 | 58.52 | 7.59 | 2.81 | 0.111 | 6081 | 2.94 | <0.125 | 0.081 | <0.00 | <0.0090 | <0.22 | 0.288 | 0.95 | <0.087 | 0.71 | <0.75 | 0.028 | 7.55 | 13.12 |
| MF33Pyr-28 | 0.833 | 128 | 58.88 | 8.8 | 0.62 | <0.037 | 6187 | 2.62 | <0.166 | 0.099 | 0.053 | <0.0078 | 0.72 | <0.067 | <0.50 | 0.305 | 0.28 | <0.70 | <0.0166 | <0.32 | 2.83 |
| MF33Pyr-29 | 1.24 | 120 | 66.61 | 442.74 | 0.48 | 0.096 | 5706 | 2.98 | <0.168 | 0.097 | <0.174 | <0.0093 | <0.31 | 0.213 | 1.04 | <0.26 | 0.217 | <0.71 | 0.023 | 10.36 | 8.03 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF33Pyr-30 | 9.78 | 216 | 114.1 | 1.72 | 1.91 | 0.089 | 5763 | 2.27 | <0.117 | <0.0168 | <0.155 | <0.0088 | 0.27 | 0.257 | 1.89 | <0.073 | <0.080 | <0.69 | 0.021 | 0.59 | 16.46 |
| MF33Pyr-31 | 0.644 | 248 | 102.6 | 2.29 | 0.8 | <0.023 | 5736 | <1.52 | <0.129 | 0.028 | <0.148 | 0.016 | 0.75 | <0.096 | 1.09 | <0.059 | 0.047 | <0.65 | <0.0129 | 0.49 | 5.01 |
| MF33Pyr-32 | 1.86 | 1863 | 945 | 6.74 | 1.7 | 0.037 | 8842 | 1.59 | <0.097 | 0.107 | <0.081 | 0.007 | 1.1 | 0.2 | 1.14 | <0.127 | 0.116 | <0.64 | <0.0151 | <0.30 | 9.08 |
| MF33Pyr-33 | 1.38 | 434 | 216 | 14.12 | 1.27 | <0.024 | 6817 | <1.75 | <0.128 | 0.435 | 0.026 | <0.0086 | <0.47 | 0.49 | 2.12 | <0.168 | 0.48 | <0.69 | 0.037 | 11.51 | 19.06 |
| MF33Pyr-34 | 1.65 | 131 | 58.22 | 21.03 | 1.72 | <0.031 | 6426 | <1.69 | <0.157 | 0.48 | 0.108 | <0.0120 | <0.41 | 0.241 | 1.41 | <0.115 | 0.26 | <0.70 | 0.025 | 7.73 | 7.41 |
| MF33Pyr-35 | 2.79 | 98 | 68.91 | 26.22 | 2.09 | 0.031 | 10459 | <1.52 | <0.115 | 0.78 | <0.159 | 0.007 | 2.91 | 0.56 | 1.84 | 0.348 | 1.64 | <0.69 | 0.082 | 29.41 | 20.62 |
| MF33Pyr-36 | 1.54 | 97 | 65.95 | 21.55 | 1.8 | 0.043 | 8747 | <1.67 | <0.123 | 0.365 | 0.141 | <0.0072 | <0.23 | 0.55 | 2.77 | <0.09 | 0.86 | <0.76 | 0.047 | 20.83 | 15.44 |
| MF33Pyr-37 | 1.04 | 86 | 65.82 | 14.57 | 2.01 | <0.038 | 8365 | 2.1 | <0.112 | 0.287 | 0.084 | 0.006 | <0.204 | 0.59 | 2.29 | <0.179 | 0.56 | <0.68 | 0.029 | 32.29 | 16.48 |
| MF33Pyr-38 | 1.14 | 90 | 61.94 | 13.21 | 0.78 | <0.021 | 8550 | <1.74 | <0.128 | 0.317 | <0.094 | <0.0092 | 0.46 | 0.276 | 1.06 | <0.094 | 0.88 | <0.75 | <0.0201 | 14.12 | 9.1 |
| MF33Pyr-39 | 0.463 | 59 | 56.03 | 10.53 | 0.43 | <0.031 | 8383 | <1.67 | <0.192 | 0.07 | <0.131 | <0.0081 | 0.6 | 0.241 | 1.12 | <0.093 | 0.28 | <0.72 | <0.0140 | 11.63 | 7.01 |
| MF33Pyr-40 | 1.19 | 451 | 90.14 | 11.05 | 1.71 | <0.035 | 8613 | <1.59 | 0.108 | 0.215 | <0.174 | <0.0094 | <0.24 | 0.29 | 1.3 | <0.153 | 0.79 | <0.64 | <0.0147 | 8.92 | 14.04 |
| MF33Pyr-41 | 0.282 | 830 | 95.32 | 6.13 | 0.73 | <0.031 | 9228 | 1.59 | <0.118 | 0.139 | <0.145 | <0.0052 | 0.53 | 0.6 | 2.07 | <0.035 | 0.45 | <1.04 | 0.027 | 16.26 | 23.55 |
| MF33Pyr-42 | 0.385 | 267 | 48.83 | 6.7 | 0.9 | <0.026 | 8956 | <1.56 | <0.095 | 0.191 | <0.089 | <0.0078 | 0.41 | 0.284 | 1.05 | <0.037 | 0.26 | <0.89 | <0.0134 | 14.62 | 13.04 |
| MF33Pyr-43 | 0.313 | 206 | 39.18 | 0.93 | 0.71 | 0.072 | 9357 | <1.50 | <0.108 | <0.0210 | <0.091 | <0.0097 | 0.25 | 0.095 | 0.73 | <0.054 | <0.028 | <0.88 | 0.014 | 0.76 | 4.24 |
| MF33Pyr-44 | 0.485 | 329 | 63.49 | 4.9 | <0.34 | 0.04 | 9176 | <1.59 | <0.111 | 0.107 | 0.079 | <0.0078 | 0.74 | 0.44 | 0.95 | <0.094 | 0.208 | <0.79 | 0.03 | 7.92 | 13.77 |
| MF33Pyr-45 | 0.92 | 549 | 65.75 | 19.93 | 0.9 | <0.040 | 8941 | <1.57 | <0.138 | 0.211 | <0.122 | <0.0076 | 0.27 | 0.374 | 1.41 | <0.112 | 0.187 | <0.74 | <0.0147 | 7.35 | 12.96 |
| MF33Pyr-46 | 6.47 | 1765 | 638.6 | 20.9 | 6.34 | 26.97 | 4324 | 2.41 | <0.218 | 0.408 | 0.075 | <0.032 | 10.08 | 0.36 | <1.02 | 3.63 | <0.81 | <1.13 | 0.23 | 3.05 | 11.81 |
| MF33Pyr-47 | 0.48 | 3411 | 1452 | 1.53 | 1.32 | 0.051 | 11086 | 4.32 | <0.150 | <0.025 | <0.094 | 0.013 | <0.211 | <0.057 | <0.56 | <0.065 | <0.041 | <0.84 | <0.0159 | 1.23 | 1.52 |
| MF33Pyr-48 | 4.39 | 1931 | 797.5 | 19.57 | 1.78 | 2.53 | 6884 | 2.15 | <0.116 | 0.303 | 0.029 | 0.011 | 2.58 | 0.5 | 1.78 | 0.76 | 0.24 | <0.82 | 0.049 | 9.31 | 11.59 |
| MF33Pyr-49 | 5.14 | 2127 | 973.2 | 12.99 | 1.72 | 1.99 | 6892 | 2.92 | <0.105 | 0.375 | <0.00 | <0.0122 | 1.51 | 0.303 | 1.29 | 0.291 | 0.39 | <0.82 | 0.028 | 9.73 | 7.73 |
| MF33Pyr-50 | 3.11 | 1648 | 733.3 | 15.27 | 3.1 | 9.25 | 4990 | 2 | <0.167 | 0.29 | <0.157 | 0.034 | 7.76 | 0.349 | <0.73 | 2.23 | 0.25 | <0.89 | 0.087 | 12.13 | 6.51 |
| MF33Pyr-51 | 1.7 | 2988 | 1256 | 6.38 | 1.32 | 2.04 | 8118 | 2.38 | <0.072 | 0.094 | <0.191 | <0.0072 | 1.07 | <0.060 | <0.64 | 0.498 | 0.096 | <0.86 | 0.03 | 0.62 | 1.43 |
| MF33Pyr-52 | 1.63 | 2733 | 928.5 | 7.44 | 1.39 | 0.587 | 6703 | 2.19 | <0.125 | 0.147 | <0.092 | 0.008 | 0.34 | 0.143 | <0.65 | 0.109 | 0.108 | <0.79 | 0.014 | 2.89 | 6.49 |
| MF33Pyr-53 | 0.77 | 881 | 398.7 | 1.51 | 0.37 | 0.287 | 7492 | 2.38 | <0.127 | 0.043 | <0.128 | 0.009 | 1.17 | 0.143 | 1.92 | <0.062 | 0.047 | <0.72 | <0.0181 | <0.156 | 11.04 |
| MF33Pyr-54 | 0.76 | 1044 | 440.6 | 1.06 | 2.18 | 0.062 | 7240 | 2.78 | <0.110 | 0.011 | <0.00 | <0.0134 | 0.25 | 0.157 | 2.99 | <0.050 | 0.09 | <0.74 | 0.002 | <0.149 | 18.61 |
| MF33Pyr-55 | 1.55 | 1813 | 860.1 | 1.84 | 2 | 0.048 | 8484 | <1.61 | <0.084 | 0.025 | <0.182 | <0.0040 | <0.208 | 0.353 | 4.38 | <0.097 | 0.27 | <0.72 | <0.0169 | <0.156 | 27.65 |
| MF33Pyr-56 | 0.526 | 2000 | 995.8 | 3.09 | 101.1 | 0.035 | 9525 | 2.31 | 0.114 | 0.143 | <0.085 | 0.008 | 0.33 | 0.386 | 2.17 | <0.0293 | 0.165 | <0.74 | 0.012 | 13.32 | 14.36 |
| MF33Pyr-57 | 0.529 | 2961 | 1383 | 2.29 | 0.92 | <0.035 | 10454 | 2.78 | <0.114 | 0.054 | <0.151 | 0.007 | 0.27 | 0.157 | 1.4 | <0.056 | 0.147 | <0.74 | <0.0093 | 1.83 | 12.26 |
| MF33Pyr-58 | 0.36 | 2906 | 1338 | 3.55 | 0.87 | <0.033 | 10370 | 4.18 | <0.106 | 0.077 | <0.154 | <0.0078 | 0.43 | 0.319 | 1.54 | <0.049 | 0.25 | <0.68 | <0.0191 | 8.39 | 12.59 |
| MF33Pyr-59 | 0.671 | 2479 | 1260 | 5.23 | 1.22 | <0.027 | 9333 | 2.56 | <0.138 | 0.122 | 0.055 | <0.0070 | 0.46 | 0.42 | 2.28 | <0.050 | 0.4 | <0.70 | 0.029 | 9.44 | 22.28 |
| MF33Pyr-60 | 1.4 | 1869 | 818 | 8.96 | 1.62 | 0.109 | 8049 | 1.95 | <0.135 | 0.138 | <0.087 | 0.009 | 0.45 | 0.79 | **** | <0.077 | 0.62 | <0.79 | 0.024 | 8.56 | 69.29 |
| MF33Pyr-61 | 1.08 | 3603 | 1171 | 2 | 4.86 | 0.234 | 10239 | 4.71 | <0.109 | 0.106 | <0.159 | <0.0070 | 0.33 | 0.348 | 4.25 | <0.095 | 0.57 | <1.25 | <0.0156 | 0.9 | 21.36 |
| MF33Pyr-62 | 0.365 | 2995 | 1083 | 0.88 | 0.51 | 0.074 | 6894 | <1.62 | <0.112 | <0.021 | <0.090 | 0.025 | 0.233 | <0.066 | 0.82 | <0.088 | <0.039 | <1.05 | <0.0167 | <0.162 | 2.12 |
| MF33Pyr-63 | 0.226 | 2817 | 928.5 | 0.39 | 0.94 | 0.045 | 6466 | 1.95 | <0.122 | <0.0179 | <0.094 | 0.004 | 0.178 | <0.059 | <0.65 | <0.072 | <0.041 | <0.91 | <0.0142 | <0.157 | 0.54 |
| MF33Pyr-64 | 0.423 | 2921 | 1338 | <0.47 | 0.82 | 0.052 | 9045 | 2.94 | <0.176 | <0.022 | <0.093 | <0.0082 | 0.201 | <0.064 | <0.71 | <0.091 | 0.03 | <0.96 | <0.0174 | <0.170 | 0.72 |
| MF33Pyr-65 | 0.358 | 2722 | 1158 | 1.39 | 1.83 | 0.063 | 8503 | <1.65 | <0.105 | 0.045 | <0.131 | <0.0070 | <0.217 | <0.068 | <0.68 | <0.088 | 0.084 | <0.84 | <0.022 | 7.57 | 3.01 |
| MF33Pyr-66 | 0.348 | 2694 | 1363 | 0.46 | 0.89 | 0.062 | 10369 | 1.99 | <0.135 | <0.0178 | <0.131 | <0.0115 | 0.31 | <0.076 | <0.68 | <0.051 | 0.043 | <0.83 | <0.0186 | 0.57 | 1.09 |
| MF33Pyr-67 | 0.268 | 3771 | 1517 | 1.34 | 0.95 | 0.051 | 9175 | 3.6 | <0.121 | 0.032 | 0.053 | <0.0055 | <0.186 | <0.056 | <0.48 | <0.049 | 0.07 | <0.78 | <0.0203 | 1.83 | 1.24 |
| MF33Pyr-68 | 1.14 | 2615 | 1238 | 5.34 | <0.38 | 0.127 | 7106 | 3.29 | <0.154 | 0.094 | <0.130 | <0.0057 | <0.183 | 0.196 | 1.06 | <0.064 | 0.27 | <0.86 | 0.031 | 9.88 | 5.57 |
| MF33Pyr-69 | 0.82 | 3204 | 1492 | 1.1 | 0.48 | 0.041 | 8088 | 2.6 | 0.118 | 0.015 | <0.00 | <0.0092 | <0.191 | <0.060 | <0.56 | <0.047 | 0.075 | <0.80 | <0.0065 | 0.6 | 2.48 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF33Pyr-70 | 0.361 | 2799 | 897.2 | 2.35 | 2.02 | 0.614 | 6769 | 3.68 | <0.136 | 0.022 | <0.090 | <0.0097 | 0.54 | 0.078 | <0.58 | <0.077 | 0.135 | <0.77 | <0.0097 | 0.31 | 1.61 |
| MF33Pyr-71 | 0.334 | 1915 | 469.7 | 1.4 | <0.38 | 0.057 | 5649 | 1.72 | <0.124 | <0.020 | <0.148 | 0.007 | 0.5 | 0.051 | 1.4 | <0.036 | 0.146 | <0.76 | 0.004 | <0.127 | 7.21 |
| MF33Pyr-72 | 0.209 | 3496 | 547.7 | 6.95 | 1.07 | 0.192 | 6229 | 2.86 | <0.120 | 0.093 | <0.086 | <0.0038 | 0.32 | 0.253 | 1.37 | <0.055 | 0.29 | <0.73 | 0.136 | 11.1 | 9.09 |
| MF33Pyr-73 | 0.65 | 3899 | 605.1 | 2.71 | 1.09 | 0.05 | 7515 | 2.16 | <0.108 | 0.085 | <0.173 | 0.006 | 0.75 | 0.195 | 0.91 | <0.052 | 0.149 | <0.76 | 0.032 | 3.44 | 8.47 |
| MF33Pyr-74 | 1.74 | 3804 | 230.9 | 15.63 | 2.32 | 0.139 | 6083 | 2.52 | <0.083 | 0.377 | <0.118 | 0.009 | 0.47 | 0.62 | 4.18 | <0.076 | 0.91 | <0.73 | 0.075 | 20.72 | 29.29 |
| MF33Pyr-75 | 0.269 | 4128 | 887.4 | 1.22 | 0.67 | <0.047 | 9323 | 3.59 | <0.154 | 0.024 | <0.096 | <0.0060 | 0.82 | 0.101 | 1.3 | <0.078 | 0.054 | <0.85 | <0.0127 | <0.163 | 8.55 |
| MF33Pyr-76 | 7.02 | 4414 | 888.1 | 0.78 | 2.27 | 0.1 | 9733 | 2.53 | <0.137 | <0.021 | <0.129 | <0.0069 | <0.211 | 0.15 | 0.74 | 0.007 | 0.42 | <0.79 | <0.0207 | <0.148 | 8.71 |
| MF33Pyr-77 | 0.489 | 5687 | 1131 | <0.23 | <0.46 | <0.036 | 12094 | 4.58 | <0.125 | <0.0281 | <0.130 | <0.0040 | <0.187 | <0.065 | <0.64 | <0.064 | <0.028 | <0.71 | <0.0121 | <0.162 | 0.286 |
| MF33Pyr-78 | 0.382 | 5754 | 977.1 | <0.31 | 19.63 | <0.031 | 11547 | 2.39 | <0.106 | <0.024 | <0.154 | <0.0078 | 0.262 | <0.062 | <0.62 | <0.044 | 0.03 | <0.72 | <0.0117 | <0.143 | 1.01 |
| MF33Pyr-79 | 9.47 | 5017 | 1207 | 1.07 | 2.17 | 0.204 | 11942 | 2.8 | <0.097 | 0.016 | <0.091 | <0.0080 | 0.49 | 0.071 | 0.72 | <0.063 | 0.064 | <0.70 | <0.0138 | <0.151 | 5.78 |
| MF33Pyr-80 | <0.25 | 3981 | 1063 | <3.98 | <0.54 | <0.034 | 10693 | 4.04 | <0.110 | <0.0242 | 0.053 | 0.011 | 0.227 | <0.057 | 1.28 | <0.022 | 0.1 | <0.78 | <0.0116 | <0.141 | 6.42 |
| **Mean n=80** | 2 | 1891 | 724 | 20 | 3 | 1 | 8264 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | - | 0 | 8 | 13 |
| **S.D** | 2 | 1430 | 523 | 72 | 12 | 4 | 1841 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | - | 0 | 8 | 14 |
| **Min** | 0.21 | 59.00 | 39.18 | 0.31 | 0.37 | 0.02 | 4324 | 1.59 | 0.11 | 0.01 | 0.03 | 0.00 | 0.18 | 0.05 | 0.67 | 0.01 | 0.02 | 0.00 | 0.00 | 0.31 | 0.29 |
| **Max** | 10 | 5754 | 1886 | 452 | 101 | 27 | 12209 | 5 | 0 | 1 | 0 | 0 | 10 | 2 | 6 | 4 | 2 | 0 | 0 | 32 | 95 |

| Sample # | $^{55}$Mn | $^{59}$Co | $^{60}$Ni | $^{65}$Cu | $^{66}$Zn | $^{69}$Ga | $^{75}$As | $^{82}$Se | $^{95}$Mo | $^{107}$Ag | $^{111}$Cd | $^{115}$In | $^{118}$Sn | $^{121}$Sb | $^{125}$Te | $^{184}$W | $^{197}$Au | $^{202}$Hg | $^{205}$Tl | $^{208}$Pb | $^{209}$Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF34Pyr-1 | 1.51 | 81 | 69.59 | 17.5 | 1.66 | 0.043 | 5359 | <3.54 | <0.116 | 0.157 | <0.094 | <0.0087 | <0.22 | <0.123 | 1.24 | 0.255 | 0.18 | <2.15 | 0.038 | 6.99 | 16.82 |
| MF34Pyr-2 | 1.01 | 80 | 52.96 | <0.83 | 2.81 | <0.030 | 5249 | <2.87 | <0.068 | <0.054 | 0.027 | <0.0088 | <0.222 | 0.126 | <0.69 | <0.073 | <0.042 | <1.85 | <0.0146 | <0.208 | 8.27 |
| MF34Pyr-3 | 3.58 | 136 | 58.84 | 0.79 | 2.25 | 0.129 | 6771 | <2.41 | <0.100 | <0.037 | <0.091 | <0.0073 | <0.22 | 0.258 | 0.97 | <0.061 | 0.195 | <1.61 | <0.0185 | 0.205 | 11.01 |
| MF34Pyr-4 | 13.76 | 746 | 152 | 10.99 | 5.37 | 0.41 | 11481 | <2.37 | <0.104 | <0.035 | 0.028 | <0.0116 | <0.26 | 1.2 | 14.48 | <0.054 | 1.5 | <1.53 | 0.014 | 1.03 | 99.84 |
| MF34Pyr-5 | 0.491 | 38 | 14.49 | 2.92 | 0.89 | <0.044 | 11161 | <2.16 | <0.040 | <0.038 | <0.139 | 0.009 | <0.27 | <0.133 | 0.7 | <0.025 | 0.097 | <1.42 | <0.0184 | <0.162 | 1.54 |
| MF34Pyr-6 | 4.95 | 88 | 56.14 | 18.46 | 2.08 | 0.125 | 7271 | <2.16 | <0.098 | 0.243 | <0.194 | <0.0077 | <0.29 | 0.348 | 2.66 | <0.128 | 0.28 | <1.57 | <0.021 | 2.89 | 16.82 |
| MF34Pyr-7 | 11.81 | 510 | 361.8 | 14.35 | 1.78 | 0.27 | 4956 | <2.09 | <0.037 | <0.033 | <0.089 | <0.0101 | <0.24 | 0.85 | 5.72 | <0.114 | 0.69 | <1.37 | <0.0153 | 0.66 | 50.18 |
| MF34Pyr-8 | 5.7 | 325 | 121.1 | 166.25 | 3.36 | 0.117 | 5828 | 2.29 | <0.063 | 0.151 | 0.079 | 0.009 | <0.21 | 0.83 | 7.48 | 0.07 | 0.73 | 1.26 | <0.0118 | 1.65 | 51.16 |
| MF34Pyr-9 | 2.57 | 49 | 41.43 | 276.11 | 432.1 | <0.051 | 10299 | <2.31 | <0.098 | 0.063 | <0.194 | <0.0110 | <0.21 | 0.71 | 3.12 | <0.035 | 0.236 | <1.31 | 0.021 | 2.32 | 36.27 |
| MF34Pyr-10 | 0.25 | 12 | 5.69 | <0.43 | 2.56 | <0.037 | 7986 | <2.02 | <0.079 | <0.037 | <0.096 | <0.0147 | <0.24 | <0.099 | <0.64 | <0.034 | <0.030 | <1.23 | <0.00 | <0.159 | 0.228 |
| MF34Pyr-11 | 0.196 | 7.8 | 2.53 | 82.28 | 1.54 | <0.026 | 7585 | <2.19 | <0.092 | <0.045 | 0.03 | 0.007 | <0.24 | <0.104 | <0.42 | <0.025 | 0.034 | <1.27 | 0.02 | <0.158 | 0.116 |
| MF34Pyr-12 | 5.48 | 284 | 14.96 | 47.82 | 1.49 | <0.047 | 7738 | <2.29 | <0.092 | 0.599 | <0.100 | <0.0104 | <0.28 | 0.211 | 1.69 | <0.160 | 0.88 | <1.33 | 0.143 | 13.52 | 20.86 |
| MF34Pyr-13 | 4.47 | 150 | 20.51 | 79.89 | <1.07 | 0.039 | 8756 | <1.98 | <0.060 | <0.040 | <0.146 | <0.0095 | <0.28 | 0.443 | 1.64 | <0.045 | 0.51 | <1.25 | <0.032 | 0.276 | 24.35 |
| MF34Pyr-14 | 1.09 | 2498 | 99.34 | 5.51 | 1.91 | <0.036 | 7214 | 3.7 | <0.095 | 0.056 | <0.146 | <0.0083 | <0.28 | 0.293 | <0.73 | <0.0263 | 0.122 | <1.40 | <0.0177 | 8.37 | 6.5 |
| MF34Pyr-15 | 2.9 | 139 | 117 | 39.37 | <0.66 | <0.035 | 4989 | 2.52 | <0.061 | 0.573 | 0.033 | <0.0138 | <0.26 | 0.8 | 11.82 | 0.113 | 3.66 | <1.43 | 0.027 | 6.68 | 78.49 |
| MF34Pyr-16 | 2.29 | 1859 | 208.1 | 21.38 | 2.4 | 0.338 | 6738 | <2.23 | 0.134 | 0.092 | <0.105 | <0.0109 | 1.04 | 0.307 | 3.13 | 0.242 | 0.45 | <1.33 | 0.035 | 3.28 | 20.57 |
| MF34Pyr-17 | 7.97 | 569 | 287.5 | 3.16 | 2.35 | 0.12 | 6442 | <2.09 | <0.122 | 0.214 | 0.059 | <0.0092 | <0.24 | 1.14 | 7.08 | <0.062 | 0.86 | <1.25 | 0.018 | 0.69 | 69.3 |
| MF34Pyr-18 | 2.93 | 78 | 46.15 | 20.03 | 1.88 | <0.039 | 6754 | 2.44 | <0.080 | 0.371 | <0.158 | <0.0104 | <0.30 | 0.609 | 0.79 | 0.178 | 0.33 | <1.34 | 0.061 | 5.39 | 27.83 |
| MF34Pyr-19 | 0.723 | 85 | 16.97 | 5.75 | 0.95 | 0.1 | 4514 | <2.25 | <0.104 | <0.036 | 0.068 | <0.0074 | <0.30 | 1.11 | 2.34 | 2.44 | 0.302 | 1.35 | <0.0123 | 0.59 | 32.87 |
| MF34Pyr-20 | 14.62 | 128 | 37.15 | 28.84 | 6.07 | 70.79 | 1929 | <5.35 | <0.19 | 0.196 | <0.270 | 0.029 | 2.05 | 2.11 | 6.08 | 6.46 | 0.68 | <3.28 | 0.088 | 6.99 | 62.36 |
| MF34Pyr-21 | 4.63 | 343 | 74.7 | 9.86 | 4.54 | 0.197 | 7650 | <2.40 | <0.141 | 0.115 | <0.217 | <0.0112 | <0.39 | 1.07 | 6.63 | <0.55 | 0.52 | <2.25 | 0.021 | 1.49 | 60.15 |
| MF34Pyr-22 | 10.43 | 78 | 25.02 | 63.49 | 12.71 | 3.05 | 5228 | <2.43 | <0.096 | 0.453 | <0.117 | 0.021 | 4.28 | 0.519 | 1.86 | 0.83 | 0.57 | <1.90 | 0.168 | 16.77 | 21.95 |
| MF34Pyr-23 | <0.151 | 4056 | 361.8 | 1.26 | 94.39 | 0.069 | 8152 | <2.26 | <0.087 | 0.066 | <0.106 | <0.0110 | <0.24 | <0.091 | <0.69 | <0.027 | <0.041 | <1.60 | 0.016 | 4.14 | 1.97 |
| MF34Pyr-24 | 1.11 | 141 | 17.61 | 10.62 | 0.87 | 0.534 | 2353 | <2.14 | <0.080 | 0.046 | <0.113 | 0.02 | 4.14 | 3.18 | 7.23 | 20.12 | 0.68 | <1.65 | <0.025 | 1.24 | 76.73 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF34Pyr-25 | 10.07 | 37 | 17.84 | 56.7 | 2.01 | 0.512 | 2698 | <2.37 | <0.084 | 0.243 | 0.035 | <0.0174 | 2.63 | 1.64 | 4.28 | 16.55 | 0.43 | <1.68 | 0.02 | 7.21 | 48.17 |
| MF34Pyr-26 | 12.04 | 46 | 45.45 | 195.4 | 19.87 | 6.83 | 1661 | <3.23 | 0.39 | 1.71 | 0.23 | 0.069 | 15.17 | 2.71 | 11.47 | 89.02 | 0.93 | 2.07 | 0.111 | 23.21 | 92.9 |
| MF34Pyr-27 | 4.33 | 36 | 32.46 | 144.87 | 2.8 | 1.7 | 1413 | <2.54 | 0.114 | 0.98 | <0.21 | 0.027 | 6.23 | 4 | 8.47 | 40.23 | 0.92 | <1.54 | 0.036 | 18.23 | 114.5 |
| MF34Pyr-28 | 1.75 | 32 | 20.45 | 60.76 | 0.9 | 0.816 | 3085 | <2.32 | <0.142 | 0.062 | <0.115 | <0.0106 | 0.75 | 2.23 | 4 | 4.31 | 0.41 | <1.50 | 0.017 | 21.43 | 70.23 |
| MF34Pyr-29 | 21.17 | 136 | 124.3 | 116.58 | 32.67 | 0.45 | 7508 | 10.05 | 0.129 | 1.43 | 0.43 | 0.118 | <0.62 | 2.14 | 12.29 | 34.23 | 0.53 | <1.60 | 0.026 | 25.43 | 69.69 |
| MF34Pyr-30 | 2.01 | 74 | 130.3 | 81.29 | 5.3 | 0.364 | 2461 | 3.17 | <0.158 | 0.629 | <0.202 | <0.0132 | 0.87 | 1.16 | 3.24 | 6.75 | 0.34 | 1.4 | 0.021 | 14.28 | 41.32 |
| MF34Pyr-31 | 13.75 | 762 | 1179 | 156.09 | 8.4 | 3.85 | 8897 | 17.18 | <0.120 | 1.9 | <0.23 | <0.0148 | 6 | 1.31 | 13.27 | 29.36 | 1.16 | 1.72 | 0.086 | 26.33 | 75.99 |
| MF34Pyr-32 | 0.643 | 23 | 35.89 | 5.79 | 2.92 | 0.476 | 1580 | <2.42 | <0.118 | <0.035 | <0.167 | <0.0134 | 0.87 | 2.31 | 3.29 | 3.13 | 0.4 | <1.40 | 0.019 | 1.4 | 67 |
| MF34Pyr-33 | 0.71 | 11 | 24.19 | 14.28 | 1.5 | 0.729 | 1171 | <2.26 | <0.147 | 0.041 | <0.120 | 0.048 | 1.78 | 2.98 | 6.42 | 10.51 | 0.49 | <1.51 | <0.023 | 1.8 | 93.35 |
| MF34Pyr-34 | 1.31 | 28 | 10.91 | 54.79 | 1.99 | 3.31 | 2874 | 2.5 | 1.15 | 0.218 | <0.109 | 0.026 | 2.63 | 2.52 | 9.04 | 10.94 | 0.81 | <1.36 | 0.166 | 6.67 | 90.24 |
| MF34Pyr-35 | 0.573 | 20 | 8.09 | 4.13 | 0.96 | 0.051 | 4776 | <2.03 | <0.146 | <0.042 | 0.14 | <0.0147 | 0.6 | 0.97 | 1.61 | 3.06 | 0.282 | <1.40 | <0.0150 | 0.302 | 26.23 |
| MF34Pyr-36 | 3.18 | 135 | 66.34 | 20.73 | 5.69 | 2.51 | 3146 | <2.45 | <0.138 | 0.072 | 0.076 | <0.0059 | 2.28 | 4.94 | 9.5 | 13.38 | 0.62 | <1.57 | <0.020 | 9.35 | 117.7 |
| MF34Pyr-37 | 4.05 | 82 | 40.2 | 17.73 | 2.78 | 2.67 | 1414 | <2.67 | 0.28 | 0.15 | <0.179 | 0.041 | 10.32 | 4.41 | 7.05 | 82.22 | 0.57 | <1.66 | <0.024 | 3.53 | 114.5 |
| MF34Pyr-38 | 9.53 | 57 | 23.63 | 57.43 | 4.05 | 0.68 | 2001 | <2.42 | <0.128 | 0.78 | <0.18 | <0.0156 | 1.11 | 1.42 | 6.17 | 7.4 | 0.44 | <1.61 | 0.235 | 22.07 | 73.41 |
| MF34Pyr-39 | 0.99 | 23 | 11.97 | 24.68 | 1.04 | 0.612 | 1504 | <2.23 | <0.124 | 0.146 | <0.18 | 0.028 | 3.74 | 2.66 | 7.38 | 22.04 | 0.57 | <1.34 | 0.026 | 8.34 | 95.69 |
| MF34Pyr-40 | 1.15 | 7.6 | 9.14 | 10.94 | 0.49 | 0.449 | 1487 | <2.14 | <0.138 | 0.029 | <0.113 | <0.0090 | 1.56 | 2.98 | 5.58 | 7.73 | 0.68 | <1.37 | 0.033 | 1.85 | 97.43 |
| MF34Pyr-41 | 31.96 | 133 | 34.77 | 10.35 | 13.03 | 2.47 | 5277 | <2.36 | <0.119 | 0.094 | 0.25 | 0.002 | <0.27 | 0.285 | <0.82 | <0.121 | 0.48 | <2.44 | 0.043 | 3.8 | 11.59 |
| MF34Pyr-42 | 3.08 | 142 | 25.84 | 28.35 | 2.26 | 2.48 | 5025 | <2.16 | <0.137 | 0.095 | 0.07 | <0.0109 | 1.64 | 0.415 | 1.89 | 1.71 | 0.181 | <1.77 | 0.035 | 0.79 | 19.66 |
| MF34Pyr-43 | 6.37 | 168 | 93.17 | 62.16 | 5.69 | 5.99 | 3815 | <2.40 | <0.107 | 0.302 | 0.039 | 0.028 | 4.8 | 0.75 | 1.08 | 3.12 | 0.254 | <2.16 | 0.077 | 2.24 | 15.39 |
| MF34Pyr-44 | 0.276 | 19 | 12.82 | 1.88 | 0.78 | <0.040 | 1943 | <2.05 | <0.153 | 0.085 | 0.067 | <0.0052 | 0.46 | 0.496 | <0.66 | 0.86 | 0.075 | <1.64 | <0.0123 | 0.66 | 14.51 |
| MF34Pyr-45 | 0.76 | 2 | 2.41 | 5.63 | 1.77 | 0.521 | 3910 | <2.33 | <0.146 | 0.118 | <0.168 | <0.0135 | 5.49 | 0.96 | <0.91 | 39.57 | 0.09 | <1.69 | 0.022 | 2.61 | 17.65 |
| MF34Pyr-46 | 0.79 | 5.5 | 3.34 | 4.37 | 1.7 | 0.227 | 1275 | <2.27 | <0.095 | <0.031 | <0.116 | <0.0108 | 0.87 | 1.19 | 1.82 | 5.4 | 0.208 | <1.45 | <0.0179 | 0.83 | 45.77 |
| MF34Pyr-47 | 0.361 | 118 | 89.72 | 2.22 | 0.95 | <0.038 | 6223 | 2.56 | <0.123 | 0.024 | <0.114 | 0.011 | <0.23 | 0.135 | <0.68 | 0.55 | <0.072 | <1.55 | <0.0152 | <0.067 | 5.42 |
| MF34Pyr-48 | 0.403 | 20 | 12.69 | 4.66 | 1.08 | 0.273 | 2021 | <2.20 | <0.124 | <0.046 | <0.162 | <0.0092 | 1.75 | 1.25 | 2.74 | 9.79 | 0.84 | <1.40 | <0.0154 | 0.92 | 43.34 |
| MF34Pyr-49 | 0.64 | 37 | 13.76 | 13.64 | 1.35 | 1 | 5200 | <2.32 | <0.122 | 0.29 | <0.122 | 0.009 | 1.45 | 0.79 | 1.86 | 3.51 | 0.239 | <1.53 | 0.019 | 11.96 | 20.46 |
| MF34Pyr-50 | 0.67 | 18 | 5.63 | 10.32 | 1.31 | 0.186 | 2834 | <2.25 | <0.140 | 0.293 | <0.210 | <0.0112 | <0.23 | 0.213 | <0.84 | 0.39 | 0.238 | <1.70 | <0.019 | 4.84 | 9.3 |
