# ALASKA OCS REGION 

## Segmental Analysis of Mercury in Hair in 80 Women of Nome, Alaska

# SEGMENTAL ANALYSIS OF MERCURY IN HAIR IN 80 WOMEN <br> OF NOME, ALASKA 

Prepared for:
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Eighty samples of hair from women of child-bearing age from Nome, Alaska, and seven control samples from women living in the Sequim, Washington, area were analyzed for mercury concentration by segmental analysis in an effort to determine whether seasonal fluctuations in mercury concentration in the hair samples can be correlated to seasonal seafood consumption. Fulllength hair strands were analyzed in $1.1-\mathrm{cm}$ segments representing 1 month's growth using a strong acid digestion and cold vapor atomic fluorescence analysis. It is assumed that the concentration of mercury in each segment is an indicator of the mercury body burden of the subject during the month in which the segment emerged from the scalp.

When mercury concentration versus month of growth is plotted for each participant, a number of trends are seen. Forty of the hair samples, including one control, are either too short to show any particular trend or have steady concentrations between 0.2 and 3 ppm for all segments. Eighteen of the samples show seasonal variability, with five of the controls showing winter highs and the remainder, all Nome residents, showing summer highs. Twenty-six of the samples show a steady increase in mercury concentration toward the distal end of the strand regardless of month of growth. Fourteen of the 26 distally increasing samples, including 1 control, have a maximum of less than 3 ppm, while the remainder have maximums as high as 16 ppm . The remaining three samples show a combination of distal increases and seasonal variation.

Those individuals with maximums over 3 ppm are of interest. These 12 individuals exceed normal levels for people consuming fish 1 to 4 times per month and in some cases 1 to 4 times per week. Some also exceed the commonly accepted levels of concern for fetal effects of mercury poisoning. However, the trend of increasing mercury concentrations toward the distal end of the hair strand regardless of month of emergence and the documented presence of elevated levels of elemental mercury in the Nome area suggest that these elevated levels may actually be due to external contamination of the hair strands by adsorption and not due to ingestion of contaminated foodstuffs such as seafood.

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## INTRODUCTION

In the autumn of 1989, 200 samples of human hair from women of childbearing age residing in Nome, Alaska, were analyzed for total mercury. The mercury analyses were conducted at Battelle/Marine Sciences Laboratory (MSL) ${ }^{(a)}$ as part of a baseline monitoring study undertaken by Minerals Management Service (MMS) during the preparation of an environmental impact statement evaluating the feasibility of off-shore gold dredging leases. There was concern that off-shore dredging could release elemental mercury, which is often associated with gold deposits, to the waters of Norton Sound. This mercury could then be accumulated by marine mammals and fish of the region that are, in turn, consumed by the population of Nome.

The results of the 1989 study (Crecelius et al. 1990) prompted MMS to pursue a more thorough investigation of the mercury levels. To that end, 80 full-length hair samples were collected in the autumn of 1990 from 27 participants of the original study, including 10 of 16 with relatively high mercury levels, plus 53 additional heavy users of subsistence foods. The goal of this study was to analyze the full-length hair samples in segments equivalent to 1 month of growth to ascertain whether variations occur in the levels of mercury in the hair as a function of dietary habits such as seasonal consumption of certain forms of marine life.

A total of 828 hair segments from the 80 Nome participants were analyzed as well as samples from 7 control subjects and 2 standard reference materials. Results are presented in Appendices A, B, and C, and analytical methods are presented in Appendix D.

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## SAMPLING AND SAMPLE HANDLING

Samples were collected by personnel from Norton Sound Health Corporation using methods and equipment supplied by MSL. Samples were taken as close to the scalp as possible by a gloved staff member using clean scissors. The sample was carefully bound with tape within 2 cm of the scalp end to maintain the hair in a bundle and placed in labeled polyethylene bags for shipment to MSL. Upon arrival at MSL, each sample was carefully removed from the bag and sectioned into $1.1-\mathrm{cm}$ lengths. This length has been determined to be equivalent to 1 -month growth on average (Marsh 1989). Each segment was placed in a labeled, pre-weighed, acid-cleaned glass vial. The portion of the sample that was in contact with the tape was discarded and the amount discarded was recorded. To reduce sample loss from static electricity, samples were wetted with distilled water during segmentation and dried prior to weighing. The number of segments generated from each sample has varied from 2 to 26 , recording between 2 and 26 months of mercury exposure.

## PRELIMINARY ANALYSES

The samples were received and logged in at MSL on November 1, 1991. Prior to beginning analysis of the samples, the following preliminary experiments were performed to be certain the procedure was appropriate and would work as expected:

- An experiment to ascertain whether any significant contamination to the hair sample would occur during storage in polyethylene bags indicated an insignificant contamination level of 0.013 ng of mercury.
- Using samples of the Japanese certified hair standard, NIES-5, a series of digestions were performed to optimize the digestion method and time while still assuring complete digestion. This resulted in the $\mathrm{HNO}_{3} / \mathrm{H}_{2} \mathrm{SO}_{4}$ digestion at $350^{\circ} \mathrm{F}$ for 3 hours as presented in our Standard Operating Procedure sent to MMS in December 1990.

Once these experiments were completed and the Standard Operating Procedure was finalized, analysis was begun.

## ANALYTICAL METHOOS

Samples were digested in sets of 24 to 40 segments. This usually included two or three segmented samples (depending on the length), a blank, NIES hair standard, a spiked NIES hair standard, and another tissue standard (usually DORM-1 dogfish muscle). Digestion batches were visually separated from each other using different colored labels so that the appropriate batch blank could be applied during analysis. Individual samples were identified by their participant number, and the segments were identified alphabetically, beginning with "a" at the scalp. Samples were digested by refluxing in a concentrated nitric/sulfuric acid solution and analyzed by cold vapor atomic fluorescence as outlined in Appendix $D$.

The instrumentation was calibrated daily using a four-point linear regression and a calibration check standard NBS-1641b. The average of the daily calibration checks was $1.51 \pm 0.07 \mu \mathrm{~g} / \mathrm{mL}$, which compares very well with the certified value of $1.52 \pm 0.04 \mu \mathrm{~g} / \mathrm{mL}$. Two tissue standards (NIES-5 human hair and DORM-1 dogfish muscle) were digested with each set and analyzed several times daily. A spiked NIES-5 hair sample was analyzed for matrix spike recovery as well. The data for these quality control analyses may be found in Appendix A.

A total of 828 hair segments were analyzed, not including duplicates, control samples, and standards. Seven samples from women of childbearing age living in the Sequim, Washington, area were segmented and analyzed as controls. Two of the samples were split prior to segmentation and analyzed as duplicates: control sample "7 was duplicated at MSL, and sample \#62 was duplicated at another laboratory. The mean deviation between mercury concentrations in each segment of the duplicated sample was $6.5 \%$ for the sample duplicated in-house and $19 \%$ for the sample duplicated at another laboratory. Raw data for all of the analyses can be found in Appendix B. Data tables and graphs for all of the participant samples and control samples, as well as the duplicates, can be found in Appendix $C$. In the generation of data, all values were first hand-calculated and then calculated within the project computer spreadsheet as a calculation crosscheck.

Initially, a problem was encountered with the mercury values in the tissue standards consistently running $10 \%$ to $15 \%$ high. This problem was finally resolved when it was discovered that when the sample vials were warmed to dry the samples after segmentation, the labels were actually losing weight as some of the adhesive evaporated. When the vials were reweighed following sample addition, the calculated weight difference was, therefore, too small, resulting in calculated mercury concentrations being too high. Because the weights of the segmented hair samples were very small, this weight difference is significant. This problem was rectified by heating the labeled vials briefly prior to the initial weighing. Because the "blank" vial was always weighed and treated exactly like the samples, its weight difference after heating was used to correct the concentrations of the samples analyzed prior to identification of the cause of the problem. Once this was done, the tissue standards once again fell into their certified ranges.

Another problem related to the very low sample weights was that the segments at the distal end of the samples (where there were fewer strands than at the scalp) were so light that we were often working near the limits of the balance, resulting in a potentially larger margin of error in the sample weight and therefore in the final concentration. Samples exhibiting this problem are flagged on the final graph. Two segments were lost in the course of the study: one caused by a vial rupture during digestion and one because of an apparent weighing error.

## RESULTS AND DISCUSSION

The results for each participant are presented graphically and tabulated in Appendix C. A summary of minimum, maximum, and average concentrations for each participant, as well as the concentration determined in the previous study when applicable, is presented in Table 1 . When referring to the set of graphs in Appendix $C$, you will note that the scale of the $y$-axis (mercury concentration in parts per million) varies. The scale for most of the graphs has a maximum of 3 ppm . However, 13 of the graphs have a $y$-axis scale with a maximum of 10 ppm and 3 of the graphs have a $y$-axis maximum of 16 ppm . We attempted to graph all of them on the same scale, but the few samples approaching 16 ppm caused most of the samples in the 0 to 3 ppm range to disappear into the baseline.

The data reveal several interesting trends, the most prevalent of which is a steady increase in the mercury concentration from scalp to ends regardless of growth month. This would be expected to some degree because of exposure of the hair strand to airborne contaminants. The longer the hair strand has been exposed to the environment, the greater the degree of external contamination. Most of the hair samples that were long enough to exhibit any trend at all exhibit this distal increase, but the overall Hg concentrations are still at or below normal levels of $1.9 \pm 0.9 \mathrm{ppm}$ (derived from an average of 559 samples from 13 industrialized countries from individuals consuming fish 1 to 4 times per month) (Mitra 1986). However, 15 of the samples exhibit this trend to a greater extent, with distal end concentrations approaching 16 ppm. When this trend became apparent, we enlisted the help of several women in the Sequim, Washington, area to provide control samples to see if this was a trend outside Nome, as well. Because the level of concern is generally considered to be 10 ppm (Mitra 1986), it is important to determine whether these high concentrations are truly representative of body burden in these 15 individuals.

In the samples with maximum concentrations less than 3 ppm , there was a variety of trends ranging from little variation (common in the short samples, of course) to distal increases or (rarely) decreases, seasonal increases

IABLE 1. Minimum, Maximum, and Average Mercury Concentrations for Each Participant as Well as the Average Concentration Determined During the Previous (1989) Study. When two participant numbers are given, the first is for the present study and the second is for the 1989 study. No statistically significant correlation was found between mercury concentration and chemical hair treatments as indicated in the perm/color column.

| $\begin{gathered} \text { Participant } \\ \text { ID } \end{gathered}$ | Present Study |  |  | 1989 Study <br> Average ( Ho ) ppon | Comments |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Minimum } \\ & (\mathrm{Ha})_{\text {_ngm }} \end{aligned}$ | $\begin{aligned} & \text { Maxinum } \\ & (\mathrm{Hg})_{\text {popm }} \end{aligned}$ | Average ( Hg ) opon |  | Length ${ }^{\text {(a) }}$ | Perm/Color |
| 1 | 1.078 | 2.744 | 1.384 |  |  |  |
| 2/38 | 1.290 | 15.194 | 4.979 | 0.89 |  |  |
| 3/99 | 2.901 | 12.743 | 7.423 | 2.15 |  | $p$ |
| 4/146 | 1.712 | 1.917 | 1.783 | 3.16 | SHORT | $p$ |
| 5/152 | 1.335 | 6.575 | 2.864 | 3.75 |  | $p$ |
| 6/84 | 0.755 | 2.527 | 1.625 | 3.82 |  | P |
| 7/166 | 0.653 | 0.742 | 0.697 | 0.39 | SHORT |  |
| 8 | 0.599 | 0.842 | 0.720 |  | SHORT |  |
| 9 | 0.729 | 7.535 | 2.853 |  |  |  |
| 10 | 0.430 | 0.842 | 0.573 |  | SHORT | $p$ |
| 11 | 0.532 | 0.866 | 0.657 |  | SHORT | $p$ |
| 12/9 | 1.081 | 6.198 | 2.898 | 1.96 |  |  |
| 13 | 0.423 | 1.139 | 0.637 |  |  | P |
| 14/145 | 0.762 | 3.975 | 1.838 | 0.80 |  | $p$ |
| 15/170 | 1.129 | 6.424 | 3.450 | 3.01 |  |  |
| 16/117 | 0.945 | 3.283 | 1.565 | 6.22 | SHORT |  |
| 17 | 0.531 | 1.433 | 0.861 |  |  | $p$ |
| 18/168 | 0.252 | 0.661 | 0.507 | 3.80 |  | C |
| 19/194 | 0.382 | 1.680 | 0.759 | 2.05 |  | $p$ |
| 20 | 0.487 | 0.611 | 0.545 |  | SHORT | P |
| 21 | 0.891 | 1.566 | 1.129 |  |  |  |
| 22 | 1.520 | 2.788 | 2.083 |  | SHORT | P |
| 23/30 | 0.272 | 1.106 | 0.659 | 0.57 |  |  |
| 24/85 | 1.027 | 3.896 | 1.931 | 3.70 |  | $p$ |
| 25/20 | 1.049 | 2.409 | 1.610 | 2.15 |  | P |
| 26/67 | 0.727 | 1.278 | 1.056 | 0.49 |  |  |
| 27/27 | 0.413 | 1.026 | 0.537 | 0.59 |  | $p$ |
| 28 | 0.681 | 1.386 | 0.980 |  | SHORT | P |
| 29/70 | 0.709 | 2.596 | 1.150 | 1.12 |  |  |
| 30 | 0.789 | 3.396 | 1.643 |  |  |  |
| 31 | 1.259 | 4.386 | 1.944 |  |  | $p$ |
| 32 | 0.802 | 1.790 | 1.166 |  |  |  |
| 33 | 1.947 | 3.333 | 2.564 |  | SHORT |  |
| 34 | 0.821 | 2.859 | 1.781 |  |  |  |
| 35 | 0.559 | 3.153 | 1.336 |  |  | $p$ |
| 36 | 0.290 | 0.793 | 0.440 |  |  | $p$ |
| 37/193 | 0.388 | 1.091 | 0.590 | 0.53 |  | $p$ |
| 38/185 | 0.667 | 1.591 | 0.992 | 0.70 |  | P |
| 39/32 | 0.628 | 0.924 | 0.717 | 0.58 |  | P |
| 40 | 0.727 | 0.994 | 0.853 |  | SHORT |  |
| 41 | 0.992 | 2.998 | 1.961 |  |  | $p$ |
| 42 | 0.365 | 0.807 | 0.578 |  |  | P |
| 43 | 0.817 | 2.525 | 1.365 |  |  |  |
| 44/150 | 0.463 | 0.980 | 0.669 | 0.85 |  | $p$ |
| 45/66 | 0.715 | 0.836 | 0.775 | 1.38 | SHORT | P |
| 46/116 | 0.457 | 0.814 | 0.611 | 0.37 |  | $p$ |
| 47 | 0.800 | 1.806 | 1.255 |  |  |  |
| 48 | 1.457 | 4.532 | 2.611 |  |  |  |
| 49 | 1.348 | 1.710 | 1.532 |  | SHORT | $p$ |