| MF34Pyr-51 | 0.177 | 44 | 30.1 | 11.9 | 1.83 | 0.52 | 5426 | <2.31 | <0.168 | 0.318 | <0.175 | <0.0152 | 0.31 | <0.086 | <0.67 | <0.148 | <0.048 | <1.45 | <0.019 | 1.75 | 1.62 |
| MF34Pyr-52 | 0.557 | 42 | 43.8 | 3.21 | 1.49 | <0.05 | 4949 | <2.23 | <0.127 | <0.022 | <0.203 | <0.0154 | 0.61 | 1.07 | 0.93 | 2.58 | 0.186 | <1.46 | 0.014 | 0.52 | 27.59 |
| MF34Pyr-53 | 0.466 | 11 | 3.27 | 2.57 | 5.9 | 0.075 | 2186 | <1.96 | <0.151 | <0.00 | <0.158 | <0.0073 | 0.6 | 0.64 | <0.79 | 2.67 | 0.085 | <1.34 | <0.0193 | 0.27 | 19.21 |
| MF34Pyr-54 | 0.37 | 12 | 14.58 | 6.06 | 1.4 | 0.201 | 2279 | <2.31 | <0.109 | 0.072 | <0.168 | <0.0146 | 0.57 | 0.65 | 1.65 | 3.79 | 0.35 | <1.48 | <0.0184 | 0.188 | 27.84 |
| MF34Pyr-55 | 0.8 | 330 | 37.68 | 2.52 | 1.5 | 0.053 | 3526 | <1.89 | <0.111 | 0.085 | <0.191 | <0.0126 | <0.23 | 0.379 | 1.5 | 0.447 | 0.152 | <1.30 | <0.0191 | 0.6 | 14.62 |
| MF34Pyr-56 | 1.12 | 487 | 46.16 | 8.2 | <0.53 | 4.17 | 3405 | <2.22 | <0.131 | 0.133 | <0.226 | <0.0166 | <0.31 | 1.06 | 1.18 | 5.21 | 0.192 | <1.28 | 0.024 | 4.15 | 21.33 |
| MF34Pyr-57 | <0.172 | 2679 | 750.9 | 0.9 | 1.01 | <0.043 | 6811 | 4.08 | <0.126 | <0.029 | <0.00 | <0.0072 | 0.21 | 0.096 | <0.60 | <0.084 | 0.074 | <1.39 | <0.0085 | 0.62 | 2.3 |
| MF34Pyr-58 | 0.94 | 68 | 32.8 | 2.76 | 1.76 | 4.69 | 3516 | <2.25 | <0.23 | <0.023 | <0.123 | <0.0152 | 0.73 | 0.72 | 1.4 | 2.61 | 0.115 | <1.37 | 0.03 | 2.58 | 21.61 |
| MF34Pyr-59 | 2.84 | 1642 | 341.4 | 26.05 | 2.63 | 11.81 | 4032 | 3.76 | <0.132 | 0.7 | <0.203 | <0.0134 | 2.04 | 0.388 | 3.06 | 1.75 | 0.72 | <1.85 | 0.034 | 14.22 | 15.78 |
| MF34Pyr-60 | 8.71 | 1722 | 395.6 | 17.18 | 3.34 | 59.85 | 4597 | <4.17 | <0.22 | 0.53 | 0.19 | 0.131 | 43.61 | <0.163 | 1.71 | 232.4 | 0.21 | <2.58 | <0.039 | 6.53 | 8.87 |
| MF34Pyr-61 | 3.95 | 24 | 11.25 | 5.78 | 2.46 | 0.047 | 5814 | <2.31 | <0.164 | 0.135 | <0.210 | <0.0138 | <0.33 | 0.423 | <0.71 | 0.68 | 0.172 | <2.53 | 0.018 | 5.52 | 9.74 |
| MF34Pyr-62 | 0.351 | 25 | 11.05 | 1.53 | 0.93 | <0.058 | 3246 | <2.35 | <0.109 | <0.032 | <0.119 | <0.0055 | <0.28 | 0.464 | 1.08 | 0.312 | 0.091 | <2.02 | <0.019 | <0.125 | 10.09 |
| MF34Pyr-63 | 2.62 | 92 | 30.58 | 2.8 | 1.65 | <0.049 | 5053 | <2.08 | <0.110 | 0.026 | <0.120 | <0.0112 | <0.27 | 0.49 | 1.06 | <0.053 | 0.182 | <1.76 | <0.0228 | <0.22 | 16.35 |
| MF34Pyr-64 | 33.52 | 254 | 261.7 | 9.69 | 6.81 | 0.318 | 6923 | <2.26 | <0.152 | 0.157 | <0.203 | <0.0122 | <0.28 | 2.79 | 14.84 | <0.117 | 1.98 | <1.58 | 0.098 | 4.22 | 174.8 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF34Pyr-65 | 1.53 | 620 | 243.4 | 2.9 | 2.01 | <0.032 | 5913 | <2.16 | <0.111 | 0.114 | <0.192 | <0.0115 | <0.24 | 0.25 | 5.53 | <0.040 | 0.5 | <1.50 | <0.0173 | 0.325 | 33.16 |
| MF34Pyr-66 | 10.29 | 531 | 226.1 | 31.49 | 3.93 | 0.159 | 6334 | <2.36 | <0.158 | 0.406 | <0.223 | <0.0103 | <0.25 | 0.91 | 6.97 | <0.070 | 1.17 | <1.51 | 0.048 | 79.69 | 63.21 |
| MF34Pyr-67 | 3.91 | 191 | 61.3 | 3.09 | 1.71 | <0.041 | 1081 | 2.87 | <0.133 | 0.049 | <0.257 | <0.0107 | <0.24 | 0.69 | 96.59 | 0.072 | 0.5 | <1.61 | 0.028 | 1.91 | 229.9 |
| MF34Pyr-68 | 7.91 | 215 | 143.5 | 2.77 | 3.54 | 0.103 | 7255 | <2.30 | <0.149 | 0.068 | <0.164 | <0.0152 | <0.29 | 0.57 | 5.39 | <0.103 | 0.38 | <1.42 | 0.017 | 0.69 | 48.65 |
| MF34Pyr-69 | 368.6 | 241 | 56.61 | 48.32 | 15.17 | 0.106 | 5935 | 3.99 | <0.150 | 1.32 | <0.150 | 0.04 | 0.67 | 0.375 | 5.25 | 4.1 | 1.94 | 2.12 | 0.218 | 50.15 | 48.6 |
| MF34Pyr-70 | 4.93 | 501 | 44.13 | 10.43 | 2.52 | <0.042 | 6616 | 2.72 | <0.127 | 0.239 | <0.234 | <0.0077 | <0.31 | 0.17 | <0.73 | <0.138 | 0.283 | <1.45 | 0.027 | 1.63 | 12.47 |
| MF34Pyr-71 | 1.7 | 158 | 17.57 | <0.31 | 1.86 | <0.049 | 5699 | <2.08 | <0.115 | <0.049 | <0.23 | <0.0107 | <0.24 | <0.093 | <0.76 | <0.089 | <0.058 | <1.38 | <0.0155 | <0.143 | 3.79 |
| MF34Pyr-72 | 2.02 | 24 | 2.62 | 2.74 | 4.73 | <0.041 | 4357 | <2.05 | <0.142 | <0.044 | <0.116 | <0.0132 | <0.22 | 0.264 | 1.19 | 0.419 | 0.53 | <1.42 | 0.018 | 0.59 | 14.72 |
| MF34Pyr-73 | 4.57 | 657 | 125.8 | 8.63 | 1.94 | 1.74 | 4867 | <1.92 | <0.131 | 0.273 | <0.19 | 0.007 | <0.195 | 0.76 | 5.08 | 0.18 | 0.78 | <1.33 | 0.044 | 5.48 | 54.37 |
| MF34Pyr-74 | 14.84 | 1957 | 458.6 | 200.25 | 11.9 | 0.253 | 7473 | 2.24 | <0.098 | 0.524 | <0.153 | <0.0071 | 1.3 | 3.42 | 29.36 | 5.94 | 4.21 | <1.26 | 0.031 | 3.38 | 211.2 |
| MF34Pyr-75 | 3.72 | 41 | 16.62 | 46.84 | 3.21 | 4.96 | 2648 | <2.59 | <0.149 | 0.368 | <0.138 | 0.04 | 6.83 | 0.92 | 3.36 | 23.93 | 0.42 | <1.85 | 0.103 | 28.42 | 28.87 |
| MF34Pyr-76 | 0.471 | 62 | 36.72 | 3.16 | <0.38 | <0.037 | 4406 | <2.11 | <0.111 | 0.108 | <0.158 | <0.0137 | <0.26 | 0.163 | <0.76 | <0.057 | <0.062 | <1.36 | 0.016 | 3.16 | 2.79 |
| MF34Pyr-77 | 1.64 | 59 | 29.04 | 23.9 | 2.7 | 0.097 | 3864 | <2.02 | <0.149 | 0.248 | <0.00 | <0.0098 | <0.30 | 0.411 | 2.14 | 2.76 | 0.145 | <1.32 | 0.02 | 2.59 | 23.13 |
| MF34Pyr-78 | 1.33 | 51 | 16.56 | 7.33 | 4.05 | 0.196 | 2238 | <1.98 | <0.094 | 0.037 | <0.179 | <0.0107 | 0.36 | 0.423 | 1.43 | 3.74 | 0.153 | <1.20 | <0.0197 | 0.81 | 10.52 |
| MF34Pyr-79 | 0.488 | 20 | 14.79 | <0.32 | 0.41 | <0.038 | 6369 | <2.03 | <0.132 | 0.025 | <0.145 | <0.0095 | <0.173 | <0.081 | <0.62 | <0.053 | <0.033 | <1.03 | 0.01 | <0.087 | <0.078 |
| MF34Pyr-80 | 2.37 | 33 | 18.25 | 14.34 | 2.31 | 4.02 | 5956 | <2.45 | <0.176 | 0.344 | <0.125 | 0.017 | 4.39 | <0.068 | <0.72 | 0.77 | 0.055 | <1.42 | 0.083 | 0.41 | 1.33 |
| **Mean n=80** | 9 | 343 | 98 | 34 | 11 | 4 | 4880 | 4 | 0 | 0 | 0 | 0 | 4 | 1 | 7 | 15 | 1 | 2 | 0 | 7 | 44 |
| **S.D** | 42 | 690 | 176 | 53 | 50 | 12 | 2434 | 4 | 0 | 0 | 0 | 0 | 7 | 1 | 13 | 35 | 1 | 0 | 0 | 12 | 46 |
| **Min** | 0.18 | 2.00 | 2.41 | 0.79 | 0.41 | 0.04 | 1081 | 2.24 | 0.11 | 0.02 | 0.03 | 0.00 | 0.21 | 0.10 | 0.70 | 0.07 | 0.03 | 1.26 | 0.01 | 0.19 | 0.12 |
| **Max** | 369 | 4056 | 1179 | 276 | 432 | 71 | 11481 | 17 | 1 | 2 | 0 | 0 | 44 | 5 | 97 | 232 | 4 | 2 | 0 | 80 | 230 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF37Pyr-1 | 0.32 | 101 | 17.53 | <0.75 | 1 | <0.030 | 951 | <1.98 | <0.154 | <0.194 | <0.148 | <0.0049 | <0.195 | <0.081 | <0.68 | <0.071 | <0.31 | <2.05 | <0.0082 | <0.067 | <0.071 |
| MF37Pyr-2 | 0.274 | 41 | 9.48 | 3.38 | 52.93 | <0.047 | 1156 | <1.97 | <0.136 | <0.025 | 0.031 | <0.0085 | <0.194 | <0.058 | <0.79 | <0.082 | <0.41 | <1.75 | <0.0082 | <0.113 | <0.074 |
| MF37Pyr-3 | 0.34 | 3.3 | 1.65 | 5.05 | 2.32 | <0.038 | 4967 | <1.99 | <0.107 | <0.194 | <0.26 | <0.0070 | 0.54 | 0.138 | <0.65 | 1.36 | <0.36 | <1.61 | <0.0118 | <0.108 | 3.49 |
| MF37Pyr-4 | 0.7 | 934 | 56.08 | 1.16 | 10.14 | 0.1 | 3112 | <1.86 | <0.134 | <0.028 | 0.031 | <0.0152 | <0.22 | 0.174 | <0.77 | 0.67 | <0.29 | <1.53 | <0.0114 | <0.088 | 5.87 |
| MF37Pyr-5 | 0.177 | 31 | 3.4 | 1.62 | 2.44 | <0.035 | 3271 | <2.01 | <0.147 | <0.124 | <0.148 | <0.0084 | 0.26 | 0.478 | 1.3 | 1.55 | <0.29 | <1.53 | <0.0115 | 0.233 | 12.69 |
| MF37Pyr-6 | 0.625 | 87 | 13.97 | 3.44 | 0.84 | <0.044 | 6362 | <2.07 | 0.106 | <0.204 | 0.033 | <0.0105 | 0.3 | 0.73 | 1.09 | 0.97 | <0.33 | <1.56 | <0.020 | 0.233 | 15.26 |
| MF37Pyr-7 | 1 | 23 | 68.28 | 6.53 | 301.8 | <0.047 | 6716 | <1.90 | 0.139 | <0.095 | 0.068 | <0.0075 | 0.5 | 1.07 | 1.64 | 4.19 | <0.36 | <1.59 | <0.0236 | 0.49 | 31.56 |
| MF37Pyr-8 | 0.491 | 416 | 405.8 | 14.67 | 0.59 | <0.029 | 8613 | <2.06 | <0.119 | 0.361 | <0.156 | <0.0115 | <0.23 | 0.86 | 3.66 | 1.49 | <0.38 | <1.33 | <0.0172 | 0.301 | 34.83 |
| MF37Pyr-9 | 0.145 | 246 | 41.04 | 4.26 | 0.84 | <0.034 | 7991 | <2.11 | <0.115 | <0.174 | 0.069 | <0.0107 | 0.39 | 0.81 | 2.83 | 1.68 | <0.37 | <1.58 | <0.018 | 0.162 | 27.17 |
| MF37Pyr-10 | 1 | 183 | 243.2 | 5.46 | 140.1 | <0.043 | 19299 | 3.59 | <0.078 | 0.554 | <0.220 | 0.017 | <0.21 | 2.04 | 9.39 | <0.075 | <0.38 | <1.40 | <0.0149 | 2.12 | 65.8 |
| MF37Pyr-11 | 3.23 | 88 | 91.53 | 360.08 | 1.26 | 0.051 | 9450 | 2.82 | <0.174 | <0.155 | <0.155 | 0.008 | <0.215 | 0.131 | 1.03 | <0.106 | <0.36 | <1.35 | 0.013 | 0.252 | 7.94 |
| MF37Pyr-12 | 8.61 | 0.08 | 1.38 | 2.04 | 3.46 | 0.155 | 25941 | 2.72 | <0.124 | <0.175 | 0.032 | <0.0150 | <0.27 | 0.271 | <0.69 | <0.062 | <0.34 | <1.43 | <0.0188 | 1.71 | 2.92 |
| MF37Pyr-13 | 0.88 | 3 | 6.42 | 28.6 | 0.91 | 0.405 | 20155 | <2.00 | <0.129 | 0.176 | <0.112 | 0.025 | 2.37 | 0.341 | <0.76 | 0.25 | <0.36 | <1.35 | 0.02 | 0.35 | 13.63 |
| MF37Pyr-14 | 2.3 | 185 | 95.07 | 29.16 | 4.18 | 0.087 | 6501 | <1.75 | <0.158 | 0.67 | <0.104 | <0.0108 | 0.76 | 2.44 | 12.4 | 1.47 | <0.57 | <1.21 | 0.013 | 2.18 | 70.22 |
| MF37Pyr-15 | 4.38 | 1999 | 976.9 | 28.93 | 1.71 | 0.83 | 12276 | <1.80 | <0.134 | 0.74 | 0.031 | <0.0160 | 2.85 | 1.52 | 13.29 | 0.59 | <0.63 | <1.30 | <0.024 | 5.16 | 66.68 |
| MF37Pyr-16 | 1.37 | 450 | 462.6 | 16.36 | 2.05 | 0.598 | 12275 | <1.96 | <0.094 | 0.86 | 0.062 | 0.014 | 2.49 | 0.492 | 3.64 | 0.211 | <0.29 | <1.07 | 0.013 | 1.71 | 16.17 |
| MF37Pyr-17 | 1.59 | 3804 | 449.4 | 43.51 | 1.09 | 1.91 | 9094 | <2.07 | <0.169 | 0.74 | <0.151 | 0.02 | 4.62 | 0.77 | 6.97 | <0.22 | <0.69 | <1.24 | <0.0145 | 3.05 | 32.88 |
| MF37Pyr-18 | 0.464 | 74 | 11.29 | 41.34 | 0.6 | 0.088 | 3492 | <2.08 | <0.111 | <0.073 | <0.00 | <0.0052 | 0.28 | 1.13 | 2.58 | 2.45 | <0.32 | <1.32 | <0.0123 | 0.73 | 34.3 |
| MF37Pyr-19 | 1.09 | 1060 | 43.82 | 3.59 | 37.15 | 0.113 | 7504 | <1.66 | <0.155 | <0.124 | <0.102 | 0.057 | 0.32 | 1.04 | 2.85 | 1.74 | <0.27 | <1.28 | <0.0178 | 0.73 | 34.09 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF37Pyr-20 | 0.498 | 440 | 16.85 | 6.3 | 2.76 | 0.214 | 5770 | 2.5 | <0.098 | <0.123 | 0.064 | <0.0151 | 0.49 | 0.75 | 2.35 | 1.46 | <0.31 | <1.22 | <0.0169 | 0.406 | 29.63 |
| MF37Pyr-21 | 0.485 | 219 | 13.11 | 5.42 | 0.74 | <0.041 | 5567 | <1.84 | <0.121 | <0.178 | 0.17 | <0.0109 | 0.38 | 0.74 | 1.81 | 1.86 | <0.26 | <2.06 | <0.0142 | 0.363 | 18.21 |
| MF37Pyr-22 | 3.27 | 83 | 17.64 | 41.26 | 1.64 | 0.96 | 5567 | <1.99 | <0.145 | 0.65 | <0.152 | <0.0159 | 1.86 | 0.95 | 2.19 | 2.09 | <0.57 | <1.90 | 0.034 | 1.23 | 21.04 |
| MF37Pyr-23 | 0.305 | 11 | 17.3 | 4.34 | <0.51 | 0.058 | 6638 | <1.90 | <0.113 | <0.151 | <0.00 | 0.01 | 0.28 | 0.7 | 1.27 | 3.16 | <0.30 | <1.56 | <0.025 | 0.364 | 25.83 |
| MF37Pyr-24 | 0.201 | 34 | 13.4 | 11.54 | <0.45 | <0.043 | 7437 | <1.73 | <0.092 | <0.178 | <0.14 | <0.0094 | <0.21 | <0.075 | <0.50 | 0.054 | <0.40 | <1.48 | <0.0262 | <0.075 | 0.98 |
| MF37Pyr-25 | 0.391 | 44 | **** | 4.47 | 1.51 | 0.048 | 4226 | <1.82 | <0.143 | <0.117 | <0.176 | <0.0067 | <0.213 | 0.73 | 1.78 | 0.213 | <0.29 | <1.49 | <0.0159 | 0.276 | 20.1 |
| MF37Pyr-26 | 0.212 | 27 | 1.47 | 2.27 | 3.16 | <0.039 | 3965 | <1.75 | <0.125 | <0.145 | 0.061 | <0.0096 | <0.23 | 0.52 | 2.16 | 0.62 | <0.29 | <1.48 | <0.0213 | <0.088 | 16.37 |
| MF37Pyr-27 | 0.411 | 318 | 645.6 | 4.4 | 1.48 | <0.026 | 8711 | 1.77 | <0.104 | <0.135 | <0.137 | <0.0078 | 0.33 | 0.65 | 2.94 | 1.8 | <0.24 | <1.25 | <0.0170 | 0.51 | 31.81 |
| MF37Pyr-28 | 0.273 | 4.4 | 9.89 | 2.89 | <0.36 | 0.022 | 5782 | <1.76 | <0.119 | <0.026 | <0.093 | <0.0061 | 0.219 | 0.66 | 1.37 | 1.48 | <0.28 | <1.15 | <0.0206 | 0.316 | 25.18 |
| MF37Pyr-29 | 0.428 | 13 | 2.2 | 4.46 | 1.23 | 0.101 | 2822 | <1.66 | <0.101 | <0.018 | <0.094 | <0.0098 | 0.47 | 0.69 | 2.55 | 2 | <0.31 | <1.23 | <0.0104 | 0.283 | 23.27 |
| MF37Pyr-30 | 1.45 | 45 | 65.59 | 15.05 | 1.7 | 0.155 | 2688 | <1.70 | <0.093 | 0.516 | <0.145 | 0.011 | 0.74 | 0.66 | 4.05 | <0.116 | <0.30 | <1.39 | <0.0213 | 1.78 | 30.59 |
| MF37Pyr-31 | <0.138 | 3.4 | 33.49 | 16.46 | 1.46 | <0.036 | 2265 | <1.77 | <0.137 | <0.142 | <0.144 | <0.0106 | <0.25 | <0.053 | <0.79 | <0.105 | <0.24 | <1.23 | <0.0138 | <0.102 | <0.077 |
| MF37Pyr-32 | 0.272 | 2.8 | 6.86 | <0.32 | 0.95 | <0.038 | 1090 | <1.81 | <0.115 | <0.083 | <0.173 | <0.0081 | <0.198 | 0.072 | <0.72 | <0.037 | <0.26 | <1.22 | <0.0157 | <0.078 | 2.11 |
| MF37Pyr-33 | 1.56 | 86 | 22.56 | 30.45 | 2.85 | 7.46 | 1536 | <2.01 | <0.140 | <0.143 | 0.069 | 0.019 | 4.3 | <0.072 | <0.79 | 0.38 | <0.30 | <1.50 | 0.054 | 0.64 | 2.74 |
| MF37Pyr-34 | 0.9 | 33 | 20.6 | 31.03 | 0.89 | 2 | 1052 | <1.68 | <0.085 | 1.04 | <0.162 | 0.021 | 3.05 | <0.056 | <0.51 | 0.18 | <0.27 | <1.20 | 0.07 | 2.36 | 3.28 |
| MF37Pyr-35 | 0.697 | 52 | 19.1 | 5.92 | 1.18 | 1.21 | 7392 | 2 | <0.107 | 0.377 | <0.132 | <0.0076 | 1.51 | 0.168 | <0.75 | 0.333 | 0.147 | <1.18 | 0.027 | 1.73 | 2.61 |
| MF37Pyr-36 | 0.552 | 167 | 27.64 | 3.25 | 0.8 | 0.485 | 5776 | 2.14 | <0.088 | <0.137 | <0.167 | <0.0078 | 0.49 | 0.289 | 2.34 | 0.87 | <0.193 | <1.17 | <0.0131 | 0.199 | 11.35 |
| MF37Pyr-37 | 0.378 | 6.5 | 57.42 | 3.78 | 31.32 | 0.042 | 5387 | <1.69 | 0.126 | <0.130 | <0.188 | <0.0088 | <0.206 | 0.61 | 1.77 | 2.12 | <0.29 | <1.25 | <0.0128 | 0.252 | 24.67 |
| MF37Pyr-38 | 0.65 | 146 | 58.97 | 5.44 | 2.09 | 0.172 | 1334 | <1.83 | <0.057 | <0.175 | <0.243 | <0.0066 | 0.47 | 0.414 | 1.39 | <0.051 | <0.43 | <1.36 | <0.0135 | 0.81 | 10.69 |
| MF37Pyr-39 | 3.52 | 36 | 20.61 | 99.29 | 2.72 | 1.32 | 654 | <1.75 | <0.101 | 1.56 | <0.102 | 0.016 | 3.37 | 0.217 | 1.32 | 0.235 | <0.56 | <1.25 | 0.053 | 6.63 | 5.82 |
| MF37Pyr-40 | 5.88 | 244 | 243.2 | 130.28 | 1.77 | 9.1 | 5465 | <2.05 | <0.112 | 0.87 | <0.194 | 0.038 | 9.27 | 1.54 | 10.87 | 1.38 | <0.59 | <1.35 | 0.15 | 20.66 | 55.01 |
| MF37Pyr-41 | 1.51 | 153 | 287.8 | 35.1 | 2.05 | 3.89 | 6983 | 1.83 | <0.071 | 0.462 | <0.144 | 0.014 | 3.98 | 0.68 | 3.07 | 1.75 | <0.44 | <2.03 | 0.077 | 2.52 | 39.63 |
| MF37Pyr-42 | 1.35 | 65 | 13.44 | 37.23 | 1.92 | 0.91 | 3508 | <1.66 | <0.134 | <0.140 | <0.190 | 0.03 | 1.3 | 0.558 | 2.81 | 3.69 | <0.35 | <1.65 | 0.021 | 2.78 | 27.13 |
| MF37Pyr-43 | 0.354 | 39 | 3.98 | 4.05 | 0.34 | 0.098 | 2774 | <1.62 | 0.155 | 0.025 | <0.00 | <0.0097 | 0.61 | 0.87 | 3.05 | 2.41 | <0.180 | <1.48 | <0.0207 | 0.337 | 28.82 |
| MF37Pyr-44 | 0.394 | 16 | 3 | 4.99 | 1.27 | 0.092 | 3778 | <1.83 | <0.129 | <0.128 | <0.136 | <0.0090 | 0.46 | 0.64 | 3.36 | 2.32 | <0.30 | <1.41 | 0.034 | 11.12 | 30.52 |
| MF37Pyr-45 | 1.22 | 35 | 14.95 | 47.5 | 4.19 | 2.03 | 1978 | <1.78 | <0.150 | 1.04 | 0.19 | 0.024 | 3 | 1.68 | 5.83 | 3.45 | <0.31 | 1.42 | 0.12 | 3.98 | 52.22 |
| MF37Pyr-46 | 0.98 | 23 | 8.34 | 29.73 | 6.03 | 1.31 | 4624 | <1.90 | <0.138 | 0.86 | <0.098 | 0.022 | 2.18 | 0.8 | 6 | 2.04 | <0.29 | <1.19 | 0.033 | 3.99 | 48.21 |
| MF37Pyr-47 | 0.88 | 44 | 156.3 | 4.91 | 2.12 | 0.054 | 6636 | <1.70 | <0.106 | <0.134 | 0.03 | <0.0080 | 0.49 | 1.26 | 4.37 | 1.59 | <0.24 | <1.34 | <0.0135 | 1.09 | 52.62 |
| MF37Pyr-48 | 2.43 | 116 | 75.38 | 35.72 | 2.74 | 0.78 | 5211 | <1.97 | <0.110 | 0.7 | 0.122 | 0.025 | 5 | 3.31 | 5.47 | 2.75 | <0.45 | <1.34 | <0.020 | 4.77 | 70.07 |
| MF37Pyr-49 | 2.19 | 46 | 39.84 | 16.52 | 6.14 | 0.376 | 4721 | <1.76 | <0.114 | 0.52 | <0.100 | <0.0104 | 0.97 | 1.77 | 5.81 | 2.97 | <0.165 | <1.28 | 0.034 | 4.67 | 52.57 |
| MF37Pyr-50 | 0.328 | 115 | 21.49 | 5.91 | <0.43 | 0.04 | 5267 | <1.82 | <0.121 | 0.226 | <0.140 | 0.013 | 0.36 | 0.59 | 0.88 | 0.93 | <0.158 | <1.19 | 0.022 | 0.56 | 16.47 |
| MF37Pyr-51 | 0.381 | 93 | 16.79 | 2.73 | <0.44 | 0.408 | 5242 | <1.86 | <0.125 | <0.112 | 0.122 | <0.0127 | 0.5 | 0.85 | 1.57 | 1.3 | <0.181 | <1.25 | 0.016 | 0.362 | 21.4 |
| MF37Pyr-52 | 0.82 | 210 | 13.28 | 15.38 | 1.23 | 0.141 | 2636 | <1.80 | <0.108 | 0.199 | <0.101 | <0.0105 | 0.73 | 0.525 | 1.89 | 1.66 | <0.44 | <1.38 | 0.022 | 0.51 | 20.78 |
| MF37Pyr-53 | 1.26 | 4.9 | 13.02 | 6.62 | 0.67 | 0.179 | 4172 | <1.91 | <0.139 | 0.073 | <0.146 | <0.0068 | 0.52 | 2.24 | 8.59 | 2.42 | <0.46 | <1.29 | <0.0163 | 1.71 | 69.21 |
| MF37Pyr-54 | 0.247 | 1.4 | 9.29 | 7.73 | 1.54 | 0.175 | 4862 | 2.07 | <0.122 | <0.034 | <0.151 | 0.011 | 0.67 | 1.19 | 4.7 | 3 | <0.36 | <1.30 | <0.0188 | 0.71 | 49.29 |
| MF37Pyr-55 | 0.81 | 9.6 | 13.37 | 4.79 | 1.33 | 0.061 | 4448 | <1.77 | <0.095 | <0.015 | <0.234 | 0.006 | 0.61 | 0.89 | 3.63 | 2.25 | <0.34 | <1.41 | 0.012 | 0.4 | 36.98 |
| MF37Pyr-56 | 0.455 | 1.1 | 14.47 | 5.92 | 2.69 | 0.071 | 5882 | <1.85 | <0.132 | <0.114 | 0.13 | <0.0068 | 0.29 | 0.82 | 3.5 | 2.17 | <0.34 | <1.18 | <0.0216 | 0.44 | 35.68 |
| MF37Pyr-57 | 0.167 | 1.5 | 2.75 | 4.37 | 0.63 | 0.048 | 4462 | <1.70 | <0.103 | <0.033 | <0.27 | <0.0084 | 0.3 | 0.69 | 3.81 | 1.15 | <0.35 | <1.31 | <0.0142 | 0.57 | 33.3 |
| MF37Pyr-58 | 0.594 | 9.3 | 5.71 | 9.62 | 1.93 | 0.196 | 4161 | <1.76 | <0.094 | <0.123 | <0.104 | 0.004 | 0.23 | 1.29 | 4.61 | 4.43 | <0.25 | <1.29 | <0.0142 | 0.78 | 48.59 |
| MF37Pyr-59 | 0.51 | 28 | 279.3 | 2.78 | 0.55 | <0.043 | 6115 | <1.74 | <0.132 | <0.101 | <0.103 | 0.013 | <0.22 | 0.352 | 1.97 | 0.75 | <0.22 | <1.33 | <0.0141 | 0.26 | 18.06 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF37Pyr-60 | 0.63 | 3.4 | 7.33 | 6.92 | 1.28 | 0.248 | 2725 | <1.71 | 0.093 | <0.027 | 0.086 | <0.0078 | 1.57 | 1.35 | 5.16 | 8.86 | <0.21 | <1.16 | 0.007 | 0.67 | 53.84 |
| MF37Pyr-61 | 0.592 | 3.5 | 23.76 | 13.21 | 1.63 | 0.203 | 5096 | <1.70 | <0.106 | <0.132 | <0.170 | <0.0138 | 0.32 | 1.46 | 5.56 | 1.91 | <0.26 | <2.00 | 0.015 | 1.23 | 59.73 |
| MF37Pyr-62 | 0.281 | 6.8 | 41.59 | 4.93 | 230.1 | <0.044 | 5923 | <1.70 | <0.113 | <0.083 | 0.088 | <0.0080 | 0.41 | 0.78 | 3.42 | 0.85 | <0.24 | <1.75 | 0.024 | 0.5 | 32.04 |
| MF37Pyr-63 | 0.86 | 10 | 35.2 | 10.37 | 0.76 | 0.211 | 5164 | <1.69 | <0.112 | 0.092 | <0.138 | 0.009 | 1.94 | 1.42 | 5.47 | 13.2 | <0.29 | <1.55 | 0.017 | 1.01 | 58.85 |
| MF37Pyr-64 | 2.02 | 71 | 67.11 | 25.31 | 2.73 | 1.12 | 2874 | <1.73 | <0.120 | 0.63 | <0.099 | <0.0153 | 1.79 | 2.72 | 11.44 | 2.31 | <0.53 | <1.39 | 0.034 | 4.81 | 85.35 |
| MF37Pyr-65 | 0.56 | 100 | 15.57 | 2.64 | 1.5 | <0.038 | 4952 | 1.85 | <0.116 | <0.041 | <0.175 | <0.0095 | 0.67 | 0.71 | 1.3 | 3.54 | <0.23 | <1.53 | <0.0139 | 0.72 | 20.98 |
| MF37Pyr-66 | 0.65 | 162 | 21.8 | <0.45 | 0.75 | 0.031 | 6630 | <1.80 | <0.146 | <0.059 | <0.180 | <0.0109 | 0.31 | 0.276 | <0.80 | 0.118 | <0.182 | <1.51 | <0.0184 | 0.56 | 6.77 |
| MF37Pyr-67 | 0.84 | 29 | 7.8 | 25.19 | 1.01 | 0.194 | 3784 | <1.72 | <0.109 | 0.34 | <0.134 | <0.0077 | 0.78 | 1.36 | 8.25 | 2.28 | <0.23 | <1.21 | <0.0150 | 1.96 | 63.84 |
| MF37Pyr-68 | 0.366 | 610 | 38.89 | 19.06 | 1.79 | 1.35 | 3386 | <1.85 | <0.143 | <0.154 | <0.00 | 0.015 | 2.12 | 0.73 | 2.5 | 1.53 | <0.22 | <1.27 | 0.061 | 6.12 | 31.04 |
| MF37Pyr-69 | 0.467 | 0.92 | 13.12 | 2.55 | 0.69 | 0.048 | 5741 | <1.80 | <0.111 | <0.039 | <0.146 | <0.0137 | <0.24 | 0.378 | 1.29 | 0.279 | <0.50 | <1.37 | <0.0231 | <0.103 | 13.69 |
| MF37Pyr-70 | 1.83 | 229 | 92.6 | 16.72 | 4.62 | 0.155 | 3783 | <1.66 | <0.130 | 0.423 | <0.00 | 0.009 | <0.26 | 2.01 | 37.75 | 1.5 | <0.53 | 1.23 | <0.015 | 9.66 | 128.2 |
| MF37Pyr-71 | 0.77 | 5.8 | 46.65 | 23.09 | 1.53 | 0.98 | 4121 | <1.80 | <0.170 | 0.447 | <0.177 | 0.027 | 1.39 | 0.83 | 2.97 | 1.94 | <0.42 | <1.16 | 0.069 | 3.4 | 32.21 |
| MF37Pyr-72 | 0.471 | 108 | 8.64 | 16.12 | 1.59 | 0.345 | 4995 | <1.75 | <0.161 | <0.152 | <0.103 | 0.037 | 0.6 | 0.413 | 1.83 | 0.95 | <0.44 | <1.35 | <0.0115 | 0.79 | 14.69 |
| MF37Pyr-73 | 0.98 | 409 | 34.91 | 17.34 | 1.55 | 1.22 | 3089 | <1.78 | 0.155 | <0.078 | <0.222 | <0.0104 | 2.64 | 0.85 | 2.51 | 1.04 | <0.29 | <1.33 | 0.017 | 0.76 | 34.07 |
| MF37Pyr-74 | 4.07 | 583 | 460.4 | 9.84 | 2.1 | 0.132 | 7532 | <2.02 | <0.146 | <0.081 | <0.161 | <0.0160 | <0.22 | 1.8 | 11.34 | 0.75 | <0.39 | <1.34 | <0.0157 | 1.45 | 68.07 |
| MF37Pyr-75 | 2.32 | 8.5 | 31.01 | 11.34 | 7.76 | 0.92 | 5982 | <1.98 | <0.183 | <0.120 | <0.165 | <0.0122 | 0.33 | 1.72 | 8.76 | 1.84 | <0.38 | <1.47 | <0.021 | 1.25 | 60.38 |
| MF37Pyr-76 | 6.15 | 318 | 463 | 45.15 | 1.85 | 0.76 | 6664 | 5.87 | <0.132 | 1.91 | <0.139 | 0.273 | 0.37 | 3.13 | 44.35 | 17.41 | 7.62 | <1.21 | 0.077 | 20.11 | 325.8 |
| MF37Pyr-77 | 0.49 | 8.8 | 0.99 | 10.95 | 1.09 | 0.093 | 2959 | <2.05 | <0.157 | 0.129 | 0.067 | <0.0148 | <0.24 | 0.58 | 3.13 | 1.37 | <0.44 | <1.29 | 0.013 | 0.43 | 24.72 |
| MF37Pyr-78 | 1.04 | 1.8 | 12.45 | 7.41 | 1.27 | 0.198 | 5369 | <1.80 | 0.22 | <0.027 | <0.243 | <0.0114 | 0.31 | 1.41 | 6.55 | 1.51 | <0.42 | <1.33 | <0.0086 | 0.73 | 65.11 |
| MF37Pyr-79 | 0.41 | 2.4 | 4.27 | 15.52 | 1.29 | 1 | 4469 | <1.94 | <0.078 | 0.411 | <0.192 | 0.013 | 2.07 | 0.78 | 3.49 | 3.94 | <0.46 | <1.39 | 0.018 | 0.85 | 32.41 |
| MF37Pyr-80 | <0.157 | 149 | 19.2 | <0.37 | 0.6 | <0.036 | 881 | <1.96 | <0.163 | <0.086 | <0.16 | <0.0091 | <0.228 | <0.057 | <0.70 | <0.051 | <0.46 | <1.38 | <0.0089 | <0.071 | <0.066 |
| **Mean n=80** | 1 | 195 | 85 | 21 | 12 | 1 | 5548 | 3 | 0 | 1 | 0 | 0 | 1 | 1 | 5 | 2 | 4 | 1 | 0 | 2 | 37 |
| **S.D** | 1 | 499 | 167 | 44 | 46 | 2 | 4028 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 7 | 3 | 5 | 0 | 0 | 4 | 41 |
| **Min** | 0.15 | 0.08 | 0.99 | 1.16 | 0.34 | 0.02 | 654 | 1.77 | 0.09 | 0.03 | 0.03 | 0.00 | 0.22 | 0.07 | 0.88 | 0.05 | 0.15 | 1.23 | 0.01 | 0.16 | 0.98 |
| **Max** | 9 | 3804 | 977 | 360 | 302 | 9 | 25941 | 6 | 0 | 2 | 0 | 0 | 9 | 3 | 44 | 17 | 8 | 1 | 0 | 21 | 326 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF38Pyr-1 | <0.139 | 33 | 1.44 | 2.9 | 1.31 | <0.032 | 11014 | <1.57 | <0.155 | 0.298 | <0.099 | 0.017 | 0.26 | 0.108 | <0.64 | 1.21 | 0.167 | <2.06 | 0.024 | 2.89 | 4.84 |
| MF38Pyr-2 | 0.265 | 349 | 12.45 | <0.51 | 1.43 | <0.026 | 12920 | 2.14 | <0.089 | <0.014 | <0.00 | <0.0080 | <0.166 | <0.060 | 0.57 | 0.156 | 0.27 | <1.60 | <0.0110 | <0.097 | 0.194 |
| MF38Pyr-3 | 0.376 | 61 | 1.72 | 0.48 | 1.29 | <0.029 | 13381 | 2.37 | <0.131 | <0.037 | <0.098 | 0.007 | <0.165 | <0.064 | <0.54 | <0.057 | 0.89 | <1.59 | <0.0205 | <0.091 | 0.388 |
| MF38Pyr-4 | 0.175 | 0.38 | 0.43 | 1.14 | 0.48 | <0.045 | 11551 | 2.64 | <0.103 | <0.024 | <0.166 | <0.0101 | <0.184 | <0.061 | <0.52 | <0.050 | 0.174 | <1.48 | <0.0076 | <0.088 | 0.237 |
| MF38Pyr-5 | 0.203 | 544 | 24.31 | 1.35 | 0.46 | <0.041 | 10927 | 1.87 | <0.127 | <0.036 | <0.134 | <0.0077 | <0.153 | <0.062 | <0.69 | <0.043 | 0.12 | <1.39 | 0.012 | <0.088 | <0.059 |
| MF38Pyr-6 | 0.77 | 285 | 20.3 | <0.70 | 1.28 | 0.054 | 11491 | <1.65 | <0.096 | 0.062 | <0.097 | <0.0101 | 0.239 | 0.347 | 1.21 | <0.062 | 0.165 | <1.34 | <0.0077 | 3.92 | 15.76 |
| MF38Pyr-7 | 0.261 | 3.7 | 1.31 | 6.31 | <0.49 | <0.024 | 6632 | 2.03 | <0.163 | 0.217 | <0.101 | <0.0082 | <0.186 | <0.059 | <0.78 | <0.059 | 0.07 | <1.45 | 0.012 | 0.35 | 3.2 |
| MF38Pyr-8 | 0.446 | 4.3 | 1.79 | 2.92 | 29.79 | 0.035 | 10711 | <1.93 | <0.089 | 0.032 | <0.140 | <0.0066 | <0.176 | 0.067 | <0.64 | <0.026 | <0.057 | <1.26 | <0.0157 | 3.76 | 6.65 |
| MF38Pyr-9 | <0.173 | 12 | 96.83 | 0.56 | 0.92 | <0.025 | 4703 | 2.17 | <0.110 | <0.021 | <0.145 | <0.0068 | <0.175 | 0.078 | <0.54 | <0.066 | <0.054 | <1.30 | 0.022 | 0.287 | 3.2 |
| MF38Pyr-10 | 0.256 | 0.13 | 0.29 | 0.82 | 0.83 | <0.034 | 6378 | <1.65 | <0.095 | 0.014 | <0.149 | <0.0086 | <0.236 | 0.091 | <0.65 | 0.069 | 0.055 | <1.32 | <0.0084 | <0.108 | 5.5 |
| MF38Pyr-11 | 0.555 | 22 | 22 | 3.46 | 1.11 | <0.039 | 12463 | <1.73 | <0.131 | 0.238 | <0.145 | 0.008 | <0.173 | 0.447 | 2.41 | <0.038 | 0.101 | <1.33 | 0.025 | 10.19 | 19.69 |
| MF38Pyr-12 | 4.26 | 645 | 33.54 | 466.36 | 1.84 | 0.071 | 13641 | <1.95 | <0.111 | 0.106 | 0.031 | 0.003 | <0.195 | 0.8 | 1.28 | <0.118 | 0.133 | 1.32 | <0.0185 | 0.97 | 21.63 |
| MF38Pyr-13 | 0.42 | 5.2 | 75.36 | 168.49 | 1.02 | <0.040 | 1824 | <1.73 | <0.126 | <0.021 | <0.21 | <0.0085 | <0.209 | <0.077 | <0.73 | <0.072 | <0.035 | <1.26 | 0.007 | <0.104 | 0.3 |
| MF38Pyr-14 | 0.596 | 992 | 122 | 4.17 | 1.96 | <0.038 | 13017 | 2.15 | <0.113 | 0.398 | 0.059 | <0.0139 | <0.206 | 2.09 | 6.99 | <0.058 | 0.34 | <1.26 | <0.0176 | 3.39 | 71.27 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF38Pyr-15 | 0.563 | 90 | 4.4 | <0.20 | 0.45 | <0.042 | 9055 | <1.85 | <0.128 | 0.03 | <0.22 | <0.0067 | <0.184 | <0.059 | <0.64 | 0.008 | <0.024 | <1.17 | <0.0160 | <0.16 | 0.313 |
| MF38Pyr-16 | 0.284 | 57 | 2.58 | <0.37 | 1.15 | <0.049 | 12638 | <1.98 | <0.100 | <0.029 | <0.101 | 0.006 | <0.191 | <0.059 | 0.69 | <0.106 | 0.45 | <1.26 | <0.0140 | <0.19 | 0.83 |
| MF38Pyr-17 | 0.179 | 515 | 55.38 | 111.84 | 1.94 | 0.182 | 11520 | <1.81 | <0.123 | 2.58 | 0.03 | <0.0096 | 0.59 | 0.8 | 5.95 | 0.076 | 0.55 | <1.19 | 0.147 | 7.32 | 23.59 |
| MF38Pyr-18 | 0.537 | 61 | 12.38 | 343.52 | 1.52 | 0.577 | 8698 | <1.87 | <0.136 | 0.64 | <0.144 | <0.0126 | 2.01 | 0.116 | <0.75 | <0.096 | 0.079 | <1.33 | <0.016 | 0.65 | 2.81 |
| MF38Pyr-19 | 0.502 | 57 | 19.91 | 9.78 | 21.09 | 0.92 | 4514 | <1.85 | <0.110 | 0.52 | <0.103 | 0.025 | 5.17 | 0.171 | <0.66 | 0.147 | 0.085 | <1.25 | 0.041 | <0.26 | 12.16 |
| MF38Pyr-20 | 0.306 | 0.64 | 1.54 | 0.77 | 4.01 | <0.044 | 8783 | <1.64 | 0.075 | 0.026 | <0.101 | <0.0067 | <0.218 | 0.072 | <0.74 | <0.065 | <0.042 | <1.22 | <0.0114 | <0.142 | 0.97 |
| MF38Pyr-21 | 0.339 | 275 | 156.3 | 1.52 | 0.87 | <0.039 | 12669 | 1.82 | <0.115 | 0.081 | <0.187 | 0.006 | <0.23 | 0.136 | <0.80 | <0.089 | 0.149 | <2.36 | <0.0172 | 0.37 | 2.87 |
| MF38Pyr-22 | 0.41 | 1291 | 62.73 | 0.78 | 118.2 | <0.017 | 13076 | 2.24 | <0.082 | <0.0295 | <0.203 | 0.006 | <0.202 | <0.046 | <0.51 | <0.065 | 0.155 | <1.77 | <0.0198 | <0.17 | 0.102 |
| MF38Pyr-23 | 0.291 | 53 | 0.95 | 0.9 | <0.37 | <0.048 | 13082 | <1.83 | <0.124 | <0.021 | <0.178 | 0.014 | <0.199 | <0.065 | <0.68 | <0.071 | 0.193 | <1.65 | <0.0184 | <0.17 | <0.071 |
| MF38Pyr-24 | 0.289 | 160 | 4.06 | 1.79 | 1.54 | <0.036 | 12529 | 1.88 | <0.121 | <0.0145 | <0.141 | <0.0105 | <0.184 | <0.054 | <0.60 | <0.037 | <0.034 | <1.52 | <0.0195 | <0.23 | <0.071 |
| MF38Pyr-25 | 0.269 | 0.35 | <0.171 | <0.50 | 1.27 | <0.049 | 12501 | <1.77 | <0.073 | <0.030 | <0.232 | <0.0085 | <0.20 | <0.066 | <0.69 | <0.0272 | <0.061 | <1.52 | <0.0166 | <0.16 | <0.061 |
| MF38Pyr-26 | 0.283 | 340 | 11.01 | 0.6 | 0.95 | <0.047 | 10209 | <1.85 | <0.102 | <0.030 | 0.031 | 0.01 | <0.214 | <0.070 | <0.74 | <0.071 | 0.06 | <1.43 | <0.0142 | <0.22 | <0.064 |
| MF38Pyr-27 | 27.8 | 27 | 23.74 | 97.07 | 1.09 | <0.035 | 10122 | 2.11 | <0.091 | <0.039 | <0.101 | <0.0067 | <0.173 | 0.248 | 1.19 | <0.070 | 0.24 | <1.42 | <0.0140 | 0.83 | 22.82 |
| MF38Pyr-28 | 0.172 | 393 | 19.31 | <0.40 | 1.05 | 0.025 | 10602 | <1.83 | <0.092 | <0.026 | <0.145 | <0.0127 | <0.156 | <0.067 | <0.64 | <0.038 | 0.007 | <1.48 | <0.0116 | <0.30 | <0.057 |
| MF38Pyr-29 | 4.63 | 922 | 44.17 | 8.06 | 0.69 | 0.17 | 9941 | <1.75 | 0.116 | 0.73 | <0.103 | 0.023 | 1.18 | 0.386 | 2.67 | 3.07 | 0.3 | <1.45 | 0.03 | 1.29 | 16.63 |
| MF38Pyr-30 | 0.156 | 83 | 3.69 | <0.50 | 1.43 | <0.038 | 10578 | <1.76 | <0.125 | <0.034 | <0.18 | <0.0119 | <0.204 | <0.061 | <0.90 | <0.047 | <0.055 | <1.35 | <0.0143 | <0.26 | 0.359 |
| MF38Pyr-31 | 0.255 | 1.5 | 0.36 | 0.48 | 0.63 | <0.032 | 13081 | 2.08 | <0.150 | <0.015 | 0.03 | <0.0132 | <0.204 | <0.054 | <0.78 | <0.064 | 0.22 | <1.18 | <0.0113 | <0.26 | 1.36 |
| MF38Pyr-32 | 0.302 | 108 | 252.6 | 0.8 | 1.35 | <0.038 | 4747 | 3.53 | <0.151 | <0.041 | <0.200 | <0.0094 | <0.23 | 0.47 | 1.29 | <0.108 | <0.059 | <1.31 | <0.0113 | <0.168 | 8.97 |
| MF38Pyr-33 | 0.412 | 1 | 0.73 | 0.65 | 0.99 | <0.039 | 7969 | <1.82 | <0.110 | <0.032 | 0.057 | 0.008 | <0.216 | <0.062 | 0.85 | <0.072 | <0.061 | <1.26 | <0.0173 | <0.27 | 2.64 |
| MF38Pyr-34 | 0.26 | 1.1 | 0.82 | <0.32 | <0.26 | 0.048 | 5306 | <1.61 | 0.121 | <0.0260 | <0.145 | 0.008 | <0.214 | <0.049 | <0.71 | 0.54 | 0.007 | <1.38 | <0.0183 | <0.20 | 1.35 |
| MF38Pyr-35 | 0.532 | 0.86 | 1.66 | 3.23 | 1.48 | <0.041 | 3443 | <1.63 | <0.136 | <0.021 | <0.29 | <0.0083 | <0.29 | 0.52 | <0.69 | 0.268 | 0.118 | <1.35 | <0.0115 | <0.26 | 26.88 |
| MF38Pyr-36 | 0.423 | 3.5 | 9.48 | 1.87 | <0.39 | 0.048 | 4960 | <1.92 | <0.123 | <0.026 | <0.227 | <0.0083 | 0.23 | 0.299 | 0.74 | 0.189 | <0.034 | <1.36 | 0.012 | <0.162 | 13.06 |
| MF38Pyr-37 | 0.67 | 1.8 | 9.92 | 7.08 | 0.73 | <0.041 | 4570 | 2.03 | 0.189 | 0.059 | <0.00 | <0.0118 | <0.232 | <0.087 | <0.75 | <0.076 | 0.156 | <1.36 | 0.01 | 5.3 | 9.32 |
| MF38Pyr-38 | 0.92 | 1.8 | 2.21 | 3.64 | 0.73 | <0.032 | 5408 | 1.97 | 0.33 | 0.107 | <0.141 | <0.0047 | <0.25 | 0.13 | <0.72 | <0.045 | <0.075 | <1.21 | <0.0159 | 1.6 | 8.15 |
| MF38Pyr-39 | 0.167 | 1.6 | 3.98 | 0.6 | 1.37 | <0.031 | 5728 | <1.58 | 0.094 | <0.0144 | <0.098 | <0.0065 | 0.19 | <0.067 | <0.72 | <0.051 | <0.070 | <1.29 | 0.002 | <0.27 | 1.41 |
| MF38Pyr-40 | 0.64 | 0.96 | 1.47 | 1.15 | 0.5 | <0.034 | 11200 | <1.68 | <0.097 | <0.0205 | <0.098 | <0.0080 | <0.192 | 0.078 | <0.64 | <0.052 | 0.03 | <1.22 | <0.0176 | 0.54 | 2.72 |
| MF38Pyr-41 | 0.405 | 6.8 | <0.173 | <0.77 | 1.24 | <0.036 | 11367 | <1.72 | <0.094 | <0.0153 | 0.062 | <0.0085 | <0.189 | 0.072 | <0.68 | <0.086 | 0.159 | <2.18 | <0.0204 | <0.17 | 0.97 |
| MF38Pyr-42 | 0.323 | 148 | 5.6 | <0.63 | 1.48 | <0.033 | 13156 | 2.52 | <0.123 | 0.019 | 0.13 | <0.0083 | <0.205 | 0.058 | <0.65 | 0.032 | 0.71 | <1.67 | <0.0200 | <0.115 | 0.17 |
| MF38Pyr-43 | 0.415 | 763 | 35.48 | 66.68 | 0.78 | <0.035 | 10344 | <1.56 | <0.169 | 0.109 | <0.204 | <0.0083 | <0.187 | 0.279 | <0.62 | <0.046 | <0.042 | <1.63 | 0.028 | 8.97 | 5.53 |
| MF38Pyr-44 | 0.437 | 452 | 92.26 | 34.21 | 1.49 | 0.062 | 8804 | <1.92 | <0.089 | 3.43 | <0.221 | <0.0138 | <0.28 | 0.339 | 8.84 | <0.193 | 0.22 | <1.65 | <0.0178 | 20.88 | 26.94 |
| MF38Pyr-45 | 0.7 | 1.1 | 1.64 | <0.52 | 0.71 | <0.036 | 11130 | <1.75 | <0.135 | <0.022 | <0.106 | 0.01 | <0.176 | <0.077 | 0.79 | <0.056 | <0.081 | <1.55 | <0.0170 | 0.095 | 2.38 |
| MF38Pyr-46 | 0.66 | 2345 | 327.9 | 15.55 | 1.94 | 6.2 | 11543 | 1.9 | <0.132 | 1.32 | <0.00 | 0.04 | 9.44 | 0.251 | 2.43 | 1.37 | 0.3 | <1.61 | 0.115 | 6.83 | 18.58 |
| MF38Pyr-47 | 1.03 | 58 | 7.09 | 16.29 | 1.26 | 1.82 | 930 | <1.75 | <0.114 | 0.341 | <0.186 | <0.0050 | 0.81 | 0.67 | 1.18 | 1.98 | 0.31 | <1.49 | 0.175 | 6.48 | 17.67 |
| MF38Pyr-48 | 0.495 | 524 | 19.05 | <0.57 | <0.49 | <0.040 | 13377 | 1.86 | <0.117 | 0.01 | <0.155 | <0.0052 | <0.187 | <0.077 | <0.69 | <0.058 | 0.142 | <1.51 | <0.020 | <0.090 | <0.071 |
| MF38Pyr-49 | 0.469 | 0.59 | 0.32 | 38.16 | 1 | <0.026 | 4164 | <2.04 | <0.131 | <0.032 | <0.188 | <0.0125 | <0.21 | <0.079 | <0.65 | 0.64 | <0.045 | <1.43 | <0.0247 | <0.111 | 4.34 |
| MF38Pyr-50 | 0.368 | 13 | 0.39 | <0.43 | 1.05 | <0.026 | 7646 | <1.74 | <0.130 | <0.016 | <0.187 | <0.0124 | <0.199 | <0.074 | <0.93 | <0.057 | 0.157 | <1.44 | 0.01 | <0.086 | <0.068 |
| MF38Pyr-51 | 0.481 | 89 | 4.76 | 2.18 | 0.55 | <0.029 | 9583 | 2.5 | <0.154 | <0.027 | <0.106 | <0.0112 | <0.189 | <0.073 | <0.62 | <0.040 | 0.113 | <1.46 | 0.021 | 1.65 | 2.71 |
| MF38Pyr-52 | 0.381 | 1.2 | 0.31 | <0.37 | 0.65 | 0.031 | 4762 | <1.80 | <0.116 | <0.028 | <0.218 | <0.0073 | <0.218 | <0.059 | <0.69 | <0.050 | <0.053 | <1.47 | <0.0152 | <0.128 | 1.3 |
| MF38Pyr-53 | 0.348 | 31 | 5.27 | 3.89 | 1.14 | 0.031 | 9146 | <1.92 | <0.182 | 0.145 | <0.110 | <0.0137 | <0.228 | <0.056 | <0.82 | <0.058 | 0.112 | <1.45 | <0.018 | 0.71 | 1.13 |
| MF38Pyr-54 | 0.199 | 5 | 3.97 | 53.13 | 1.51 | <0.033 | 6815 | <1.86 | <0.168 | 0.59 | 0.033 | <0.0105 | <0.23 | 0.279 | 2.91 | <0.072 | 0.156 | <1.43 | 0.121 | 2.56 | 8.72 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF38Pyr-55 | 0.358 | 121 | 10.23 | 313.14 | <0.47 | <0.028 | 10486 | 3.76 | <0.154 | 0.71 | <0.115 | <0.0122 | <0.30 | 0.212 | 1.78 | <0.086 | <0.084 | <1.40 | 0.037 | 13.04 | 6.33 |
| MF38Pyr-56 | 0.65 | 164 | 6.7 | 1.67 | 1.81 | <0.038 | 8498 | 2.87 | 0.42 | <0.041 | 0.033 | <0.0129 | <0.22 | 0.243 | 1.53 | 0.48 | 0.172 | <1.48 | <0.0127 | <0.173 | 17.38 |
| MF38Pyr-57 | 1.26 | 705 | 175 | 4.14 | 0.82 | <0.047 | 11173 | 2.43 | <0.114 | 0.2 | <0.185 | 0.009 | <0.205 | 1.51 | 8.39 | <0.063 | 0.32 | <1.43 | <0.0149 | 1.62 | 68.11 |
| MF38Pyr-58 | 0.58 | 112 | 9.14 | 23.96 | 2.63 | 3.82 | 6314 | <1.69 | <0.129 | 0.55 | 0.095 | 0.01 | 1.76 | 0.175 | 7.4 | <0.149 | 0.134 | <1.49 | 0.031 | 13.57 | 20.06 |
| MF38Pyr-59 | 0.257 | 1.9 | 5.49 | 8.03 | <0.37 | 0.039 | 8588 | <1.97 | <0.087 | 0.52 | <0.243 | <0.0114 | <0.25 | <0.099 | <0.71 | <0.040 | <0.053 | <1.35 | <0.0151 | <0.20 | 0.63 |
| MF38Pyr-60 | 0.164 | 14 | 20.01 | 8.72 | 1 | 0.026 | 13006 | 2.22 | 0.266 | 0.142 | <0.26 | <0.0167 | <0.190 | 0.58 | 1.52 | <0.093 | 0.5 | <1.32 | 0.054 | 12.5 | 27.51 |
| MF38Pyr-61 | <0.147 | 101 | 11.56 | 22.98 | 0.94 | 0.035 | 9417 | <1.96 | <0.085 | 8.86 | <0.21 | <0.0100 | <0.23 | 0.48 | 14.51 | <0.040 | 0.59 | <2.08 | 0.101 | 18.36 | 20.58 |
| MF38Pyr-62 | 0.306 | 635 | 88.35 | 16.9 | 3.79 | 1.08 | 9756 | <1.84 | <0.17 | 1.06 | <0.107 | 0.043 | 5.13 | 3.26 | 10.15 | 1.49 | 0.124 | <1.83 | 0.57 | 11.99 | 31.35 |
| MF38Pyr-63 | 0.8 | 333 | 14.98 | 43.87 | 0.84 | <0.037 | 12322 | <1.83 | <0.149 | 0.04 | <0.152 | <0.0072 | <0.21 | 0.264 | <0.61 | <0.127 | 0.28 | <1.65 | <0.029 | 0.83 | 0.272 |
| MF38Pyr-64 | 0.7 | 1403 | 60.24 | 8.19 | 0.59 | <0.032 | 14219 | <2.04 | <0.137 | 0.57 | <0.108 | 0.015 | <0.26 | 0.65 | 3.01 | <0.117 | 0.092 | <1.67 | 0.032 | 7.29 | 27.94 |
| MF38Pyr-65 | 0.44 | 970 | 64.26 | 28.81 | 0.67 | 0.68 | 7286 | 3.64 | <0.110 | 1.15 | <0.158 | <0.0105 | 2.51 | 2.62 | 1.79 | 1.68 | 0.065 | <1.54 | 0.307 | 10.98 | 8.33 |
| MF38Pyr-66 | 0.65 | 54 | 0.88 | <0.59 | 7.2 | <0.037 | 13417 | 2.41 | <0.113 | <0.0277 | <0.184 | <0.0112 | <0.193 | 0.071 | <0.67 | <0.040 | <0.037 | <1.50 | <0.0227 | <0.088 | 0.44 |
| MF38Pyr-67 | 0.288 | 46 | 11.65 | 2.44 | 1.2 | 0.073 | 11127 | 2.34 | <0.141 | 0.076 | <0.212 | 0.005 | <0.196 | 0.236 | 1.59 | 0.052 | 0.74 | <1.44 | <0.0227 | 1.04 | 4.63 |
| MF38Pyr-68 | 0.445 | 430 | 22.02 | 0.61 | 0.85 | <0.040 | 8392 | 2.32 | <0.104 | 0.017 | <0.139 | <0.0080 | <0.177 | <0.065 | <0.56 | 0.045 | 0.042 | <1.26 | <0.0137 | <0.113 | 0.52 |
| MF38Pyr-69 | 0.42 | 1140 | 154.2 | 10.36 | 2.68 | 4.69 | 9127 | <1.77 | <0.126 | 1 | <0.193 | 0.082 | 21.85 | 0.45 | 1.99 | 1.85 | 0.31 | <1.50 | 0.113 | 20.49 | 17.11 |
| MF38Pyr-70 | 0.433 | 37 | 3.07 | 2.34 | 1.76 | 0.68 | 7786 | 2 | <0.127 | <0.030 | <0.141 | <0.0116 | <0.177 | 0.13 | <0.66 | 0.41 | 0.073 | <1.31 | 0.01 | <0.135 | 7.56 |
| MF38Pyr-71 | 0.371 | 1723 | 75.94 | 1.82 | 0.96 | <0.037 | 9535 | <1.75 | <0.100 | <0.027 | 0.061 | <0.0096 | <0.192 | 0.242 | 0.93 | 0.282 | 0.21 | 1.26 | <0.0082 | 0.39 | 8.28 |
| MF38Pyr-72 | 0.69 | 100 | 56.8 | 48.14 | 2.84 | 0.09 | 9519 | <1.51 | <0.162 | 3.97 | <0.098 | <0.0113 | 0.71 | 0.74 | 9.53 | 1.27 | 0.71 | <1.29 | <0.0112 | 3.17 | 29.64 |
| MF38Pyr-73 | 0.61 | 1822 | 127.6 | 0.83 | 0.81 | 0.72 | 10716 | <1.69 | 0.4 | <0.0152 | <0.101 | <0.0095 | <0.187 | 0.389 | 1.16 | 0.92 | 0.21 | <1.34 | <0.0163 | 0.152 | 17.36 |
| MF38Pyr-74 | 0.325 | 79 | 5.32 | 1.81 | 0.78 | 0.049 | 12962 | <1.66 | <0.119 | 0.134 | 0.059 | <0.0047 | <0.174 | <0.057 | 0.78 | <0.052 | 0.33 | <1.22 | 0.029 | 4.7 | 3.89 |
| MF38Pyr-75 | 0.471 | 354 | 9.47 | <0.30 | 1.08 | <0.044 | 10167 | 2.11 | 0.082 | 0.019 | <0.00 | <0.0082 | <0.161 | <0.07 | <0.68 | 0.024 | <0.069 | <1.06 | <0.0081 | <0.042 | 0.298 |
| MF38Pyr-76 | 0.92 | 742 | 51.92 | 65.81 | 3.48 | <0.041 | 8204 | <1.57 | 0.167 | 1.01 | <0.168 | <0.0103 | 1.13 | 0.29 | 1.45 | 0.52 | 0.38 | 1.36 | <0.019 | 3.36 | 8.15 |
| MF38Pyr-77 | 0.353 | 623 | 95.47 | 1.68 | 1.58 | <0.034 | 9870 | <1.71 | <0.088 | 0.056 | <0.170 | <0.0066 | <0.187 | 0.106 | <0.65 | <0.026 | <0.076 | <1.20 | <0.0178 | 2.09 | 3.52 |
| MF38Pyr-78 | 0.296 | 3231 | 2866 | 2.98 | 2.01 | 0.074 | 12959 | 4.58 | <0.116 | 0.053 | 0.12 | 0.004 | <0.196 | 0.052 | <0.81 | 0.106 | <0.043 | <1.33 | <0.022 | <0.140 | 1.32 |
| MF38Pyr-79 | 0.254 | 1190 | 51.46 | 43.92 | 1.12 | <0.037 | 11168 | <1.72 | 0.135 | 0.164 | <0.144 | 0.004 | 0.57 | <0.072 | <0.67 | 0.058 | 0.054 | <1.22 | <0.0142 | 1.65 | 2.15 |
| MF38Pyr-80 | 0.442 | 657 | 4110 | 10.84 | <0.46 | <0.0212 | 12682 | 6.21 | <0.106 | 0.092 | <0.100 | <0.0094 | <0.173 | 0.094 | <0.73 | <0.026 | 0.179 | <1.33 | <0.0162 | 2.39 | 6.6 |
| **Mean n=80** | 1 | 358 | 125 | 34 | 4 | 1 | 9613 | 3 | 0 | 1 | 0 | 0 | 3 | 0 | 3 | 1 | 0 | 1 | 0 | 5 | 10 |
| **S.D** | 3 | 580 | 561 | 83 | 14 | 2 | 3076 | 1 | 0 | 1 | 0 | 0 | 5 | 1 | 4 | 1 | 0 | 0 | 0 | 6 | 14 |
| **Min** | 0.16 | 0.13 | 0.29 | 0.48 | 0.45 | 0.03 | 930 | 1.82 | 0.08 | 0.01 | 0.03 | 0.00 | 0.19 | 0.05 | 0.57 | 0.01 | 0.01 | 1.26 | 0.00 | 0.10 | 0.10 |
| **Max** | 28 | 3231 | 4110 | 466 | 118 | 6 | 14219 | 6 | 0 | 9 | 0 | 0 | 22 | 3 | 15 | 3 | 1 | 1 | 1 | 21 | 71 |

| Sample # | $^{55}$Mn | $^{59}$Co | $^{60}$Ni | $^{65}$Cu | $^{66}$Zn | $^{69}$Ga | $^{75}$As | $^{82}$Se | $^{95}$Mo | $^{107}$Ag | $^{111}$Cd | $^{115}$In | $^{118}$Sn | $^{121}$Sb | $^{125}$Te | $^{184}$W | $^{197}$Au | $^{202}$Hg | $^{205}$Tl | $^{208}$Pb | $^{209}$Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF39Pyr-1 | 0.578 | 0.89 | 5.54 | <0.76 | <0.51 | <0.142 | 6272 | <2.36 | <0.139 | <0.028 | <0.153 | <0.0136 | <0.27 | <0.161 | 0.5 | <0.056 | 0.015 | <1.92 | <0.0158 | <0.18 | 0.171 |
| MF39Pyr-2 | 0.579 | 0.14 | 0.99 | 3.44 | 239.8 | <0.146 | 10317 | <2.35 | <0.172 | <0.038 | <0.128 | 0.026 | <0.26 | <0.161 | <0.65 | 0.2 | 0.025 | <1.69 | <0.0144 | <0.15 | 0.544 |
| MF39Pyr-3 | 0.431 | 1.7 | 145.5 | 0.9 | <0.54 | <0.116 | 2827 | <2.23 | <0.133 | <0.019 | <0.153 | <0.0149 | <0.27 | <0.137 | <0.50 | <0.045 | <0.017 | <1.44 | <0.0122 | <0.17 | 4.95 |
| MF39Pyr-4 | 0.381 | 0.63 | 4.31 | 0.68 | <0.49 | <0.107 | 8509 | <2.20 | <0.108 | <0.027 | <0.124 | 0.008 | 0.35 | <0.152 | 0.51 | <0.023 | 0.034 | <1.36 | <0.0070 | <0.103 | <0.118 |
| MF39Pyr-5 | 0.797 | 0.13 | 0.187 | 171.66 | 0.68 | <0.104 | 8469 | <2.25 | <0.118 | <0.026 | <0.182 | <0.0098 | <0.27 | <0.134 | <0.50 | <0.047 | <0.025 | <1.26 | <0.0125 | <0.12 | <0.113 |
| MF39Pyr-6 | 0.31 | 0.2 | 0.49 | 6.46 | 1.19 | <0.105 | 8678 | 2.56 | <0.069 | <0.035 | <0.159 | <0.0099 | <0.27 | <0.137 | <0.56 | <0.041 | <0.025 | <1.31 | <0.0163 | <0.11 | <0.107 |
| MF39Pyr-7 | 0.265 | 0.67 | 4.22 | 127.95 | <0.49 | 0.775 | 5544 | <2.40 | <0.135 | <0.029 | 0.028 | <0.0102 | <0.30 | 0.162 | <0.48 | 0.399 | 0.05 | <1.31 | <0.0106 | <0.14 | 7.71 |
| MF39Pyr-8 | 0.461 | 0.74 | 2.22 | 337.87 | 0.74 | <0.096 | 4731 | <2.14 | 0.161 | <0.032 | <0.201 | <0.0115 | 0.52 | 0.14 | <0.61 | 0.87 | 0.94 | <1.25 | <0.0124 | <0.13 | 6.23 |
| MF39Pyr-9 | 0.305 | 0.39 | 1.68 | 0.57 | 0.58 | <0.070 | 8297 | <2.12 | <0.108 | <0.0159 | <0.088 | <0.0105 | <0.29 | <0.137 | <0.51 | <0.0321 | <0.030 | <1.19 | <0.0172 | <0.100 | 0.16 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF39Pyr-10 | 0.517 | 1.1 | 2.81 | 10.83 | 1.09 | <0.084 | 6613 | <2.21 | <0.094 | 0.043 | 0.026 | <0.0096 | <0.31 | 0.178 | 0.97 | 1.08 | 0.166 | 1.16 | <0.0173 | 2.57 | 9.88 |
| MF39Pyr-11 | 0.86 | 152 | 54.92 | 12.05 | 2.41 | <0.071 | 5696 | 2.07 | <0.101 | 0.442 | <0.088 | <0.0095 | 1.08 | <0.130 | <0.45 | 6.4 | 0.88 | <1.15 | 0.052 | 6.01 | 3.07 |
| MF39Pyr-12 | 0.463 | 0.45 | 1.44 | 2.09 | 1.85 | <0.075 | 7767 | <2.11 | <0.165 | 0.039 | 0.052 | <0.0112 | <0.28 | <0.140 | <0.55 | 0.098 | <0.076 | <1.22 | <0.0121 | 1.21 | 4.58 |
| MF39Pyr-13 | <0.138 | 3.8 | 4 | 47.05 | 1.93 | <0.060 | 6274 | <1.94 | <0.120 | <0.025 | <0.088 | <0.0104 | <0.28 | <0.123 | <0.54 | <0.059 | <0.045 | <1.13 | <0.0120 | <0.12 | 0.441 |
| MF39Pyr-14 | 0.87 | 247 | 40.78 | 9.09 | 6.9 | 0.063 | 10293 | <2.02 | <0.117 | 0.661 | <0.156 | <0.0115 | <0.29 | <0.127 | 0.46 | 0.05 | 0.152 | <1.13 | 0.047 | 1.15 | 0.447 |
| MF39Pyr-15 | 0.313 | 10 | 8.1 | 23.53 | 12.03 | 0.138 | 5897 | <1.83 | 0.238 | 0.145 | <0.233 | <0.0104 | <0.29 | 0.671 | 1.64 | 1.09 | 0.287 | <1.06 | 0.058 | 9.79 | 19.42 |