TABLE.1. (contd)

| $\begin{gathered} \text { Participant } \\ \quad 10 \\ \hline \end{gathered}$ | Minimua $\text { ( } \mathrm{Ha} \text { ) _mom }$ | $\begin{aligned} & \text { Maximum } \\ & (\mathrm{Ha} \text { ) } \mathrm{omm} \end{aligned}$ | Average $(\mathrm{Hg}) \text { pon }$ | Average $\text { ( } \mathrm{Ha})_{\text {ppin }}$ | Length ${ }^{(a)}$ | Perm/Color |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50 | 1.402 | 1.902 | 1.626 |  |  |  |
| 51 | 1.197 | 1.644 | 1.403 |  |  |  |
| 52 | 0.508 | 1.613 | 0.850 |  |  | $p$ |
| 53 | 0.209 | 0.380 | 0.270 |  |  | P |
| 54 | 0.429 | 1.242 | 0.830 |  |  |  |
| 55 | 1.176 | 2.387 | 1.755 |  |  | $p$ |
| 56 | 1.394 | 2.628 | 2.073 |  | SHORT | P |
| 57 | 1.195 | 2.324 | 1.543 |  |  |  |
| 58 | 0.315 | 0.704 | 0.417 |  |  |  |
| 59 | 2.025 | 2.123 | 2.068 |  | SHORT |  |
| 60 | 0.564 | 1.064 | 0.748 |  |  |  |
| 61 | 0.847 | 2.533 | 1.366 |  | SHORT |  |
| 62 | 0.836 | 1.215 | 1.031 |  |  |  |
| 62 DUP | 0.660 | 1.240 | 0.973 |  |  |  |
| 63 | 1.664 | 2.284 | 1.990 |  | SHORT |  |
| 64 | 0.712 | 1.232 | 0.973 |  |  |  |
| 65 | 0.954 | 1.764 | 1.196 |  |  |  |
| 66 | 2.051 | 3.113 | 2.306 |  |  |  |
| 67 | 1.037 | 1.790 | 1.490 |  | SHORT |  |
| 68 | 0.565 | 1.402 | 0.828 |  |  | P |
| 69/155 | 0.563 | 1.224 | 0.872 | 0.20 |  | P |
| 70 | 0.221 | 0.770 | 0.455 |  | SHORT | P |
| 71/108 | 0.332 | 1.459 | 0.642 | 0.66 |  |  |
| 72 | 1.700 | 2.583 | 1.993 |  |  | p |
| 73 | 0.420 | 0.794 | 0.612 |  | SHORT | P |
| 74 | 1.028 | 1.358 | 1.207 |  | SHORT | $p$ |
| 75 | 0.309 | 0.322 | 0.316 |  | SHORT | P |
| 76 | 0.530 | 0.895 | 0.712 |  |  | P |
| 77 | 0.254 | 1.787 | 0.577 |  |  | P |
| 78 | 0.852 | 1.537 | 1.096 |  |  |  |
| 79/93 | 1.381 | 1.604 | 1.493 | 0.54 | SHORT | P |
| 80 | 0.516 | 1.192 | 0.895 |  |  |  |
| CONTROL 1 | 0.403 | 0.728 | 0.605 |  |  |  |
| CONTROL 2 | 0.590 | 1.572 | 0.963 |  |  |  |
| CONTROL 3 | 0.164 | 0.805 | 0.359 |  |  | P |
| CONTROL 4 | 0.427 | 1.341 | 0.874 |  |  |  |
| CONTROL 5 | 0.493 | 1.272 | 0.764 |  |  |  |
| CONTROL 6 | 0.249 | 0.597 | 0.475 |  |  | P |
| CONTROL 7 | 0.430 | 1.178 | 0.872 |  |  |  |
| CONTROL 7DUP | 0.392 | 1.149 | 0.848 |  |  |  |

(a) Five segments or fumer.
(usually autumn/winter for the control samples and summer for the Nome participants) or any combination thereof. Idealized examples of the common trends are presented in Figures 1, 2, and 3. Figure 1 exemplifies the samples with seasonal trends, both summer and winter highs. As illustrated, the samples with summer highs tend to have higher concentrations overall, as well. Figure 2 illustrates both large and small distal increases and Figure 3 illustrates seasonal trends superimposed on a distal increase and samples that show no trend, predominantly from lack of length. The most common trend appears to be seasonal increases with or without a superimposed distal increase. Note that six of the seven control subjects fall into this category; however, the control subjects show winter increases while almost all of the Nome participants show seasonal variation peak during the summer months. None of the controls analyzed has an average concentration over 1 ppm . Because 65 of the 80 participants of the study had maximum mercury in hair concentrations of less than 3 ppm , it can be inferred, assuming that these subjects consume quantities of marine life representative of the population of Nome as a whole, that consumption of marine life from Norton Sound does not contribute levels of mercury that are above normal levels of concern.

In the remaining 15 samples, those with maximums in the 3 to 16 ppm range, all of the participants except participant \#3 exhibit a nearly constant concentration for the first 3 or 4 months of emergence followed by a steady increase toward the distal end regardless of month of emergence. Participant \#3 showed this general trend, but the values fluctuate somewhat because of low segment weights. This trend suggests that the participants showing the distal increase (particularly those greater than 3 ppm ) are exposed to some source of mercury that results in hair strand uptake by adsorption rather than ingestion. Dr. Tom Clarkson of the University of Rochester told us in May 1991 that similar trends were seen in the hair of infants and their families exposed to diapers containing phenylmercury. Wilson et al. (1974) report similar trends in a family using a shampoo containing an unusually high concentration of mercury. In these cases, it is probably the first few segments (those most recently emerged from the scalp) that are indicative of the true body burden of the participant. There was initial suspicion that the


Seasonal Variability - Winter Highs: C1,C2,C4,C5,C6,26. $n=6$ Seasonal Variability - Summer Highs: 13,17,27,32,41,44,52,53,64, $68,78,80$. $\quad n=12$

EIGURE 1. Idealized Examples of Seasonally Variable Trends


$$
\begin{array}{ll}
\text { Distal Increase - Overall [Hg]<3 ppm: } & \begin{array}{l}
C 3,1,6,19,23,29,36,37, \\
43,47,58,69,71,77, \\
\text { Oistal Increase - Overall }[\mathrm{Hg}]>3 \mathrm{ppm}: \\
2,3,5,12,14,15,16,
\end{array} \\
\begin{array}{ll}
24,30,31,35 ., n=12
\end{array}
\end{array}
$$

EIGURE 2. Idealized Examples of Distally Increasing Trends


Superimposed Seasonal/Distal Increase: 25,34,54. $n=3$ No Apparent Trend: C7, 4,7,8,10,11,18,20,21,22,28,33,38,39,40,42, $45,46,48,49,50,51,55,56,57,59,60,61,62,63,65,66,67$, 70,72,73,74,75,76,79. $\quad n=40$

EIGURE 3. Idealized Examples of Other Trends
distal increases could be an analytical artifact caused by processing contamination or weighing error in the distal ends of the hair strands. These segments were sometimes up to $50 \%$ lighter than segments near the scalp from the same subject because of layered haircuts or breakage. However, examination of the numerous replicate analyses of the 31 digestions of the NIES-5 hair standard varying in weight from 0.0032 to 0.0156 grams (a total of 81 analyses) shows that this is not probable (See Figure 4). This graph shows the correlation between sample weight of the analyses of 31 digestions of the NIES Hair Standard weighing between 0.003 and 0.0156 and the corresponding analytical result, illustrating the fact that the increase in the mercury concentration at the distal end of many samples cannot be attributed to contamination. The certified mercury concentration for this standard is 4.4 $\pm 0.4 \mathrm{ppm}$. The range of NIES-5 digestion weights bracket the sample weights with the exception of the few flagged as somewhat unreliable because of low weights on the graphs. The graph shows that there is little or no correlation between sample size and analyzed concentration, except for sample weights less than 0.004 grams. However, even the slight correlation seen at weights less than 0.004 grams does not account for the order-of-magnitude increases seen in many of the samples.

Because apparent seasonal variations were seen only in the samples having lower maximum concentrations (<3ppm), this apparent absorption may be masking seasonal effects in those with higher, probably non-dietary, concentrations. Possible sources of this adsorbed mercury are airborne mercury (such as vapor from latex paints containing mercury as a mildew retardant), water, or sediment tracked into buildings and contributing mercury to the vapor phase. However, the fact that most of the Nome participants who showed seasonal variations had peak levels in the summer may indicate that the contamination may have an outdoor source. It is known that, in the early part of this century, when mercury was heavily used in the gold ore purification process, large amounts of elemental mercury were released to the environment in the vicinity of Nome and soil levels in the range of 350 to 1000 ppm have been measured within the city limits (MMS 89-0049). The relatively high mercury concentrations measured in the hair of the individuals exhibiting this trend may be indicative of this rather large source of mercury contamination in the Nome area.


EIGURE 4. Correlation of Sample Weight and Measured Mercury Concentration.

If these data are to be used as a reliable indicator for exposure assessment, it is important to determine whether the steady distal increase seen in many of the samples is indeed caused by abiotic adsorption from the environment. If that is the case, there are implications with respect to the interpretation of this and other mercury in hair data, both segmental and total hair. Several possibilities for investigating this include the following:

- If adsorption is taking place, it would be in the form of elemental mercury, as opposed to methylmercury, which is the predominant species of mercury found in marine mammals and fish. It would be possible to resolve the question of the origin of the mercury increase by analyzing segmented hair from the same subject for both methylmercury and total mercury (methylmercury + elemental mercury). If the increase is an accurate reflection of the mercury ingested by the subject, the trend should be the same for both types of mercury. If the increase is due to abiotic adsorption, the methylmercury levels should remain relatively constant while the total mercury level increases toward the distal end of the hair. By analyzing hair in this way, the results would be indicative of both body burden as a result of ingestion of organomercury compounds common in fish and marine mammals and abiotically adsorbed mercury.
- Passive air samplers can be placed in the homes of several of the participants, both those exhibiting low trendless mercury levels and those exhibiting high, distally increasing mercury levels, to see if there is a correlation between the vapor levels and hair levels. Water samples could also be taken in these homes, though this parameter is somewhat more difficult to interpret because the water is also ingested.
- It would be of interest to geographically plot the locations of the homes and/or work places (and occupations) of the participants exhibiting the high, distally increasing concentrations and to note relationships with areas of documented high levels of mercury in the soil. It would also be interesting to note other habits of the participants that would affect their exposure to air or water-borne mercury, such as living in different locations during summer versus winter, leaving Nome at a certain time of year for extended periods, exposing themselves to possible sources during certain seasons (i.e., gardening would expose them to possibly contaminated soil in the summer time), etc.


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## APPENDIX A

## CALIBRATION AND STANDARD DATA

## A. 1 CALIBRATION DATA

TISSOR DIGESTIOM CALIBRATIOM SHEET
:PROJBCT ID: HONR SBGETMTAL AMLYSIS
PILBHMR: HOMCLL

| SEQ ${ }^{\text {P }}$ | $\begin{gathered} \text { DATB } \\ \text { ROII } \end{gathered}$ | START SEO | $\begin{aligned} & \text { BID } \\ & \text { SEO } \end{aligned}$ | $\begin{gathered} \text { BLAIR } \\ \text { (AREA) } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { PACTOR } \\ \text { ARE/ng } \end{gathered}\right.$ | $\left\lvert\, \begin{aligned} & \text { MREA, } \\ & \text { STD 1641b } \end{aligned}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $14 \mathrm{JWM91}$ | 10 | 22 | 28 | 5852 |  |
| 2 | 15Jam91 | 23 | 51 | 26.5 | 5588 | 1.55 |
| 3 | $16 J 4 n 91$ | 52 | 60 | 83 | 5771 | 1.54 |
| 1 | 1671199 | 61 | 80 | 226 | 5771 | 1.54 |
| 5 | $17 J$ M91 | 81 | 102 | 30 | 5750 | 1.55 |
| 6 | 175 N991 | 103 | 107 | 26 | 5750 | 1.55 |
| 7 | 1851591 | 108 | 130 | 43 | 5742 | 1.51 |
| 8 | 2151191 | 131 | 145 | 39 | 6081 | 1.38 |
| 9 | 22J2191 | 146 | 164 | 17.5 | 6084 | 1.54 |
| 10 | 23J1791 | 165 | 183 | 30 | 6138 | 1.47 |
| 11 | 2671191 | 184 | 209 | 28.5 | 5958 | 1.57 |
| 12 | 2972151 | 210 | 231 | 43 | 5808 | 1.58 |
| 13 | 3072191 | 232 | 257 | 34 | 5939 | 1.56 |
| 14 | 3172191 | 258 | 270 | 31 | 5897 | 1.61 |
| 15 | 31J1M91 | 271 | 280 | 19 | 5897 | 1.61 |
| 16 | 178991 | 281 | 303 | 28 | 6104 | 1.55 |
| 17 | 478391 | 304 | 311 | 24 | 6288 | 1.51 |
| 18 \| | 578691 | 312 | 317 | 22 | 6321 | 1.51 |