| MF39Pyr-16 | 0.246 | 2.7 | 12.94 | 4.11 | 1.96 | <0.060 | 6844 | <2.10 | <0.138 | <0.029 | <0.131 | <0.0167 | 0.35 | 0.265 | <0.59 | 2.28 | 0.059 | <1.15 | <0.019 | 0.72 | 9.31 |
| MF39Pyr-17 | 0.523 | 143 | 38.62 | 23.79 | 2.64 | <0.071 | 7957 | <2.09 | 0.092 | 0.41 | <0.129 | <0.0108 | <0.26 | 0.317 | 0.65 | <0.033 | 0.69 | <1.20 | 0.089 | 17.26 | 16.94 |
| MF39Pyr-18 | 0.193 | 4.5 | 4.13 | 9.35 | 1.05 | <0.056 | 5863 | <2.06 | <0.135 | 0.083 | 0.081 | <0.0087 | <0.25 | 0.114 | <0.48 | <0.077 | 0.274 | <1.18 | 0.027 | 4.33 | 4.45 |
| MF39Pyr-19 | 0.784 | 3.6 | 3.96 | 2.99 | 1.27 | <0.069 | 6756 | <2.09 | <0.096 | 0.078 | <0.158 | <0.0088 | <0.21 | <0.110 | 0.7 | <0.033 | 0.135 | <1.16 | 0.023 | 4.97 | 6.51 |
| MF39Pyr-20 | 0.352 | 0.96 | 4.54 | 1.37 | 0.87 | <0.060 | 5182 | <2.10 | <0.125 | <0.020 | <0.092 | 0.012 | <0.26 | 0.135 | 0.69 | 0.77 | 0.055 | <1.04 | 0.016 | 0.21 | 7.13 |
| MF39Pyr-21 | 1.74 | 0.89 | 10 | 4.92 | 1.99 | 1.4 | 1210 | <2.23 | 0.55 | 0.02 | <0.096 | 0.015 | 2.31 | 1.07 | 0.83 | 10.55 | 0.117 | <2.01 | 0.007 | 0.78 | 39.37 |
| MF39Pyr-22 | 0.454 | 0.23 | 1.48 | <0.50 | <0.41 | <0.06 | 7774 | <1.98 | <0.151 | <0.0176 | <0.168 | <0.0081 | <0.25 | <0.101 | <0.65 | 0.103 | <0.033 | <1.73 | <0.0109 | <0.11 | 1.09 |
| MF39Pyr-23 | 0.286 | 0.53 | 9.9 | <0.47 | <0.49 | <0.051 | 8735 | <1.84 | <0.118 | <0.0202 | 0.054 | <0.0076 | <0.21 | <0.119 | 0.55 | <0.033 | <0.025 | <1.35 | <0.0145 | <0.13 | <0.079 |
| MF39Pyr-24 | 0.294 | 0.15 | 1.61 | <0.51 | 2.76 | <0.047 | 10793 | <2.11 | <0.088 | <0.037 | <0.159 | <0.0076 | <0.215 | <0.104 | <0.50 | <0.024 | 0.034 | <1.36 | <0.0126 | <0.11 | 0.153 |
| MF39Pyr-25 | 3.32 | 7.6 | 1.78 | <0.44 | 1.75 | <0.066 | 9217 | <2.07 | <0.088 | <0.037 | 0.082 | <0.0062 | 0.23 | 0.124 | <0.40 | <0.047 | 0.027 | <1.13 | <0.0192 | 0.13 | 3.22 |
| MF39Pyr-26 | 5.99 | 0.67 | 20.43 | 10.11 | 1.47 | 2.51 | 2697 | <2.00 | <0.177 | 0.048 | <0.134 | 0.014 | 0.71 | 1.69 | 4.94 | 1.83 | 0.37 | 1.27 | <0.020 | 1.7 | 97.68 |
| MF39Pyr-27 | 3.63 | 1.8 | 101.8 | 4.63 | <0.37 | 1.046 | 2023 | <1.96 | <0.124 | 0.054 | <0.159 | <0.0108 | 0.35 | 0.729 | 0.78 | 1.48 | 0.197 | <1.24 | 0.014 | 2.41 | 27.46 |
| MF39Pyr-28 | 12.69 | 1.4 | 34.68 | 21.61 | 57.19 | 1.057 | 2660 | <1.89 | <0.092 | 0.205 | <0.088 | 0.015 | 1.33 | 2.98 | 9.39 | 6.47 | 0.79 | <1.25 | 0.088 | 11.85 | 138.6 |
| MF39Pyr-29 | 0.92 | 1977 | 591.2 | 7.72 | 1.38 | 0.993 | 3522 | 21.75 | <0.114 | 0.056 | <0.153 | 0.008 | 0.39 | 10.53 | 10.82 | 3.19 | 0.249 | <1.11 | <0.0156 | 13.42 | 116.3 |
| MF39Pyr-30 | 0.541 | 830 | 826.8 | 4.35 | 0.85 | 0.468 | 3264 | 11.78 | <0.152 | <0.015 | <0.216 | 0.008 | 0.68 | 4.71 | 6.75 | 2.26 | 0.159 | <1.05 | <0.0129 | 3.71 | 66.33 |
| MF39Pyr-31 | 0.783 | 394 | 3138 | 3.02 | 0.45 | 0.096 | 7601 | 22.36 | 0.192 | 0.068 | <0.085 | <0.0058 | 0.41 | 3.15 | 5.36 | 0.88 | 0.06 | <1.14 | <0.0165 | 2.15 | 43.33 |
| MF39Pyr-32 | 7.24 | 108 | 77.06 | 4.82 | <0.43 | 0.897 | 1900 | 13.86 | <0.120 | <0.031 | <0.119 | <0.0070 | 0.46 | 3.07 | 1.95 | 4.18 | 0.039 | <1.08 | 0.021 | 9.69 | 31.91 |
| MF39Pyr-33 | 0.724 | 0.21 | 2.43 | 5.79 | 1.05 | <0.050 | 5897 | <1.74 | <0.109 | 0.009 | <0.161 | <0.0103 | 0.46 | 0.91 | 2.44 | 1.25 | 0.324 | <0.96 | <0.0111 | 0.28 | 45.97 |
| MF39Pyr-34 | 65.93 | 1.6 | 49.46 | 7.66 | 1.72 | 1.18 | 2967 | 1.84 | <0.107 | <0.026 | <0.145 | <0.0127 | 0.62 | 1.23 | 4.47 | 4.36 | 0.35 | <0.98 | 0.02 | 0.95 | 71.61 |
| MF39Pyr-35 | 42.98 | 0.31 | 1.88 | 4.22 | 0.85 | 1.008 | 5934 | 2.52 | <0.075 | 0.095 | <0.123 | <0.0072 | 0.31 | 0.568 | 1.95 | 0.58 | 0.163 | <0.95 | 0.021 | 0.54 | 32.55 |
| MF39Pyr-36 | 6.01 | 8.2 | 39.86 | 5.25 | 3.32 | 16.34 | 2768 | 2.91 | 0.126 | 0.254 | 0.27 | 0.066 | 0.62 | 0.522 | 1.02 | 4.62 | 0.203 | <1.18 | 0.151 | 2.2 | 32.33 |
| MF39Pyr-37 | 1.34 | 125 | 208.5 | 26.95 | 3.23 | 1.034 | 3541 | 2.61 | <0.138 | 1.09 | 0.18 | 0.021 | 2.24 | 1.13 | 3.91 | 4.53 | 0.61 | <1.06 | 0.156 | 11.55 | 49.81 |
| MF39Pyr-38 | 0.646 | 0.83 | 45.83 | 4.93 | 1.51 | 1.37 | 3086 | <1.77 | 0.121 | <0.018 | <0.00 | <0.0087 | <0.22 | 0.88 | 2.84 | 0.498 | 0.192 | <0.93 | 0.012 | 0.72 | 47.04 |
| MF39Pyr-39 | 2.42 | 0.91 | 38.86 | 5.85 | 2.25 | 6.59 | 2333 | <1.95 | 0.223 | <0.028 | <0.155 | 0.015 | 1.36 | 1.27 | 3.23 | 5.87 | 0.34 | <1.03 | 0.035 | 3.19 | 66.13 |
| MF39Pyr-40 | 38.59 | 0.43 | 5.68 | 13.16 | 4.12 | 40.6 | 2971 | <2.45 | <0.160 | 0.101 | <0.159 | 0.058 | 3.26 | 1.08 | 3.95 | 3.64 | 0.115 | <1.38 | 0.35 | 15.94 | 68.24 |
| MF39Pyr-41 | 0.282 | 0.42 | 1.34 | <0.64 | 0.83 | <0.053 | 6694 | <1.75 | <0.102 | <0.022 | <0.170 | <0.0070 | <0.23 | 0.09 | <0.41 | 0.262 | <0.024 | <1.70 | <0.0211 | 0.07 | 2.01 |
| MF39Pyr-42 | 0.763 | 9.6 | 9.8 | 7.17 | <0.39 | 0.178 | 4178 | <1.79 | <0.122 | 0.217 | <0.122 | 0.009 | 0.94 | 0.411 | 2.11 | 2.1 | 0.228 | <1.35 | 0.041 | 2.51 | 26.6 |
| MF39Pyr-43 | 0.292 | 0.85 | 7.66 | 90.92 | 0.35 | <0.061 | 5812 | <1.84 | 0.112 | <0.0194 | <0.123 | <0.0131 | 0.27 | <0.071 | <0.45 | 0.262 | <0.024 | <1.37 | <0.0097 | <0.10 | <0.063 |
| MF39Pyr-44 | 0.169 | 0.55 | 1.33 | 88.24 | <0.36 | <0.034 | 7553 | <1.88 | <0.124 | <0.034 | <0.00 | <0.0119 | <0.22 | <0.088 | <0.55 | <0.072 | <0.039 | <1.33 | 0.01 | 0.18 | 0.65 |
| MF39Pyr-45 | 0.317 | 16 | 31.23 | 1.71 | <0.29 | <0.042 | 4281 | <1.79 | <0.127 | 0.081 | <0.128 | <0.0129 | 0.35 | 0.315 | 0.6 | 4.5 | 0.042 | <1.12 | 0.011 | 5.94 | 5.16 |
| MF39Pyr-46 | 0.601 | 1.4 | 11.1 | <0.42 | 1.19 | <0.037 | 5745 | 1.78 | <0.104 | <0.016 | <0.00 | 0.005 | <0.24 | 0.157 | 2.24 | 0.292 | 0.104 | <1.15 | 0.004 | 0.31 | 12.14 |
| MF39Pyr-47 | 0.406 | 0.69 | 4.08 | 0.8 | 0.45 | <0.049 | 6983 | <1.73 | <0.104 | <0.0112 | <0.00 | <0.0083 | 0.34 | 0.066 | <0.48 | 0.57 | 0.072 | <1.22 | <0.0118 | <0.13 | 1.3 |
| MF39Pyr-48 | 0.419 | 0.65 | 4.36 | 1.22 | 1.67 | <0.036 | 6208 | <1.71 | <0.123 | <0.016 | <0.087 | <0.0072 | 0.63 | 0.213 | <0.45 | 5.25 | <0.025 | <1.11 | <0.0069 | 0.29 | 6.09 |
| MF39Pyr-49 | 0.438 | 1.5 | 7.51 | 0.69 | 0.47 | 0.031 | 7024 | <1.68 | <0.088 | 0.036 | <0.084 | <0.0140 | <0.21 | 0.272 | <0.43 | 0.21 | 0.074 | <1.07 | <0.0188 | 0.13 | 9.21 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF39Pyr-50 | 0.262 | 6.8 | 5.9 | 5.32 | 0.48 | 0.047 | 5525 | <1.50 | <0.088 | 0.065 | <0.085 | <0.0121 | <0.27 | 0.148 | <0.48 | <0.097 | 0.04 | <1.13 | <0.0149 | 5.52 | 3.98 |
| MF39Pyr-51 | 0.313 | 14 | 30.13 | 1.43 | 2.48 | <0.040 | 4392 | <1.65 | <0.146 | 0.081 | <0.086 | <0.0142 | <0.30 | <0.076 | <0.51 | <0.049 | <0.042 | <1.08 | <0.0151 | <0.08 | 0.207 |
| MF39Pyr-52 | 0.352 | 15 | 4.68 | 17.57 | 9.71 | <0.039 | 7236 | 2.06 | <0.124 | 0.067 | <0.125 | <0.0103 | 0.97 | 0.192 | <0.57 | <0.056 | 0.04 | <1.04 | <0.0120 | 3.51 | 1.31 |
| MF39Pyr-53 | 1.39 | 1.2 | 3.7 | 0.37 | 0.74 | <0.030 | 5479 | <1.64 | <0.091 | <0.030 | <0.124 | <0.0132 | <0.21 | 0.118 | <0.47 | 0.133 | 0.068 | <0.96 | <0.0138 | <0.13 | 6.48 |
| MF39Pyr-54 | 0.536 | 24 | 12.86 | 5 | 1.01 | 2.12 | 4807 | 1.98 | 0.139 | 0.054 | <0.144 | <0.0097 | <0.28 | <0.079 | <0.51 | 0.334 | 0.054 | <0.99 | 0.034 | <0.078 | 0.365 |
| MF39Pyr-55 | 0.309 | 0.87 | 2.93 | 1.11 | 0.85 | 0.049 | 5959 | <1.88 | <0.119 | <0.020 | <0.125 | <0.0134 | <0.41 | <0.066 | <0.47 | 0.254 | 0.011 | <1.00 | <0.0121 | <0.070 | 1.52 |
| MF39Pyr-56 | 0.504 | 0.17 | 0.45 | 0.46 | 0.47 | <0.038 | 7621 | 2.54 | <0.091 | <0.0279 | <0.176 | <0.0084 | <0.24 | <0.081 | <0.34 | <0.064 | 0.038 | <1.06 | <0.0138 | <0.08 | 0.091 |
| MF39Pyr-57 | 0.549 | 12 | 50.17 | 1.28 | 2.95 | 0.047 | 4002 | <1.92 | 0.154 | 0.047 | <0.188 | <0.0110 | <0.25 | 0.329 | <0.56 | 0.59 | 0.081 | <1.19 | <0.019 | 3.28 | 7.85 |
| MF39Pyr-58 | <0.134 | 20 | 53.15 | 1.31 | <0.43 | 0.042 | 4994 | <2.01 | <0.057 | 0.038 | <0.213 | <0.0091 | <0.29 | <0.091 | <0.93 | <0.055 | 0.104 | <1.17 | <0.0150 | 2.35 | 3.99 |
| MF39Pyr-59 | 0.396 | 4.2 | 1.83 | 160.81 | 0.64 | <0.026 | 8216 | <1.85 | <0.132 | <0.024 | <0.133 | <0.0127 | <0.34 | <0.067 | <0.35 | 0.216 | <0.033 | 1.25 | 0.012 | 0.1 | 1.17 |
| MF39Pyr-60 | 13 | 0.83 | 1.96 | 3.48 | 5.49 | 0.165 | 5876 | <1.83 | 0.204 | <0.025 | 0.117 | 0.012 | 1.07 | 0.268 | 0.67 | 2.25 | 0.037 | <1.18 | <0.022 | 3.52 | 8.74 |
| MF39Pyr-61 | 1.54 | 22 | 63.37 | 6.2 | 1.68 | 0.198 | 4001 | 1.97 | 0.84 | <0.0188 | <0.102 | 0.039 | 15.3 | 0.95 | 2.1 | 71.39 | 0.108 | <2.18 | <0.0180 | 1 | 32.21 |
| MF39Pyr-62 | 0.292 | 6.5 | 4.62 | 6.98 | 85.8 | <0.041 | 6034 | <2.01 | <0.164 | 0.039 | <0.174 | 0.009 | <0.25 | 0.334 | 1.15 | 1.27 | 0.176 | <1.57 | 0.023 | 3.13 | 9.56 |
| MF39Pyr-63 | 0.491 | 0.66 | 3.84 | <0.53 | 0.42 | <0.040 | 7363 | <2.01 | <0.155 | <0.0255 | <0.098 | <0.0094 | 0.203 | <0.062 | <0.64 | <0.057 | 0.043 | <1.45 | <0.019 | <0.15 | 0.426 |
| MF39Pyr-64 | 0.399 | 2.3 | 4.64 | 2.45 | 1.15 | <0.036 | 5993 | <1.82 | 0.132 | 0.037 | 0.03 | <0.0094 | <0.24 | 0.157 | 0.79 | <0.084 | 0.081 | 1.86 | <0.0206 | 2.83 | 7.58 |
| MF39Pyr-65 | 0.357 | 4 | 14.61 | 1.13 | 1.44 | <0.052 | 5687 | <2.07 | <0.095 | 0.021 | <0.101 | 0.009 | <0.23 | 0.125 | 0.89 | 0.61 | 0.087 | <1.33 | <0.0079 | 0.9 | 3.43 |
| MF39Pyr-66 | 0.362 | 0.72 | 1.85 | 276.07 | <0.46 | <0.049 | 3030 | <2.10 | <0.123 | <0.020 | <0.156 | 0.011 | <0.25 | 0.273 | 0.69 | <0.057 | <0.039 | <1.50 | <0.0194 | <0.11 | 4.87 |
| MF39Pyr-67 | 0.286 | 1.9 | 3.39 | 8.29 | 2.44 | <0.052 | 7980 | <2.17 | <0.113 | 0.116 | <0.155 | <0.0074 | <0.25 | 0.315 | 0.74 | <0.040 | 0.31 | <1.49 | 0.064 | 13.08 | 11.36 |
| MF39Pyr-68 | 0.3 | 0.22 | 0.31 | 5.73 | 18.59 | 0.169 | 3828 | <2.25 | <0.150 | <0.021 | <0.253 | <0.0093 | 0.27 | 0.192 | <0.68 | 0.56 | 0.034 | <1.54 | <0.0153 | 1.96 | 6.77 |
| MF39Pyr-69 | 0.244 | 0.54 | 1.89 | 31.52 | 0.81 | 0.047 | 5568 | <2.00 | <0.140 | 0.039 | <0.111 | <0.0074 | 0.27 | 0.77 | 0.98 | 0.141 | 0.124 | <1.39 | <0.0087 | 6.57 | 13.42 |
| MF39Pyr-70 | 0.487 | 156 | 27.6 | 7.81 | 2.31 | 0.061 | 8536 | <2.26 | <0.121 | 0.478 | <0.109 | <0.0155 | 1.02 | <0.071 | <0.57 | 0.6 | 0.05 | <1.30 | 0.109 | 4.54 | 1.94 |
| MF39Pyr-71 | 0.246 | 1.1 | 2.04 | 19.42 | 8.04 | 0.045 | 6770 | <2.12 | <0.091 | <0.024 | <0.108 | <0.0125 | <0.24 | 0.402 | 0.59 | <0.0277 | 0.072 | <1.49 | <0.0189 | 2.55 | 1.61 |
| MF39Pyr-72 | 3.1 | 9.2 | 5.25 | 0.82 | 1.5 | <0.044 | 6512 | <2.21 | <0.205 | 0.091 | <0.109 | <0.0073 | 0.26 | 0.268 | 1.11 | <0.056 | 0.049 | <1.45 | <0.021 | 9.29 | 7.53 |
| MF39Pyr-73 | <0.148 | 0.57 | 2.7 | 57.94 | 0.69 | 0.038 | 3535 | <2.22 | <0.163 | <0.029 | <0.194 | 0.017 | 0.35 | 0.44 | 1.36 | 2.47 | 0.095 | <1.52 | <0.0088 | <0.14 | 22.54 |
| MF39Pyr-74 | 0.373 | 0.42 | 2.8 | 1.29 | 1.96 | <0.053 | 6792 | <2.23 | <0.163 | <0.039 | 0.033 | <0.0107 | <0.29 | 0.28 | 1.12 | 1.54 | <0.068 | <1.44 | <0.0233 | 0.14 | 12.64 |
| MF39Pyr-75 | 1.12 | 89 | 23.31 | 6.18 | 1.2 | <0.048 | 6079 | <1.93 | <0.107 | 0.268 | <0.161 | <0.0093 | <0.26 | 0.235 | 0.8 | <0.113 | 0.213 | <1.46 | 0.056 | 4.01 | 16.44 |
| MF39Pyr-76 | 0.78 | 0.47 | 6.94 | 1.78 | 0.86 | 0.056 | 5434 | <2.37 | <0.135 | <0.022 | <0.172 | <0.0116 | <0.29 | 0.283 | 1.52 | 0.41 | <0.043 | <1.62 | 0.02 | <0.13 | 17.53 |
| MF39Pyr-77 | 1.04 | 62 | 75.94 | 10.44 | 1.74 | 1.53 | 2542 | <2.32 | 0.39 | 0.283 | <0.121 | <0.0190 | 1.34 | 1.27 | 2.59 | 4.1 | 0.28 | <1.58 | 0.065 | 5.1 | 69.51 |
| MF39Pyr-78 | 0.314 | 1.2 | 23.19 | 4.36 | 1.4 | 0.201 | 5235 | <2.42 | 0.148 | <0.0161 | <0.174 | <0.0101 | 0.75 | 0.92 | 1.34 | 5.75 | 0.23 | <1.55 | <0.014 | 1.09 | 37.37 |
| MF39Pyr-79 | 1.31 | 0.78 | 2.7 | 4.48 | 3.87 | 0.96 | 5564 | <2.17 | 0.246 | <0.023 | 0.037 | <0.0175 | 1.03 | 0.86 | 1.62 | 5.4 | 0.36 | <1.51 | <0.0167 | 0.56 | 42.05 |
| MF39Pyr-80 | 20.76 | 1.4 | 67.84 | 1.64 | 0.66 | 3.25 | 2655 | <2.32 | <0.137 | <0.023 | 0.15 | 0.009 | 0.69 | 0.462 | 0.85 | 0.376 | 0.106 | <1.56 | 0.032 | 0.24 | 28.82 |
| **Mean n=80** | 3 | 57 | 77 | 25 | 8 | 2 | 5718 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 0 | 1 | 0 | 4 | 20 |
| **S.D** | 10 | 243 | 365 | 59 | 31 | 7 | 2144 | 7 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 10 | 0 | 0 | 0 | 4 | 28 |
| **Min** | 0.17 | 0.13 | 0.19 | 0.37 | 0.35 | 0.03 | 1210 | 1.78 | 0.09 | 0.01 | 0.03 | 0.01 | 0.20 | 0.07 | 0.46 | 0.05 | 0.01 | 1.16 | 0.00 | 0.07 | 0.09 |
| **Max** | 66 | 1977 | 3138 | 338 | 240 | 41 | 10793 | 22 | 1 | 1 | 0 | 0 | 15 | 11 | 11 | 71 | 1 | 2 | 0 | 17 | 139 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF40pyr-1 | 0.232 | 49 | 58.84 | 2.47 | 1.02 | <0.065 | 3008 | <2.37 | <0.135 | <0.028 | <0.211 | <0.0100 | <0.24 | <0.093 | <0.55 | <0.031 | <0.035 | <2.71 | <0.0135 | <0.20 | <0.093 |
| MF40pyr-2 | 0.56 | 19 | 16.65 | 78.93 | 2.79 | <0.041 | 4186 | <2.01 | <0.177 | 0.336 | <0.204 | <0.0124 | <0.27 | <0.094 | 0.67 | <0.030 | <0.048 | <1.93 | <0.0159 | 6.31 | 3.68 |
| MF40pyr-3 | 0.324 | 6.1 | 24.52 | 1.34 | 1.65 | 0.055 | 241 | 3.76 | 0.1 | 0.028 | <0.118 | <0.0137 | <0.21 | <0.092 | <0.63 | <0.061 | <0.024 | <1.70 | <0.0226 | <0.29 | 3.61 |
| MF40pyr-4 | 0.304 | 5.4 | 3.92 | 88.79 | 277.9 | 0.054 | 349 | <2.55 | <0.207 | <0.031 | <0.166 | <0.0175 | <0.26 | <0.102 | <0.70 | <0.080 | <0.024 | <1.91 | 0.1 | 1.49 | 2.99 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF40pyr-5 | 0.433 | 7.2 | 3.32 | 1.01 | 0.91 | <0.035 | 1048 | 2.7 | <0.169 | <0.022 | <0.165 | 0.016 | <0.21 | 0.093 | <0.49 | <0.030 | <0.034 | <1.69 | <0.0182 | <0.20 | <0.077 |
| MF40pyr-6 | 0.468 | 2.5 | 0.79 | 1.5 | <0.44 | 0.076 | 5371 | <2.19 | <0.127 | <0.015 | <0.163 | <0.0133 | <0.24 | <0.093 | <0.57 | 0.037 | <0.024 | <1.70 | <0.0127 | <0.22 | <0.081 |
| MF40pyr-7 | 0.282 | 27 | 13.99 | 1.32 | <0.35 | <0.048 | 5298 | <2.16 | <0.143 | <0.021 | <0.229 | <0.0153 | <0.207 | <0.075 | 0.43 | <0.072 | <0.041 | <1.53 | <0.0126 | <0.18 | <0.077 |
| MF40pyr-8 | <0.180 | 1.1 | <0.26 | 0.51 | 1.12 | 0.055 | 221 | <2.20 | <0.149 | <0.016 | <0.119 | <0.0113 | <0.26 | <0.074 | <0.73 | <0.061 | <0.055 | <1.71 | <0.0186 | <0.16 | <0.078 |
| MF40pyr-9 | 0.448 | 1.5 | 4.84 | 2.74 | 1.95 | <0.054 | 188 | <2.23 | <0.178 | 0.114 | <0.123 | <0.0101 | <0.25 | <0.074 | 0.7 | <0.055 | <0.057 | <1.78 | <0.0215 | 2.48 | 2.18 |
| MF40pyr-10 | 0.322 | 5 | 1.9 | <0.52 | 145.2 | <0.054 | 3319 | <1.99 | <0.148 | <0.031 | <0.119 | <0.0056 | <0.20 | <0.091 | <0.76 | <0.061 | <0.069 | <1.52 | <0.019 | <0.27 | <0.084 |
| MF40pyr-11 | <0.150 | 89 | 197.4 | 0.86 | 5.22 | <0.056 | 4708 | <2.25 | <0.136 | 0.041 | <0.124 | <0.0117 | <0.26 | <0.112 | <0.67 | <0.045 | <0.044 | <1.64 | 0.015 | <0.12 | <0.091 |
| MF40pyr-12 | <0.161 | 19 | 4.39 | <0.57 | 52.16 | <0.049 | 2196 | <2.11 | <0.112 | <0.016 | <0.00 | <0.0127 | <0.29 | <0.088 | 0.64 | <0.031 | <0.035 | <1.72 | <0.0187 | <0.19 | <0.082 |
| MF40pyr-13 | 0.483 | 7.8 | 4.44 | <0.59 | 31.76 | <0.044 | 5716 | <2.53 | <0.173 | <0.0315 | <0.241 | <0.0150 | <0.25 | 0.186 | <0.65 | <0.044 | <0.035 | <1.73 | <0.0162 | <0.18 | <0.083 |
| MF40pyr-14 | 1.43 | 16 | 13.7 | <0.41 | 1.37 | <0.039 | 4761 | <2.31 | <0.173 | <0.0223 | <0.00 | <0.0080 | <0.26 | <0.07 | 0.66 | <0.088 | <0.035 | <1.57 | 0.015 | <0.14 | 0.192 |
| MF40pyr-15 | 0.446 | 20 | 36.6 | <0.63 | 0.94 | <0.065 | 4860 | <2.14 | <0.105 | <0.0166 | 0.113 | <0.0158 | <0.24 | <0.103 | <0.75 | <0.092 | <0.052 | <1.66 | <0.0139 | <0.12 | <0.089 |
| MF40pyr-16 | 1.39 | 117 | 77.35 | 1.21 | 0.62 | <0.057 | 708 | <2.23 | <0.152 | <0.038 | <0.224 | <0.0061 | <0.32 | 0.139 | 1.37 | <0.074 | 0.043 | 1.62 | <0.0225 | <0.15 | 9.82 |
| MF40pyr-17 | 0.383 | 9.9 | 2.24 | 0.77 | 60 | <0.031 | 311 | <2.36 | <0.167 | 0.015 | <0.128 | <0.0134 | <0.27 | <0.098 | <0.60 | <0.073 | <0.070 | <1.50 | <0.024 | <0.13 | <0.092 |
| MF40pyr-18 | 0.415 | 1.5 | <0.23 | 6.26 | 0.5 | <0.052 | 334 | <2.50 | <0.103 | <0.016 | 0.074 | <0.0083 | <0.23 | 0.065 | <0.69 | <0.0321 | <0.073 | <1.54 | <0.0194 | <0.27 | <0.097 |
| MF40pyr-19 | <0.182 | 3.4 | 2.55 | 1.17 | 0.79 | <0.052 | 626 | 3.6 | <0.192 | 0.407 | <0.288 | <0.0171 | <0.28 | <0.085 | <0.85 | <0.074 | <0.046 | <1.55 | <0.0141 | <0.24 | 10.11 |
| MF40pyr-20 | 0.334 | 82 | 44.53 | 1.02 | 4.02 | <0.038 | 3731 | <2.40 | <0.130 | <0.038 | <0.181 | <0.0060 | <0.28 | <0.079 | <0.73 | <0.046 | <0.053 | <1.48 | 0.003 | <0.13 | <0.095 |
| MF40pyr-21 | 1.59 | 21 | 24.81 | 83.43 | 1.36 | <0.027 | 4254 | <2.33 | <0.203 | 0.05 | <0.180 | <0.0084 | <0.28 | 0.299 | <0.79 | <0.056 | <0.064 | <2.76 | 0.138 | 0.16 | 0.99 |
| MF40pyr-22 | <0.154 | 459 | 159.4 | 332.27 | 0.77 | <0.037 | 1996 | <2.16 | <0.171 | <0.037 | <0.125 | <0.0155 | <0.26 | <0.060 | <0.73 | 0.01 | <0.068 | <2.25 | 0.014 | <0.14 | <0.092 |
| MF40pyr-23 | <0.192 | 7 | 62.68 | 0.57 | <0.45 | <0.062 | 4141 | <2.38 | <0.141 | <0.042 | 0.11 | <0.0160 | <0.26 | 0.11 | 0.82 | <0.033 | 0.115 | <2.09 | <0.026 | <0.20 | 11.98 |
| MF40pyr-24 | <0.195 | 20 | 39.36 | 10.33 | 6.59 | <0.042 | 5702 | 2.18 | <0.125 | 0.025 | <0.175 | 0.038 | <0.26 | 0.198 | <0.75 | <0.071 | <0.036 | <1.90 | <0.0192 | <0.14 | 6.04 |
| MF40pyr-25 | 0.88 | 995 | 546.8 | 68.61 | 1.42 | 0.075 | 3608 | <2.44 | <0.225 | 0.136 | <0.00 | <0.0091 | <0.26 | 0.139 | 1.19 | <0.061 | 0.088 | <2.01 | 0.028 | 4.55 | 13.12 |
| MF40pyr-26 | 0.431 | 50 | 86 | <0.67 | 4.09 | <0.071 | 3507 | <2.48 | <0.136 | <0.025 | <0.135 | <0.0141 | <0.30 | <0.081 | <0.83 | <0.085 | <0.074 | <2.05 | <0.028 | <0.25 | 0.234 |
| MF40pyr-27 | 0.37 | 10 | 19.63 | 0.67 | 0.61 | 0.035 | 5045 | <2.45 | <0.179 | <0.034 | <0.185 | <0.0137 | <0.28 | <0.078 | <0.64 | <0.034 | <0.054 | <1.75 | <0.0101 | <0.21 | 0.156 |
| MF40pyr-28 | 0.32 | 29 | 24.26 | 91.88 | <0.39 | 0.064 | 3608 | <2.54 | <0.139 | <0.026 | <0.277 | <0.0112 | <0.28 | <0.083 | <0.77 | <0.094 | <0.041 | <2.09 | <0.0152 | <0.21 | 0.97 |
| MF40pyr-29 | 0.409 | 266 | 399.9 | 2.54 | 0.46 | <0.049 | 1076 | <2.58 | <0.22 | 0.066 | <0.192 | <0.0127 | <0.30 | <0.075 | <0.66 | <0.070 | 0.059 | <1.97 | <0.023 | 2.03 | 1.73 |
| MF40pyr-30 | 26.02 | 55 | 169.3 | 1999 | 0.68 | <0.055 | 3043 | <2.36 | <0.172 | 0.553 | 0.2 | 0.025 | 0.43 | 0.241 | <0.76 | 1.9 | 0.062 | <1.77 | 0.599 | 1.55 | 3.53 |
| MF40pyr-31 | 1.15 | 279 | 157.2 | 293.84 | 1 | <0.053 | 3347 | <2.51 | <0.163 | 0.481 | <0.23 | <0.0124 | 0.74 | 0.201 | 1.14 | <0.127 | <0.091 | <1.87 | 0.219 | 5.98 | 5.05 |
| MF40pyr-32 | 0.407 | 350 | 1339 | <0.45 | <0.42 | <0.055 | 2933 | <2.24 | <0.138 | <0.024 | <0.127 | <0.0084 | <0.25 | <0.091 | <0.80 | <0.065 | <0.026 | <1.79 | <0.0098 | <0.11 | <0.076 |
| MF40pyr-33 | 0.537 | 9.7 | 11.94 | 5.58 | 0.51 | <0.042 | 3661 | <2.03 | <0.201 | <0.028 | <0.212 | <0.0152 | <0.24 | <0.052 | <0.67 | <0.031 | <0.044 | <1.61 | <0.0232 | <0.16 | <0.088 |
| MF40pyr-34 | 0.198 | 17 | 23.69 | <0.46 | <0.41 | <0.062 | 1148 | <2.22 | <0.125 | <0.043 | <0.124 | <0.0101 | <0.23 | <0.093 | <0.53 | <0.078 | <0.037 | <1.69 | 0.014 | <0.14 | <0.080 |
| MF40pyr-35 | <0.172 | 10 | 11.73 | 106.95 | <0.53 | <0.051 | 2406 | <2.34 | <0.113 | <0.040 | <0.123 | <0.0129 | <0.25 | <0.088 | <0.58 | <0.045 | <0.026 | <1.66 | <0.0212 | <0.11 | <0.081 |
| MF40pyr-36 | 0.261 | 0.68 | 5.21 | <0.51 | 1.97 | <0.052 | 4365 | <2.11 | <0.124 | 0.071 | <0.00 | <0.0100 | <0.25 | <0.079 | <0.68 | <0.064 | 0.086 | <1.65 | <0.0135 | <0.11 | <0.085 |
| MF40pyr-37 | 0.306 | 44 | 8.69 | 9.99 | 0.85 | <0.063 | 340 | <2.42 | <0.185 | 0.074 | 0.32 | 0.172 | <0.27 | <0.075 | <0.87 | <0.075 | <0.061 | <1.66 | <0.020 | <0.083 | <0.091 |
| MF40pyr-38 | 3.62 | 133 | 104.5 | 220.68 | 6.27 | <0.033 | 2707 | <2.20 | <0.133 | 0.336 | <0.213 | <0.0081 | <0.23 | 0.567 | 2.92 | <0.134 | 0.202 | <1.61 | 0.038 | 17.86 | 28.59 |
| MF40pyr-39 | 14.04 | 4.8 | 12.46 | 1305.6 | 1.38 | 1.06 | 1095 | 14.11 | <0.114 | 0.088 | <0.175 | 0.095 | 4.29 | <0.091 | <0.61 | <0.055 | <0.064 | <1.60 | <0.0136 | 0.37 | 5.59 |
| MF40pyr-40 | <0.161 | 25 | 41.76 | <0.42 | 0.96 | <0.058 | 1105 | <2.08 | <0.141 | 0.005 | <0.00 | <0.0080 | <0.28 | <0.078 | <0.70 | <0.070 | 0.039 | <1.56 | <0.0163 | <0.11 | 1.79 |
| MF40pyr-41 | 0.46 | 10 | 23.99 | <0.69 | <0.57 | <0.047 | 4740 | <2.03 | 0.126 | <0.0270 | <0.166 | <0.0146 | <0.24 | <0.060 | <0.50 | <0.043 | 0.062 | <2.42 | <0.0182 | <0.15 | <0.079 |
| MF40pyr-42 | 18.53 | 9.3 | 202.8 | 1.83 | 18.73 | 1.12 | 6188 | <2.42 | <0.167 | <0.034 | <0.25 | <0.0092 | <0.27 | 0.409 | 3.19 | <0.127 | 0.035 | <1.96 | 0.062 | 2.74 | 42.03 |
| MF40pyr-43 | 3.74 | 18 | 29.24 | 1.04 | 197 | 0.206 | 5001 | <1.92 | <0.163 | <0.029 | 0.8 | <0.0116 | <0.21 | 0.249 | 1.62 | 0.185 | 0.11 | <1.84 | 0.022 | 25.09 | 20.96 |
| MF40pyr-44 | 0.518 | 1.1 | 1.38 | 0.56 | 0.83 | <0.047 | 3930 | <2.21 | <0.160 | <0.043 | <0.00 | <0.0116 | <0.27 | <0.087 | <0.63 | <0.064 | <0.045 | <1.67 | <0.0135 | <0.12 | <0.087 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF40pyr-45 | 3.68 | 30 | 10.72 | 18372 | 5.37 | <0.040 | 8824 | <1.94 | 0.73 | 3.92 | <0.18 | 0.365 | 17.3 | 1.89 | 2.33 | <0.082 | 0.31 | <1.55 | 16.44 | 42.23 | 14.43 |
| MF40pyr-46 | 0.231 | 37 | 1.4 | 0.54 | 1.39 | <0.040 | 8821 | <2.24 | <0.173 | <0.0221 | <0.24 | 0.087 | <0.24 | <0.068 | <0.70 | <0.043 | <0.025 | <1.58 | <0.0129 | <0.10 | <0.076 |
| MF40pyr-47 | 0.49 | 36 | 14.26 | 0.69 | 2.24 | 0.029 | 14905 | <1.87 | <0.108 | <0.025 | <0.00 | <0.0113 | <0.197 | 0.236 | <0.57 | <0.074 | 0.027 | <1.41 | <0.0205 | 0.11 | 12.36 |
| MF40pyr-48 | 0.335 | 19 | 1.07 | 4.87 | 347 | <0.039 | 12687 | <2.19 | <0.147 | <0.026 | <0.28 | <0.0092 | <0.215 | <0.076 | <0.72 | <0.051 | <0.042 | <1.72 | <0.0233 | <0.17 | 0.072 |
| MF40pyr-49 | 1.34 | 31 | 23.69 | 18.62 | 4.15 | <0.062 | 9023 | 3.57 | <0.128 | <0.031 | 0.031 | <0.0147 | <0.21 | 1.38 | 1.07 | <0.066 | 0.164 | <1.54 | <0.0162 | 0.33 | 60.53 |
| MF40pyr-50 | 0.83 | 2.4 | 4.05 | 36.69 | 2.85 | 2.48 | 7799 | <2.06 | <0.082 | <0.044 | <0.117 | <0.0109 | 0.37 | <0.073 | 0.76 | <0.060 | 0.101 | <1.38 | 0.011 | <0.086 | 6.13 |
| MF40pyr-51 | 2.69 | 167 | 76.17 | 5919.7 | 34.49 | 0.615 | 297 | 3.87 | 0.158 | 0.91 | 0.19 | 0.208 | 36.6 | 1.07 | 12.02 | <0.146 | 0.66 | <1.57 | 0.578 | 6.28 | 69.5 |
| MF40pyr-52 | 0.96 | 0.74 | 29.28 | 3.03 | 0.8 | <0.043 | 10681 | <1.95 | <0.175 | 0.013 | <0.152 | <0.0123 | <0.21 | 0.213 | 1.1 | <0.087 | 1.05 | <1.40 | <0.0143 | 0.84 | 17.36 |
| MF40pyr-53 | 0.35 | 219 | 207.2 | 2.99 | 0.58 | <0.046 | 7970 | <2.18 | <0.157 | <0.038 | <0.29 | <0.0144 | <0.24 | 0.091 | 0.68 | <0.085 | <0.055 | <1.64 | <0.0127 | <0.120 | 7.67 |
| MF40pyr-54 | 0.213 | 128 | 408.6 | 23.49 | 0.91 | <0.034 | 9068 | <2.02 | <0.081 | <0.022 | <0.115 | <0.0142 | <0.24 | <0.061 | <0.70 | <0.094 | <0.049 | <1.55 | <0.0198 | <0.10 | 1.13 |
| MF40pyr-55 | 1.45 | 11 | 51.74 | 497.41 | 73.81 | 0.066 | 358 | <1.84 | <0.133 | 0.3 | 0.13 | 0.029 | 27.44 | 0.66 | 4.6 | 0.105 | 0.142 | <1.50 | 0.28 | 2.51 | 31.62 |
| MF40pyr-56 | 1.69 | 8.7 | 54.6 | 9.48 | 3.33 | 0.046 | 8845 | <2.10 | <0.140 | 0.134 | <0.199 | <0.0131 | <0.24 | 0.78 | 4.41 | <0.066 | 0.157 | <1.58 | <0.0177 | 2.15 | 38.65 |
| MF40pyr-57 | 0.498 | 7.2 | 19.86 | 1.65 | 3.92 | <0.045 | 7107 | <2.04 | <0.140 | <0.029 | 0.065 | <0.0088 | <0.23 | 0.188 | 0.74 | <0.056 | <0.033 | <1.41 | <0.0084 | <0.07 | 8.94 |
| MF40pyr-58 | 0.328 | 280 | 25.72 | 3.36 | 5.83 | <0.045 | 8512 | <1.98 | <0.153 | 0.056 | <0.29 | <0.0113 | <0.26 | <0.061 | 0.7 | <0.084 | 0.055 | <1.46 | 0.008 | <0.108 | 2.47 |
| MF40pyr-59 | <0.183 | 8.2 | 0.98 | <0.31 | 5.83 | <0.035 | 9673 | <2.17 | <0.162 | <0.015 | <0.157 | 0.019 | <0.21 | <0.080 | <0.67 | <0.028 | <0.053 | <1.41 | <0.0171 | <0.09 | 0.315 |
| MF40pyr-60 | 0.315 | 6.9 | 17.18 | 63.77 | 1.51 | 0.071 | 10243 | <2.03 | <0.116 | 0.323 | 0.065 | <0.0087 | <0.22 | 0.169 | <0.70 | <0.088 | 0.219 | 1.25 | 0.02 | 7.6 | 8.12 |
| MF40pyr-61 | 1.69 | 127 | 117.3 | 28339 | 15.55 | 0.099 | 6419 | 3.82 | 1.17 | 5.33 | 0.43 | 0.35 | 9.2 | 3 | 5.29 | 0.228 | 0.67 | <2.25 | 28.55 | 66.15 | 27.86 |
| MF40pyr-62 | 0.7 | 27 | 34.39 | 51.48 | 0.82 | <0.025 | 5001 | <2.19 | <0.107 | <0.032 | <0.21 | <0.0095 | <0.26 | <0.085 | <0.85 | <0.043 | <0.051 | <2.07 | <0.0129 | <0.13 | 4.65 |
| MF40pyr-63 | 1.3 | 66 | 48.84 | 10505 | 2.95 | 1.56 | 6451 | <2.09 | 0.197 | 2.79 | 0.108 | 0.181 | 6.59 | 0.77 | 0.81 | <0.161 | 0.64 | <1.75 | 6.96 | 12.45 | 10.56 |
| MF40pyr-64 | 0.375 | 6.1 | 4.33 | 1.19 | 0.83 | <0.040 | 4803 | <2.32 | <0.144 | <0.034 | <0.28 | <0.0117 | <0.28 | <0.086 | 0.6 | <0.073 | <0.060 | <2.03 | 0.021 | <0.13 | 0.65 |
| MF40pyr-65 | 0.509 | 1 | 4.16 | 1.81 | <0.58 | 0.046 | 5091 | <2.46 | <0.147 | <0.032 | <0.00 | <0.0143 | <0.29 | 0.088 | <0.64 | <0.137 | <0.078 | <1.86 | 0.053 | 3.92 | 1.9 |
| MF40pyr-66 | 0.59 | 20 | 7.02 | 762.72 | 5.28 | 26.88 | 130 | 3.09 | <0.151 | 0.068 | <0.32 | 1.95 | 569.8 | 0.27 | <2.80 | <0.089 | 0.074 | <2.08 | <0.0217 | <0.16 | <1.34 |
| MF40pyr-67 | 0.358 | 83 | 2.05 | 130.84 | <0.36 | 10.89 | 60 | <2.70 | <0.164 | <0.031 | <0.191 | 0.294 | 93.48 | <0.076 | <0.79 | <0.070 | <0.058 | <1.72 | <0.025 | <0.18 | 0.375 |
| MF40pyr-68 | 3.6 | 60 | 42.17 | 3203.6 | 1.99 | 0.082 | 365 | <2.41 | <0.183 | 1.41 | 0.16 | 0.048 | 3.45 | 0.84 | 1.77 | <0.089 | 0.35 | <1.88 | 4.22 | 14.23 | 13.3 |
| MF40pyr-69 | 0.92 | 10 | 14.38 | 2341.4 | <0.46 | <0.059 | 188 | <2.27 | <0.21 | 0.485 | <0.28 | 0.178 | 0.26 | 0.213 | 1.3 | <0.105 | 0.063 | <1.77 | 1.43 | 3.79 | 9.11 |
| MF40pyr-70 | <0.192 | 17 | 7.64 | 0.54 | <0.42 | <0.068 | 858 | <2.55 | <0.203 | <0.036 | <0.00 | <0.0140 | <0.27 | 0.075 | <0.83 | <0.069 | <0.050 | <2.01 | <0.0179 | <0.23 | 0.125 |
| MF40pyr-71 | 4.1 | 98 | 175.5 | 18791 | 74.82 | 0.068 | 6325 | <2.28 | <0.183 | 4.27 | 0.32 | 0.135 | 3.98 | 1.01 | 9.41 | <0.162 | 0.57 | <1.83 | 2.95 | 7.48 | 54.34 |
| MF40pyr-72 | 0.46 | 8.4 | 14.63 | 117.53 | 1.23 | <0.046 | 4157 | <2.21 | <0.213 | 0.01 | <0.128 | <0.0119 | <0.22 | <0.083 | <0.82 | <0.057 | <0.067 | <1.80 | <0.0220 | <0.11 | 0.092 |
| MF40pyr-73 | 1.77 | 32 | 58.3 | 91.01 | 6.83 | <0.046 | 5064 | <2.43 | <0.128 | 0.078 | <0.130 | <0.0170 | <0.34 | 0.398 | 4.6 | <0.160 | 0.191 | <1.92 | 0.033 | 2.25 | 28.69 |
| MF40pyr-74 | 0.42 | 41 | 33.6 | 0.58 | 1.25 | <0.049 | 5488 | <2.20 | <0.166 | <0.035 | <0.130 | 0.013 | <0.27 | <0.059 | <0.77 | <0.047 | <0.069 | <1.80 | <0.0100 | <0.16 | <0.094 |
| MF40pyr-75 | 0.374 | 57 | 15.67 | 11.54 | 0.89 | <0.050 | 5621 | <2.34 | <0.160 | 0.061 | <0.22 | 0.007 | <0.25 | <0.064 | 0.62 | <0.046 | 0.008 | <1.62 | 0.03 | <0.12 | <0.084 |
| MF40pyr-76 | 0.66 | 6.6 | 5.4 | 1.21 | <0.42 | <0.037 | 6490 | <2.05 | <0.134 | 0.035 | <0.126 | <0.0117 | <0.23 | <0.08 | <0.79 | <0.032 | <0.038 | <1.57 | <0.0193 | <0.16 | <0.082 |
| MF40pyr-77 | 0.58 | 29 | 18.85 | 4249.3 | 1.9 | 4.08 | 268 | <2.26 | <0.157 | 1.07 | 0.116 | 0.08 | 1.68 | 0.278 | <0.87 | <0.047 | 0.124 | <1.88 | 2.6 | 2.91 | 6.86 |
| MF40pyr-78 | 0.23 | 49 | 34.53 | <0.46 | 36.71 | <0.052 | 6627 | <2.43 | <0.113 | 0.035 | <0.18 | <0.0083 | <0.23 | 0.139 | <0.69 | <0.097 | <0.047 | <1.68 | <0.0168 | <0.18 | 5.6 |
| MF40pyr-79 | 0.467 | 164 | 87.96 | 4.24 | 1.75 | <0.050 | 5074 | <2.30 | <0.169 | <0.0170 | <0.254 | <0.0166 | <0.24 | <0.079 | <0.66 | <0.046 | <0.039 | <1.68 | <0.0194 | <0.13 | <0.082 |
| MF40pyr-80 | 0.33 | 39 | 32.23 | 0.77 | 0.8 | <0.031 | 3612 | 2.8 | <0.235 | <0.030 | <0.185 | <0.0148 | <0.25 | <0.087 | <0.57 | <0.048 | <0.028 | <1.82 | <0.0100 | <0.22 | <0.090 |
| **Mean n=80** | 2 | 66 | 73 | 1467 | 22 | 2 | 4288 | 4 | 0 | 1 | 0 | 0 | 52 | 0 | 2 | 0 | 0 | 1 | 2 | 9 | 12 |
| **S.D** | 4 | 135 | 174 | 4824 | 61 | 6 | 3242 | 3 | 0 | 1 | 0 | 0 | 145 | 1 | 3 | 1 | 0 | 0 | 6 | 14 | 16 |
| **Min** | 0.20 | 0.68 | 0.79 | 0.51 | 0.46 | 0.03 | 60 | 2.18 | 0.10 | 0.00 | 0.03 | 0.01 | 0.26 | 0.07 | 0.43 | 0.01 | 0.01 | 1.25 | 0.00 | 0.11 | 0.07 |
| **Max** | 26 | 995 | 1339 | 28339 | 347 | 27 | 14905 | 14 | 1 | 5 | 1 | 2 | 570 | 3 | 12 | 2 | 1 | 2 | 29 | 66 | 70 |

| Sample # | $^{55}$Mn | $^{59}$Co | $^{60}$Ni | $^{65}$Cu | $^{66}$Zn | $^{69}$Ga | $^{75}$As | $^{82}$Se | $^{95}$Mo | $^{107}$Ag | $^{111}$Cd | $^{115}$In | $^{118}$Sn | $^{121}$Sb | $^{125}$Te | $^{184}$W | $^{197}$Au | $^{202}$Hg | $^{205}$Tl | $^{208}$Pb | $^{209}$Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF41Pyr-1 | 0.419 | 25 | 744.7 | <0.78 | 44.08 | <0.048 | 1105 | 5.73 | <0.128 | <0.033 | <0.171 | <0.0079 | <0.25 | <0.068 | <0.72 | <0.054 | 0.016 | <2.75 | <0.0185 | <0.10 | 0.38 |
| MF41Pyr-2 | 0.454 | 195 | 626.8 | 1.21 | 5.53 | <0.039 | 895 | 4.35 | 0.148 | <0.029 | <0.22 | <0.0128 | <0.28 | <0.070 | <0.77 | <0.055 | <0.054 | <2.25 | <0.030 | <0.13 | 0.151 |
| MF41Pyr-3 | 0.425 | 799 | 352.7 | 455.53 | 143 | 0.335 | 730 | 4.31 | <0.204 | 0.025 | <0.175 | 0.014 | 0.82 | <0.078 | <0.66 | <0.064 | <0.060 | <2.03 | <0.0134 | <0.11 | 1.14 |
| MF41Pyr-4 | 0.409 | 20 | 764.8 | <0.48 | 1.75 | <0.037 | 984 | 5.84 | <0.152 | <0.0240 | <0.126 | <0.0175 | <0.33 | <0.091 | <0.81 | <0.056 | <0.047 | <2.23 | <0.0097 | <0.09 | 0.193 |
| MF41Pyr-5 | 0.344 | 21 | 826.7 | <0.68 | 2.9 | <0.052 | 674 | 4.99 | <0.152 | <0.017 | 0.16 | <0.0102 | <0.28 | <0.094 | <0.80 | <0.046 | <0.028 | <1.96 | <0.0194 | <0.10 | <0.088 |
| MF41Pyr-6 | 0.36 | 24 | 673.3 | 297.7 | <0.48 | <0.037 | 1472 | 5.72 | <0.094 | 0.219 | 0.17 | 0.026 | 0.89 | <0.085 | 1.15 | 0.09 | <0.062 | <1.84 | 0.86 | 0.64 | 0.75 |
| MF41Pyr-7 | 0.58 | 95 | 3040 | <0.57 | 0.6 | <0.032 | 183 | 3.71 | <0.068 | <0.023 | <0.169 | <0.0096 | <0.26 | <0.061 | <0.59 | <0.031 | <0.052 | <1.80 | <0.0183 | <0.08 | <0.079 |
| MF41Pyr-8 | 0.198 | 118 | 281.8 | 412.77 | 0.6 | <0.050 | 259 | 7.12 | <0.102 | 0.128 | <0.22 | 0.016 | <0.30 | <0.097 | <0.67 | <0.073 | <0.062 | <1.74 | 0.554 | <0.13 | <0.116 |
| MF41Pyr-9 | <0.197 | 15 | 232.1 | 1.37 | 1.22 | 0.07 | 61 | 2.27 | <0.160 | <0.024 | <0.127 | <0.0101 | <0.28 | <0.068 | <0.81 | <0.065 | 0.051 | <1.85 | <0.0137 | <0.15 | <0.083 |
| MF41Pyr-10 | 0.9 | 128 | 782.9 | 252.51 | 1.03 | <0.051 | 294 | 5.74 | <0.184 | 0.054 | <0.25 | 0.023 | <0.28 | <0.092 | 1.48 | <0.063 | <0.047 | 1.83 | 0.246 | 2.08 | 6.28 |
| MF41Pyr-11 | 0.273 | 1051 | 847.9 | 47.52 | 1.41 | <0.036 | 564 | 4.74 | <0.129 | 0.085 | <0.174 | <0.0113 | 0.32 | <0.072 | <0.82 | <0.118 | <0.046 | <1.84 | 0.059 | <0.12 | 0.39 |
| MF41Pyr-12 | <0.181 | 301 | 980.5 | 16563 | 3.39 | <0.049 | 318 | 3.79 | 0.31 | 2.43 | 0.32 | 0.579 | 1.73 | 0.62 | 0.93 | <0.075 | 0.23 | <1.83 | 24.8 | 1.51 | 3.27 |
| MF41Pyr-13 | 0.271 | 355 | 369.6 | 252.74 | 0.48 | <0.056 | 411 | 4.87 | <0.154 | 0.149 | 0.15 | 0.08 | 7.14 | <0.088 | <0.73 | <0.031 | <0.046 | <1.74 | 0.082 | 0.94 | 1.1 |
| MF41Pyr-14 | 0.336 | 963 | 1227 | 4657.3 | 1.23 | 0.093 | 962 | 7.99 | 0.25 | 2.13 | <0.22 | 0.251 | 1.83 | 1.4 | 108.9 | 0.01 | 4.79 | <1.86 | 6.07 | 6.56 | 241.9 |
| MF41Pyr-15 | 0.177 | 317 | 263.6 | 0.48 | <0.48 | <0.050 | 110 | 3.06 | <0.154 | <0.029 | <0.00 | <0.00 | <0.28 | <0.087 | <0.84 | <0.063 | <0.046 | <1.67 | <0.019 | <0.12 | <0.096 |
| MF41Pyr-16 | 0.21 | 404 | 2049 | <0.48 | 0.41 | 0.083 | 88 | 4.47 | <0.169 | <0.023 | <0.27 | <0.0150 | <0.29 | <0.077 | 19.74 | <0.055 | 0.061 | <1.78 | <0.0094 | <0.11 | 34.65 |
| MF41Pyr-17 | 0.313 | 72 | 1814 | 294.27 | 1.68 | 0.053 | 5610 | 3.87 | <0.129 | 0.032 | <0.173 | 0.017 | 2.85 | 0.328 | 1.66 | <0.054 | 0.081 | <1.70 | <0.026 | <0.12 | 6.55 |
| MF41Pyr-18 | 2.04 | 1176 | 901.9 | 3098.6 | 2.19 | 0.086 | 1857 | 3.61 | <0.168 | 2.45 | <0.30 | 0.311 | 22.24 | 0.64 | 23.22 | <0.117 | 0.68 | <1.73 | 4.16 | 8.07 | 43.1 |
| MF41Pyr-19 | 0.61 | 395 | 314.1 | 2.69 | 0.59 | <0.042 | 112 | 2.44 | <0.126 | 0.037 | <0.120 | <0.0110 | <0.26 | <0.073 | 2.01 | <0.092 | 0.13 | <1.72 | <0.030 | 0.1 | 2.95 |
| MF41Pyr-20 | 0.491 | 673 | 303.1 | <0.47 | 1.11 | <0.040 | 182 | <2.18 | <0.095 | 0.005 | 0.142 | <0.0122 | <0.27 | <0.058 | <0.73 | <0.043 | <0.045 | <1.50 | <0.0203 | <0.14 | <0.083 |
| MF41Pyr-21 | 0.268 | 49 | 686.6 | 0.82 | 0.8 | 0.034 | 1908 | 4.78 | <0.116 | <0.040 | <0.208 | <0.0078 | <0.28 | <0.083 | <0.67 | <0.044 | <0.053 | <2.72 | <0.0204 | <0.11 | 0.137 |
| MF41Pyr-22 | 0.69 | 1053 | 852.5 | 904.47 | <0.28 | <0.039 | 1582 | 4.93 | <0.124 | 0.477 | <0.21 | 0.101 | 2.02 | 0.164 | <0.63 | <0.043 | <0.074 | <2.20 | 2.92 | 0.61 | 0.229 |
| MF41Pyr-23 | 0.397 | 814 | 3326 | 1.52 | 0.78 | <0.042 | 12960 | 6.09 | <0.148 | 0.033 | <0.204 | <0.0108 | <0.213 | <0.079 | <0.62 | <0.052 | <0.058 | <1.88 | <0.027 | <0.14 | 0.2 |
| MF41Pyr-24 | 0.509 | 8.5 | 4042 | 6.38 | 1.04 | <0.052 | 9999 | 5 | <0.156 | <0.032 | <0.206 | <0.0055 | <0.27 | <0.070 | <0.66 | <0.075 | 0.066 | <2.06 | <0.0181 | <0.14 | 0.67 |
| MF41Pyr-25 | 0.207 | 19 | 5288 | 353.39 | 1.51 | <0.042 | 74 | 5.7 | <0.132 | 0.159 | <0.235 | <0.0108 | <0.190 | 0.121 | <0.64 | <0.052 | <0.052 | <1.86 | 0.115 | <0.15 | 0.92 |
| MF41Pyr-26 | 0.228 | 52 | 6586 | 1.71 | 1.07 | <0.059 | 424 | 3.66 | <0.115 | 0.037 | <0.167 | <0.0077 | <0.26 | 0.073 | 1.55 | <0.074 | 0.093 | <1.81 | <0.0127 | <0.11 | 2.25 |
| MF41Pyr-27 | 0.58 | 36 | 1076 | 1087.1 | 7.1 | 9.2 | 13 | 4.35 | <0.182 | 0.127 | <0.119 | 4.35 | 1399 | 1.1 | 5.68 | <0.061 | 0.113 | <1.76 | <0.0202 | 0.23 | 16.29 |
| MF41Pyr-28 | 0.211 | 20 | 333.4 | 0.95 | 149.5 | 0.043 | 355 | <1.98 | <0.105 | <0.039 | <0.265 | <0.0144 | <0.24 | <0.069 | <0.85 | <0.068 | <0.052 | <1.60 | <0.022 | <0.10 | <0.094 |
| MF41Pyr-29 | <0.175 | 374 | 657.7 | <0.46 | <0.56 | <0.043 | 320 | <2.07 | <0.126 | <0.028 | <0.210 | <0.0055 | <0.25 | 0.359 | <0.68 | <0.054 | 0.032 | <1.64 | <0.034 | 0.41 | 1.23 |
| MF41Pyr-30 | 0.233 | 1559 | 989.6 | 142.43 | 6.84 | <0.023 | 3366 | <1.92 | 0.15 | <0.027 | <0.228 | <0.0117 | <0.26 | <0.059 | 0.74 | <0.097 | <0.051 | <1.68 | <0.0150 | <0.13 | <0.074 |
| MF41Pyr-31 | 0.294 | 17 | 997.4 | 1.21 | 4.57 | <0.031 | 2662 | <2.21 | <0.122 | 0.014 | <0.165 | <0.0119 | <0.28 | <0.07 | <0.60 | <0.052 | 0.032 | <1.67 | <0.0125 | <0.12 | <0.085 |
| MF41Pyr-32 | 1.15 | 84 | 1103 | 504.64 | 2.06 | 1.12 | 122 | <2.01 | 0.088 | 0.082 | <0.279 | 0.184 | 22.92 | 0.173 | 8.82 | <0.072 | 0.098 | <1.48 | <0.0150 | <0.11 | 18.73 |
| MF41Pyr-33 | 0.339 | 20 | 549 | 7.84 | 0.66 | <0.056 | 15 | <1.80 | <0.106 | <0.026 | <0.190 | <0.0112 | <0.19 | <0.067 | <0.68 | <0.040 | <0.042 | <1.52 | <0.0186 | <0.15 | 0.267 |
| MF41Pyr-34 | 0.401 | 24 | 286.4 | 0.72 | 1.12 | <0.064 | 11 | 2.71 | <0.066 | <0.0229 | <0.119 | <0.0077 | <0.23 | <0.064 | <0.61 | <0.061 | <0.053 | <1.65 | <0.0222 | <0.11 | <0.084 |
| MF41Pyr-35 | 0.66 | 102 | 1570 | 0.99 | <0.43 | 0.03 | 5.2 | <1.95 | <0.174 | <0.027 | <0.161 | <0.0147 | <0.24 | <0.069 | <0.66 | <0.065 | <0.072 | <1.55 | <0.0122 | <0.10 | 0.224 |
| MF41Pyr-36 | 0.164 | 22 | 590.4 | 12.91 | <0.40 | <0.042 | 8.9 | <1.96 | <0.076 | <0.026 | <0.112 | <0.0102 | 0.43 | 0.071 | <0.46 | <0.076 | 0.085 | <1.57 | <0.0241 | <0.13 | 0.272 |
| MF41Pyr-37 | 0.436 | 86 | 657 | 1775.3 | 0.92 | 0.051 | 89 | 2.34 | <0.109 | 0.84 | <0.20 | 0.061 | 0.93 | 0.81 | 3.97 | <0.050 | 0.177 | <1.51 | 0.76 | 19.99 | 15.8 |
| MF41Pyr-38 | 0.7 | 52 | 406.8 | 72.42 | 0.73 | 0.032 | <3.08 | 3.13 | <0.113 | <0.023 | <0.166 | <0.0093 | <0.23 | <0.072 | <0.57 | <0.043 | <0.037 | 1.47 | 0.017 | <0.11 | <0.082 |
| MF41Pyr-39 | 3.36 | 175 | 336.3 | 1.83 | 68.78 | 0.364 | 178.42 | <1.97 | <0.138 | <0.036 | <0.20 | 0.013 | <0.24 | 0.13 | 1.59 | <0.060 | <0.045 | <1.55 | 0.105 | 22.5 | 9.32 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF41Pyr-40 | 0.83 | 41 | 342.1 | 45.83 | 1.14 | <0.041 | 30.99 | 2.94 | <0.098 | 0.218 | 0.067 | <0.0088 | 2.08 | 0.464 | 2.45 | <0.064 | 0.083 | <1.57 | <0.025 | 11.38 | 11.31 |
| MF41Pyr-41 | 0.188 | 130 | 4808 | 1752.8 | 0.49 | 0.082 | 15827 | 5.51 | <0.121 | 0.345 | <0.109 | 0.076 | 5.01 | 0.52 | 1.48 | <0.105 | <0.073 | <2.65 | 0.281 | 3.29 | 10.86 |
| MF41Pyr-42 | 1.17 | 221 | 5513 | 15037 | 4.1 | <0.031 | 14722 | 7.52 | <0.105 | 4.89 | <0.19 | 1.1 | 104.2 | 1.62 | 11.74 | 0.35 | 0.76 | <2.06 | 20.71 | 28.93 | 37.85 |
| MF41Pyr-43 | 0.354 | 32 | 4771 | 1104.6 | 4.01 | 0.064 | 11084 | 8.89 | <0.124 | 1 | 0.13 | 0.08 | 7.14 | 1.83 | 4.8 | <0.066 | 0.158 | <1.81 | 0.89 | 17.73 | 24.98 |
| MF41Pyr-44 | 0.6 | 235 | 2835 | 123.26 | 4.09 | 0.102 | 7317.4 | 6.01 | <0.139 | 0.236 | <0.151 | 0.26 | 99.93 | 0.25 | 1.53 | <0.078 | <0.041 | <1.85 | <0.0229 | 4.91 | 8.92 |
| MF41Pyr-45 | 1.05 | 105 | 1042 | 1493.5 | 7.53 | 3.35 | 1187.2 | 2.56 | <0.170 | 0.294 | 0.14 | 6.26 | 1931 | 0.401 | 1.03 | <0.074 | 0.19 | <1.73 | <0.0142 | 1.24 | 7.22 |
| MF41Pyr-46 | <0.137 | 31 | 234.5 | 0.89 | 0.48 | <0.034 | 60.94 | 2.99 | <0.121 | 0.497 | 0.13 | <0.0124 | <0.195 | <0.067 | 2.27 | <0.046 | <0.080 | <1.65 | <0.029 | 9.75 | 7.12 |
| MF41Pyr-47 | 0.326 | 407 | 3915 | 451.61 | 1.37 | <0.038 | 12835 | 5.28 | <0.081 | 0.218 | <0.146 | <0.0115 | 1.33 | 0.38 | 2.83 | <0.046 | 0.075 | <1.64 | 0.029 | 6.86 | 7.95 |
| MF41Pyr-48 | 5.52 | 68 | 1113 | 621.49 | 1.53 | 4.29 | 111.33 | 3.39 | <0.108 | 0.036 | <0.180 | 0.213 | 14.98 | 0.383 | 13.39 | <0.060 | 0.22 | <1.46 | <0.0176 | <0.09 | 32.16 |
| MF41Pyr-49 | <0.177 | 20 | 1137 | 46.68 | 2.36 | 0.294 | 21.61 | 2.62 | <0.133 | <0.042 | <0.19 | <0.0155 | 0.62 | <0.053 | 1.09 | <0.055 | <0.042 | <1.51 | <0.0141 | <0.12 | 0.81 |
| MF41Pyr-50 | 0.546 | 154 | 1175 | 0.96 | 0.75 | <0.030 | 21.09 | 6.48 | <0.108 | <0.032 | <0.182 | <0.0067 | <0.220 | <0.051 | 1.65 | <0.060 | 0.059 | <1.57 | <0.0158 | <0.092 | 3.27 |
| MF41Pyr-51 | 0.137 | 259 | 1142 | 2.32 | 1.48 | <0.037 | 9.62 | 3.68 | <0.104 | <0.0195 | <0.202 | <0.0065 | <0.203 | <0.062 | 1.66 | <0.110 | <0.060 | <1.54 | <0.0132 | <0.10 | <0.076 |
| MF41Pyr-52 | 0.286 | 27 | 915.3 | 2.16 | 1.11 | <0.049 | 42.9 | 2.74 | <0.170 | <0.044 | <0.102 | <0.0081 | <0.219 | <0.067 | <0.57 | <0.064 | <0.023 | <1.57 | <0.0134 | <0.11 | 0.209 |
| MF41Pyr-53 | 0.347 | 392 | 1540 | 288.25 | 3.18 | 0.541 | 93.69 | 6.92 | <0.139 | 0.067 | <0.171 | 1.52 | 485.6 | 0.138 | 0.74 | 0.015 | <0.039 | <1.46 | <0.0167 | <0.09 | 2.53 |
| MF41Pyr-54 | 0.518 | 235 | 2214 | 361.29 | 0.79 | <0.023 | 8011.6 | <1.68 | <0.108 | 0.58 | <0.220 | 0.012 | 0.89 | 0.287 | 1.18 | <0.126 | 0.153 | <1.37 | 0.63 | 14.17 | 4.34 |
| MF41Pyr-55 | 0.175 | 331 | 1317 | 3.81 | 1.39 | <0.024 | 4206.4 | 3.85 | <0.079 | 0.121 | <0.102 | <0.0123 | <0.220 | <0.053 | <0.58 | <0.052 | <0.061 | <1.59 | <0.0189 | 0.57 | 0.77 |
| MF41Pyr-56 | 0.251 | 178 | 421.6 | 17.44 | 0.53 | <0.029 | 204.6 | 4 | <0.080 | 0.202 | 0.13 | <0.0066 | 0.9 | 1.72 | <0.63 | <0.059 | <0.033 | <1.41 | 0.047 | 4.39 | 7.59 |
| MF41Pyr-57 | 0.46 | 336 | 2056 | 384.92 | <0.35 | <0.045 | 2925.8 | 4.35 | <0.053 | 0.57 | <0.192 | 0.015 | <0.26 | 0.57 | 5.1 | <0.074 | 0.067 | <1.44 | 0.113 | 18.96 | 16.71 |
| MF41Pyr-58 | 0.294 | 391 | 948.8 | 1471.1 | 8.7 | 69.16 | 18.42 | 2.55 | <0.111 | 0.138 | <0.20 | 3.72 | 990.4 | 0.444 | 0.67 | <0.069 | 0.067 | <1.43 | <0.0132 | <0.10 | 5.21 |
| MF41Pyr-59 | 0.186 | 154 | 816 | <0.37 | 1.42 | <0.040 | 91.05 | 4.83 | <0.122 | <0.020 | <0.104 | <0.0095 | <0.23 | <0.061 | <0.71 | <0.046 | 0.044 | <1.62 | <0.0136 | <0.09 | 0.142 |
| MF41Pyr-60 | 0.79 | 84 | 357.2 | 21.5 | 1.37 | <0.033 | 33.7 | 4.66 | <0.130 | <0.039 | <0.142 | <0.0112 | 0.52 | <0.068 | 1.23 | <0.045 | <0.040 | <1.47 | 0.03 | <0.10 | 0.55 |
| MF41Pyr-61 | 2.18 | 253 | 1552 | 157.08 | 0.91 | 0.075 | 187.72 | 3.14 | <0.121 | 0.55 | <0.104 | <0.0094 | <0.24 | 0.073 | 4.72 | <0.088 | <0.053 | <2.31 | 0.023 | 11.89 | 12.03 |
| MF41Pyr-62 | 0.457 | 82 | 1419 | 6.16 | 13.32 | 0.339 | 1010.9 | 2.94 | <0.152 | 0.154 | <0.29 | 0.011 | <0.23 | 0.28 | 4.46 | <0.069 | <0.032 | <1.98 | <0.0152 | 5.65 | 15.92 |