A.1-1

IISSUR DIGRSTIOM CALIBRAFIOR SBRET
PRONET ID: HOKR SECTRILAL AMALYSIS
PILBALIR: HOMCAL

| SEQ 1 | $\begin{gathered} \text { DATB } \\ \text { RDII } \end{gathered}$ | $\begin{aligned} & \text { STARI } \\ & \text { SEDA } \end{aligned}$ | $\begin{aligned} & \text { EID } \\ & \text { SER } \end{aligned}$ | $\begin{gathered} \text { BLAMIR } \\ \text { (ARRA) } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { PACTOR } \\ \text { ARR1/ng } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { KIBAI } \\ \text { STD } 1641 \mathrm{~b} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | 578691 | 318 | 332 | 25 | 6321 | 1.51 |
| 20 | 678691 | 333 | 353 | 40 | 6336 | 1.61 |
| 21 | $77 \mathrm{FB91}$ | 354 | 360 | 33.5 | 6294 | 1.59 |
| 22 | 778891 | 361 | 366 | 44 | 6294 | 1.59 |
| 23 | $12 \mathrm{PB691}$ | 367 | 368 | 53 | 7839 | 1.41 |
| 24 | $12 \mathrm{PES91}$ | 369 | 384 | 30 | 7839 | 1.41 |
| 25 | $13 \mathrm{FRB91}$ | 385 | 405 | 34 | 7495 | 1.36 |
| 26 | $14 \mathrm{PEB91}$ | 406 | 428 | 27 | 6850 | 1.52 |
| 27 | $18 \mathrm{ERB91}$ | 429 | 442 | 33 | 7838 | 1.48 |
| 28 | $19 \mathrm{FKB91}$ | 452 | 456 | 24 | 7916 | 1.41 |
| 29 | $19 \mathrm{PB891}$ | 457 | 464 | 29 | 7916 | 1.41 |
| 30 | 20 FEB91 | 465 | 492 | 24.5 | 7979 | 1.47 |
| 31 | 414R91 | 493. | 526 | 64 | 9058 | 1.46 |
| 32 | 514R91 | 527 | 531 | 28 | 9163 | 1.50 |
| 33 | 54AR91 | 532 | 559 | 24 | 9163 | 1.50 |
| 34 | 6HAR91 | 560 | 596 | 24 | 9058 | 1.52 |
| 35 | 714R91 | 597 | 633 | 46 | 9128 | 1.55 |
| 36 | 84aR91 | 634 | 665 | 37 | 9073 | 1.57 |

TISSOE DIGESTIOA CALIBRATIOM SHEEI
:PROTECT ID: HOHE SBGIETMAL AMLYSIS
FILRHAME:
HOMCAL

| SBO ${ }^{\text {P }}$ | $\begin{gathered} \text { DAIE } \\ \text { RUI: } \end{gathered}$ | $\begin{aligned} & \text { STARI } \\ & \text { SEOI } \end{aligned}$ | $\begin{aligned} & \text { ELD } \\ & \text { SEOI } \end{aligned}$ | $\begin{aligned} & \text { BLARIK } \\ & \text { (ARRA) } \end{aligned}$ | $\left\lvert\, \begin{array}{r} \text { FACHOR } \\ \text { ARBA/ng } \end{array}\right.$ | HIBAM |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 37 | 11HAR91 | 666 | 668 | 35 | 9439 | 1.51 |
| 38 | 11HAR91 | 669 | 697 | 39.5 | 9439 | 1.51 |
| 39 | 12101291 | 698 | 727 | 39.5 | 9589 | 1.46 |
| 40 | 13142091 | 728 | 762 | 37.5 | 9393.6 | 1.39 |
| 41 | 1414P91 | 763 | 770 | 34 | 6912 | 1.56 |
| 42 | 1414R91 | 771 | 788 | 32 | 6912 | 1.53 |
| 43 | 187nP91 | 789 | 820 | 56.5 | 6904 | 1.56 |
| 44 | 2213P91 | 821 | 839 | 31 | 4048 | 1.47 |
| 45 | 251uP91 | 840 | 867 | 30.5 | 3737 | 1.50 |
| 46 | 26nP91 | 868 | 881 | 26.5 | 3910 | 1.11 |
| 47 | 261MP91 | 882 | 895 | 43.5 | 3910 | 1.11 |
| 48 | 27.1991 | 896 | 917 | 22.5 | 4025 | 1.51 |
| 49 | 2714P91 | 918 | 926 | 24 | 4025 | 1.51 |
| 50 | 28101891 | 927 | 959 | 29 | 4502 | 1.50 |
| 51 | 29\%41291 | 960 | 965 | 42 | 4513 | 1.44 |
| 52 | 29\%1291 | 966 | 986 | 43 | 4513 | 1.44 |
| 53 | 24P991 | 987 | 1003 | 30 | 4574 | 1.48 |
| 54 | 24P991 | 1004 | 1016 | 28 | 4574 | 1.48 |

TISSOE DIGRSTIOM CALIBRATIOM SHEFI
PROUECT ID: MONE SEGIBSILAL AMALYSIS
PILERNR: HOMCNL

| SEO ${ }^{\text {P }}$ | $\begin{gathered} \text { DAEB } \\ \text { RUI } \end{gathered}$ | $\begin{aligned} & \text { STARI } \\ & \text { SERY } \end{aligned}$ | $\begin{aligned} & \text { EID } \\ & \text { SEOA } \end{aligned}$ | $\begin{gathered} \text { BLAIRR } \\ \text { (ARRS) } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { PACTOR } \\ \text { ARERA/ng } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { HRA1 } \\ \text { STD 164ib } \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 55 | 34PR91 | 1017 | 1031 | 28 | 4806 | 1.52 |
| 56 | 34P991 | 1032 | 1052 | 45.5 | 4806 | 1.52 |
| 57 | 44P891 | 1053 | 1071 | 35.5 | 4764.4 | 1.54 |
| 58 | 4, PR21 | 1072 | 1075 | 43 | 4764.4 | 1.54 |
| 59 | 51PP91 | 1076 | 1103 | 35 | 4936 | 1.64 |
| 60 | 84PR91 | 1104 | 1115 | 30 | 4840 | 1.65 |
| 61 | 84P891 | 1116 | 1132 | 26 | 4840 | 1.65 |
| 62 | 91PR91 | 1133 | 1162 | 26.5 | 4876 | 1.55 |
| 63 | 104PR91 | 1163 | 1196 | 29.5 | 4920 | 1.47 |
| 64 | $181 \mathrm{PR91}$ | 1197 | 1225 | 37 | 6917 | 1.57 |
| 65 | 191PR91 | 1226 | 1256 | 42.5 | 7172 | 1.41 |
| 66 | 221PR91 | 1257 | 1259 | 47 | 8150 | 1.52 |
| 67 | 221PR91 | 1260 | 1284 | 53 | 8150 | 1.52 |
| 68 | 23APR91 | 1285 | 1301 | 46.5 | 8233 | 1.54 |
|  |  |  |  |  | HEAM | 1.51 |
|  |  |  |  |  | STD DET | 0.07 |
|  |  |  |  | CERTIFI | valor | 1.52+0.04 |

## A. 2 ANALYSIS RECORD FOR TISSUE STANDARD DORM-1

DORH-1

| $\begin{gathered} \text { BATPRLLLR } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAIB } \end{gathered}\right.$ |  |
| :---: | :---: | :---: |
| DORH-1-01 | 9J1491 | 0.790 |
| DORH-1-01 | 9JAF91 | 0.716 |
| DORH-1-01 | 9J1491 | 0.707 |
| DORH-1-02 | 14Jan91 | 0.856 |
| DORH-1-02 | 14511991 | 0.832 |
| DORH-1-02 | 14J31991 | 0.879 |
| DORH-1-03 | 16 J 1 M 91 | 0.930 |
| DORH-1-03 | 1651191 | 0.896 |
| DORH-1-03 | $16 \mathrm{Jam91}$ | 0.783 |
| DORH-1-04 | 17711991 | 0.903 |
| DORH-1-04 | 17511991 | 0.911 |
| DORH-1-05 | 22J1.91 | 0.748 |
| DORH-1-05 | 22J4991 | 0.819 |
| D084-1-05 | 22J1991 | 0.803 |
| D089-1-06 | 23JX191 | 0.638 |
| 1089-1-06 | 23J1991 | 0.817 |
| 1089-1-06 | 23511991 | 0.879 |
| 100\%-1-06 | 23J1491 | 0.856 |
| D08\%-1-06 | 23JdF91 | 0.779 |
| D030-1-07 | 25 J 1491 | 0.963 |
| D084-1-07 | 25J1491 | 0.906 |
| D03\%-1-07 | 25JLM91 | 0.857 |

DORH-1

| $\begin{aligned} & \text { BATTELLB } \\ & \text { ID } \end{aligned}$ | DIGESIIOM | $\underset{[\mathrm{EH}]}{\mathrm{VEg} / \mathrm{g}}$ |
| :---: | :---: | :---: |
| DORT-1-07 | 25131191 | 0.887 |
| D0, ${ }^{1-1-08}$ | 28J2191 | 0.905 |
| DORH-1-08 | 28J2491 | 0.915 |
| D08\%-1-08 | 28J3M91 | 0.944 |
| 10301-1-08 | $28 J 1491$ | 0.907 |
| D0, ${ }^{\text {P-1-09 }}$ | 31JM991 | 0.871 |
| DOM ${ }^{\text {d-1-09 }}$ | 31J1191 | 0.852 |
| DOPH-1-10 | 8 FEB91 | 0.810 |
| D0, 2 -1-10 | 858691 | 0.824 |
| DOPN-1-10 | $85 \mathrm{EB91}$ | 0.948 |
| DORH-1-10 | 8FEB91 | 0.909 |
| DOSH-1-11 | $12 \mathrm{FEB91}$ | 0.804 |
| DOM-1-12 | 14FEB91 | 0.743 |
| D02 | 14 FEP91 | 0.766 |
| 10294-1-13 | 20781391 | 0.803 |
| 10301-1-13 | 2015891 | 0.777 |
| DOPM-1-14 | 412R91 | 0.840 |
| D091-1-14 | 414AR91 | 0.850 |
| DOPT-1-15 | 511229 | 0.852 |
| DORH-1-15 | 54RR91 | 0.851 |
| DORH-1-16 | 61nR91 | 0.800 |
| DORS-1-16 | 614R91 | 0.833 |


| $\begin{gathered} \text { BMTELLSB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOR } \\ \text { DATE } \end{gathered}\right.$ | $\underset{[\mathrm{Bq}] \mathrm{Hg} / \mathrm{g} / \mathrm{g}}{ }$ |
| :---: | :---: | :---: |
| DORH-1-16 | 6412R91 | 0.880 |
| DORH-1-17 | 11HAR91 | 0.867 |
| DORH-1-18 | 1214R91 | 0.920 |
| DORH-1-18 | 1210R291 | 0.877 |
| DOPH-1-18 | 12H14891 | 0.980 |
| DORH-1-19 | 1314P91 | 0.727 |
| DOP\%-1-19 | 1314AR91 | 0.891 |
| D084-1-20 | 21HAR21 | 0.828 |
| DOPM-1-21 | 2214P91 | 1.112 |
| D084-1-21 | 22412891 | 1.132 |
| DOPR-1-21 | 221:AP91 | 1.078 |
| DO8P-1-22 | 2540R91 | 0.800 |
| D08\%-1-22 | 25UAR91 | 0.870 |
| D084-1-23 | 2610.91 | 0.810 |
| 1002-1-23 | 2610891 | 0.857 |
| 100e-1-24 | 2714891 | 0.840 |
| D00\%-1-25 | 2914P91 | 0.914 |
| D08i-1-25 | 29MARO1 | 0.833 |
| 10001-1-26 | 11PP91 | 0.926 |
| 1089-1-26 | $1 \mathrm{PPR91}$ | 0.892 |
| DO2R-1-26 | 1 P PR91 | 0.935 |
| D084-1-27 | $2 \mathrm{PPR91}$ | 0.778 |

## DORH-1

| $\begin{aligned} & \text { BATTELLB } \\ & \therefore \quad \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\underset{[\mathrm{Hfg}] \mathrm{mg} / \mathrm{g}}{\mathrm{Eng}}$ |
| :---: | :---: | :---: |
| DOR2-1-27 | 2APR91 | 0.766 |
| DOSM-1-28 | 44P891 | 0.913 |
| DORH-1-29 | 9AP291 | 0.840 |
| DORH-1-30 | $1714 \mathrm{PR91}$ | 1.135 |
| DO34-1-30 | 172P891 | 1.023 |
| DO23-1-31 | 182PR91 | 0.849 |
| HEMA |  | 0.864 |
| STD DES |  | 0.091 |

## A. 3 ANALYSIS RECORD FOR HAIR STANDARD NIES-5

CERTIPIED GAIR STANDARD MIES

| $\begin{gathered} \text { BATTRILJB } \\ \text { ID } \end{gathered}$ | $\left.\right\|_{\text {DAIE }} ^{\text {DIGSTIIOM }}$ | $\underset{[\mathrm{Bg}]}{\mathrm{EHg} / \mathrm{g} / \mathrm{g}}$ |
| :---: | :---: | :---: |
| HIES-01 | 9JAM91 | 4.402 |
| MIES-01 | 9J1491 | 5.913 |
| MIES-01 | 9Jג191 | 5.576 |
| HIES-01 | 9J4191 | 5.386 |
| MISS-01 | gJan91 | 4.927 |
| MIES-02 | 14JA1991 | 3.677 |
| MIES-02 | 14J1\%91 | 4.568 |
| MIES-03 | 16 J 1591 | 4.580 |
| MIES-03 | 16J1991 | 4.416 |
| IIPS-04 | 17J3991 | 4.540 |
| MIRS-04 | 17J8991 | 4.307 |
| MIES-04 OLD | 1751591 | 4.794 |
| HIES-05 | 22511991 | 4.720 |
| IIES-05 | 2251491 | 4.450 |
| IIES-05 | 22J1491 | 4.786 |
| MISS-06 | 23J1591 | 4.342 |
| IISS-07 | 25 J 1991 | 4.248 |
| IIES-07 | 2571191 | 4.157 |
| HISS-07 | 25 J 1991 | 4.123 |
| MIES-08 | 28Jan91 | 4.577 |
| MIES-09 | 31J1991 | 3.857 |
| MIES-09 | 315М91 | 4.811 |