| MF41Pyr-63 | 0.27 | 727 | 1733 | 1024.6 | 0.81 | <0.045 | 4982.2 | 4.56 | <0.106 | 0.145 | <0.179 | 0.038 | 2.94 | 0.22 | 0.59 | <0.075 | 0.045 | <1.93 | <0.019 | <0.106 | 2.15 |
| MF41Pyr-64 | 0.253 | 8.2 | 491.9 | 0.82 | 88.53 | <0.027 | 1248.4 | <1.77 | <0.108 | <0.029 | <0.211 | <0.0096 | <0.25 | <0.049 | <0.56 | 0.032 | <0.034 | <1.86 | <0.0210 | <0.09 | 0.156 |
| MF41Pyr-65 | 0.291 | 191 | 560.6 | 82.36 | 0.83 | <0.037 | 1783.2 | 2.05 | <0.129 | 0.164 | <0.183 | <0.0107 | 0.33 | 0.164 | 1 | <0.038 | 0.077 | <1.84 | 0.022 | 5.37 | 2.1 |
| MF41Pyr-66 | 0.423 | 33 | 386.8 | <0.38 | 0.79 | <0.039 | 42.54 | 2.2 | <0.117 | <0.026 | <0.21 | <0.0119 | <0.24 | <0.061 | <0.72 | <0.048 | <0.042 | <1.76 | <0.0140 | <0.09 | 0.229 |
| MF41Pyr-67 | 0.9 | 112 | 2301 | 12487 | 2.69 | 0.053 | 7974.2 | 2.39 | <0.082 | 3.52 | <0.150 | 0.406 | 29.54 | 0.53 | 4.65 | 0.44 | 0.43 | <1.75 | 16.59 | 13.67 | 13.58 |
| MF41Pyr-68 | 0.413 | 75 | 1139 | 3217.3 | 0.96 | <0.034 | 3886.5 | 2.43 | <0.151 | 1.25 | <0.181 | 0.155 | 15.28 | 0.71 | 5.15 | <0.066 | 0.23 | <1.72 | 2.63 | 7.83 | 6.93 |
| MF41Pyr-69 | 0.234 | 969 | 1330 | <0.51 | 140.5 | <0.042 | 2241.6 | 4.88 | <0.040 | <0.020 | 0.031 | <0.0106 | <0.25 | <0.086 | <0.66 | <0.047 | <0.059 | <1.49 | <0.0208 | <0.08 | <0.069 |
| MF41Pyr-70 | 0.134 | 57 | 559.9 | 7.9 | 2.62 | 0.083 | 498.13 | 2.19 | <0.109 | 0.59 | <0.238 | <0.0096 | <0.213 | 0.168 | 1.81 | <0.061 | <0.081 | <1.55 | <0.023 | 9.25 | 5.72 |
| MF41Pyr-71 | 0.213 | 553 | 503.9 | 3371.4 | 3.33 | 0.557 | 966.86 | 11.57 | 0.083 | 0.433 | <0.29 | 0.146 | 5.87 | 0.34 | 3 | <0.146 | <0.075 | <1.70 | <0.0116 | 17.23 | 9.94 |
| MF41Pyr-72 | 0.67 | 243 | 449.6 | <0.35 | 0.67 | <0.038 | 1241 | 6.74 | <0.128 | <0.015 | <0.110 | <0.0070 | <0.23 | <0.072 | <0.73 | <0.057 | <0.056 | <1.65 | <0.0203 | <0.12 | 0.99 |
| MF41Pyr-73 | 1.2 | 50 | 4074 | 2307.1 | 1.1 | <0.046 | 873.83 | 5.23 | <0.148 | 1.25 | 0.124 | 0.09 | 5.12 | 1.4 | 12.88 | <0.057 | 0.22 | <1.50 | 3.15 | 7.77 | 45.82 |
| MF41Pyr-74 | 2.91 | 81 | 586.6 | 5810.3 | 24.12 | 0.77 | 618.81 | 4.25 | <0.098 | 1.16 | 5.28 | 0.427 | 10.94 | 1.02 | 9.13 | <0.071 | 0.4 | <1.68 | 3.01 | 47.85 | 26.78 |
| MF41Pyr-75 | 0.297 | 133 | 3751 | 52.04 | 6.09 | <0.042 | 41.82 | <2.05 | <0.124 | 0.194 | <0.197 | <0.0089 | 0.75 | 0.196 | 3.07 | <0.072 | 0.048 | <1.59 | 0.024 | 3.67 | 12.88 |
| MF41Pyr-76 | 0.9 | 86 | 1263 | 896.98 | 1.99 | 0.048 | 428.99 | 4.55 | <0.124 | 0.76 | <0.114 | 0.069 | 9.26 | 0.96 | 8.24 | 0.054 | 0.25 | <1.87 | 0.237 | 4.35 | 19.48 |
| MF41Pyr-77 | 15.21 | 80 | 547.2 | 10.74 | 4.58 | 0.375 | 150.95 | 2.02 | <0.121 | 0.091 | <0.30 | <0.0125 | 0.57 | 1.45 | 20.28 | <0.25 | 0.38 | <1.47 | 0.042 | 2.74 | 101.5 |
| MF41Pyr-78 | 19.2 | 52 | 692.6 | 14.95 | 5.8 | 0.51 | 163.25 | 3.58 | <0.153 | 0.029 | <0.106 | 0.042 | 6.99 | 1.95 | 5.35 | <0.20 | 0.062 | <1.68 | <0.016 | 2.53 | 63.15 |
| MF41Pyr-79 | 3.14 | 217 | 3223 | 7030.1 | 2.09 | 0.078 | 90.12 | 2.68 | 0.148 | 2.95 | 0.25 | 0.393 | 33.49 | 0.93 | 12.59 | <0.093 | 0.92 | <1.66 | 2.7 | 8.07 | 34.29 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF41Pyr-80 | 11.28 | 13 | 590.2 | 252.57 | 5.44 | 0.567 | 30.34 | 2.65 | <0.095 | 0.212 | <0.111 | 0.288 | 71.55 | 1.38 | 8.91 | <0.24 | 0.113 | <1.53 | 0.088 | 4.36 | 65.4 |
| **Mean n=80** | 1 | 244 | 1419 | 1321 | 11 | 3 | 2004 | 4 | 0 | 1 | 1 | 1 | 133 | 1 | 7 | 0 | 0 | 2 | 3 | 9 | 16 |
| **S.D** | 3 | 317 | 1404 | 3198 | 31 | 12 | 3647 | 2 | 0 | 1 | 1 | 1 | 400 | 1 | 16 | 0 | 1 | 0 | 6 | 10 | 34 |
| **Min** | 0.13 | 8.20 | 232 | 0.48 | 0.41 | 0.03 | 5.2 | 2.02 | 0.08 | 0.00 | 0.03 | 0.01 | 0.32 | 0.07 | 0.59 | 0.01 | 0.02 | 1.47 | 0.02 | 0.10 | 0.14 |
| **Max** | 19 | 1559 | 6586 | 16563 | 150 | 69 | 15827 | 12 | 0 | 5 | 5 | 6 | 1931 | 2 | 109 | 0 | 5 | 2 | 25 | 48 | 242 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF42-1 | <0.27 | 403 | 999.3 | 3.05 | 7.04 | <0.041 | 14692 | <4.12 | <0.036 | <0.030 | <0.173 | <0.0102 | <0.171 | <0.094 | <0.43 | <0.059 | <0.045 | <3.41 | <0.0205 | <0.114 | 0.504 |
| MF42-2 | 1.57 | 23 | 33.05 | <0.59 | 1.33 | 0.117 | 9110.1 | <3.24 | <0.00 | <0.048 | <0.090 | <0.0113 | <0.200 | 0.129 | <0.69 | <0.065 | 0.25 | <3.54 | <0.0157 | 0.137 | 1.23 |
| MF42-3 | <0.201 | 267 | 611 | 23408 | 292.1 | 4.48 | 3018.8 | <3.56 | 0.81 | 3.65 | 0.126 | 2.28 | 633.1 | 2 | 2.46 | <0.066 | 0.25 | <3.68 | 26.56 | 7.75 | 8.23 |
| MF42-4 | 0.552 | 113 | 575.8 | 17.42 | 1.39 | <0.041 | 2830.1 | 4.29 | <0.038 | <0.032 | <0.131 | <0.0083 | <0.50 | 0.137 | <0.75 | <0.045 | 0.052 | <3.14 | <0.047 | 0.486 | 2.84 |
| MF42-5 | 0.355 | 116 | 683.5 | 1859.6 | 263.8 | <0.035 | 3247.7 | <2.69 | 0.133 | 0.77 | 0.027 | 0.026 | 3.32 | 0.82 | 3.37 | 0.114 | 0.054 | <3.23 | 4.88 | 2.01 | 3.34 |
| MF42-6 | 0.321 | 425 | 3707 | 28276 | 4.08 | 0.073 | 12723 | 9.78 | 0.99 | 6.99 | 0.28 | 0.191 | 5.2 | 5.73 | 2.56 | <0.026 | 0.199 | <3.57 | 26.36 | 12.03 | 8 |
| MF42-7 | 0.298 | 108 | 1073 | 45349 | 2.12 | <0.040 | 5386.7 | 11.75 | 0.122 | 7.76 | <0.19 | 0.22 | 4.55 | 2.44 | 6.92 | 2.92 | 0.33 | 3.89 | 77.34 | 13.67 | 31.21 |
| MF42-8 | 0.243 | 112 | 4310 | 696.22 | 18.54 | 0.147 | 10974 | 13.84 | <0.087 | 0.453 | 0.027 | 0.03 | 4.08 | 1.98 | 16.11 | 23.77 | 0.92 | <2.75 | 0.452 | 5.6 | 66.18 |
| MF42-9 | 2.55 | 31 | 1464 | 6.49 | 1.79 | 3.96 | 7393.5 | 10.84 | <0.069 | 0.115 | <0.167 | <0.0105 | 2.51 | 1.73 | 3.36 | 4.29 | 0.114 | <3.96 | <0.022 | 10.59 | 54.98 |
| MF42-10 | <0.141 | 5.8 | 218.3 | 11.01 | 4.59 | <0.041 | 1122.1 | 5.56 | <0.076 | 0.027 | <0.236 | <0.0067 | <0.25 | <0.126 | <0.80 | <0.224 | 0.168 | <3.51 | <0.026 | <0.188 | 4.54 |
| MF42-11 | 0.563 | 1.9 | 314.1 | 6.78 | 1.65 | <0.035 | 4370.9 | 5.15 | 0.079 | <0.035 | <0.185 | <0.0095 | <0.22 | <0.110 | <0.90 | <0.068 | <0.032 | <3.40 | <0.024 | <0.117 | 1.06 |
| MF42-12 | 1.03 | 2.5 | 122.7 | 6090.9 | 2.94 | 27.72 | 1365.4 | 7.01 | <0.096 | 0.91 | <0.33 | 0.381 | 34.42 | 1.66 | 2.58 | 8.09 | 0.52 | <4.86 | 0.047 | 2.01 | 41.21 |
| MF42-13 | 1.41 | 1580 | 2247 | 843.36 | 20.32 | 0.409 | 5687.8 | 9.05 | <0.104 | 1.42 | <0.145 | 0.063 | 3.82 | 2.56 | 35.72 | <0.093 | 1.48 | <3.03 | <0.0221 | 20.86 | 156 |
| MF42-14 | 0.426 | 2726 | 3228 | 22.74 | <0.74 | 0.239 | 221.61 | 4.26 | <0.117 | 0.032 | <0.200 | 0.047 | 18.95 | 0.184 | 5.27 | <0.064 | 0.102 | <2.78 | <0.0259 | <0.106 | 5.99 |
| MF42-15 | 2.43 | 2196 | 1564 | 1073.8 | 3.03 | 0.213 | 1264.9 | 4 | <0.070 | 0.99 | <0.241 | 0.032 | 2.09 | 1.14 | 21.27 | 0.085 | 0.29 | <2.89 | 0.116 | 31.25 | 69.13 |
| MF42-16 | 4.22 | 1710 | 2693 | 8346.3 | 51.4 | 0.111 | 6198.3 | 6.42 | <0.107 | 4.06 | <0.20 | 0.203 | 11.87 | 4.06 | 58.97 | 0.229 | 1.53 | 4.43 | 3.51 | 25.78 | 168.4 |
| MF42-17 | 1.53 | 828 | 4170 | 1448.7 | 4.7 | <0.035 | 2164.3 | 4.62 | <0.110 | 0.58 | <0.175 | 0.016 | 1.92 | 0.5 | 20.73 | 0.071 | 0.147 | <2.73 | 2.12 | 1.2 | 34.5 |
| MF42-18 | 0.682 | 1484 | 4755 | 17431 | 3.38 | 0.085 | 4071.8 | 10.92 | 0.133 | 6 | 0.19 | 0.134 | 8.74 | 7.93 | 16.32 | 1.34 | 0.88 | 5.08 | 30.56 | 14.18 | 24.34 |
| MF42-19 | 0.835 | 2117 | 1230 | 1143.4 | 1.16 | <0.034 | 452.07 | <2.55 | <0.103 | 0.327 | <0.00 | <0.0102 | <0.20 | 0.36 | 0.92 | <0.043 | 0.061 | <3.08 | 3.57 | 1.42 | 4.26 |
| MF42-20 | 0.648 | 1002 | 3062 | 1589.4 | 1.72 | 1.13 | 603.87 | 4 | <0.084 | 1.14 | <0.145 | 0.24 | 13.78 | 1.97 | 14.07 | <0.055 | 1.69 | <2.79 | <0.0148 | 14.82 | 100.2 |
| MF42-21 | 0.407 | 706 | 4257 | 376.87 | 2.51 | 1.26 | 689.61 | 3.82 | 0.068 | 0.71 | <0.103 | 0.932 | 260.5 | 0.93 | 15.87 | <0.086 | 0.6 | <4.71 | 0.002 | 4.75 | 55.15 |
| MF42-22 | 0.455 | 717 | 3150 | 1764.6 | 19.75 | 0.364 | 1183 | 4.17 | <0.094 | 1.71 | <0.103 | 0.275 | 16.86 | 0.65 | 12.04 | <0.00 | 0.87 | <3.69 | <0.0209 | 6.4 | 50.16 |
| MF42-23 | 9.02 | 3124 | 1428 | 1433.8 | 92.08 | 0.31 | 2775.5 | 2.94 | <0.087 | 1.87 | 0.27 | 0.029 | 0.76 | 2.55 | 19.8 | 0.222 | 0.66 | 3.21 | 5.53 | 138 | 111.8 |
| MF42-24 | 0.823 | 1669 | 4595 | 9278.9 | 3.88 | 0.052 | 4286.5 | 10.29 | 0.113 | 3.64 | <0.137 | 0.093 | 3.74 | 2.94 | 30.1 | 0.49 | 0.64 | <3.32 | 10.73 | 13.48 | 74.36 |
| MF42-25 | 1.97 | 2072 | 2863 | 81.7 | 2.9 | 0.201 | 1029.5 | 3.53 | <0.059 | 0.055 | 0.031 | 0.059 | 14.99 | 0.42 | 15.5 | <0.070 | 0.138 | <3.35 | <0.064 | 0.52 | 35.43 |
| MF42-26 | 1.3 | 2205 | 2968 | 1625.2 | 5.64 | 0.135 | 4867.4 | 6.92 | <0.095 | 2.64 | 0.52 | 0.047 | 1.51 | 3.39 | 42.47 | <0.080 | 0.48 | <2.90 | 0.388 | 32.58 | 198.7 |
| MF42-27 | 9.24 | 1835 | 4777 | 3923.6 | 3.63 | 0.144 | 7938.3 | 10.74 | <0.066 | 2.9 | <0.163 | 0.147 | 11.25 | 3.13 | 56.57 | <0.114 | 1.96 | <2.79 | 1.9 | 21.97 | 163.1 |
| MF42-28 | 5.98 | 1200 | 2473 | 35.06 | 1.2 | 0.133 | 922.96 | <2.36 | 0.097 | <0.031 | <0.00 | 0.049 | 23.92 | 0.215 | 2.68 | <0.057 | <0.058 | <3.17 | <0.020 | <0.114 | 6.57 |
| MF42-29 | 1.08 | 3268 | 3854 | 34422 | 6.19 | 0.041 | 6134.3 | 14.56 | 0.83 | 10.3 | <0.18 | 0.207 | 7.33 | 5.45 | 19.8 | 0.071 | 0.73 | 3.03 | 92.25 | 31.48 | 64.48 |
| MF42-30 | 2.63 | 2035 | 2821 | 65440 | 7.7 | 0.098 | 10677 | 9.48 | 1.83 | 11.95 | 0.37 | 0.355 | 8.95 | 8.77 | 8.58 | 0.074 | 0.65 | <3.66 | 124.6 | 30.46 | 42.26 |
| MF42-31 | 0.9 | 1885 | 1726 | 193242 | 19.57 | 0.378 | 2025.3 | 30.73 | 6.09 | 29.87 | 1.86 | 1.07 | 26.94 | 17.13 | 34.12 | <0.089 | 1.69 | 21.3 | 312.1 | 103.4 | 61.76 |
| MF42-32 | 2.84 | 754 | 2748 | 4301.9 | 6.65 | 1.42 | 405.6 | 3.97 | <0.083 | 0.94 | <0.227 | 1.7 | 375.6 | 1.64 | 19.24 | <0.065 | 1.07 | <2.52 | <0.0164 | 20.46 | 71.58 |
| MF42-33 | 0.633 | 976 | 1126 | 102.76 | 1.08 | 0.146 | 283.58 | 3.79 | <0.042 | 0.119 | 0.062 | 0.077 | 19.96 | 0.4 | 6.64 | <0.043 | 0.58 | <2.66 | <0.021 | 3.95 | 26.75 |
| MF42-34 | 0.47 | 965 | 2914 | 455.25 | 2.03 | 0.752 | 729.94 | 4.4 | <0.083 | 0.88 | 0.092 | 0.406 | 97.74 | 1.1 | 16.87 | <0.049 | 0.52 | <2.48 | 0.43 | 6.22 | 62.24 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF42-35 | 2.01 | 1086 | 1507 | 533.41 | 5.59 | 0.228 | 2347.5 | 3.09 | <0.080 | 1.21 | <0.172 | 0.076 | 20.38 | 1.22 | 25.72 | 0.093 | 0.65 | <2.64 | 0.477 | 10.34 | 76.95 |
| MF42-36 | 2.13 | 754 | 4757 | 246.99 | 2.65 | 0.061 | 1744.9 | 8.98 | <0.089 | 0.464 | <0.221 | <0.0098 | 2.02 | 1.14 | 23.52 | <0.089 | 0.37 | <2.39 | 0.06 | 2.8 | 57.48 |
| MF42-37 | 3.72 | 1666 | 1181 | 131.72 | 7.25 | 1.05 | 12067 | 3.78 | <0.101 | 5.33 | 0.28 | 0.032 | <0.26 | 5.85 | 119.1 | <0.132 | 1.68 | <2.52 | 0.272 | 48.33 | 396.7 |
| MF42-38 | 1.82 | 1496 | 1499 | 10594 | 3.92 | 0.519 | 11766 | 3.19 | <0.109 | 5.21 | 0.69 | 0.432 | 13.56 | 7.26 | 85.36 | <0.137 | 1.67 | <2.43 | 1.06 | 53.19 | 413.5 |
| MF42-39 | 1.57 | 401 | 9980 | 3486 | 5.82 | 1.024 | 2781.5 | 11.6 | <0.118 | 4.55 | 0.47 | 0.228 | 28.38 | 4.98 | 71.33 | <0.062 | 1.37 | <2.67 | 0.093 | 70.84 | 466.4 |
| MF42-40 | 5.49 | 1708 | 2011 | 172.18 | 25.55 | 0.542 | 2271.8 | 5.91 | <0.115 | 2.22 | 0.62 | 0.14 | 27.55 | 3.6 | 45.01 | <0.145 | 0.93 | <2.63 | 0.074 | 62.36 | 250.5 |
| MF42-41 | 3.37 | 1118 | 3108 | 3568.2 | 40.05 | 0.306 | 3884.3 | 6.98 | <0.082 | 4.2 | 0.29 | 0.048 | 1.25 | 3.1 | 69.08 | 0.95 | 1.4 | <3.97 | 2.81 | 49.64 | 227.7 |
| MF42-42 | 1.89 | 1917 | 1923 | 923.25 | 10.12 | 0.152 | 4589.8 | 4.8 | 0.051 | 2.75 | 0.49 | 0.016 | 0.39 | 2.33 | 64.99 | 0.124 | 0.96 | <3.21 | 0.45 | 46.09 | 247.5 |
| MF42-43 | 228 | 2137 | 1328 | 112.13 | 405.3 | 0.24 | 4405.6 | 2.46 | <0.099 | 2.25 | 0.24 | <0.0140 | <0.24 | 1.73 | 48.42 | <0.143 | 0.65 | <2.78 | 0.095 | 73.06 | 216.6 |
| MF42-44 | 5.09 | 759 | 6641 | 1526.3 | 6.8 | 1.04 | 5646.7 | 8.99 | <0.066 | 5.46 | 1.71 | 0.083 | 1.58 | 7.59 | 112.5 | <0.218 | 1.66 | <2.66 | 1.76 | 63.19 | 451.8 |
| MF42-45 | 3.58 | 615 | 5973 | 114.59 | 5.15 | 0.259 | 4123.7 | 8.49 | <0.107 | 2.97 | 0.28 | <0.0127 | <0.22 | 2.83 | 56.3 | <0.133 | 1.14 | <2.60 | 0.058 | 37.51 | 201 |
| MF42-46 | 1.31 | 844 | 4379 | 43750 | 6.55 | 0.048 | 4601.6 | 9.93 | 0.266 | 15.35 | 0.36 | 0.293 | 12.15 | 11.61 | 37.54 | <0.23 | 0.91 | 5.51 | 68.3 | 34.41 | 155 |
| MF42-47 | 5.58 | 615 | 4680 | 4202.7 | 12.02 | 0.79 | 3453.7 | 6.16 | <0.071 | 6.19 | 0.32 | 0.124 | 29.39 | 4.97 | 92.6 | <0.23 | 1.5 | 3.29 | 4.21 | 79.57 | 342.8 |
| MF42-48 | 0.483 | 1992 | 909 | 1232.8 | 1.47 | 0.029 | 3927.6 | 3.97 | 0.13 | 0.436 | 0.032 | 0.014 | 0.37 | 0.199 | 1.78 | <0.057 | 0.104 | <2.69 | 3.13 | 2.46 | 11.95 |
| MF42-49 | 1.67 | 2779 | 2306 | 76.7 | 0.65 | 0.461 | 1170.1 | 5.83 | <0.092 | 0.04 | 0.031 | <0.0112 | <0.179 | 0.35 | 8.44 | <0.043 | 0.152 | <2.59 | <0.033 | <0.107 | 22.98 |
| MF42-50 | 3.54 | 638 | 7608 | 427.77 | 71.61 | 0.375 | 3832.1 | 9.36 | <0.093 | 3.98 | 1.99 | 0.046 | 0.88 | 5.24 | 95.34 | <0.128 | 1.43 | 3.58 | 0.236 | 62.56 | 343.5 |
| MF42-51 | 2.98 | 726 | 4427 | 244.1 | 37.92 | 1.21 | 4556.5 | 7.14 | <0.084 | 4.24 | 2.02 | 0.068 | 1.02 | 6.67 | 93.23 | <0.072 | 2.36 | 3.8 | 0.144 | 89.57 | 414.7 |
| MF42-52 | 5.85 | 658 | 3517 | 2290.7 | 7.27 | 0.344 | 3454.8 | 11.11 | <0.039 | 4.82 | 0.39 | 0.055 | 5.61 | 4.28 | 80.11 | <0.142 | 1.38 | <2.52 | 3.59 | 73.51 | 349.8 |
| MF42-53 | 5.47 | 593 | 4915 | 3285.3 | 10.78 | 0.312 | 3806.5 | 6.26 | <0.066 | 3.28 | 1.07 | 0.079 | 2.93 | 3.23 | 51.5 | <0.185 | 0.98 | <2.14 | 0.293 | 69.42 | 237.4 |
| MF42-54 | 1.8 | 603 | 4973 | 286.7 | 12.07 | 0.452 | 3508.4 | 7.89 | 0.091 | 4.09 | 2.41 | 0.038 | 1.26 | 4.52 | 107.1 | <0.32 | 3.5 | <2.50 | 0.11 | 62.28 | 448.8 |
| MF42-55 | 1.01 | 161 | 1570 | 7.66 | 0.86 | <0.036 | 8060 | 4.06 | <0.118 | 0.062 | <0.148 | <0.0080 | <0.194 | 0.304 | 3.75 | 0.57 | 0.112 | <2.57 | <0.0201 | 0.178 | 23.28 |
| MF42-56 | 0.515 | 8.5 | 1402 | 0.31 | 4.69 | <0.039 | 4696.2 | 5.7 | <0.067 | 0.004 | <0.239 | 0.008 | <0.155 | <0.066 | <0.52 | <0.047 | <0.040 | <2.47 | <0.031 | <0.166 | 1.29 |
| MF42-57 | 0.431 | 403 | 1993 | 35764 | 4.49 | 0.036 | 7926 | 5.58 | 0.72 | 7.77 | 0.55 | 0.233 | 10.07 | 5.44 | 1.05 | <0.069 | 0.45 | 8.97 | 124.1 | 20.16 | 33.69 |
| MF42-58 | 0.162 | 141 | 167.7 | 25.16 | 1.19 | <0.031 | 10904 | <1.96 | 0.137 | <0.051 | <0.101 | <0.0119 | <0.165 | <0.076 | 0.68 | <0.073 | <0.055 | <2.60 | <0.077 | <0.149 | 1.14 |
| MF42-59 | 0.658 | 20 | 11.46 | 56.02 | 1.5 | <0.034 | 11560 | <1.87 | <0.123 | <0.038 | <0.17 | <0.0075 | <0.184 | <0.072 | <0.65 | <0.078 | <0.029 | <2.29 | 0.088 | <0.127 | 0.1 |
| MF42-60 | 0.234 | 69 | 3244 | 32.33 | 2.12 | <0.026 | 13025 | 5.09 | <0.063 | 0.02 | 0.163 | <0.0057 | 0.201 | <0.060 | <0.53 | <0.062 | <0.042 | <3.29 | <0.057 | <0.149 | 0.325 |
| MF42-61 | 0.247 | 369 | 678.4 | 3 | 233.9 | <0.026 | 3399.1 | 2.55 | <0.056 | <0.0122 | <0.142 | <0.0063 | <0.198 | 0.17 | 5.34 | <0.042 | <0.062 | <3.12 | 0.039 | <0.087 | 8.04 |
| MF42-62 | 0.366 | 1.9 | 5.11 | 1.56 | 2.15 | <0.046 | 101.02 | <1.79 | <0.066 | <0.0166 | <0.096 | <0.0095 | <0.171 | 0.076 | 5.72 | <0.033 | <0.044 | <2.55 | <0.0157 | <0.156 | 0.8 |
| MF42-63 | 0.256 | 0.96 | 4.19 | <0.50 | <0.38 | <0.022 | 139.06 | <1.86 | <0.065 | <0.026 | <0.135 | <0.0060 | <0.178 | <0.043 | 1.76 | <0.033 | 0.074 | <2.60 | <0.0251 | <0.107 | <0.070 |
| MF42-64 | 1.16 | 381 | 3057 | 4651.7 | 2.38 | 0.037 | 7751.4 | 6.01 | <0.072 | 1.36 | 0.22 | 0.018 | 0.59 | 0.92 | 5.74 | <0.038 | 0.31 | <2.27 | 1.63 | 3.98 | 22.85 |
| MF42-65 | 0.845 | 193 | 3463 | 1538.6 | 95.98 | 0.022 | 12794 | 5.2 | <0.114 | 0.261 | <0.00 | 0.107 | 4.87 | 0.6 | 6.5 | <0.080 | 0.114 | <2.39 | <0.021 | <0.201 | 29.29 |
| MF42-66 | 0.565 | 490 | 154.3 | 0.73 | 2.13 | 0.032 | 7125.7 | 2.18 | <0.087 | <0.0121 | <0.17 | <0.0076 | <0.187 | <0.066 | <0.58 | 0.044 | <0.035 | <2.45 | <0.0161 | <0.105 | <0.079 |
| MF42-67 | 0.441 | 332 | 310.9 | 13.34 | 0.96 | <0.028 | 9673.8 | <1.71 | <0.078 | <0.017 | <0.141 | <0.0132 | <0.176 | 0.159 | 0.69 | 2 | <0.041 | <2.36 | <0.0192 | 0.096 | 4.9 |
| MF42-68 | 0.486 | 611 | 490.1 | 34.44 | 1.22 | 0.04 | 7756.5 | <1.69 | <0.094 | 0.068 | 0.088 | <0.0061 | 0.37 | 0.193 | <0.51 | 1.71 | <0.053 | <2.18 | <0.024 | 0.62 | 4.85 |
| MF42-69 | 0.174 | 632 | 318 | 0.46 | 1.16 | <0.034 | 3067.8 | <1.83 | <0.082 | <0.0128 | 0.031 | <0.0103 | <0.171 | <0.059 | <0.73 | 0.361 | <0.037 | <2.49 | <0.0264 | <0.106 | 6.01 |
| MF42-70 | 0.438 | 304 | 263.5 | <0.53 | 2.54 | 0.066 | 8927.2 | <2.04 | <0.104 | <0.035 | <0.224 | <0.0089 | 0.51 | 0.48 | <0.50 | 3.62 | <0.021 | <2.51 | <0.027 | <0.118 | 7.79 |
| MF42-71 | 0.453 | 479 | 543.7 | 1.76 | 0.59 | 0.031 | 9186 | <1.72 | <0.087 | <0.027 | <0.199 | <0.0044 | 0.35 | 0.229 | 0.76 | 2.62 | 0.088 | <2.35 | <0.0192 | <0.118 | 4.43 |
| MF42-72 | 0.223 | 527 | 439.7 | 610.06 | 0.79 | 0.068 | 6164.9 | <1.60 | <0.115 | 0.17 | 0.17 | 0.019 | 1.6 | 0.284 | 1.83 | 1.92 | 0.043 | 2.29 | 2.69 | 0.6 | 6.94 |
| MF42-73 | 3.85 | 40 | 12208 | 2095 | 3.67 | 0.313 | 380.5 | 20.15 | 0.08 | 0.77 | 42.79 | 0.386 | 10.17 | 7.06 | 6.79 | <0.079 | 0.3 | <2.40 | <0.022 | 125.1 | 75.85 |
| MF42-74 | 2.07 | 23 | 8886 | 14025 | 62.72 | 0.81 | 625.17 | 16.89 | <0.075 | 0.195 | 1.93 | 3.57 | 108.4 | 3.93 | 4.71 | <0.0230 | 0.2 | <2.28 | <0.021 | 2.06 | 39.18 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF42-75 | 0.449 | 425 | 955.4 | 373.8 | 1.41 | <0.026 | 370.52 | 20.98 | <0.088 | 0.168 | 0.06 | 0.03 | <0.205 | 0.115 | <0.59 | <0.073 | <0.051 | <2.33 | 0.176 | <0.111 | 2.55 |
| MF42-76 | 0.34 | 588 | 610.9 | 6.77 | 0.55 | <0.039 | 187.04 | 13.95 | <0.069 | <0.018 | 0.03 | <0.0077 | <0.190 | 0.061 | 2.04 | <0.060 | 0.073 | <2.36 | <0.0166 | <0.089 | 6.58 |
| MF42-77 | 0.183 | 547 | 1246 | 76.1 | 2.2 | 0.04 | 52.09 | 18.34 | <0.096 | <0.033 | <0.174 | <0.0088 | <0.165 | <0.052 | 0.97 | <0.059 | <0.036 | <2.12 | <0.0220 | <0.099 | 1.61 |
| MF42-78 | 0.355 | 587 | 538 | 3.89 | 1.01 | 0.024 | 303.78 | 20.1 | <0.081 | 0.234 | <0.00 | <0.0113 | <0.178 | 0.216 | 3.09 | 0.054 | 0.106 | <2.31 | <0.0171 | <0.089 | 16.01 |
| MF42-79 | 0.232 | 565 | 778.1 | 0.8 | 6.72 | <0.038 | 1040.2 | 21.2 | <0.088 | 0.132 | <0.101 | <0.0077 | <0.179 | 0.144 | <0.64 | <0.034 | 0.045 | <2.05 | <0.0222 | <0.075 | 3.44 |
| MF42-80 | 0.251 | 250 | 269 | 46.68 | <0.53 | <0.042 | 355.04 | 13.67 | <0.096 | <0.025 | <0.143 | <0.0044 | <0.169 | <0.063 | <0.66 | <0.054 | <0.036 | <2.26 | <0.0234 | <0.129 | 0.69 |
| **Mean n=80** | 5 | 874 | 2500 | 7671 | 26 | 1 | 4554 | 8 | 1 | 3 | 2 | 0 | 35 | 3 | 28 | 2 | 1 | 6 | 21 | 31 | 95 |
| **S.D** | 26 | 817 | 2362 | 24556 | 69 | 4 | 3868 | 6 | 1 | 5 | 7 | 1 | 104 | 3 | 33 | 5 | 1 | 5 | 54 | 34 | 131 |
| **Min** | 0.16 | 0.96 | 4.19 | 0.31 | 0.55 | 0.02 | 52 | 2.18 | 0.05 | 0.00 | 0.03 | 0.01 | 0.20 | 0.06 | 0.68 | 0.04 | 0.04 | 2.29 | 0.00 | 0.10 | 0.10 |
| **Max** | 228 | 3268 | 12208 | 193242 | 405 | 28 | 14692 | 31 | 6 | 30 | 43 | 4 | 633 | 17 | 119 | 24 | 4 | 21 | 312 | 138 | 466 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF43-1 | 0.53 | 18 | 3.85 | 569528 | 96.26 | 1.71 | 13.8 | 8.71 | 0.28 | 0.56 | 0.32 | 13.56 | 887.6 | 0.76 | <0.73 | <0.058 | <0.070 | <4.76 | 1.72 | 6.15 | 0.381 |
| MF43-2 | 0.519 | 5.8 | 0.47 | 561953 | 286.3 | 2.17 | <3.01 | 6.81 | <0.122 | 0.095 | 0.33 | 11.37 | 927.1 | 0.082 | <0.65 | <0.044 | <0.059 | <3.47 | 0.016 | 1.59 | 0.68 |
| MF43-3 | 0.398 | 2.4 | 0.25 | 573799 | 355.8 | 2.86 | <2.99 | 4.4 | <0.110 | 0.051 | 1.38 | 11.1 | 925.5 | 0.087 | 1.09 | <0.043 | <0.045 | <3.31 | <0.0132 | 0.255 | 0.333 |
| MF43-4 | <0.153 | 3.8 | 0.167 | 586601 | 398 | 2.34 | <2.87 | 5.59 | <0.127 | 0.066 | 1.39 | 11.15 | 920.2 | 0.097 | <0.66 | <0.090 | <0.036 | <3.00 | <0.016 | 0.44 | 0.155 |
| MF43-5 | 0.375 | 6.1 | 0.38 | 568752 | 268.6 | 2.24 | <3.02 | 6.7 | <0.135 | 1 | 0.16 | 11.46 | 972.6 | 0.134 | <0.82 | <0.063 | 0.016 | <3.17 | 0.214 | 1.16 | 0.481 |
| MF43-6 | 0.599 | 3.8 | 0.66 | 576210 | 403.2 | 2.58 | <2.96 | 4.65 | <0.110 | 0.074 | 0.31 | 10.96 | 948.6 | 0.102 | 0.68 | 0.038 | <0.068 | <3.06 | <0.0246 | 0.23 | 0.217 |
| MF43-7 | 1.2 | 13 | 0.88 | 565951 | 64.51 | 2.46 | 3.7 | 7.04 | <0.119 | 1.35 | 0.63 | 16.38 | 917.4 | 2.08 | 1.41 | <0.061 | 0.135 | 3.26 | 3.04 | 11.67 | 0.467 |
| MF43-8 | 0.435 | 205 | 246.2 | <1.37 | 1.08 | <0.030 | 9796.1 | 2.05 | 0.073 | <0.046 | 0.063 | <0.0124 | <0.206 | <0.070 | <0.55 | 0.008 | <0.043 | <2.39 | <0.0156 | <0.081 | 0.166 |
| MF43-9 | 38.31 | 150 | 236.5 | 205.5 | 1.33 | 0.102 | 3933 | 2.01 | 0.078 | <0.019 | <0.109 | 0.016 | <0.190 | 0.094 | 27.47 | <0.074 | <0.050 | <2.55 | <0.0139 | <0.082 | 39.43 |
| MF43-10 | 0.483 | 877 | 128.2 | 499.11 | 1.14 | 0.642 | 3238.5 | 2.58 | <0.092 | 0.033 | <0.107 | 0.046 | 1.29 | 0.104 | 45.96 | <0.036 | 0.145 | <2.33 | <0.0176 | <0.087 | 81.1 |
| MF43-11 | 23.44 | 20 | 28.52 | 74.81 | 1.18 | 0.64 | 42.7 | 2.52 | <0.113 | <0.024 | 0.066 | 0.422 | 122.6 | <0.069 | 5.15 | <0.065 | 0.094 | <2.55 | <0.0141 | <0.088 | 4.84 |
| MF43-12 | <0.135 | 227 | 1206 | 53.06 | 0.78 | <0.023 | 6234.7 | <1.67 | <0.079 | <0.022 | <0.103 | <0.0110 | <0.151 | <0.088 | <0.46 | <0.043 | 0.041 | <2.16 | <0.0075 | <0.063 | <0.073 |
| MF43-13 | 12.6 | 353 | 35.9 | 597030 | 45.43 | 2.49 | 162.9 | 9.09 | 0.39 | 25.93 | 3.31 | 9.54 | 1087 | 9.99 | <1.14 | <0.28 | 3.14 | 14.08 | 79 | 247.9 | 30.88 |
| MF43-14 | 0.262 | 13 | 0.77 | 555371 | 138.1 | 2.05 | 2.93 | 6.47 | <0.145 | 2.2 | 0.56 | 13.74 | 886.4 | 1.5 | 1.2 | <0.113 | 0.19 | <2.40 | 3.23 | 16.8 | 2.13 |
| MF43-15 | 0.285 | 6.9 | <0.22 | 555750 | 331.9 | 2.12 | <2.99 | 4.93 | <0.169 | 0.426 | 0.77 | 10.13 | 891.1 | 0.124 | <0.73 | <0.101 | 0.039 | <2.90 | <0.026 | 1.9 | 0.68 |
| MF43-16 | 0.303 | 7.7 | <0.27 | 573534 | 284.2 | 2.65 | <3.37 | 8.71 | <0.178 | 0.29 | 0.43 | 11.24 | 954.8 | 0.47 | 0.6 | <0.079 | 0.1 | <2.98 | 0.016 | 7.11 | 1.2 |
| MF43-17 | 0.447 | 13 | 1.1 | 576577 | 184.7 | 2.85 | 4.11 | 5.01 | <0.152 | 1.17 | 0.4 | 15.15 | 918.1 | 0.78 | 0.98 | <0.084 | <0.071 | <2.74 | 1.55 | 9.49 | 1.52 |
| MF43-18 | 1 | 47 | 4.4 | 580141 | 172.3 | 2.64 | 19.85 | 4.71 | <0.105 | 8.6 | 6.88 | 16.15 | 1061 | 2.78 | 1.27 | <0.137 | 0.71 | 5.79 | 24.17 | 111.4 | 7.86 |
| MF43-19 | 0.281 | 6.3 | 1.1 | 565012 | 281.3 | 2.78 | <3.17 | 7.41 | <0.107 | 0.454 | 0.25 | 10.36 | 896.3 | 0.181 | 0.67 | <0.075 | 0.073 | <2.60 | <0.0179 | 1.55 | 0.86 |
| MF43-20 | 9.69 | 463 | 41 | 580505 | 28.19 | 2.71 | 79 | 9.15 | 0.45 | 27.41 | 1.55 | 5.02 | 923.2 | 5.05 | <0.81 | 3.12 | 4.29 | 20.67 | 89.08 | 251.8 | 34.33 |
| MF43-21 | 0.771 | 28 | 1258 | 9.86 | <0.41 | <0.033 | 4596 | 4.1 | 0.078 | 0.004 | <0.104 | <0.0102 | <0.192 | <0.076 | 1.89 | <0.035 | 0.045 | <3.30 | <0.0153 | 0.345 | 1.57 |
| MF43-22 | 0.541 | 214 | 648 | 6.63 | 0.98 | 0.014 | 4530 | 2.28 | <0.097 | 0.68 | 0.062 | <0.0079 | <0.171 | 0.28 | 1.67 | <0.061 | 0.062 | <2.88 | <0.0171 | 15.67 | 13.42 |
| MF43-23 | 0.194 | 13 | 114 | <0.80 | 0.46 | <0.029 | 395 | 3.35 | <0.069 | <0.029 | <0.208 | <0.0079 | 0.144 | <0.068 | 0.48 | 0.022 | <0.042 | <2.72 | <0.0108 | <0.076 | 0.225 |
| MF43-24 | 0.261 | 74 | 29 | 378.04 | 1.67 | 0.032 | 42 | <1.73 | 0.075 | 0.318 | <0.141 | 0.014 | <0.164 | <0.073 | 1.57 | <0.059 | 0.032 | 2.34 | 0.103 | 1.85 | 3.1 |
| MF43-25 | <0.138 | 12 | 26 | 26.75 | 0.82 | 3.98 | 43 | <1.67 | <0.098 | <0.023 | <0.105 | <0.0080 | <0.185 | <0.070 | 0.49 | <0.062 | <0.021 | <2.25 | <0.0174 | <0.076 | <0.090 |
| MF43-26 | 1.11 | 182 | 41 | 10.18 | 1.02 | 0.081 | 181 | <1.67 | <0.093 | <0.0218 | <0.14 | <0.0076 | <0.160 | 0.209 | 1.56 | <0.053 | 0.044 | <2.18 | <0.0180 | 0.083 | 11.67 |
| MF43-27 | 0.503 | 165 | 761 | 2.97 | 1.41 | 0.026 | 4403 | <1.61 | <0.090 | 0.088 | <0.097 | <0.0060 | <0.163 | 0.149 | 2.17 | <0.052 | <0.044 | <2.34 | <0.0072 | 0.091 | 6.93 |
| MF43-28 | 4.89 | 155 | 161 | 420.35 | 1.91 | 0.35 | 774 | 4.64 | <0.075 | 0.321 | <0.098 | <0.0061 | 0.9 | 0.73 | 6.84 | 0.081 | 0.073 | <2.06 | 0.071 | 2.67 | 42.81 |
| MF43-29 | 0.249 | 20 | 43 | <0.60 | 0.87 | <0.035 | 138 | 13.54 | <0.065 | <0.028 | <0.198 | <0.0106 | 0.186 | <0.059 | <0.50 | <0.047 | 0.051 | <2.06 | <0.0164 | <0.102 | 0.095 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF43-30 | 0.96 | 16 | 123 | 10317 | 2 | 0.074 | 235 | 2.8 | 0.058 | 0.72 | <0.17 | 0.428 | 13.88 | 1 | 3.64 | <0.046 | 0.18 | <2.16 | 0.165 | 5.63 | 11.16 |
| MF43-31 | 1.97 | 214 | 680 | 10600 | 5.68 | 0.038 | 5262 | <1.46 | <0.102 | 2.2 | <0.127 | 0.289 | 26.12 | 1.45 | 7.76 | <0.099 | 0.48 | <1.71 | 6.02 | 22.87 | 51.12 |
| MF43-32 | 0.78 | 420 | 771 | 12479 | 3.3 | 0.169 | 5515 | 3.08 | <0.094 | 2.43 | <0.143 | 0.315 | 37.68 | 2.46 | 7.83 | <0.064 | 0.48 | <2.03 | 2.78 | 30.21 | 27.78 |
| MF43-33 | 0.455 | 195 | 990 | 5041.9 | 1.19 | <0.030 | 4751 | 1.96 | <0.066 | 1.68 | 0.19 | 0.259 | 44.77 | 0.68 | 3.06 | <0.048 | 0.5 | <2.02 | 1.97 | 7.05 | 11.02 |
| MF43-34 | 0.83 | 13 | 442 | 189.31 | 1.16 | <0.029 | 356 | 5.76 | <0.069 | 0.067 | <0.183 | <0.0092 | 0.49 | 0.3 | 13.81 | <0.036 | <0.056 | <1.98 | 0.172 | 0.88 | 16.81 |
| MF43-35 | 2.2 | 277 | 988 | 825.8 | 0.96 | <0.048 | 4258 | 1.93 | <0.123 | <0.023 | <0.103 | 0.009 | <0.180 | 0.121 | 1.02 | <0.049 | <0.021 | <1.80 | <0.0202 | 0.13 | 4.66 |
| MF43-36 | 0.214 | 202 | 582 | 426.16 | 0.44 | <0.038 | 7598 | <1.62 | <0.086 | 0.412 | <0.145 | 0.012 | 0.65 | 0.38 | 2.68 | 0.036 | 0.09 | <1.94 | 0.153 | 11.38 | 11.49 |
| MF43-37 | <0.121 | 19 | 48 | 1.32 | <0.41 | <0.023 | 85 | 13.99 | <0.054 | <0.026 | <0.142 | 0.007 | <0.161 | 0.113 | <0.57 | <0.034 | <0.035 | <1.85 | <0.0105 | <0.106 | 3.79 |
| MF43-38 | 0.379 | 24 | 100 | 155.08 | 1.7 | 0.099 | 140 | 14.74 | <0.127 | 0.6 | 0.16 | <0.0077 | 1.05 | 0.32 | 3.61 | <0.055 | <0.125 | <1.80 | 0.03 | 21.59 | 16.19 |
| MF43-39 | 0.267 | 528 | 524 | <0.53 | 0.45 | <0.042 | 5264 | <1.63 | <0.133 | <0.019 | 0.063 | <0.0066 | <0.24 | <0.064 | <0.50 | <0.051 | <0.037 | <1.88 | <0.0137 | <0.101 | <0.082 |
| MF43-40 | 0.293 | 8.7 | 19 | 16.78 | <0.39 | <0.035 | 71 | 13.11 | <0.078 | <0.027 | <0.104 | <0.0091 | <0.182 | <0.039 | <0.61 | <0.066 | <0.047 | <2.05 | <0.0204 | <0.128 | <0.083 |
| MF43-41 | 0.248 | 13 | 91 | 5.78 | 1.02 | <0.039 | 394 | 12.9 | <0.100 | <0.034 | <0.109 | <0.0095 | <0.184 | <0.049 | <0.62 | <0.058 | <0.044 | <3.17 | <0.0140 | <0.074 | <0.075 |
| MF43-42 | 0.196 | 28 | 119 | 11.66 | 0.58 | <0.038 | 575 | 6.65 | <0.094 | 0.6 | 0.15 | 0.007 | <0.159 | 0.39 | 0.98 | <0.0246 | <0.029 | <2.59 | <0.0229 | 2.24 | 3.23 |
| MF43-43 | 0.491 | 17 | 43 | 148.33 | 0.68 | <0.041 | 487 | 13.89 | 0.214 | <0.0232 | <0.00 | <0.0091 | <0.158 | <0.047 | <0.57 | <0.035 | <0.030 | <2.27 | <0.0257 | <0.067 | <0.077 |
| MF43-44 | 0.545 | 996 | 1053 | 4703.6 | 2.7 | 0.96 | 3764 | 2.33 | <0.118 | 0.15 | 0.25 | 0.28 | 8.94 | 0.33 | <0.58 | <0.035 | 0.05 | <2.13 | <0.017 | 7.17 | 3.03 |
| MF43-45 | 0.62 | 224 | 2125 | 7374.2 | 2.42 | 0.046 | 1862 | 5.75 | <0.086 | 0.89 | <0.25 | 0.167 | 20.79 | 0.47 | 1.57 | <0.194 | 0.21 | <2.27 | 1.77 | 8.58 | 15.41 |
| MF43-46 | 0.58 | 328 | 2300 | 754.15 | 1.81 | <0.035 | 150 | 4.99 | <0.057 | 0.56 | <0.154 | 0.035 | 6.44 | 0.54 | 4.98 | <0.052 | 0.132 | <2.15 | 0.413 | 9.46 | 14.07 |
| MF43-47 | 0.239 | 288 | 622 | 4468 | 1.78 | 0.082 | 41 | 3.06 | 0.062 | 2.41 | <0.16 | 0.115 | 13.92 | 0.48 | 3.68 | <0.109 | 0.114 | <2.28 | 3.46 | 221 | 31.79 |
| MF43-48 | 0.37 | 629 | 1799 | 8.44 | <0.34 | <0.037 | 257 | 4.69 | <0.086 | <0.0134 | <0.179 | <0.0150 | 0.224 | <0.049 | <0.46 | <0.089 | <0.029 | <1.88 | <0.0154 | <0.083 | <0.076 |
| MF43-49 | 0.604 | 1877 | 1326 | <0.64 | 0.95 | <0.045 | 2331 | 5.32 | <0.080 | <0.031 | <0.15 | <0.0105 | 0.178 | <0.054 | 0.76 | <0.068 | 0.035 | <1.98 | <0.0139 | <0.077 | 0.09 |
| MF43-50 | 0.463 | 779 | 203 | 1.29 | 2.38 | <0.037 | 98 | 2.74 | <0.082 | 0.03 | <0.110 | 0.007 | <0.178 | 0.056 | <0.44 | <0.037 | 0.068 | <2.01 | <0.026 | <0.090 | 0.1 |
| MF43-51 | 0.485 | 699 | 1287 | 1030.6 | 2.06 | <0.030 | 7188 | 2.14 | <0.100 | 0.357 | <0.16 | 0.031 | 1.98 | 0.33 | 2.63 | <0.30 | 0.119 | <2.08 | 0.44 | 6.51 | 12 |
| MF43-52 | 0.374 | 1447 | 3049 | <0.49 | 1.35 | <0.038 | 15930 | <1.83 | <0.059 | <0.041 | 0.034 | 0.006 | <0.181 | <0.045 | <0.56 | <0.054 | <0.039 | <2.26 | <0.0168 | <0.070 | 0.15 |
| MF43-53 | 1.66 | 411 | 1622 | 60561 | 3.35 | 0.309 | 4293 | 7.58 | <0.099 | 1.76 | 0.16 | 2.33 | 80.61 | 2.45 | 4.6 | <0.149 | 0.4 | <1.98 | 1.58 | 14.07 | 21 |
| MF43-54 | 1.57 | 161 | 192 | 2356 | 2.02 | 0.116 | 5387 | <1.68 | <0.106 | 0.56 | <0.19 | 0.078 | 7.69 | 1 | 5.91 | <0.045 | 0.89 | <2.11 | 0.51 | 31.09 | 30 |
| MF43-55 | 0.95 | 55 | 1041 | 83 | 0.75 | <0.044 | 7044 | <1.89 | <0.118 | <0.036 | <0.159 | <0.0138 | <0.186 | 0.29 | 2.06 | <0.054 | 0.095 | <2.12 | <0.031 | 2.12 | 16 |
| MF43-56 | 2.53 | 416 | 340 | 1357 | 1.67 | <0.036 | 5293 | <1.72 | <0.090 | 1.09 | <0.153 | 0.027 | 1.4 | 1.31 | 9.62 | 0.023 | 2.19 | <1.81 | 0.245 | 16.19 | 38 |
| MF43-57 | 1.25 | 869 | 2842 | 3418 | 1.56 | 0.329 | 14348 | 3.53 | <0.039 | 0.62 | <0.28 | 0.164 | 6.54 | 0.6 | 4.54 | <0.127 | 0.27 | <1.88 | 0.277 | 28.01 | 25 |
| MF43-58 | 1.47 | 384 | 998 | 45705 | 2.74 | <0.031 | 8633 | 6.66 | <0.087 | 12.29 | 0.2 | 0.81 | 29.29 | 3.08 | 6.49 | 0.113 | 1.67 | <1.93 | 47.81 | 65.21 | 46 |
| MF43-59 | <1.12 | 3224 | 1189 | 203 | 10.56 | <0.123 | 412 | <15.59 | <0.184 | 0.112 | <0.26 | 0.114 | 3.61 | 0.141 | 2.44 | <0.070 | 0.062 | <1.09 | <0.0203 | 2.56 | 9.7 |
| MF43-60 | 1.6 | 644 | 2509 | 73 | 1.61 | 0.441 | 170 | <3.70 | <0.083 | <0.039 | <0.159 | 0.057 | 19.26 | 0.11 | 1.58 | <0.046 | <0.050 | <1.76 | <0.025 | 0.081 | 6 |
| MF43-61 | 2.12 | 2589 | 477 | 5366 | <2.19 | 0.85 | 64 | 12.24 | <0.106 | 0.85 | <0.24 | 0.204 | 30.72 | 1.21 | 3.41 | <0.040 | 0.17 | <3.03 | 0.55 | 7.11 | 14 |
| MF43-62 | <0.154 | 47 | 444 | 7754 | 1.05 | <0.034 | 6626 | 3.02 | <0.085 | 2.3 | <0.11 | 0.078 | 5.04 | 0.5 | 3.61 | <0.160 | 0.36 | <2.49 | 4.36 | 9.25 | 13 |
| MF43-63 | 0.174 | 7.3 | 14 | 37 | 9.29 | <0.034 | 3423 | 2.9 | <0.085 | <0.026 | <0.200 | <0.0071 | <0.194 | <0.064 | <0.43 | <0.039 | <0.061 | <2.58 | <0.0122 | <0.082 | 1.2 |
| MF43-64 | 0.543 | 429 | 4229 | 4925 | 1.31 | <0.028 | 16030 | 6.14 | <0.072 | 1.41 | <0.20 | 0.096 | 8.24 | 0.62 | 5.7 | <0.121 | 0.26 | <2.17 | 3.31 | 5.55 | 23 |
| MF43-65 | 0.78 | 281 | 4541 | 3301 | 4.7 | <0.050 | 12938 | 6.28 | <0.124 | 1.33 | <0.113 | 0.268 | 51.95 | 0.96 | 8.4 | <0.038 | 0.3 | <2.11 | 1.64 | 7.85 | 49 |
| MF43-66 | 0.67 | 23 | 1053 | 67 | 3.13 | <0.043 | 6744 | 4.19 | <0.104 | 0.156 | <0.164 | 0.011 | <0.190 | 0.189 | 3.6 | <0.078 | 0.27 | <2.16 | 0.046 | 5.49 | 14 |
| MF43-67 | 1.52 | 302 | 3006 | 30 | 1.39 | 0.045 | 10039 | 4.64 | <0.041 | 0.038 | <0.158 | <0.0084 | <0.161 | 0.217 | 3.8 | <0.046 | 0.17 | <1.97 | <0.017 | 0.51 | 17 |
| MF43-68 | 0.34 | 22 | 38 | 4688 | 244.1 | 21.42 | 71 | 9.23 | 0.063 | 0.357 | 13.79 | 12.12 | 3581 | 0.49 | 1.3 | <0.026 | 0.21 | <1.91 | 0.032 | 0.81 | 15 |
| MF43-69 | 0.35 | 5.9 | 166 | 0.7 | 0.84 | <0.032 | 78 | 7.79 | <0.121 | <0.020 | <0.190 | <0.0107 | <0.170 | <0.059 | 2 | <0.052 | <0.031 | <2.02 | <0.0202 | <0.064 | 0.16 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF43-70 | 0.484 | 21 | 301 | 42 | 1.51 | 0.05 | 6363 | 4.1 | <0.102 | 0.028 | <0.160 | <0.0070 | 0.37 | 0.25 | 1.9 | <0.098 | 0.11 | <1.99 | <0.0208 | 2.28 | 12 |
| MF43-71 | 0.436 | 18 | 56 | 11 | <0.40 | <0.049 | 4054 | 3.72 | <0.130 | <0.036 | <0.22 | <0.0120 | <0.195 | 0.29 | 3.8 | <0.168 | 0.07 | <2.07 | <0.027 | 0.73 | 22 |
| MF43-72 | 0.84 | 260 | 3586 | 5926 | 0.47 | 0.033 | 12847 | 5.72 | <0.103 | 1.11 | 0.17 | 0.315 | 16.41 | 0.79 | 13 | <0.168 | 1.8 | <2.06 | 1.45 | 7.51 | 46 |
| MF43-73 | 0.53 | 243 | 1073 | 21678 | 2.1 | <0.037 | 4921 | <1.93 | <0.114 | 3.04 | 0.18 | 0.447 | 19.97 | 1.3 | 6.4 | <0.129 | 0.41 | <2.12 | 8.16 | 27.95 | 34 |
| MF43-74 | 1.29 | 58 | 47 | 36065 | 2.6 | 0.053 | 3669 | <1.78 | <0.131 | 4.8 | 0.39 | 0.65 | 61.89 | 1.9 | 11 | <0.090 | 0.83 | <2.10 | 9.27 | 49.05 | 45 |
| MF43-75 | 0.43 | 32 | 32 | 6072 | 2.4 | 0.035 | 5909 | 3.57 | <0.098 | 1.46 | <0.155 | 0.105 | 8.09 | 0.73 | 4.1 | <0.045 | 0.25 | <1.90 | 6.96 | 8.96 | 18 |
| MF43-76 | 1.24 | 126 | 86 | 47789 | 4.4 | 0.066 | 5543 | 2.28 | <0.066 | 4.73 | 0.32 | 0.91 | 77.7 | 3.4 | 8.3 | <0.139 | 0.85 | <1.77 | 15.01 | 37.25 | 64 |
| MF43-77 | <0.180 | 780 | 1334 | 15305 | 2.3 | 0.041 | 10100 | <1.81 | <0.092 | 2.1 | <0.23 | 0.317 | 18.64 | 1.9 | 9.5 | <0.101 | 0.59 | <1.97 | 4.63 | 10.42 | 37 |
| MF43-78 | 2.3 | 462 | 4152 | 62476 | 32 | 0.166 | 12015 | 9.2 | <0.124 | 6.44 | <0.23 | 1.21 | 97.9 | 3.9 | 10 | <0.25 | 1.4 | <2.01 | 17.01 | 40.34 | 50 |
| MF43-79 | 0.42 | 1.5 | 65 | 2.2 | 1.2 | <0.032 | 6045 | 4.1 | <0.111 | <0.0266 | <0.200 | <0.0087 | <0.161 | 0.1 | 0.58 | <0.055 | 0.36 | <1.97 | <0.025 | <0.076 | 4 |
| MF43-80 | 4.5 | 167 | 990 | 21480 | 1.8 | <0.042 | 5966 | 5 | <0.092 | 3.3 | <0.20 | 0.77 | 70 | 2.6 | 9.9 | <0.093 | 0.57 | <1.88 | 13 | 23 | 49 |
| **Mean n=80** | 2 | 307 | 779 | 121672 | 50 | 2 | 3948 | 6 | 0 | 2 | 1 | 4 | 338 | 1 | 5 | 0 | 0 | 9 | 8 | 24 | 17 |
| **S.D** | 5 | 539 | 1093 | 229259 | 108 | 3 | 4262 | 3 | 0 | 5 | 3 | 6 | 607 | 2 | 7 | 1 | 1 | 8 | 19 | 53 | 18 |
| **Min** | 0.17 | 1.50 | 0.17 | 0.70 | 0.44 | 0.01 | 2.93 | 1.93 | 0.06 | 0.00 | 0.03 | 0.01 | 0.14 | 0.06 | 0.48 | 0.01 | 0.02 | 2.34 | 0.02 | 0.08 | 0.09 |
| **Max** | 38 | 3224 | 4541 | 597030 | 403 | 21 | 16030 | 15 | 0 | 27 | 14 | 16 | 3581 | 10 | 46 | 3 | 4 | 21 | 89 | 252 | 81 |

| **Sample #** | **$^{55}$Mn** | **$^{59}$Co** | **$^{60}$Ni** | **$^{65}$Cu** | **$^{66}$Zn** | **$^{69}$Ga** | **$^{75}$As** | **$^{82}$Se** | **$^{95}$Mo** | **$^{107}$Ag** | **$^{111}$Cd** | **$^{115}$In** | **$^{118}$Sn** | **$^{121}$Sb** | **$^{125}$Te** | **$^{184}$W** | **$^{197}$Au** | **$^{202}$Hg** | **$^{205}$Tl** | **$^{208}$Pb** | **$^{209}$Bi** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MF44-1 | 0.42 | 2238 | 1886 | 83 | 3.5 | 0.08 | 4064 | <2.45 | <0.106 | 3.3 | 4.2 | <0.0126 | 0.7 | 0.23 | <0.69 | 0.21 | 0.14 | <3.94 | 56 | 36 | 3.1 |
| MF44-2 | 0.27 | 1826 | 1538 | 92 | 5.3 | <0.028 | 4366 | 3.2 | <0.174 | 2.3 | 5.6 | <0.0109 | 0.33 | 0.26 | <0.66 | <0.098 | 0.1 | 5 | 80 | 19 | 1.7 |
| MF44-3 | 0.52 | 59 | 234 | <0.82 | <0.94 | <0.050 | 2225.9 | <2.35 | <0.072 | <0.046 | <0.20 | <0.0150 | <0.24 | <0.055 | <0.53 | <0.058 | <0.039 | <2.81 | <0.133 | <0.145 | <0.107 |
| MF44-4 | 0.44 | 5008 | 3457 | 184 | 1.7 | 0.02 | 5859 | 3.3 | <0.071 | 3.5 | 10 | <0.0170 | 0.65 | 0.58 | 0.52 | <0.110 | 0.07 | 6 | 148 | 57 | 5.3 |
| MF44-5 | 1.3 | 12864 | 7458 | 184 | 3.6 | 0.25 | 6884 | 4.9 | 0.07 | 2 | 6.9 | <0.0125 | 1.2 | 0.39 | <0.75 | 0.43 | 0.29 | 7.2 | 79 | 220 | 5.2 |
| MF44-6 | 0.54 | 22034 | 11599 | 125 | 1.8 | <0.041 | 8925 | 4.8 | <0.150 | 1.1 | 1.7 | <0.0134 | 1.3 | 0.28 | <0.56 | <0.114 | 0.09 | 6.1 | 49 | 193 | 1.1 |
| MF44-7 | 0.22 | 4358 | 2372 | 37 | 1.2 | <0.036 | 3695 | <2.08 | <0.106 | 0.46 | <0.37 | <0.0098 | 1.1 | 0.16 | <0.61 | <0.179 | <0.045 | <2.44 | 9.3 | 14 | 0.2 |
| **Mean n=7** | 1 | 6912 | 4078 | 118 | 3 | 0 | 5146 | 4 | 0 | 2 | 6 | - | 1 | 0 | 1 | 0 | 0 | 6 | 70 | 90 | 3 |
| **S.D** | 0 | 7841 | 4027 | 59 | 2 | 0 | 2244 | 1 | - | 1 | 3 | - | 0 | 0 | - | 0 | 0 | 1 | 46 | 92 | 2 |
| **Min** | 0.22 | 59 | 234 | 37 | 1.2 | 0.02 | 2226 | 3.20 | 0.07 | 0.46 | 1.70 | 0.00 | 0.33 | 0.16 | 0.52 | 0.21 | 0.07 | 5.0 | 9.3 | 14 | 0.20 |
| **Max** | 1 | 22034 | 11599 | 184 | 5 | 0 | 8925 | 5 | 0 | 4 | 10 | 0 | 1 | 1 | 1 | 0 | 0 | 7 | 148 | 220 | 5 |

## APPENDIX D

| Sample # | $^{55}$Mn | $^{59}$Co | $^{60}$Ni | $^{65}$Cu | $^{66}$Zn | $^{69}$Ga | $^{75}$As | $^{82}$Se | $^{95}$Mo | $^{107}$Ag | $^{111}$Cd | $^{115}$In | $^{118}$Sn | $^{121}$Sb | $^{125}$Te | $^{184}$W | $^{197}$Au | $^{202}$Hg | $^{205}$Tl | $^{208}$Pb | $^{209}$Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MF2** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 2.4 | 873 | 185 | 15 | 2.4 | 1.0 | 3704 | 2.4 | 0.15 | 3.3 | 0.07 | 0.05 | 1.3 | 0.23 | 3.1 | 6.6 | 0.22 | 0.47 | 0.03 | 32 | 12 |
| **S.D** | 5.7 | 1670 | 508 | 27 | 2.4 | 3.1 | 2228 | 1.8 | 0.23 | 6.9 | 0.10 | 0.12 | 2.6 | 0.30 | 6.4 | 21 | 0.54 | 0.32 | 0.07 | 151 | 18 |
| **Min** | 0.09 | 2.3 | 1.4 | 1.3 | 0.40 | 0.01 | 808 | 0.94 | 0.01 | 0 | 0.01 | 0 | 0.07 | 0.01 | 0.02 | 0.03 | 0.01 | 0.17 | 0 | 0.01 | 0.38 |
| **Max** | 33 | 9468 | 4138 | 174 | 15 | 21 | 13455 | 11 | 1.1 | 39 | 0.52 | 0.70 | 18 | 1.6 | 46 | 145 | 3.6 | 0.90 | 0.37 | 1243 | 97 |
| **MF3** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=79** | 43 | 364 | 54 | 27 | 25 | 187 | 5124 | 2.5 | 2.4 | 3.5 | 0.09 | 1.4 | 172 | 1.1 | 40 | 48 | 0.69 | 26 | 1.3 | 26 | 61 |
| **S.D** | 309 | 1060 | 143 | 93 | 137 | 903 | 3784 | 4.7 | 8.7 | 11 | 0.34 | 7.3 | 1084 | 6.2 | 280 | 318 | 4.4 | 50 | 7.2 | 43 | 383 |
| **Min** | 0.09 | 0.71 | 0.03 | 1.5 | 0.33 | 0.01 | 1462 | 0.89 | 0 | 0 | 0.01 | 0 | 0.04 | 0 | 0.07 | 0 | 0 | 0.14 | 0 | 0.03 | 0.02 |
| **Max** | 2663 | 7192 | 939 | 824 | 919 | 4949 | 34778 | 35 | 53 | 92 | 1.9 | 40 | 8416 | 49 | 2387 | 2514 | 38 | 100 | 52 | 193 | 3357 |
| **MF4** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 8.2 | 3095 | 736 | 15 | 7.9 | 1.2 | 7854 | 2.9 | 0 | 1.3 | 0 | 0 | 1.5 | 0 | 3.6 | 0.6 | 0 | 0.9 | 0 | 10 | 7.3 |
| **S.D** | 33 | 3512 | 551 | 18 | 35 | 2.4 | 5020 | 2.5 | 0 | 1.7 | 1.4 | 0 | 2.5 | 0 | 6.4 | 1.7 | 0 | 0.9 | 0 | 12 | 13 |
| **Min** | 0.28 | 26 | 8.5 | 0.69 | 0.6 | 0.01 | 895 | 1.4 | 0.01 | 0 | 0.01 | 0 | 0.12 | 0.02 | 0.02 | 0.01 | 0 | 0.21 | 0 | 0.06 | 0 |
| **Max** | 260 | 12804 | 2315 | 80 | 315 | 11 | 22391 | 13 | 0.28 | 8.1 | 8.2 | 0.08 | 14 | 1.4 | 42 | 13 | 0.84 | 2.5 | 0.17 | 52 | 68 |
| **MF5** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 6.4 | 1092 | 208 | 1115 | 4.1 | 2.6 | 8801 | 3.7 | 4.9 | 20 | 0.11 | 0.09 | 4.1 | 0.52 | 23 | 1.2 | 0.72 | 0.46 | 0.07 | 335 | 38 |
| **S.D** | 23 | 2553 | 675 | 3889 | 5.3 | 5.3 | 5626 | 1.2 | 14.3 | 37 | 0.14 | 0.16 | 7.2 | 0.60 | 33 | 2.3 | 1.8 | 0.05 | 0.08 | 1377 | 43 |
| **Min** | 0.25 | 0.48 | 0.64 | 0.69 | 0.79 | 0.01 | 2317 | 2.1 | 0.01 | 0.01 | 0.02 | 0 | 0.13 | 0.02 | 0.06 | 0 | 0.01 | 0.41 | 0 | 0.11 | 0.17 |
| **Max** | 180 | 11791 | 5530 | 25455 | 31 | 30 | 46766 | 7.5 | 74 | 194 | 0.56 | 0.69 | 30 | 3.2 | 144 | 12 | 15 | 0.51 | 0.28 | 10941 | 184 |
| **MF6** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 3.1 | 3945 | 614 | 207 | 24 | 3.1 | 10595 | 3.8 | 0.2 | 19 | 0.05 | 0 | 1.2 | 1.4 | 14 | 1.0 | 1.3 | - | 0.14 | 649 | 45 |
| **S.D** | 4.9 | 6137 | 871 | 974 | 115 | 5.0 | 8327 | 1.5 | 0.2 | 40 | 0.05 | 0 | 1.4 | 1.9 | 27 | 2.2 | 7.5 | - | 0.13 | 1229 | 65 |
| **Min** | 0.15 | 3.50 | 4.30 | 0.88 | 0.47 | 0.01 | 1395 | 1.4 | 0.01 | 0 | 0.02 | 0 | 0.07 | 0.01 | 0.02 | 0 | 0 | - | 0 | 0.02 | 0 |
| **Max** | 31 | 23838 | 3924 | 6993 | 884 | 24 | 38037 | 9.30 | 0.98 | 225 | 0.27 | 0.06 | 6 | 11 | 137 | 16 | 62 | - | 0.62 | 7054 | 336 |
| **MF7** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 116 | 4690 | 2628 | 19996 | 61 | 1.4 | 1272 | 17 | 0.19 | 94 | 0.7 | 0.64 | 102 | 3.7 | 40 | 0.32 | 27 | 0.63 | 0.18 | 7797 | 92 |
| **S.D** | 324 | 1505 | 1413 | 36201 | 316 | 5.1 | 2378 | 9.0 | 0.23 | 152 | 3.3 | 1.6 | 491 | 5.2 | 56 | 0.84 | 214 | 0.10 | 0.20 | 18360 | 104 |
| **Min** | 0.35 | 2349 | 572 | 0.98 | 0.69 | 0.01 | 6.1 | 5.3 | 0.02 | 0.04 | 0.03 | 0 | 0.20 | 0.03 | 0.67 | 0.01 | 0.01 | 0.48 | 0 | 1.7 | 0.2 |