CERTIFIED HAIR STAMDARD MIRS

| $\begin{gathered} \text { BATHELLS } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { DIGRSIIOM } \\ \text { DATE } \end{gathered}\right.$ | $\underset{[\mathrm{Hig}]}{\mathrm{Eig}}$ |
| :---: | :---: | :---: |
| HIRS-09 | 31J1491 | 4.247 |
| MIRS-10 | 878391 | 4.671 |
| MIES-10 | $87 \mathrm{EB91}$ | 4.620 |
| MIRS-10 | $8 \mathrm{PrB91}$ | 4.247 |
| MIES-10 | 878891 | 4.185 |
| HIES-11 | 12F区B91 | 3.986 |
| MIPS-11 | 12 PEB91 | 4.011 |
| MISS-11 | 12 F [891 | 3.984 |
| MIRS-12 | $14 \mathrm{FEB91}$ | 3.716 |
| IIES-12 | 1478891 | 3.790 |
| MIRS-12 | $14 \mathrm{PB891}$ | 3.913 |
| MIES-13 | 20P8B91 | 4.090 |
| MES-13 | $20 \mathrm{FB891}$ | 4.082 |
| MIES-13 | $20 \mathrm{FBB91}$ | 4.011 |
| IIES-14 | 4:1RP91 | 4.342 |
| WISS-14 | 4MAR91 | 4.245 |
| IIRS-15 | 541R91 | 4.142 |
| HIES-15 | 5HAR91 | 4.054 |
| MISS-16 | 64AR91 | 4.315 |
| MIES-16 | 6HAR91 | 4.548 |
| MIES-16 | 6H2R91 | 4.402 |
| MIES-17 | 114aR91 | 4.215 |


| $\begin{gathered} \text { BATTELLLB } \\ \text { DD } \end{gathered}$ | DIGBSTIOM <br> DATB | $\underset{[\mathrm{Hg}]}{\mathrm{EHg} / \mathrm{g} / \mathrm{g}}$ |
| :---: | :---: | :---: |
| HIES-17 | 11HAR91 | 4.412 |
| MIES-18 | 124AR91 | 4.269 |
| MIES-18 | 121:AR91 | 4.966 |
| HIES-19 | 13HARO1 | 4.839 |
| MIES-19 | 13HAR91 | 5.235 |
| MIES-19 | 1314891 | 5.453 |
| HIES-20 | 21/14891 | 4.830 |
| MIES-20 | 21142891 | 4.829 |
| MIES-21 | 2210891 | 4.877 |
| MIES-21 | 2210891 | 4.636 |
| UIES-22 | 2514P91 | 4.8\% |
| UIES-22 | 2541891 | 4.879 |
| IISS-22 | 2514P91 | 4.820 |
| MIES-23 | 2641891 | 3.938 |
| MISS-23 | 2614P91 | 4.461 |
| IIIS-23 | 2601891 | 4.376 |
| IISS-24 | 2941801 | 4.205 |
| IIPS-24 | 2714891 | 4.398 |
| IIIS-24 | 271ap91 | 4.066 |
| IISS-25 | 2914891 | 4.988 |
| HIES-25 | 2940891 | 4.646 |
| HIES-25 | \| 29\%12r91 | 4.593 |

CERTIPIED EAIR STADDARD IIES

| $\begin{gathered} \text { BATHELLR } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { DIGRSITOI } \\ \text { DAIEB } \end{gathered}\right.$ | $\underset{[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g} / \mathrm{g}}{ }$ |
| :---: | :---: | :---: |
| HISS-26 | 14PR91 | 4.856 |
| MIRS-26 | $1 \mathrm{PPR91}$ | 4.937 |
| MIRS-26 | 14PR91 | 5.186 |
| UIES-27 | 2APR91 | 4.286 |
| MIES-27 | 2APR91 | 4.237 |
| UIES-28 | 4 4 PR91 | 4.829 |
| MIES-28 | 418291 | 4.684 |
| IIRS-29 | 918991 | 4.769 |
| MIES-29 | 919891 | 4.856 |
| IISS-30 | 174PR91 | 4.398 |
| IIRS-30 | 174PR91 | 4.347 |
| MIRS-31 | 18APR91 | 4.454 |
| MIES-31 | 181PR91 | 4.629 |
| UIES-31 | 18APR91 | 4.573 |
| MIES-31 | 184P991 | 4.613 |
| MRNE |  | 4.51 |
| STD DEV |  | 0.42 |

## A. 4 ANALYSIS RECORD FOR SPIKED HAIR

 STANDARD NIES-5CERTIPTED RAIR STAMDARD MIRS

| $\begin{gathered} \text { BAITELLS } \\ \text { ID } \end{gathered}$ | $\begin{array}{\|c} \text { DIGESTIOM } \\ \text { DAIE } \end{array}$ | $\stackrel{\text { EFg }}{[\mathrm{Bg}][\mu \mathrm{g} / \mathrm{g}}$ | $\begin{aligned} & \text { \& SPIKB } \\ & \text { RECOVERR } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| IIES SPIKR-01 | 9 Tax91 | 15.209 | 87.3 |
| HIBS SPIRB-01 | 9J1091 | 15.357 | 88.5 |
| MIES SPIKR-01 | 9J491 | 16.728 | 99.5 |
| IIES SPIKP-02 | 1451991 | 10.531 | 105.4 |
| HISS SPIKE-02 | 1431991 | 10.594 | 96.8 |
| MIES SPIKP-03 | 16 J 1991 | 8.702 | 65.6 |
| ITES SPLEE-03 | 16 J M91 | 11.956 | 116.4 |
| MISS SPIKB-04 | 1752991 | 12.439 | 102.4 |
| MIES SPIXE-05 | 22J11991 | 9.956 | 96.7 |
| IISS SPIKT-05 | 22J1991 | 10.284 | 103.5 |
| IIIS SPIXE-05 | 227a191 | 8.175 | 65.5 |
| IIES SPIKT-06 | 2351991 | 15.232 | 105.3 |
| IISS SPIET-07 | 25J1991 | 15.117 | 99.6 |
| IISS SPIM-08 | 288291 | 12.876 | 108.2 |
| IISS SPITR-09 |  | 9.271 | 103.9 |
| IISS SPIRT-09 | 31731991 | 9.850 | 115.1 |
| IIS SPIN-10 | 87599 | 10.273 | 120.1 |
| 1153 SPIRT-11 | 12 Fr 991 | 10.324 | 85.5 |
| IIS SPITE-12 | 1475991 | 12.542 | 86.6 |
| IISS SPIST-13 | $20 \% 3691$ | 11.311 | 74.4 |
| IISS SPILT-13 | 2015391 | 11.876 | 80.4 |
| IIES SPIKS-13 | 2014891 | 11.205 | 73.3 |

CERTIPIED HAIR STAIDARD MIES

| $\begin{aligned} & \text { BATYELLLB } \\ & \cdot \quad \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DAPE } \end{gathered}\right.$ | $\underset{[\mathrm{Eg}] \mathrm{Mg} / \mathrm{g}}{\mathrm{E}}$ | \& SPIKB RECOVERY |
| :---: | :---: | :---: | :---: |
| ITES SPIKP-14 | 4TAR91 | 11.856 | 93.0 |
| IIES SPISP-14 | 414R91 | 12.363 | 99.9 |
| MIES SPIKP-15 | 54aR91 | 12.990 | 104.0 |
| WIES SPIRE-15 | 54AR91 | 13.213 | 106.8 |
| IIRS SPIRX-16 | 61/4891 | 8.326 | 69.4 |
| IIES SPIKP-16 | G4P91 | 9.508 | 89.9 |
| IIES SPIKP-17 | 11HAP91 | 16.094 | 96.5 |
| IIES SPIXB-17 | 11HAP91 | 16.024 | 96.0 |
| IIES SPILR-17 | 11HAR91 | 14.894 | 86.7 |
| IIISS SPIKR-18 | 121012891 | 15.025 | 97.8 |
| \| IIRS SPIKP-18 | 124AR91 | 16.279 | 110.2 |
| \| IIRS SPIKR-19 | 13HAR91 | 19.549 | 100.0 |
| MIIES SPIRE-20 | 21HAR91 | 21.703 | 110.2 |
| IIES SPIKP-21 | 2240P91 | 13.562 | 98.4 |
| \| IIRS SPILR-22 | 2514R91 | 14.954 | 97.9 |
| \| IIRS SPITR-23 | 26 H R91 | 15.098 | 102.6 |
| IIES SPIKP-24 | 2714R91 | 13.548 | 100.4 |
| \| IIRS SPILE-25 | 294RR91 | 15.273 | 98.5 |
| \| IIRS SPIKR-26 | $14 \mathrm{PR91}$ | 20.182 | 102.2 |
| \| IIES SPIKR-27 | $2 \mathrm{PPR91}$ | 15.412 | 110.2 |
| \| IIES SPIKR-28 | 41PR91 | 14.718 | 92.7 |
| \| MIES SPIKR-29 | 9APR91 | 36.701 | 94.3 |

CERTIPIED HAIR STAMDARD IIES

| $\begin{aligned} & \text { BATIELLS } \\ & \text { ID } \end{aligned}$ | $\begin{gathered} \text { DIGESTIOM } \\ \text { DATE } \end{gathered}$ | $\stackrel{\Sigma E g}{[B g] \mu / g / g}$ | \& SPIKB RECOVERY |
| :---: | :---: | :---: | :---: |
| MIES SPIINS-29 | 9118991 | 33.583 | 85.2 |
| HIES SPIKR-30 | 171PP991 | 18.337 | 102.5 |
| HIES SPIN8-31 | 18APP91 | 20.164 | 115.9 |
| HEXI |  |  | 96.6 |
| STD DEV |  |  | 12.7 |

APPENDIX B

RAH DATA
howe seghamal mair nalysis

| SEQ | $\underset{\text { DD }}{\substack{\text { Barrulus }}}$ | $\left\|\begin{array}{c} \text { ITrRCRMOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\{\begin{array}{c} \text { Digessiton } \\ \text { DAIE } \end{array}\right.$ | $\begin{gathered} \text { digestion } \\ \text { wI g } \end{gathered}$ | $\left\|\begin{array}{l}\text { SAMPLP VOL } \\ \text { AMALYZZD } \\ \text { H1 }\end{array}\right\|$ | $\begin{aligned} & \text { Anaryzed } \\ & \text { ITI mg } \end{aligned}$ | \|arra | $\int_{[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}}^{\mathrm{zig}}$ | $\left.\right\|_{[\mathrm{Hg})} ^{\mathrm{HOL}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | MIES-1 | 126 | grav91 | 0.0065 | 250 | 0.076 | 12424 | 5.386 | 0.057 |
| 11 | HIES SPIKS-1 | 127 | 9JM91 | 0.0061 | 250 | 0.071 | 17011 | 16.728 | 0.061 |
| 12 | DORH-1-1 | 128 | 9Jan91 | 0.0987 | 250 | 1.154 | \| 4865 | 0.716 | 0.004 |
| 13 | 1-1 | 129 | 9 9, 191 | 0.0128 | 250 | 0.150 | \|1015 | 1.127 | 0.029 |
| 14 | 1-2 | 131 | grav9 | 0.0152 | 250 | 0.178 | $\mid 1242$ | 1.167 | 0.024 |
| 15 | 1-3 | 132 | 9, 2199 | 0.0161 | 250 | 0.188 | \|1131 | 1.001 | 0.023 |
| 16 | D08H-1-1 dup | 144 | 930191 | 0.0987 | 250 | 1.154 | 14806 | 0.707 | 0.004 |
| 17 | 1-6 | 145 | 931991 | 0.0163 | 250 | 0.191 | \| 2208 | 1.058 | 0.023 |
| 18 | 1-7 | 146 | 971991 | 0.0162 | 250 | 0.189 | \|1174 | 1.034 | 0.023 |
| 19 | 1-8 | 151 | 9Jam1 | 0.0155 | 250 | 0.181 | \|1451 | 1.342 | 0.024 |
| 20 | 1-9 | 152 | 931991 | 0.0143 | 250 | 0.167 | \|268 | 1.267 | 0.026 |
| 21 | 1-4 | 157 | 9rame | 0.0145 | 250 | 0.170 | \| 1007 | 0.987 | 0.026 |
| 22 | 1-5 | 158 | 921191 | 0.0157 | 250 | 0.184 | \|1139 | 1.034 | 0.024 |
| 23 | MISS-1 dup | 170 | grame | 0.0065 | 250 | 0.076 | 12538 | 5.913 | 0.057 |
| 24 | 1-10 | 171 | 9 N 9192 | 0.0140 | 250 | 0.164 | \|1695 | 1.824 | 0.027 |
| 25 | Doxill-1 dup | 173 |  | 0.0887 | 250 | 1.154 | 5119 | 0.790 | 0.004 |
| 26 | \|ITES SPITR-1 dip| | 174 | gramer | 0.0061 | 250 | 0.071 | 16089 | 15.209 | 0.061 |
| 27 | 1-11 | 175 | 9, ${ }^{\text {am91 }}$ | 0.0071 | 250 | 0.083 | \|1299 | 2.743 | 0.052 |
| 28 | 1-1 dot | 176 | 9J3191 | 0.0128 | 250 | 0.150 | 996 | 1.159 | 0.029 |
| 29 | HISS-1 dup | 178 | 93xi91 | 0.0065 | 250 | 0.076 | 12395 | 5.576 | 0.057 |
| 30 | 1-2 dup | 179 | $9 \mathrm{Sag91}$ | 0.0152 | 250 | 0.178 | 1261 | 1.243 | 0.024 |
| 31 | 1-3 dup | 180 | grame | 0.0161 | 250 | 0.188 | \| 1213 | 1.156 | 10.023 |