| **Max** | 2054 | 10542 | 6427 | 2E+05 | 2685 | 39 | 15239 | 49 | 1.1 | 999 | 20 | 13 | 4266 | 37 | 289 | 5.4 | 1853 | 0.82 | 1.0 | 80850 | 544 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MF8** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 3.0 | 4053 | 784 | 371 | 61 | 1.5 | 12685 | 6.3 | 0.28 | 25 | 0.06 | 0 | 5.0 | 1.1 | 19 | 33 | 2.2 | 0.68 | 0.06 | 26 | 77 |
| **S.D** | 4.6 | 6143 | 1010 | 1922 | 436 | 5.1 | 8279 | 2.4 | 0.36 | 52 | 0.05 | 0 | 9.3 | 1.3 | 29 | 79 | 3.6 | 0.10 | 0.12 | 39 | 150 |
| **Min** | 0.3 | 0.21 | 8.1 | 0.64 | 0.74 | 0.02 | 126 | 2.7 | 0.02 | 0 | 0.02 | 0 | 0.16 | 0.02 | 0.04 | 0.01 | 0 | 0.51 | 0 | 0.06 | 0.03 |
| **Max** | 31 | 25999 | 4000 | 16691 | 3722 | 28 | 37058 | 14 | 1.6 | 353 | 0.20 | 0.2 | 46 | 6.3 | 129 | 551 | 20 | 0.83 | 0.84 | 204 | 1015 |
| **MF9** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 99 | 2260 | 244 | 2502 | 12 | 8.0 | 3681 | 4.7 | 0.47 | 138 | 0.10 | 0.62 | 37 | 3.1 | 19 | 6.9 | 1548 | 1.3 | 0.44 | 106 | 123 |
| **S.D** | 423 | 1541 | 166 | 6904 | 65 | 41 | 2150 | 3.1 | 1.5 | 1105 | 0.10 | 3.6 | 271 | 9.3 | 28 | 50 | 13183 | 1.8 | 0.74 | 203 | 255 |
| **Min** | 0.41 | 50 | 24 | 0.71 | 0.40 | 0.01 | 769 | 2.80 | 0.01 | 0.01 | 0.03 | 0 | 0.17 | 0.01 | 0.03 | 0.01 | 0.01 | 0.47 | 0 | 0.04 | 0.01 |
| **Max** | 2667 | 9078 | 726 | 38739 | 557 | 266 | 14761 | 16 | 7.30 | 9251 | 0.41 | 24 | 2140 | 62 | 169 | 408 | 112642 | 4.90 | 3.80 | 927 | 1841 |
| **MF10** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=79** | 56 | 2868 | 285 | 13 | 15 | 20 | 6743 | 2.3 | 0.35 | 0.75 | 0.17 | 0 | 3.2 | 0.9 | 13 | 6.2 | 0.84 | - | 0.08 | 46 | 43 |
| **S.D** | 396 | 3142 | 186 | 21 | 55 | 136 | 3483 | 1.0 | 1.0 | 0.64 | 0.78 | 0 | 10 | 1.0 | 15 | 28.4 | 1.0 | - | 0.10 | 95 | 53 |
| **Min** | 0.19 | 84 | 11 | 1.5 | 0.55 | 0 | 1552 | 1.3 | 0.01 | 0 | 0.01 | 0 | 0.06 | 0 | 0.12 | 0.01 | 0.01 | - | 0 | 0.08 | 0.34 |
| **Max** | 3480 | 11763 | 819 | 175 | 434 | 1010 | 16577 | 6.2 | 5.5 | 2.7 | 4.3 | 0.16 | 55 | 6.8 | 64 | 217 | 4.6 | - | 0.48 | 747 | 307 |
| **MF11** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=60** | 4.6 | 4841 | 273.0 | 469 | 6.4 | 3.0 | 11164 | 1.7 | 0.07 | 0.43 | 0 | 2.8 | 320 | 0.57 | 9.5 | 0.23 | 0.52 | 0.26 | 0 | 20 | 28 |
| **S.D** | 8.0 | 7570 | 376 | 2007 | 20 | 9.0 | 8838 | 0.53 | 0.17 | 0.63 | 0.07 | 12 | 1495 | 0.75 | 14 | 0.36 | 1.5 | 0.08 | 0 | 35 | 39 |
| **Min** | 0.11 | 6.5 | 0.09 | 0.20 | 0.29 | 0 | 2.1 | 0.66 | 0.01 | 0 | 0.01 | 0 | 0.06 | 0 | 0.02 | 0 | 0 | 0.15 | 0 | 0.01 | 0 |
| **Max** | 43 | 24514 | 1604 | 12963 | 145 | 40 | 36961 | 2.9 | 0.73 | 2.5 | 0.28 | 74 | 9716 | 3.3 | 58 | 1.4 | 10 | 0.54 | 0.18 | 132 | 152 |
| **MF12** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=60** | 37 | 2657 | 330 | 71 | 310 | 68 | 6900 | 1.5 | 0.73 | 0.40 | 0.05 | 0.87 | 162 | 0.86 | 13 | 33 | 0.35 | 0.85 | 1.3 | 16 | 30 |
| **S.D** | 159 | 3164 | 249 | 336 | 1540 | 344 | 3519 | 0.77 | 3.3 | 1.4 | 0.07 | 3.8 | 869 | 1.8 | 44 | 181 | 1.4 | 2.9 | 7.6 | 35 | 82 |
| **Min** | 0.09 | 24 | 8.6 | 0.22 | 0.40 | 0.01 | 847 | 0.72 | 0.01 | 0 | 0.01 | 0 | 0.07 | 0.01 | 0.05 | 0 | 0 | 0.21 | 0 | 0.02 | 0.02 |
| **Max** | 949 | 11787 | 1051 | 2510 | 10759 | 1910 | 13055 | 5.1 | 16 | 9.6 | 0.24 | 24 | 6081 | 8.5 | 304 | 1192 | 10 | 22 | 49 | 212 | 560 |
| **MF13** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=60** | 117 | 867 | 106 | 8.1 | 6.6 | 0.13 | 5852 | 1.9 | 0 | 0.81 | 0 | 0.4 | 21 | 0.93 | 1.8 | 0.1 | 1.0 | 0.50 | 0.06 | 20 | 8.7 |
| **S.D** | 327 | 1703 | 168 | 12.6 | 38.0 | 0.28 | 3524 | 1.4 | 0 | 2.0 | 0 | 1.1 | 58 | 1.8 | 3.0 | 0.3 | 2.1 | 0.23 | 0.14 | 42 | 13 |
| **Min** | 0.13 | 0.09 | 0.33 | 0.25 | 0.26 | 0 | 589 | 0.65 | 0.01 | 0 | 0.01 | 0 | 0.06 | 0.01 | 0.05 | 0 | 0 | 0.11 | 0 | 0.02 | 0 |
| **Max** | 1860 | 10202 | 636 | 71 | 283 | 1.4 | 14160 | 10 | 0.15 | 12 | 0.05 | 5.4 | 267 | 11 | 20 | 1.3 | 9.2 | 1.2 | 0.68 | 258 | 64 |
| **MF14** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 27 | 839 | 113 | 46 | 5.5 | 6.7 | 6789 | 2.3 | 0 | 0.47 | 0 | 0 | 43 | 0.8 | 4.7 | 2.5 | 0.7 | 0.39 | 0 | 17 | 15 |
| **S.D** | 219 | 1822 | 242 | 231 | 31 | 28 | 4139 | 1.4 | 0 | 1.5 | 0 | 1.2 | 185 | 1.6 | 7.2 | 7.2 | 1.2 | 0.20 | 0 | 37 | 21 |
| **Min** | 0.13 | 0.07 | 0.03 | 0.25 | 0.26 | 0 | 17 | 0.65 | 0.01 | 0 | 0.01 | 0 | 0.06 | 0 | 0.05 | 0 | 0 | 0.11 | 0 | 0.02 | 0 |
| **Max** | 1860 | 10202 | 1621 | 1957 | 283 | 204 | 15414 | 10 | 2.3 | 12 | 0.12 | 7.3 | 1418 | 11 | 35 | 42 | 9.2 | 1.2 | 0.68 | 258 | 101 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MF15** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 2.9 | 449 | 30 | 2.5 | 1.5 | 0.21 | 2458 | 1.8 | 0.16 | 0.04 | 0.04 | 0.82 | 85 | 0.12 | 0.41 | 0.13 | 0.04 | 0.35 | 0 | 0.64 | 2.5 |
| **S.D** | 8.5 | 628 | 27 | 2.0 | 0.81 | 0.27 | 1089 | 0.6 | 0.26 | 0.14 | 0.1 | 1.4 | 191 | 0.15 | 0.75 | 0.30 | 0.06 | 0.03 | 0 | 1.4 | 5.0 |
| **Min** | 0.15 | 2.2 | 0.54 | 0.47 | 0.46 | 0.03 | 573 | 1.4 | 0.01 | 0 | 0.01 | 0.01 | 1.3 | 0 | 0.03 | 0 | 0 | 0.31 | 0 | 0.02 | 0.01 |
| **Max** | 47 | 2694 | 112 | 10 | 4.1 | 1.1 | 5019 | 2.8 | 1.1 | 0.62 | 0.48 | 7.2 | 1210 | 0.73 | 3.7 | 1.3 | 0.21 | 0.40 | 0.01 | 7.5 | 22 |
| **MF16** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 0.60 | 1473 | 169 | 5.1 | 7.0 | 0.11 | 5200 | 1.5 | 1.8 | 0.37 | 0.02 | 0.13 | 11 | 0.39 | 1.1 | 1.7 | 0.11 | 0.44 | 0 | 4.7 | 5.5 |
| **S.D** | 1.1 | 1451 | 116 | 5.3 | 32 | 0.16 | 2190 | 0.37 | 7.8 | 0.53 | 0.01 | 0.25 | 18 | 0.64 | 1.4 | 10.4 | 0.15 | 0.10 | 0.01 | 11.0 | 12.9 |
| **Min** | 0.15 | 51 | 22 | 0.44 | 0.45 | 0 | 1274 | 1.1 | 0 | 0 | 0.01 | 0 | 0.10 | 0 | 0.01 | 0 | 0 | 0.26 | 0 | 0.02 | 0 |
| **Max** | 6.8 | 6625 | 577 | 30 | 257 | 0.65 | 12765 | 2.8 | 42 | 2.8 | 0.05 | 1.3 | 98 | 3.4 | 5.9 | 76 | 1.0 | 0.66 | 0.06 | 76 | 104 |
| **MF17** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 192 | 1572 | 120 | 12 | 14 | 0.09 | 4232 | 7.6 | 0.06 | 0.36 | 0.13 | 0.05 | 1.7 | 0.47 | 2.3 | 0.12 | 0.12 | 1.0 | 0.02 | 6.8 | 12 |
| **S.D** | 650 | 2547 | 149 | 14 | 57 | 0.02 | 3037 | 0.43 | 0.02 | 0.66 | 0.09 | 0.15 | 1.4 | 0.70 | 5.2 | 0.19 | 0.25 | 0.32 | 0.03 | 13 | 29 |
| **Min** | 0.53 | 2.2 | 0.72 | 2.6 | 1.3 | 0.06 | 239 | 7.2 | 0.03 | 0.01 | 0.06 | 0 | 0.44 | 0.01 | 0.07 | 0.01 | 0.01 | 0.75 | 0 | 0.09 | 0.01 |
| **Max** | 3409 | 14565 | 621 | 75 | 313 | 0.11 | 19617 | 8.2 | 0.11 | 3.3 | 0.34 | 0.66 | 5.8 | 2.8 | 33 | 0.82 | 1.5 | 1.2 | 0.12 | 57 | 154 |
| **MF18** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 141 | 692 | 720 | 2615 | 14 | 2.0 | 4890 | 9.6 | 0.11 | 0.49 | 0.15 | 0.12 | 6.6 | 2.2 | 3.8 | 0.15 | 0.45 | 1.1 | 0.07 | 30 | 11 |
| **S.D** | 362 | 509 | 576 | 12760 | 51 | 9.0 | 2399 | 1.9 | 0.24 | 0.79 | 0.10 | 0.35 | 20 | 2.9 | 5.7 | 0.30 | 0.83 | 0 | 0.09 | 42 | 20 |
| **Min** | 0.74 | 38 | 3.1 | 1.6 | 1.6 | 0.03 | 144 | 6.3 | 0.03 | 0.01 | 0.05 | 0 | 0.33 | 0.03 | 0.07 | 0.01 | 0.01 | 1.1 | 0 | 0.1 | 0 |
| **Max** | 1985 | 2096 | 1984 | 81279 | 301 | 48 | 11883 | 13 | 1.2 | 4.0 | 0.42 | 1.6 | 103 | 12 | 35 | 1.1 | 5.0 | 1.1 | 0.49 | 196 | 155 |
| **MF19** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 129 | 5358 | 158 | 1071 | 4.6 | 1.4 | 6383 | 3.0 | 0.10 | 0.69 | 0.05 | 0.09 | 3.3 | 1.3 | 9.3 | 1.6 | 1.1 | 0.37 | 0.09 | 32 | 28 |
| **S.D** | 332 | 5222 | 220 | 7007 | 9.4 | 3.5 | 4445 | 0.82 | 0.22 | 1.7 | 0.03 | 0.33 | 7.3 | 1.4 | 12 | 8.8 | 4.1 | 0.06 | 0.11 | 43 | 33 |
| **Min** | 0.22 | 77 | 2.1 | 0.43 | 0.35 | 0.02 | 281 | 1.7 | 0.01 | 0 | 0.02 | 0 | 0.12 | 0 | 0.1 | 0 | 0 | 0.26 | 0 | 0.03 | 0 |
| **Max** | 1714 | 18030 | 1064 | 61756 | 73 | 16 | 18976 | 5.3 | 1 | 13 | 0.18 | 2.3 | 47 | 5.6 | 70 | 59 | 36 | 0.43 | 0.44 | 205 | 195 |
| **MF20** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 13 | 4918 | 280 | 288 | 6.9 | 0.88 | 6400 | 5.1 | 0.88 | 13 | 0.15 | 0.08 | 5.3 | 1.5 | 106 | 2.5 | 0.79 | 0.68 | 0.13 | 266 | 263 |
| **S.D** | 34 | 4352 | 241 | 899 | 14.2 | 2.0 | 4773 | 1.9 | 2.7 | 21 | 0.28 | 0.22 | 16 | 2.1 | 217 | 7.5 | 1.4 | 0.17 | 0.22 | 500 | 752 |
| **Min** | 0.34 | 50 | 11 | 1.9 | 0.48 | 0.01 | 1256 | 2.8 | 0.02 | 0.02 | 0.03 | 0 | 0.14 | 0 | 0.05 | 0.01 | 0 | 0.52 | 0 | 0.03 | 0.06 |
| **Max** | 229 | 20961 | 1149 | 6134 | 90 | 10 | 24622 | 12 | 14 | 82 | 1.5 | 1.3 | 108 | 12 | 1159 | 40 | 8.1 | 0.86 | 1.5 | 2475 | 5973 |
| **MF21** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 163 | 2472 | 532 | 36326 | 11 | 0.28 | 7937 | 3.7 | 0.10 | 14.2 | 0.11 | 2.6 | 67 | 7.1 | 9.7 | 3.8 | 1.1 | 0.38 | 0.43 | 82 | 43 |
| **S.D** | 387 | 2172 | 302 | 63736 | 20 | 0.34 | 3699 | 1.4 | 0.14 | 17.3 | 0.10 | 3.9 | 137 | 7.8 | 11 | 23 | 1.4 | 0.08 | 0.51 | 83 | 53 |
| **Min** | 0.18 | 232 | 69 | 0.84 | 0.83 | 0.03 | 104 | 2.0 | 0.01 | 0 | 0.02 | 0.01 | 0.13 | 0 | 0.03 | 0 | 0.01 | 0.27 | 0 | 0.12 | 0.01 |
| **Max** | 2434 | 10493 | 1249 | 3E+05 | 125 | 1.5 | 14886 | 7.7 | 0.96 | 70 | 0.48 | 16 | 977 | 36 | 51 | 179 | 7.3 | 0.49 | 2.8 | 349 | 268 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MF22** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=120** | 15.1 | 877 | 573 | 158 | 4.1 | 0.18 | 5882 | 2.9 | 0.09 | 6.5 | 0.16 | 0.08 | 3.8 | 8.3 | 1.9 | 0.65 | 0.51 | 0.35 | 7.2 | 69 | 15 |
| **S.D** | 47.9 | 455 | 347 | 151 | 6.0 | 0.74 | 3019 | 1.1 | 0.18 | 11 | 0.22 | 0.14 | 22 | 12 | 2.1 | 1.9 | 1.1 | 0.10 | 11 | 124 | 15 |
| **Min** | 0.17 | 114 | 19 | 2.0 | 0.55 | 0.01 | 146 | 1.6 | 0.01 | 0.01 | 0.02 | 0 | 0.08 | 0.01 | 0.02 | 0 | 0 | 0.19 | 0 | 0.03 | 0.02 |
| **Max** | 349 | 1921 | 1718 | 803 | 50 | 4.5 | 12919 | 6.5 | 0.98 | 71 | 1.7 | 1.0 | 185 | 64 | 11 | 12 | 6.8 | 0.70 | 55 | 692 | 82 |
| **MF23** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 81 | 4505 | 630 | 2370 | 4.3 | 9.3 | 6245 | 5.0 | 0.08 | 0.81 | 0.09 | 0.12 | 11 | 0.95 | 15 | 1.9 | 0.83 | 0.51 | 0.08 | 24 | 35 |
| **S.D** | 633 | 3112 | 843 | 13543 | 10 | 21.7 | 3768 | 2.1 | 0.11 | 1.2 | 0.14 | 0.33 | 22 | 1.5 | 20 | 8.5 | 1.9 | 0.15 | 0.10 | 30 | 48 |
| **Min** | 0.32 | 33 | 17 | 0.71 | 0.67 | 0.01 | 636 | 3.00 | 0.01 | 0 | 0.03 | 0 | 0.17 | 0.04 | 0.21 | 0 | 0.01 | 0.37 | 0 | 0.04 | 0.02 |
| **Max** | 5103 | 12092 | 3067 | 120253 | 84 | 109 | 17330 | 11 | 0.50 | 6.00 | 0.68 | 2.4 | 106 | 6.7 | 100 | 68 | 12 | 0.91 | 0.39 | 152 | 294 |
| **MF28** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=10** | 51 | 442 | 2599 | 32 | 22 | 6.6 | 10754 | 22 | 2.2 | 1.9 | 0.05 | 0.04 | 7.6 | 1.1 | 5.3 | 1.3 | 17 | 0.36 | 0.11 | 38 | 41 |
| **S.D** | 99 | 367 | 1501 | 37 | 31 | 9.3 | 6221 | 3.9 | 5.1 | 2 | 0.02 | 0.03 | 6.6 | 1 | 3.8 | 2.3 | 22 | na | 0.12 | 34 | 28 |
| **Min** | 0.5 | 91 | 861 | 1.5 | 1.4 | 0.66 | 4893 | 17 | 0.12 | 0.07 | 0.04 | 0.01 | 0.97 | 0.45 | 0.67 | 0.13 | 1.8 | 0.36 | 0.04 | 1.5 | 2.5 |
| **Max** | 274 | 1345 | 5798 | 126 | 92 | 31 | 25933 | 30 | 13 | 5.7 | 0.07 | 0.1 | 22 | 3.7 | 14 | 6.5 | 33 | 0.36 | 0.42 | 104 | 88 |
| **MF29** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=20** | 208 | 342 | 2030 | 2240 | 20 | 4.7 | 7783 | 24 | 0.84 | 0.92 | 0.06 | 0.53 | 17 | 1 | 5 | 1.5 | 1 | 0.47 | 0.07 | 2.2 | 42 |
| **S.D** | 480 | 469 | 2207 | 6891 | 39 | 5 | 4379 | 6.3 | 0.92 | 1 | 0.04 | 1.1 | 35 | 0.81 | 3.3 | 2.8 | - | 0.01 | 0.05 | 1.9 | 24 |
| **Min** | 0.47 | 5.2 | 200 | 2 | 0.35 | 0.03 | 2001 | 14 | 0.19 | 0.08 | 0.03 | 0.01 | 0.45 | 0.18 | 1.3 | 0.09 | 1 | 0.46 | 0.01 | 0.17 | 7.5 |
| **Max** | 1551 | 1469 | 8029 | 29805 | 150 | 21 | 18209 | 36 | 1.5 | 3.1 | 0.1 | 3.3 | 105 | 3.2 | 12 | 9.3 | 1 | 0.48 | 0.22 | 6.1 | 92 |
| **MF30** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=20** | 7.6 | 72 | 1115 | 657 | 2.7 | 0.79 | 4023 | 22 | 0.58 | 1.6 | 0.07 | 0.15 | 3.6 | 0.49 | 3.3 | 0.44 | - | 0.41 | 0.02 | 1.1 | 14 |
| **S.D** | 20 | 131 | 757 | 1062 | 2.1 | 1.2 | 3494 | 3.9 | 0.38 | 2 | 0.02 | 0.2 | 6.5 | 0.25 | 2.6 | 0.4 | - | 0.1 | 0.01 | 1.2 | 9.7 |
| **Min** | 0.16 | 4.3 | 326 | 0.85 | 0.76 | 0.03 | 486 | 14 | 0.14 | 0.15 | 0.06 | 0.01 | 0.31 | 0.17 | 0.48 | 0.04 | - | 0.33 | 0.01 | 0.08 | 0.58 |
| **Max** | 91 | 475 | 3585 | 4396 | 8.9 | 4.7 | 13797 | 32 | 1.2 | 3.8 | 0.09 | 0.7 | 28 | 1 | 8.4 | 1.2 | - | 0.56 | 0.03 | 3.2 | 29 |
| **MF31** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 56 | 958 | 273 | 3108 | 14 | 0.52 | 9429 | 3.3 | 0.3 | 0.77 | 0.22 | 0.03 | 10 | 0.27 | 3.6 | 6.1 | 1.2 | 1.2 | 0.18 | 15 | 12 |
| **S.D** | 297 | 1102 | 339 | 7385 | 51 | 0.79 | 3927 | 1.4 | 0.36 | 1.3 | 0.35 | 0.05 | 24 | 0.18 | 8.4 | 20 | 5.2 | 0.57 | 0.23 | 31 | 18 |
| **Min** | 0.2 | 10 | 1.4 | 0.35 | 0.45 | 0.03 | 1684 | 2.1 | 0.14 | 0.01 | 0.03 | 0.01 | 0.3 | 0.11 | 0.57 | 0.01 | 0.03 | 0.78 | 0 | 0.05 | 0.1 |
| **Max** | 2463 | 5879 | 1764 | 37195 | 323 | 3 | 21430 | 7.5 | 1.3 | 6.6 | 1.2 | 0.21 | 70 | 0.86 | 50 | 132 | 32 | 1.6 | 1 | 176 | 83 |
| **MF32** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 2.6 | 92 | 29 | 6157 | 11 | 0.61 | 6150 | 2.6 | 0.24 | 0.88 | 0.1 | 0.17 | 27 | 0.26 | 2.8 | 2.4 | 0.29 | 0.78 | 0.11 | 9 | 20 |
| **S.D** | 5 | 132 | 35 | 46941 | 38 | 1.3 | 3055 | 0.52 | 0.09 | 4.5 | 0.07 | 0.36 | 100 | 0.2 | 5.2 | 4.6 | 0.38 | 0.11 | 0.35 | 25 | 77 |
| **Min** | 0.14 | 0.27 | 0.39 | 0.39 | 0.47 | 0.04 | 38 | 1.9 | 0.14 | 0 | 0.03 | 0 | 0.35 | 0.07 | 0.62 | 0.01 | 0.03 | 0.7 | 0 | 0.1 | 0.12 |
| **Max** | 24 | 951 | 160 | 381430 | 278 | 5.4 | 17308 | 3.3 | 0.37 | 27 | 0.28 | 1.4 | 450 | 1.1 | 26 | 23 | 1.7 | 0.85 | 1.4 | 146 | 617 |

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| **MF33** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 1.7 | 1891 | 724 | 20 | 3.4 | 0.94 | 8264 | 2.9 | 0.11 | 0.19 | 0.09 | 0.01 | 1.2 | 0.35 | 1.9 | 0.9 | 0.35 | - | 0.04 | 8.1 | 13 |
| **S.D** | 2.2 | 1430 | 523 | 72 | 12 | 4 | 1841 | 0.8 | 0.01 | 0.2 | 0.1 | 0.01 | 1.7 | 0.32 | 1.2 | 1.1 | 0.35 | - | 0.04 | 8.1 | 14 |
| **Min** | 0.21 | 59 | 39 | 0.31 | 0.37 | 0.02 | 4324 | 1.6 | 0.11 | 0.01 | 0.03 | 0 | 0.18 | 0.05 | 0.67 | 0.01 | 0.02 | - | 0 | 0.31 | 0.29 |
| **Max** | 9.8 | 5754 | 1886 | 452 | 101 | 27 | 12209 | 4.8 | 0.12 | 0.9 | 0.46 | 0.03 | 10 | 2.2 | 6.1 | 3.6 | 1.7 | - | 0.23 | 32 | 95 |
| **MF34** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 9.3 | 343 | 98 | 34 | 11 | 3.6 | 4880 | 4.4 | 0.37 | 0.32 | 0.11 | 0.03 | 3.8 | 1.2 | 6.6 | 15 | 0.57 | 1.7 | 0.05 | 7.4 | 44 |
| **S.D** | 42 | 690 | 176 | 53 | 50 | 12 | 2434 | 4 | 0.4 | 0.4 | 0.11 | 0.03 | 7.2 | 1.1 | 13 | 35 | 0.69 | 0.38 | 0.05 | 12 | 46 |
| **Min** | 0.18 | 2 | 2.4 | 0.79 | 0.41 | 0.04 | 1081 | 2.2 | 0.11 | 0.02 | 0.03 | 0 | 0.21 | 0.1 | 0.7 | 0.07 | 0.03 | 1.3 | 0.01 | 0.19 | 0.12 |
| **Max** | 369 | 4056 | 1179 | 276 | 432 | 71 | 11481 | 17 | 1.2 | 1.9 | 0.43 | 0.13 | 44 | 4.9 | 97 | 232 | 4.2 | 2.1 | 0.24 | 80 | 230 |
| **MF37** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 1.2 | 195 | 85 | 21 | 12 | 0.78 | 5548 | 2.7 | 0.14 | 0.59 | 0.08 | 0.03 | 1.4 | 0.97 | 5.2 | 2.2 | 3.9 | 1.3 | 0.04 | 2.2 | 37 |
| **S.D** | 1.5 | 499 | 167 | 44 | 46 | 1.6 | 4028 | 1.2 | 0.04 | 0.42 | 0.05 | 0.05 | 1.6 | 0.68 | 7.1 | 2.7 | 5.3 | 0.13 | 0.03 | 3.8 | 41 |
| **Min** | 0.15 | 0.08 | 0.99 | 1.2 | 0.34 | 0.02 | 654 | 1.8 | 0.09 | 0.03 | 0.03 | 0 | 0.22 | 0.07 | 0.88 | 0.05 | 0.15 | 1.2 | 0.01 | 0.16 | 0.98 |
| **Max** | 8.6 | 3804 | 977 | 360 | 302 | 9.1 | 25941 | 5.9 | 0.22 | 1.9 | 0.19 | 0.27 | 9.3 | 3.3 | 44 | 17 | 7.6 | 1.4 | 0.15 | 21 | 326 |
| **MF38** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 0.9 | 358 | 125 | 34 | 3.7 | 0.8 | 9613 | 2.5 | 0.2 | 0.71 | 0.06 | 0.02 | 3.2 | 0.46 | 3.3 | 0.68 | 0.23 | 1.3 | 0.07 | 5.1 | 10 |
| **S.D** | 3.2 | 580 | 561 | 83 | 14 | 1.5 | 3076 | 0.93 | 0.12 | 1.5 | 0.03 | 0.02 | 5.4 | 0.64 | 3.5 | 0.78 | 0.2 | 0.05 | 0.12 | 5.7 | 14 |
| **Min** | 0.16 | 0.13 | 0.29 | 0.48 | 0.45 | 0.03 | 930 | 1.8 | 0.08 | 0.01 | 0.03 | 0 | 0.19 | 0.05 | 0.57 | 0.01 | 0.01 | 1.3 | 0 | 0.1 | 0.1 |
| **Max** | 28 | 3231 | 4110 | 466 | 118 | 6.2 | 14219 | 6.2 | 0.42 | 8.9 | 0.13 | 0.08 | 22 | 3.3 | 15 | 3.1 | 0.89 | 1.4 | 0.57 | 21 | 71 |
| **MF39** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 3.4 | 57 | 77 | 25 | 7.9 | 2.3 | 5718 | 6.3 | 0.24 | 0.16 | 0.09 | 0.02 | 1.2 | 0.89 | 2.1 | 3.4 | 0.18 | 1.4 | 0.05 | 3.8 | 20 |
| **S.D** | 10 | 243 | 365 | 59 | 31 | 7.1 | 2144 | 7.4 | 0.19 | 0.22 | 0.07 | 0.02 | 2.4 | 1.6 | 2.3 | 9.7 | 0.21 | 0.32 | 0.07 | 4.3 | 28 |
| **Min** | 0.17 | 0.13 | 0.19 | 0.37 | 0.35 | 0.03 | 1210 | 1.8 | 0.09 | 0.01 | 0.03 | 0.01 | 0.2 | 0.07 | 0.46 | 0.05 | 0.01 | 1.2 | 0 | 0.07 | 0.09 |
| **Max** | 66 | 1977 | 3138 | 338 | 240 | 41 | 10793 | 22 | 0.84 | 1.1 | 0.27 | 0.07 | 15 | 11 | 11 | 71 | 0.94 | 1.9 | 0.35 | 17 | 139 |
| **MF40** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 1.7 | 66 | 73 | 1467 | 22 | 2.1 | 4288 | 4.4 | 0.41 | 0.67 | 0.2 | 0.21 | 52 | 0.49 | 2.3 | 0.41 | 0.22 | 1.4 | 2.3 | 8.8 | 12 |
| **S.D** | 4.1 | 135 | 174 | 4824 | 61 | 5.8 | 3242 | 3.5 | 0.44 | 1.3 | 0.19 | 0.42 | 145 | 0.61 | 2.7 | 0.73 | 0.25 | 0.26 | 6 | 14 | 16 |
| **Min** | 0.2 | 0.68 | 0.79 | 0.51 | 0.46 | 0.03 | 60 | 2.2 | 0.1 | 0 | 0.03 | 0.01 | 0.26 | 0.07 | 0.43 | 0.01 | 0.01 | 1.3 | 0 | 0.11 | 0.07 |
| **Max** | 26 | 995 | 1339 | 28339 | 347 | 27 | 14905 | 14 | 1.2 | 5.3 | 0.8 | 2 | 570 | 3 | 12 | 1.9 | 1.1 | 1.6 | 29 | 66 | 70 |
| **MF41** | | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 1.3 | 244 | 1419 | 1321 | 11 | 2.8 | 2004 | 4.4 | 0.17 | 0.63 | 0.52 | 0.61 | 133 | 0.64 | 7.3 | 0.14 | 0.3 | 1.7 | 2.9 | 8.7 | 16 |
| **S.D** | 3.1 | 317 | 1404 | 3198 | 31 | 12 | 3647 | 1.8 | 0.08 | 1 | 1.4 | 1.4 | 400 | 0.54 | 16 | 0.18 | 0.77 | 0.25 | 6.1 | 9.5 | 34 |
| **Min** | 0.13 | 8.2 | 232 | 0.48 | 0.41 | 0.03 | 5.2 | 2 | 0.08 | 0 | 0.03 | 0.01 | 0.32 | 0.07 | 0.59 | 0.01 | 0.02 | 1.5 | 0.02 | 0.1 | 0.14 |
| **Max** | 19 | 1559 | 6586 | 16563 | 150 | 69 | 15827 | 12 | 0.31 | 4.9 | 5.3 | 6.3 | 1931 | 2 | 109 | 0.44 | 4.8 | 1.8 | 25 | 48 | 242 |

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| **MF42** | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 4.7 | 874 | 2500 | 7671 | 26 | 0.95 | 4554 | 8.4 | 0.67 | 3.1 | 1.6 | 0.3 | 35 | 2.8 | 28 | 2.2 | 0.74 | 5.7 | 21 | 31 | 95 |
| **S.D** | 26 | 817 | 2362 | 24556 | 69 | 3.7 | 3868 | 5.7 | 1.4 | 4.7 | 6.7 | 0.63 | 104 | 3.1 | 33 | 4.9 | 0.69 | 5.2 | 54 | 34 | 131 |
| **Min** | 0.16 | 0.96 | 4.2 | 0.31 | 0.55 | 0.02 | 52 | 2.2 | 0.05 | 0 | 0.03 | 0.01 | 0.2 | 0.06 | 0.68 | 0.04 | 0.04 | 2.3 | 0 | 0.1 | 0.1 |
| **Max** | 228 | 3268 | 12208 | 193242 | 405 | 28 | 14692 | 31 | 6.1 | 30 | 43 | 3.6 | 633 | 17 | 119 | 24 | 3.5 | 21 | 312 | 138 | 466 |
| **MF43** | | | | | | | | | | | | | | | | | | | | |
| **Mean n=80** | 2 | 307 | 779 | 121672 | 50 | 1.5 | 3948 | 5.9 | 0.17 | 2.4 | 1.1 | 3.7 | 338 | 1 | 5.1 | 0.43 | 0.48 | 9.2 | 8.5 | 24 | 17 |
| **S.D** | 5.4 | 539 | 1093 | 229259 | 108 | 3.3 | 4262 | 3.4 | 0.15 | 5.2 | 2.7 | 5.5 | 607 | 1.6 | 7 | 1.1 | 0.79 | 7.9 | 19 | 53 | 18 |
| **Min** | 0.17 | 1.5 | 0.17 | 0.7 | 0.44 | 0.01 | 2.9 | 1.9 | 0.06 | 0 | 0.03 | 0.01 | 0.14 | 0.06 | 0.48 | 0.01 | 0.02 | 2.3 | 0.02 | 0.08 | 0.09 |
| **Max** | 38 | 3224 | 4541 | 597030 | 403 | 21 | 16030 | 15 | 0.45 | 27 | 14 | 16 | 3581 | 10 | 46 | 3.1 | 4.3 | 21 | 89 | 252 | 81 |
| **MF44** | | | | | | | | | | | | | | | | | | | | |
| **Mean n=7** | 0.53 | 6912 | 4078 | 118 | 2.9 | 0.12 | 5146 | 4.1 | 0.07 | 2.1 | 5.7 | - | 0.88 | 0.32 | 0.52 | 0.32 | 0.14 | 6.1 | 70 | 90 | 2.8 |
| **S.D** | 0.36 | 7841 | 4027 | 59 | 1.6 | 0.12 | 2244 | 0.93 | - | 1.2 | 3.1 | - | 0.38 | 0.15 | - | 0.16 | 0.09 | 0.9 | 46 | 92 | 2.1 |
| **Min** | 0.22 | 59 | 234 | 37 | 1.2 | 0.02 | 2226 | 3.2 | 0.07 | 0.46 | 1.7 | - | 0.33 | 0.16 | 0.52 | 0.21 | 0.07 | 5 | 9.3 | 14 | 0.2 |
| **Max** | 1.3 | 22034 | 11599 | 184 | 5.3 | 0.25 | 8925 | 4.9 | 0.07 | 3.5 | 10 | - | 1.3 | 0.58 | 0.52 | 0.43 | 0.29 | 7.2 | 148 | 220 | 5.3 |