HOKIE SEGHETTAL HAIR AMALYSIS

| SEQ $\ddagger$ | $\begin{gathered} \text { BATYELLB } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { IITBGRATOR } \\ \text { SEOA } \end{array}\right\|$ | \|DIGRSIIOM | DIGESTIOM $\mathrm{m}$ | $\left\|\begin{array}{l} \text { SAMPIB } \\ \text { ALALYZED } \\ \mu \mathrm{I} \end{array}\right\|$ | AMSLYZED WI mg | ARES | $\underset{[\mathrm{Eg}] \mathrm{gq} / \mathrm{g} / \mathrm{g}}{ }$ | $\left\lvert\, \begin{gathered} \mathrm{VDL} \\ {[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 32 | 1-4 dup | 182 | 9J4.91 | 0.0145 | 250 | 0.170 | \|1150 | 1.186 | 0.026 |
| 33 | 1-5 dup | 183 | وтan91 | 0.0157 | 250 | 0.184 | \| 1216 | 1.159 | 0.024 |
| 34 | 1-6 dup | 184 | gJam91 | 0.0163 | 250 | 0.191 | \|1192 | 1.094 | 0.023 |
| 35 | 1-7 dup | 185 | gJam91 | 0.0162 | 250 | 0.189 | \|1408 | 1.305 | 0.023 |
| 36 | 1-8 dup | 186 | 9JM191 | 0.0155 | 250 | 0.181 | \|1557 | 1.511 | 0.024 |
| 37 | 1-9 dup | 187 | 9J1491 | 0.0143 | 250 | 0.167 | \|1463 | 1.537 | 0.026 |
| 38 | 1-10 dep | 188 | 9J4.91 | 0.0140 | 250 | 0.164 | \|1662 | 1.788 | 0.027 |
| 39 | 1-11 dup | 189 | 9J2M91 | 0.0071 | 250 | 0.083 | 11303 | 2.751 | 0.052 |
| 40 | IIES SPIKR-1 dup | 190 | 9J2M91 | 0.0061 | 250 | 0.071 | $\mid 6148$ | 15.357 | 0.061 |
| 41 | 3-1 | 192 | 9J1491 | 0.0020 | 250 | 0.023 | 534 | 3.872 | 0.186 |
| 42 | 3-2 | 193 | gralial | 0.0023 | 250 | 0.027 | 464 | 2.901 | 0.162 |
| 43 | 3-3 | 194 | 9J2991 | 0.0021 | 250 | 0.025 | 467 | 3.199 | 0.177 |
| 44 | MISS-1 dup | 195 | 9 SL 1091 | 0.0065 | 250 | 0.076 | 2121 | 4.927 | 0.057 |
| 45 | 3-4 | 196 | 9J1M91 | 0.0018 | 250 | 0.021 | 589 | 4.769 | 0.207 |
| 46 | 3-5 | 197 | 9J1591 | 0.0019 | 250 | 0.022 | 635 | 4.889 | 0.196 |
| 47 | 3-6 | 198 | 9 J 4 M 91 | 0.0018 | 250 | 0.021 | 594 | 4.812 | 0.207 |
| 48 | 3-7 | 199 | 9J1491 | 0.0016 | 250 | 0.019 | 439 | 3.931 | 0.233 |
| 49 | 3-8 | 200 | 9J2491 | 0.0008 | 250 | 0.009 | 378 | 6.695 | 0.465 |
| 50 | 3-9 | 201 | 9J1491 | 0.0006 | 250 | 0.007 | 399 | 9.462 | 0.620 |
| 51 | 3-10 | 202 | gJan91 | 0.0004 | 250 | 0.005 | 301 | 10.444 | 0.930 |
| 52 | 3-11 | 212 | 9J1491 | 0.0006 | 250 | 0.007 | 603 | 12.842 | 0.620 |
| 53 | 3-12 | 213 | \| 9J土【91 | 0.0006 | 250 | 0.007 | 494 | 10.150 | 0.620 |

HONR SBGIRTEAL HAIR AHALYSIS

| SEQ 1 | $\begin{gathered} \text { BATTELLLB } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { IITBGPAFOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGRSTIO } \\ \text { DATB } \end{gathered}\right.$ | $\begin{gathered} \text { DIGRSIIOM } \\ \text { WI } \mathrm{g} \end{gathered}$ | $\left\|\begin{array}{l} \text { SAIPRLB VOL } \\ \text { AMALYZED } \mu 1 \end{array}\right\|$ |  | ARRA | [ Hg ] $\mathrm{mg} / \mathrm{g}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Eg}]_{\mathrm{Hg}} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 54 | 3-13 | 214 | 9J4M91 | 0.0004 | 250 | 0.005 | 414 | 12.262 | 0.930 |
| 55 | 3-14 | 215 | gram9 | 0.0014 | 250 | 0.016 | 704 | 6.573 | 0.266 |
| 56 | 3-15 | 216 | 9J1491 | 0.0006 | 250 | 0.007 | 501 | 10.323 | 0.620 |
| 57 | 3-16 | 217 | 9JdM91 | 0.0006 | 250 | 0.007 | 599 | 12.743 | 0.620 |
| 58 | HIES-1 dup | 218 | 9J1/91 | 0.0065 | 250 | 0.076 | 2014 | 4.402 | 0.057 |
| 59 | 3-14 dup | 219 | 9ramel | 0.0014 | 250 | 0.016 | 668 | 6.192 | 0.266 |
| 60 | 3-8 dup | 220 | 9J1991 | 0.0008 | 250 | 0.009 | 347 | 4.850 | 0.465 |
| 61 | IIIES-2 | 222 | 1451491 | 0.0128 | 250 | 0.150 | 14172 | 4.568 | 0.029 |
| 62 | 7-1 | 225 | 14511591 | 0.0274 | 250 | 0.320 | \|1487 | 0.682 | 0.014 |
| 63 | 7-2 | 226 | 1 1JAM91 | 0.0254 | 250 | 0.297 | \|1448 | 0.713 | 0.015 |
| 64 | 7-3 | 228 | 14J1991 | 0.0216 | 250 | 0.253 | \|1178 | 0.653 | 0.017 |
| 65 | MIES SPIKS-2 | 229 | 14521991 | 0.0117 | 100 | 0.055 | \|3552 | 10.531 | 0.079 |
| 66 | DORH-1-2 dup | 230 | 14501591 | 0.1612 | 100 | 0.754 | 4052 | 0.879 | 0.006 |
| 67 | 7-4 | 231 | 1451591 | 0.0165 | 250 | 0.193 | \| 1052 | 0.742 | 0.023 |
| 68 | 8-1 | 232 | 147191 | 0.0354 | 250 | 0.414 | \|2238 | 0.842 | 0.011 |
| 69 | 8-2 | 233 | 1471991 | 0.0251 | 250 | 0.294 | 1240 | 0.599 | 0.015 |
| 70 | 2-1 | 235 | 1471991 | 0.0147 | 250 | 0.172 | \|1506 | 1.290 | 0.025 |
| 71 | 2-2 | 236 | 1451591 | 0.0162 | 250 | 0.189 | \|1684 | 1.334 | 0.023 |
| 72 | 2-3 | 237 | 1451591 | 0.0161 | 250 | 0.188 | \|1978 | 1.612 | 0.023 |
| 73 | 2-4 | 238 | 1451991 | 0.0143 | 250 | 0.167 | \|1813 | 1.644 | 0.026 |
| 74 | 2-5 | 239 | 14 T 1991 | 0.0154 | 250 | 0.180 | \|2161 | 1.862 | 0.024 |
| 75 | 2-6 | 240 | \| 14J1492 | 0.0135 | 250 | 0.158 | \|2130 | 2.090 | 0.028 |

B.1-3
hour SEGiETTILL BAIR MMALYSIS

| SEO $\ddagger$ | $\begin{aligned} & \text { BAITELLS } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { HITBCRATOR } \\ \text { SEO } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAIER } \end{gathered}\right.$ | $\begin{gathered} \text { DIGRSITOM } \\ \text { WI } g \end{gathered}$ | $\left\|\begin{array}{ll} S A 1 P L E L & V O L \\ A: A L Y Z E D & \mu l \end{array}\right\|$ | MULYESD WI $\mathbf{~ m ~}$ | \|arsa | $\begin{gathered} \text { EHg } \\ \text { [Bg] } \mathrm{Hg} / \mathrm{g} \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { HDL } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 76 | 2-7 | 241 | 14J31991 | 0.0118 | 250 | 0.138 | \|2148 | 2.114 | 0.032 |
| 77 | 2-8 | 212 | 1 1J4\%91 | 0.0127 | 250 | 0.149 | $\mid 2728$ | 2.919 | 0.029 |
| 78 | 2-9 | 243 | 14J1491 | 0.0113 | 250 | 0.132 | $\mid 2583$ | 3.091 | 0.033 |
| 79 | 2-10 | 244 | 14Jג1991 | 0.0121 | 250 | 0.142 | \|3034 | 3.439 | 0.031 |
| 81 | 2-7 dup | 253 | 14J1191 | 0.0118 | 250 | 0.138 | \|2153 | 2.676 | 0.032 |
| 82 | 2-8 dup | 254 | 14 J 1491 | 0.0127 | 250 | 0.149 | $\mid 2739$ | 3.172 | 0.029 |
| 83 | HIRS-2 | 256 | 14JA1991 | 0.0128 | 250 | 0.150 | 3195 | 3.677 | 0.029 |
| 84 | HIES SPIKP-2 | 257 | $14 \mathrm{JIM91}$ | 0.0117 | 100 | 0.055 | \|3364 | 10.594 | 0.079 |
| 85 | DORH-1-2 | 258 | 1453191 | 0.1612 | 100 | 0.754 | \|3639 | 0.832 | 0.006 |
| 86 | 2-11 | 259 | 14Jג1991 | 0.0110 | 250 | 0.129 | \|2934 | 3.926 | 0.034 |
| 87 | 2-12 | 260 | 14 J M91 | 0.0111 | 250 | 0.130 | $\mid 3386$ | 4.496 | 0.034 |
| 88 | 2-13 | 261 | 14J1491 | 0.0111 | 250 | 0.130 | \|3761 | 4.999 | 0.034 |
| 89 | 2-14 | 262 | 14 J 191 | 0.0110 | 250 | 0.129 | \|3651 | 4.895 | 0.034 |
| 90 | 2-15 | 263 | 145 NM 91 | 0.0098 | 250 | 0.115 | \|3634 | 5.469 | 0.038 |
| 91 | 2-16 | 264 | 1451591 | 0.0087 | 250 | 0.102 | 13580 | 6.068 | 0.043 |
| 92 | 2-17 | 265 | 14J19991 | 0.0090 | 250 | 0.105 | \|4188 | 6.871 | 0.041 |
| 93 | 2-18 | 266 | 14511991 | 0.0080 | 250 | 0.094 | \| 4522 | 8.350 | 0.047 |
| 94 | 2-19 | 267 | $14 \mathrm{~J} 4 \mathrm{M91}$ | 0.0089 | 250 | 0.104 | \|4958 | 8.235 | 0.042 |
| 95 | 2-20 | 268 | $14 J 1491$ | 0.0076 | 250 | 0.089 | \|4877 | 9.485 | 0.049 |
| 96 | 2-21 | 269 | 14J3191 | 0.0087 | 250 | 0.102 | \|5557 | 9.448 | 0.043 |
| 97 | 2-22 | 270 | 14J1991 | 0.0057 | 250 | 0.067 | 15857 | 15.203 | 0.065 |
| 98 | 2-2 dup | 271 | 1451891 | 0.0162 | 250 | 0.189 | \|1719 | 1.551 | 0.023 |

HOHR SEGIRATLLL HAIR AHALYSIS

| SEOP | $\begin{aligned} & \text { BAPTELLEB } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { ITIEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\begin{gathered} \text { DIGRSIIOM } \\ \text { DATE } \end{gathered}$ | $\begin{gathered} \text { DIGRSTIOM } \\ \text { WT } g \end{gathered}$ | $\left\|\begin{array}{ll} \text { SAAPLR } & \text { VOL } \\ A M L Y Y Z B D & \mu 1 \end{array}\right\|$ | AMALYEED in mg | AREA | $\begin{gathered} \text { EKg } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { KidL } \\ {[\mathrm{Eg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 99 | 2-13 dup | 272 | 14J1491 | 0.0111 | 250 | 0.130 | \|3895 | 5.178 | 0.034 |
| 100 | DO8H-1-2 | 274 | 145 ม191 | 0.1612 | 100 | 0.754 | \|3741 | 0.856 | 0.006 |
| 101 | 2-18 dup | 275 | 14 J 2191 | 0.0080 | 250 | 0.094 | $\mid 4481$ | 8.274 | 0.047 |
| 102 | 2-22 dup | 276 | 14 J M991 | 0.0057 | 250 | 0.067 | 15850 | 15.185 | 0.065 |
| 103 | HIES-3 | 278 | 16J1491 | 0.0102 | 250 | 0.119 | \| 3055 | 4.416 | 0.036 |
| 104 | HITS SPIKB-3 | 279 | 16 J 1991 | 0.0115 | 250 | 0.134 | $\mid 6755$ | 8.702 | 0.032 |
| 105 | DORH-1-3 | 280 | 16 J 1991 | 0.0460 | 250 | 0.538 | 12798 | 0.896 | 0.008 |
| 106 | 5-1 | 281 | 16J3191 | 0.0188 | 250 | 0.220 | 1885 | 1.471 | 0.020 |
| 107 | 5-2 | 282 | 16 J 1991 | 0.0214 | 250 | 0.250 | 1964 | 1.347 | 0.017 |
| 108 | DORH-1-3 | 291 | 16JJM91 | 0.0460 | 250 | 0.538 | \|2917 | 0.930 | 0.008 |
| 109 | 5-3 | 292 | 16JJM91 | 0.0182 | 250 | 0.213 | 1747 | 1.394 | 0.020 |
| 110 | 5-4 | 293 | 16 J 1991 | 0.014 | 250 | 0.168 | \|1334 | 1.335 | 0.026 |
| 111 | 5-5 | 295 | 16JJ1991 | 0.0143 | 250 | 0.167 | \|1351 | 1.362 | 0.026 |
| 112 | 5-6 | 296 | $16 \mathrm{JN591}$ | 0.014 | 250 | 0.168 | \|1397 | 1.400 | 0.026 |
| 113 | 5-7 | 297 | 16711991 | 0.0123 | 250 | 0.144 | \|1373 | 1.610 | 0.030 |
| 114 | 5-8 | 298 | 16J1991 | 0.0130 | 250 | 0.152 | 1804 | 2.017 | 0.029 |
| 115 | MIISS-3 | 300 | 16J11991 | 0.0102 | 250 | 0.119 | 3180 | 4.580 | 0.036 |
| 116 | MIES SPILS ${ }^{\text {-3 }}$ | 301 | 16 JNI 91 | 0.0115 | 100 | 0.054 | \|3736 | 11.956 | 0.081 |
| 117 | 5-9 | 302 | 16J1591 | 0.0127 | 250 | 0.149 | \|1813 | 2.076 | 0.029 |
| 118 | 5-10 | 303 | 16JJ191 | 0.0107 | 250 | 0.125 | \|2034 | 2.771 | 0.035 |
| 119 | 5-11 | 304 | 16 J 1991 | 0.0080 | 250 | 0.094 | \|1839 | 3.343 | 0.047 |
| 120 | 5-12 | 305 | $16 J 3191$ | 0.0085 | 250 | 0.099 | \|2362 | 4.063 | 0.044 |

HOHR SBGIEITILL HAIR AMALYSIS

| SESA | $\begin{gathered} \text { BATtELLLR } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { IITBERATOR } \\ S E R A \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\begin{gathered} \text { DIGESIOM } \\ \text { Wi g } \end{gathered}$ | $\left\|\begin{array}{ll} \text { SNAPLR } & \text { VOL } \\ \text { AMALYZED } & \mu 1 \end{array}\right\|$ | AMALYESD in 8 | \|arsa | $\underset{[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}}{\mathrm{Eg}}$ | $\left\lvert\, \begin{aligned} & \mathrm{nim} \\ & {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{aligned}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 121 | 5-13 | 306 | 16J1591 | 0.0078 | 250 | 0.091 | \|2311 | 4.330 | 0.048 |
| 122 | 5-14 | 307 | 26 J 1991 | 0.0077 | 250 | 0.090 | $\mid 2723$ | 5.183 | 0.048 |
| 123 | 5-15 | 308 | 16 J 1591 | 0.0065 | 250 | 0.076 | \| 2465 | | 5.549 | 0.057 |
| 124 | 6-1 | 311 | 1651991 | 0.0104 | 250 | 0.122 | 570 | 0.755 | 0.036 |
| 125 | 6-2 | 312 | 16J1991 | 0.0096 | 250 | 0.112 | 611 | 0.881 | 0.039 |
| 126 | 6-3 | 313 | 16J1991 | 0.009 | 250 | 0.112 | 617 | 0.890 | 0.039 |
| 127 | 6-4 | 314 | 16J1991 | 0.0089 | 250 | 0.104 | 535 | 0.823 | 0.042 |
| 128 | 5-16 | 316 | 16J11991 | 0.0059 | 250 | 0.069 | \|2648 | 6.575 | 0.063 |
| 129 | 6-5 | 317 | 16J1191 | 0.0089 | 250 | 0.104 | 603 | 0.937 | 0.042 |
| 130 | 6-6 | 318 | 16JJ191 | 0.0079 | 250 | 0.092 | 723 | 1.282 | 0.047 |
| 131 | 6-7 | 330 | $16 \mathrm{Jam91}$ | 0.0073 | 250 | 0.085 | 823 | 1.510 | 0.051 |
| 132 | 6-8 | 331 | 16 JLM 91 | 0.0082 | 250 | 0.096 | \| 1098 | 1.816 | 0.045 |
| 133 | 6-9 | 332 | 16JJK91 | 0.0079 | 250 | 0.092 | 1174 | 2.020 | 0.047 |
| 134 | 6-10 | 333 | 1671591 | 0.0077 | 250 | 0.090 | 1053 | 1.852 | 0.048 |
| 135 | 6-11 | 334 | $16 \mathrm{JLY91}$ | 0.0071 | 250 | 0.083 | \|1057 | 2.016 | 0.052 |
| 136 | 6-12 | 335 | 16J1791 | 0.0064 | 250 | 0.075 | 988 | 2.085 | 0.058 |
| 137 | D0NF-1-3 | 337 | 16J1491 | 0.0460 | 250 | 0.538 | 12600 | 0.783 | 0.008 |
| 138 | 6-13 | 338 | 16J1791 | 0.0064 | 250 | 0.075 | \|1102 | 2.336 | 0.058 |
| 139 | 6-14 | 339 | 16J1991 | 0.0057 | 250 | 0.067 | 856 | 2.016 | 0.065 |
| 140 | 6-15 | 340 | 16J1491 | 0.0053 | 250 | 0.062 | 868 | 2.200 | 0.070 |
| 141 | 6-16 | 341 | 16J1491 | 0.0052 | 250 | 0.061 | 941 | 2.439 | 0.072 |
| 142 | 6-15 dup | 342 | 16J3199 | 0.0053 | 250 | 0.062 | \| 882 | 2.237 | 0.070 |

HOHE SEGHETTAL HAIR AMALYSIS

| SEQ $\ddagger$ | $\begin{gathered} \text { BATYRLLR } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { ITTEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAFB } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESTIOM } \\ & \text { WT } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{l} \text { SAMPLB VOL } \\ A M A L Y Z E D \end{array}\right\|$ | ABALYZED WI mg | AREA | [ Hg ] $\mathrm{mg} / \mathrm{g}$ | $\begin{gathered} \text { VDI } \\ {[\mathrm{Bq}] \mathrm{Hg} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 143 | 6-16 dup | 343 | 16J1491 | 0.0052 | 250 | 0.061 | \| 1006 | 2.615 | 0.072 |
| 144 | 6-3 dup | 344 | 16JAM91 | 0.0096 | 250 | 0.112 | 631 | 0.867 | 0.039 |
| 145 | 6-13 dup | 345 | 16 J N91 | 0.0064 | 250 | 0.075 | \|1140 | 2.419 | 0.058 |
| 146 | DORH-1-4 | 356 | 1751191 | 0.0771 | 250 | 0.902 | \|5016 | 0.911 | 0.005 |
| 147 | HIRS-4 | 357 | 17Jג.191 | 0.0107 | 250 | 0.125 | \| 3474 | 4.540 | 0.035 |
| 148 | OLD IIES 41 | 358 | 17Jג191 | 0.0155 | 250 | 0.181 | 5304 | 4.794 | 0.024 |
| 149 | 4-1 | 360 | 1751191 | 0.0078 | 250 | 0.091 | \|1027 | 1.819 | 0.048 |
| 150 | 4-2 | 361 | 17J2M91 | 0.0079 | 250 | 0.092 | \| 1095 | 1.917 | 0.047 |
| 151 | 4-3 | 362 | 17J21991 | 0.0083 | 250 | 0.097 | \|1062 | 1.769 | 0.045 |
| 152 | 4-4 | 363 | 17J1191 | 0.0076 | 250 | 0.089 | 906 | 1.643 | 0.049 |
| 153 | 4-5 | 364 | 17JaM91 | 0.0040 | 250 | 0.047 | 536 | 1.822 | 0.093 |
| 154 | 9-1 | 365 | 1751991 | 0.0145 | 250 | 0.170 | 770 | 0.729 | 0.026 |
| 155 | 9-2 | 366 | 17Jล1991 | 0.0137 | 250 | 0.160 | 887 | 0.892 | 0.027 |
| 156 | 9-3 | 367 | 17JM991 | 0.0121 | 250 | 0.142 | 979 | 1.117 | 0.031 |
| 157 | 9-4 | 368 | 1731191 | 0.0110 | 250 | 0.129 | 1000 | 1.255 | 0.034 |
| 158 | HIES SPIKT-4 | 370 | 1751991 | 0.00\% | 100 | 0.045 | \|3416 | 12.439 | 0.097 |
| 159 | 9-5 | 371 | 1751191 | 0.0092 | 250 | 0.108 | \|1138 | 1.712 | 0.040 |
| 160 | 9-6 | 372 | 1731991 | 0.0074 | 250 | 0.087 | \|1082 | 2.022 | 0.050 |
| 161 | 9-7 | 373 | 17J1991 | 0.0061 | 250 | 0.071 | \|1135 | 2.575 | 0.061 |
| 162 | 9-8 | 374 | 17511991 | 0.0044 | 250 | 0.051 | \|1168 | 3.675 | 0.085 |
| 163 | 4-3 dup | 375 | 1751991 | 0.0083 | 250 | 0.097 | 998 | 1.660 | 0.045 |
| 164 | $9-6$ dup | 376 | 17J1991 | 0.0074 | 250 | 0.087 | \|1093 | 2.043 | 0.050 |

B.1-7

MONE SEGIBITAL BAIR AHALYSIS

| SEQ 1 | $\begin{gathered} \text { BATIELLIR } \\ \text { DD } \end{gathered}$ | $\left\|\begin{array}{c} \text { IITBGRATOR } \\ \text { SERA } \end{array}\right\|$ | \|DIGESIIOM | $\begin{aligned} & \text { DIGESTIOM } \\ & \text { WI } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{l} \text { SANPLE VOL } \\ \text { AHALYZZD } \end{array}\right\|$ | AMALYESD ming | AREA | 2 Eg g <br> [ Hg ] $\mathrm{pg} / \mathrm{g}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 165 | IIRS-4 | 386 | 17J1991 | 0.0107 | 250 | 0.125 | \|3338 | 4.307 | 0.035 |
| 166 | 9-9 | 387 | 1751191 | 0.0044 | 250 | 0.051 | \|1188 | 3.667 | 0.085 |
| 167 | 9-10 | 388 | 1751191 | 0.0049 | 250 | 0.057 | \|2199 | 6.167 | 0.076 |
| 168 | 9-11 | 389 | 17Jג191 | 0.0035 | 250 | 0.041 | \|1923 | 7.535 | 0.106 |
| 169 | 9-2 dup | 390 | 1752191 | 0.0137 | 250 | 0.160 | 956 | 0.942 | 0.027 |
| 170 | 10-1 | 391 | 17 J 991 | 0.0111 | 250 | 0.130 | 701 | 0.842 | 0.034 |
| 171 | 10-2 | 392 | 1751591 | 0.0110 | 250 | 0.129 | 547 | 0.655 | 0.034 |
| 172 | 10-3 | 393 | 17J2991 | 0.0109 | 250 | 0.127 | 413 | 0.490 | 0.034 |
| 173 | 10-4 | 394 | 17J1991 | 0.0109 | 250 | 0.127 | 389 | 0.459 | 0.034 |
| 174 | 10-5 | 395 | 17J11991 | 0.0096 | 250 | 0.112 | 326 | 0.430 | 0.039 |
| 175 | 10-2 dup | 396 | 17J1491 | 0.0110 | 250 | 0.129 | 534 | 0.638 | 0.034 |
| 176 | 11-1 | 397 | 17J1M91 | 0.0083 | 250 | 0.097 | 546 | 0.866 | 0.045 |
| 177 | 11-2 | 398 | 17J1M91 | 0.0072 | 250 | 0.084 | 306 | 0.534 | 0.052 |
| 178 | 11-3 | 399 | $17 J 1591$ | 0.0074 | 250 | 0.087 | 313 | 0.533 | 0.050 |
| 179 | 11.4 | 400 | 17J1M91 | 0.0072 | 250 | 0.084 | 322 | 0.565 | 0.052 |
| 180 | 11-5 | 401 | 17JN191 | 0.0059 | 250 | 0.069 | 318 | 0.680 | 0.063 |
| 181 | 116 | 402 | 17J1491 | 0.0070 | 250 | 0.082 | 416 | 0.768 | 0.053 |
| 182 | 11-2 dup | 403 | 17JA191 | 0.0072 | 250 | 0.084 | 304 | 0.530 | 0.052 |
| 183 | DOPOH-1-4 | 404 | 17Jג191 | 0.0771 | 250 | 0.902 | 15026 | 0.903 | 0.005 |
| 184 | DORH-1-5 | 414 | 22J13191 | 0.1019 | 250 | 1.192 | 5337 | 0.748 | 0.004 |
| 185 | MIES-5 | 415 | 22J1491 | 0.0113 | 250 | 0.132 | 13745 | 4.720 | 0.033 |
| 186 | IIES SPIKP-5 | 416 | 22JL191 | 0.0131 | 250 | 0.153 | \|7481 | 9.956 | 10.071 |

HOME SEGIESTAL BAIR AMALYSIS

| SEQf | $\begin{gathered} \text { BATPELLEB B } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { DITEGRATOR } \\ \text { SEQf } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESITOH } \\ \text { DAIB } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESTIOM } \\ & \text { WI } g \end{aligned}$ | $\left\|\begin{array}{ll} \text { SAMPLE } & \text { VOL } \\ A M A L Y Z E D D & \beta 1 \end{array}\right\|$ | $\begin{aligned} & \text { AMALYBED } \\ & \text { WI mg } \end{aligned}$ | \|arEa | $\stackrel{2 \mathrm{Bg}}{[\mathrm{Bg}] \mathrm{\mu g} / \mathrm{g}}$ | $\left.\left\lvert\, \begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Hg}]} \end{array}\right.\right] \mathrm{gq} / \mathrm{g}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 187 | 12a | 417 | 22J1191 | 0.0188 | 250 | 0.220 | \| 1444 | 1.081 | 0.020 |
| 188 | 12b | 418 | 22Jan91 | 0.0182 | 250 | 0.213 | \|1631 | 1.264 | 0.020 |
| 189 | 12c | 419 | 22JA1991 | 0.0176 | 250 | 0.206 | \|2393 | 1.928 | 0.021 |
| 190 | 12d | 420 | 22Jan91 | 0.0165 | 250 | 0.193 | $\mid 2907$ | 2.504 | 0.023 |
| 191 | 12 e | 421 | 22J11991 | 0.0180 | 250 | 0.210 | \|5472 | 4.340 | 0.021 |
| 192 | 125 | 422 | 22JaM91 | 0.0129 | 250 | 0.151 | \|5599 | 6.198 | 0.029 |
| 193 | 12b dup | 423 | 22J1991 | 0.0165 | 250 | 0.193 | \|1646 | 1.407 | 0.023 |
| 194 | HIES SPIKP-5 | 424 | 22J1F91 | 0.0131 | 100 | 0.061 | \|3647 | 8.175 | 0.028 |
| 195 | 13a | 425 | 22JNT91 | 0.0090 | 250 | 0.105 | 540 | 0.816 | 0.041 |
| 196 | 13b | 426 | 22JAF91 | 0.0113 | 250 | 0.132 | 601 | 0.727 | 0.033 |
| 197 | 13 C | 427 | 22J1991 | 0.0096 | 250 | 0.112 | 392 | 0.543 | 0.039 |
| 198 | 13d | 428 | 22J1191 | 0.0098 | 250 | 0.115 | 327 | 0.437 | 0.038 |
| 199 | 138 | 429 | 22311991 | 0.0099 | 250 | 0.116 | 320 | 0.423 | 0.038 |
| 200 | 138 | 430 | 22J11991 | 0.0075 | 250 | 0.088 | 287 | 0.495 | 0.050 |
| 201 | 13 g | 431 | 22J1M91 | 0.0076 | 250 | 0.089 | 295 | 0.503 | 0.049 |
| 202 | 13b | 432 | 22J1091 | 0.0076 | 250 | 0.089 | 280 | 0.475 | 0.049 |
| 203 | $13 i$ | 433 | 2251291 | 0.0073 | 250 | 0.085 | 298 | 0.530 | 0.051 |
| 204 | 13j | 434 | 22J11991 | 0.0060 | 250 | 0.070 | 290 | 0.626 | 0.062 |
| 205 | 13k | 435 | 22J1191 | 0.0050 | 250 | 0.058 | 351 | 0.926 | 0.074 |
| 206 | 131 | 436 | 22517991 | 0.0038 | 250 | 0.044 | 330 | 1.139 | 0.098 |
| 207 | 13 f dup | 437 | 22J1991 | 0.0075 | 250 | 0.088 | 265 | 0.453 | 0.050 |
| 208 | 13k dup | 438 | \| 22J1.991 | 0.0050 | 250 | 0.058 | 366 | 0.969 | 0.074 |

HONR SEGFITHLL HAIR AILLYSIS

| SEQ | $\begin{gathered} \text { BAITHLLB } \\ \text { DD } \end{gathered}$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SEOA } \end{array}\right\|$ | $\left.\right\|_{\text {DIGESIIC }}$ | $\begin{aligned} & \text { DIGESIIOM } \\ & \text { WI } g \end{aligned}$ | SAMPLE VOL AMLYEED PI | AmLYesd <br>  | \|ARRA | $\underset{[\mathrm{Hg}] \mathrm{Hg} / \mathrm{g}}{\mathrm{mig}}$ | $\left\lvert\, \begin{gathered} \mathrm{KDL} \\ {[\mathrm{Bg}]^{\prime} \mathrm{Hg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 209 | MIES-5 | 440 | 22J1991 | 0.0113 | 250 | 0.132 | \|3532 | 4.450 | 0.033 |
| 210 | DORT-1-5 | 481 | $22 J 1991$ | 0.1015 | 250 | 1.187 | \|5687 | 0.819 | 0.004 |
| 211 | MIRS-5 | 482 | 22J1491 | 0.0113 | 250 | 0.132 | \|3716 | 4.786 | 0.033 |
| 212 | 14a | 485 | 22J1491 | 0.0105 | 250 | 0.123 | 579 | 0.752 | 0.035 |
| 213 | 14b | 486 | 22J1991 | 0.0090 | 250 | 0.105 | 581 | 0.880 | 0.041 |
| 214 | 14adup | 487 | 2231991 | 0.0105 | 250 | 0.123 | 594 | 0.773 | 0.035 |
| 215 | 14 C | 488 | 22J1491 | 0.0077 | 250 | 0.090 | 547 | 0.964 | 0.048 |
| 216 | 14d | 489 | 2271991 | 0.0076 | 250 | 0.089 | 560 | 1.002 | 0.049 |
| 217 | 140 | 490 | 2251991 | 0.0086 | 250 | 0.101 | 672 | 1.077 | 0.043 |
| 218 | 14 f | 491 | 2251991 | 0.0069 | 250 | 0.081 | 517 | 1.011 | 0.054 |
| 219 | 149 | 493 | 22J1491 | 0.0081 | 250 | 0.095 | 694 | 1.183 | 0.046 |
| 220 | 14 f dup | 494 | 22JAF91 | 0.0069 | 250 | 0.081 | 734 | 1.474 | 0.054 |
| 221 | $14 i$ | 495 | 22J1191 | 0.0068 | 250 | 0.080 | 896 | 1.847 | 0.055 |
| 222 | $14 j$ | 49 | 22J1191 | 0.0062 | 250 | 0.073 | 967 | 2.194 | 0.060 |
| 223 | 14k | 497 | 22J1491 | 0.0050 | 250 | 0.058 | 932 | 2.618 | 0.074 |
| 224 | 141 | 498 | 22J1991 | 0.0046 | 250 | 0.054 | 1032 | 3.165 | 0.081 |
| 225 | 148 | 499 | 22J14991 | 0.0043 | 250 | 0.050 | \|1078 | 3.544 | 0.087 |
| 226 | 141 | 500 | 22J1191 | 0.0048 | 250 | 0.056 | \|1339 | 3.975 | 0.078 |
| 227 | $14 i$ dup | 501 | 22J1491 | 0.0068 | 250 | 0.080 | 915 | 1.888 | 0.055 |
| 228 | MIRS-6 | 504 | 23J1491 | 0.0094 | 250 | 0.110 | \|2798 | 4.342 | 0.040 |
| 229 | MIRS SPIKP-6 | 506 | 23J4.991 | 0.0073 | 100 | 0.034 | 13047 | 15.232 | 0.127 |
| 230 | IIRS SPIKR-5 | 507 | 22Jג1991 | 0.0131 | 100 | 0.061 | \|3703 | 10.284 | 0.071 |

HOTR SEGIRTTAL RAIR ANALYSIS

| SEQ | $\begin{gathered} \text { Batreilir } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { ITTEGRATOR } \\ \text { SER } \ddagger \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DATR } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESTIOM } \\ & \text { WT } g \end{aligned}$ | $\left\|\begin{array}{l} \text { SAMPLB VOL } \\ \text { AMALYZED } \end{array}\right\|$ | $\begin{aligned} & \text { AMALYZEXD } \\ & \text { WI Eg } \end{aligned}$ | \|AREA | $\underset{[\mathrm{Eg}] \mathrm{gg} / \mathrm{g}}{\mathrm{~g}}$ | $\left\lvert\, \begin{gathered} \text { NDL } \\ \text { [Hg] } \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 231 | DORH-1-6 | 508 | 23J1491 | 0.1063 | 250 | 1.243 | \|5922 | 0.817 | 0.003 |
| 232 | 17a | 520 | 23J1891 | 0.0082 | 250 | 0.096 | 675 | 1.126 | 0.045 |
| 233 | 17b | 521 | 23J1ㅙ91 | 0.0060 | 250 | 0.070 | 357 | 0.775 | 0.062 |
| 234 | 17c | 522 | 23Jak91 | 0.0062 | 250 | 0.073 | 320 | 0.664 | 0.060 |
| 235 | DORH-1-6 | 523 | 23J1791 | 0.1063 | 100 | 0.497 | \|2631 | 0.879 | 0.009 |
| 236 | 17d | 524 | 23J11991 | 0.0063 | 250 | 0.074 | 268 | 0.535 | 0.059 |
| 237 | 17e | 525 | 23719191 | 0.0067 | 250 | 0.078 | 281 | 0.531 | 0.056 |
| 238 | 17 f | 526 | 2354191 | 0.0075 | 250 | 0.088 | 332 | 0.572 | 0.050 |
| 239 | 17 g | 528 | 23J11991 | 0.0061 | 250 | 0.071 | 353 | 0.753 | 0.061 |
| 240 | 176 | 529 | 23 J 1591 | 0.0059 | 250 | 0.069 | 338 | 0.742 | 0.063 |
| 241 | 17 i | 530 | 23J11991 | 0.0033 | 250 | 0.039 | 236 | 0.881 | 0.113 |
| 242 | DORH-1-6 | 531 | 23J11991 | 0.1063 | 100 | 0.497 | \|2561 | 0.856 | 0.009 |
| 243 | 17j | 532 | 23J11991 | 0.0031 | 250 | 0.036 | 270 | 1.096 | 0.120 |
| 244 | 17k | 533 | 23J1M91 | 0.0044 | 250 | 0.051 | 421 | 1.266 | 0.085 |
| 245 | 171 | 534 | 23J11991 | 0.0033 | 250 | 0.039 | 372 | 1.475 | 0.113 |
| 246 | Cla | 535 | 23J1991 | 0.0185 | 250 | 0.216 | 857 | 0.641 | 0.020 |
| 247 | Cle | 537 | 2351991 | 0.0198 | 250 | 0.232 | 1095 | 0.772 | 0.019 |
| 248 | Cld | 538 | 23JA191 | 0.0203 | 250 | 0.237 | 792 | 0.538 | 0.018 |
| 249 | 170 dip | 539 | 2351191 | 0.0060 | 250 | 0.070 | 325 | 0.698 | 0.062 |
| 250 | 171 dup | 540 | 23JJM91 | 0.0033 | 250 | 0.039 | 616 | 2.539 | 0.113 |
| 251 | Clb | 541 | 23J1091 | 0.0213 | 250 | 0.249 | 1056 | 0.691 | 0.017 |
| 252 | Cle | 542 | 23Ja1991 | 0.0186 | 250 | 0.218 | 760 | 0.562 | 0.020 |

B.1-11

HOTE SBGIBTITLL HAIR AMALYSIS

| SEQ ${ }^{\text {P }}$ | $\begin{gathered} \text { BATt'RLLSB } \\ \text { DD } \end{gathered}$ | $\left\|\begin{array}{l} \text { IITEGERAOR } \\ -\mathrm{SEOf} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGRSIIOM } \\ \text { DAFB } \end{gathered}\right.$ | $\begin{gathered} \text { DICESSIIO } \\ \text { WI } 9 \end{gathered}$ | $\left\lvert\, \begin{aligned} & \text { SAMPLE VOL } \\ & \text { MMLYZED } \mu \mathrm{L}\end{aligned}\right.$ | AMLYESD Tis mg | AREA | $\underset{[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}}{ }$ | $\left\lvert\, \begin{gathered} \text { NDL } \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 253 | Clf | 543 | 2351491 | 0.0197 | 250 | 0.230 | 819 | 0.574 | 0.019 |
| 254 | C1g | 544 | 23511991 | 0.0180 | 250 | 0.210 | 692 | 0.526 | 0.021 |
| 255 | 171 dup 2 | 545 | 235Д591 | 0.0033 | 250 | 0.039 | 353 | 1.392 | 0.113 |
| 256 | DORH-1-6 | 546 | 23511991 | 0.1063 | 100 | 0.497 | \|1919 | 0.638 | 0.009 |
| 257 | DORH-1-6 | 557 | 23511991 | 0.1063 | 100 | 0.497 | \| 2314 | 0.779 | 0.009 |
| 258 | Clh | 558 | 23511991 | 0.0223 | 250 | 0.261 | 781 | 0.488 | 0.017 |
| 259 | Cli | 559 | 23J11991 | 0.0189 | 250 | 0.221 | 673 | 0.493 | 0.020 |
| 260 | clj | 561 | 23J11991 | 0.0184 | 250 | 0.215 | 542 | 0.403 | 0.020 |
| 261 | Clk | 562 | 23511991 | 0.0180 | 250 | 0.210 | 642 | 0.492 | 0.021 |
| 262 | Cll | 563 | 2352191 | 0.0183 | 250 | 0.214 | 668 | 0.505 | 0.020 |
| 263 | Clir | 564 | 2351991 | 0.0147 | 250 | 0.172 | 665 | 0.625 | 0.025 |
| 264 | Cln | 565 | 23J1591 | 0.0162 | 250 | 0.189 | 781 | 0.671 | 0.023 |
| 265 | Clo | 566 | 2351991 | 0.0138 | 250 | 0.161 | 724 | 0.728 | 0.027 |
| 266 | Clp | 567 | 23J11991 | 0.0119 | 250 | 0.139 | 623 | 0.721 | 0.031 |
| 267 | Clq | 568 | 23J1991 | 0.0101 | 250 | 0.118 | 493 | 0.663 | 0.037 |
| 268 | CIr | 569 | 23JД1991 | 0.0084 | 250 | 0.098 | 431 | 0.691 | 0.044 |
| 269 | cls | 570 | 23J11991 | 0.0063 | 250 | 0.074 | 342 | 0.716 | 0.059 |
| 270 | Cuk dup | 571 | 23511591 | 0.0180 | 250 | 0.210 | 635 | 0.487 | 0.021 |
| 271 | DORH-1-7 | 574 | 2551191 | 0.0278 | 100 | 0.130 | 714 | 0.906 | 0.033 |
| 272 | MIES-7 | 575 | 25JA191 | 0.0103 | 250 | 0.120 | \|3036 | 4.248 | 0.036 |
| 273 | UIES SPIER-7 | 576 | 25J11991 | 0.0070 | 100 | 0.033 | \|2938 | 15.117 | 0.133 |
| 274 | 15a | 577 | 25JММ91 | 0.0078 | 250 | 0.091 | \| 638 | 1.151 | \| 0.048 |

HOYR SEGMBTAL HAIR ANALYSIS

| SEQ | $\begin{gathered} \text { BATrELLLB } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { HITEGRSIOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DATB } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESTIOM } \\ & \text { WT } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{l} \text { SAMPLE YOL } \\ \text { AHALYZED } \end{array}\right\|$ | AMALYZED解 Mg | AREA | $\underset{[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}}{\mathrm{~g}}$ | $\left\lvert\, \begin{gathered} \mathrm{nDL} \\ {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 275 | 15b | 578 | 25.51191 | 0.0077 | 250 | 0.090 | 753 | 1.382 | 0.048 |
| 276 | 15 C | 579 | 25Jaw91 | 0.0066 | 250 | 0.077 | 533 | 1.129 | 0.056 |
| 277 | 15d | 580 | 25JA191 | 0.0069 | 250 | 0.081 | 644 | 1.313 | 0.054 |
| 278 | 150 | 581 | 25 J 2191 | 0.0056 | 250 | 0.065 | 677 | 1.704 | 0.066 |
| 279 | $15 f$ | 582 | 2551191 | 0.0061 | 250 | 0.071 | 966 | 2.251 | 0.061 |
| 280 | 159 | 583 | 25 J ¢1991 | 0.0059 | 250 | 0.069 | 1020 | 2.460 | 0.063 |
| 281 | DO84-1-7 | 594 | 25 J 1991 | 0.0278 | 100 | 0.130 | 792 | 0.963 | 0.033 |
| 282 | IIES-7 | 595 | 25511991 | 0.0103 | 250 | 0.120 | \| 3084 | 4.157 | 0.036 |
| 283 | 15h | 596 | 25711991 | 0.0089 | 250 | 0.104 | \|1773 | 2.747 | 0.042 |
| 284 | $15 i$ | 597 | 2551591 | 0.0059 | 250 | 0.069 | 11290 | 2.997 | 0.063 |
| 285 | 15j | 598 | 25511991 | 0.0073 | 250 | 0.085 | \|1893 | 3.579 | 0.051 |
| 286 | 15k | 599 | 25 J 1991 | 0.0069 | 250 | 0.081 | 1983 | 3.969 | 0.054 |
| 287 | 151 | 600 | 25 J 1991 | 0.0066 | 250 | 0.077 | \|2017 | 4.222 | 0.056 |
| 288 | 15. | 601 | 25 J 3191 | 0.0065 | 250 | 0.076 | 2040 | 4.336 | 0.057 |
| 289 | 150 | 602 | 25.31991 | 0.0057 | 250 | 0.067 | \|1953 | 4.731 | 0.065 |
| 290 | 150 | 603 | 25JaM91 | 0.0050 | 250 | 0.058 | \|1866 | 5.150 | 0.074 |
| 291 | 15p | 604 | 25 J 191 | 0.0043 | 250 | 0.050 | \|1647 | 5.275 | 0.087 |
| 292 | 159 | 605 | 25 J 1991 | 0.0041 | 250 | 0.048 | \|1580 | 5.303 | 0.091 |
| 293 | 155 | 606 | 25.51591 | 0.0039 | 250 | 0.046 | \|1548 | 5.460 | 0.095 |
| 294 | 158 | 607 | 25J2991 | 0.0034 | 250 | 0.040 | 1587 | 6.424 | 0.109 |
| 295 | 15h dup | 608 | 25JA1991 | 0.0089 | 250 | 0.104 | 1703 | 2.637 | 0.042 |
| 296 | 15p dup | 609 | 25Jd991 | 0.0043 | 250 | 0.050 | \|655 | 5.301 | 0.087 |


| SEOf | $\begin{gathered} \text { BAHELIS } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { Mriserasor } \\ -\quad \text { SERf } \end{array}\right\|$ | DIGESTIO | $\begin{gathered} \text { DICESSIIOM } \\ \text { Ting } \end{gathered}$ | $\left\|\begin{array}{l} \text { SANPLE VOL } \\ \text { AMLYESD AI } \end{array}\right\|$ | ARLEYEBD WI Eq | \| 2 PEA | $\underset{[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}}{\mathrm{Em}}$ | $\left\lvert\, \begin{aligned} & \mathrm{KDDL} \\ & {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{aligned}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 297 | IIRS-7 | 611 | 2571491 | 0.0103 | 250 | 0.120 | $\mid 3059$ | 4.123 | 0.036 |
| 298 | 16a | 612 | 25.51991 | 0.0063 | 250 | 0.074 | 453 | 0.945 | 0.059 |
| 299 | 16b | 613 | 25 JLIM 91 | 0.0069 | 250 | 0.081 | 646 | 1.255 | 0.054 |
| 300 | 16 C | 614 | $25 J 1191$ | 0.0075 | 250 | 0.088 | \|1213 | 2.213 | 0.050 |
| 301 | 16d | 615 | 25711991 | 0.0048 | 250 | 0.056 | \|1153 | 3.283 | 0.078 |
| 302 | 16 e | 616 | 2551991 | 0.1223 | 250 | 1.430 | \|1169 | 0.131 | 0.003 |
| 303 | 189 | 617 | 25511991 | 0.0086 | 250 | 0.101 | 183 | 0.252 | 0.043 |
| 304 | DORH-1-7 | 643 | 25 J 1591 | 0.0278 | 100 | 0.130 | 749 | 0.887 | 0.033 |
| 305 | 18b | 645 | 25 J 1991 | 0.0083 | 250 | 0.097 | 193 | 0.277 | 0.045 |
| 306 | 18 C | 646 | 2551191 | 0.0087 | 250 | 0.102 | 280 | 0.400 | 0.043 |
| 307 | 18d | 647 | 2551191 | 0.0083 | 250 | 0.097 | 369 | 0.565 | 0.045 |
| 308 | 18 e | 648 | $25 \mathrm{JNM91}$ | 0.0083 | 250 | 0.097 | 417 | 0.644 | 0.045 |
| 309 | 18 f | 649 | 25 J 1491 | 0.0074 | 250 | 0.087 | 340 | 0.581 | 0.050 |
| 310 | 189 | 650 | 25511991 | 0.0072 | 250 | 0.084 | 299 | 0.519 | 0.052 |
| 311 | 18b dup | 652 | 25711991 | 0.0083 | 250 | 0.097 | 206 | 0.298 | 0.045 |
| 312 | DOPH-1-7 | 662 | 2571191 | 0.0278 | 250 | 0.325 | 1783 | 0.857 | 0.013 |
| 313 | 18h | 663 | 25JM191 | 0.0076 | 250 | 0.089 | 326 | 0.541 | 0.049 |
| 314 | 181 | 664 | 2513191 | 0.0050 | 250 | 0.058 | 226 | 0.552 | 0.074 |
| 315 | 18j | 665 | $25 J 1491$ | 0.0036 | 250 | 0.042 | 198 | 0.661 | 0.103 |
| 316 | 18h dup | 666 | 25J1391 | 0.0036 | 250 | 0.042 | 202 | 0.676 | 0.103 |
| 317 | DORH-1-8 | 668 | 28J1491 | 0.0372 | 100 | 0.174 | 1020 | 0.905 | 0.025 |
| 318 | HIES-8 | 669 | 28JL191 | 0.0156 | 250 | 0.182 | \|5303 | 4.577 | 0.024 |

WOHR SEGYRMTAL BAIR MALYSIS

| SEQ | $\begin{gathered} \text { BATYBLLB } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SEOff } \end{array}\right\|$ | $\left.\right\|_{\text {DATE }} ^{\text {DIGRSTIOM }}$ | $\begin{gathered} \text { DIGBSIIOM } \\ \text { WT } \mathrm{g} \end{gathered}$ | $\left\|\begin{array}{l\|l} \text { SAIPLE VOL } \\ A M A L Y Z E D & \mu 1 \end{array}\right\|$ | AMALYZED䚡 19 | AREA | 2ig [ Hg ] $\mathrm{Hg} / \mathrm{g}$ | $\left\lvert\, \begin{gathered} \mathrm{KDL} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 319 | HIES SPIKP-8 | 670 | 28Ja1991 | 0.0096 | 100 | 0.045 | $\mid 3680$ | 12.876 | 0.097 |
| 320 | 19a | 671 | 28J1991 | 0.0053 | 250 | 0.062 | 193 | 0.429 | 0.070 |
| 321 | 19b | 672 | 28J3191 | 0.0052 | 250 | 0.061 | 172 | 0.382 | 0.072 |
| 322 | 19c | 673 | 28J1491 | 0.0045 | 250 | 0.053 | 172 | 0.442 | 0.083 |
| 323 | 198 dup | 674 | 28J1991 | 0.0045 | 250 | 0.053 | 167 | 0.427 | 0.083 |
| 324 | 198 | 675 | 28J1491 | 0.0053 | 250 | 0.062 | 210 | 0.472 | 0.070 |
| 325 | 19 | 676 | 2854191 | 0.0052 | 250 | 0.061 | 172 | 0.382 | 0.072 |
| 326 | 191 | 677 | 28541991 | 0.0050 | 250 | 0.058 | 171 | 0.395 | 0.074 |
| 327 | 19 g | 678 | 2851991 | 0.0052 | 250 | 0.061 | 174 | 0.388 | 0.072 |
| 328 | 19h | 679 | 2851191 | 0.0056 | 250 | 0.065 | 219 | 0.469 | 0.066 |
| 329 | 19 i | 680 | 28J1M91 | 0.0049 | 250 | 0.057 | 191 | 0.458 | 0.076 |
| 330 | 19 j | 681 | 28541991 | 0.0044 | 250 | 0.051 | 224 | 0.612 | 0.085 |
| 331 | 19k | 682 | 28JД791 | 0.0045 | 250 | 0.053 | 259 | 0.703 | 0.083 |
| 332 | 191 | 683 | 28JJ1991 | 0.0040 | 250 | 0.047 | 267 | 0.818 | 0.093 |
| 333 | 191 dupl | 69 | 2851191 | 0.0040 | 250 | 0.047 | 255 | 0.725 | 0.093 |
| 334 | 191 dup 2 | 697 | 2851991 | 0.0040 | 250 | 0.047 | 271 | 0.779 | 0.093 |
| 335 | 19 | 698 | 28J1991 | 0.0040 | 250 | 0.047 | 29 | 0.864 | 0.093 |
| 336 | DOPer-1-8 | 699 | 28J11991 | 0.0372 | 100 | 0.174 | 1049 | 0.915 | 0.025 |
| 337 | 190 | 700 | 28JA1991 | 0.0035 | 250 | 0.041 | 295 | 0.983 | 0.106 |
| 338 | 190 | 701 | 28J1991 | 0.0029 | 250 | 0.034 | 319 | 1.298 | 0.128 |
| 339 | 19p | 702 | 2851991 | 0.0026 | 250 | 0.030 | 317 | 1.438 | 0.143 |
| 340 | 199 | 703 | 28JJY91 | 0.0027 | 250 | 0.032 | 335 | 1.475 | 0.138 |

HONR SEGHITILL HAIR AMALYSIS

| SEOI | $\begin{gathered} \text { BATtELLE } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{cc} \text { IIEGRRIOR } \\ - & \text { SEQf } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGRSIIO } \\ \text { DAFEB } \end{gathered}\right.$ | $\begin{gathered} \text { DIGESTIOM } \\ \text { WI } \mathrm{g} \end{gathered}$ | $\left\|\begin{array}{l} \text { SAMPIB VOL } \\ \text { AMLYZED } \end{array}\right\|$ | amacyex WI Eg | AREA | $\underset{[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}}{\mathrm{zig}}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Hg}]_{\mathrm{L}} / \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 341 | 19 r | 704 | 28J31991 | 0.0029 | 250 | 0.034 | 392 | 1.638 | 0.128 |
| 342 | 19r dup | 705 | 28Ja191 | 0.0029 | 250 | 0.034 | 410 | 1.722 | 0.128 |
| 343 | 20a | 706 | 285AM91 | 0.0116 | 250 | 0.136 | 565 | 0.611 | 0.032 |
| 344 | 20b | 707 | 2851991 | 0.0104 | 250 | 0.122 | 414 | 0.485 | 0.036 |
| 345 | 20 C | 708 | 285 M 91 | 0.0144 | 250 | 0.168 | 613 | 0.537 | 0.026 |
| 346 | 20b dup | 709 | 28JnM91 | 0.0104 | 250 | 0.122 | 416 | 0.488 | 0.036 |
| 347 | DOSu-1-8 | 710 | 28J31991 | 0.0372 | 250 | 0.435 | \|2539 | 0.907 | 0.010 |
| 348 | 21a | 711 | 28511991 | 0.0066 | 250 | 0.077 | 591 | 1.127 | 0.056 |
| 349 | 2 bb | 712 | 2851991 | 0.0053 | 250 | 0.062 | 472 | 1.100 | 0.070 |
| 350 | 21 c | 713 | 28Jal91 | 0.0053 | 250 | 0.062 | 501 | 1.174 | 0.070 |
| 351 | 21d | 714 | 2851991 | 0.0040 | 250 | 0.047 | 304 | 0.891 | 0.093 |
| 352 | 21 | 715 | 2854,91 | 0.0049 | 250 | 0.057 | 375 | 0.923 | 0.076 |
| 353 | 21f | 716 | 2853191 | 0.0042 | 250 | 0.049 | 389 | 1.121 | 0.089 |
| 354 | DORH-1-8 | 727 | 2854191 | 0.0372 | 250 | 0.435 | \|2619 | 0.944 | 0.010 |
| 355 | 219 | 728 | 2854991 | 0.0036 | 250 | 0.042 | 462 | 1.617 | 0.103 |
| 356 | 219 dup | 729 | 28J4.991 | 0.0036 | 250 | 0.042 | 435 | 1.515 | 0.103 |
| 357 | 22a | 730 | 28JM191 | 0.0057 | 250 | 0.058 | \|1106 | 2.918 | 0.074 |
| 358 | 22 b | 731 | 28Jan91 | 0.0052 | 250 | 0.061 | 777 | 1.943 | 0.072 |
| 359 | 22c | 732 | 28J3191 | 0.0046 | 250 | 0.054 | 548 | 1.520 | 0.081 |
| 360 | 22a dup | 734 | 28JN9191 | 0.0057 | 250 | 0.067 | 1149 | 2.659 | 0.065 |
| 361 | DORH-1-9 | 736 | 31Jal191 | 0.0281 | 250 | 0.329 | \|1846 | 0.871 | 0.013 |
| 362 | HIRS-9 | 738 | 31J3491 | 0.0081 | 250 | 0.095 | \|2912 | 4.811 | 0.046 |

HOHE SEGHETTAL HAIR ARALYSIS

| SEQ $\ddagger$ | $\begin{gathered} \text { BATTELLS } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SEROI } \end{array}\right\|$ | $\left.\right\|_{\text {DIFTB }} ^{\text {DIGSTIOM }}$ | $\begin{gathered} \text { DIGRSIIOH } \\ \text { WI } \mathrm{g} \end{gathered}$ | $\left.\left\|\begin{array}{l} \text { SAMPLR POL } \\ \text { AMALYZBD } \end{array}\right\| 1 \right\rvert\,$ | ahalyekd WI 89 | \|ARRA | $\begin{gathered} \text { EHg } \\ {[\mathrm{ig}] \mathrm{Hg} / \mathrm{g}} \end{gathered}$ | $\left.\left\lvert\, \begin{array}{c} \mathrm{KDL} \\ {[\mathrm{~Bq}} \end{array}\right.\right] \mathrm{mg} / \mathrm{g}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 363 | 23a | 739 | 31J1\%91 | 0.0035 | 250 | 0.041 | 114 | 0.272 | 0.106 |
| 364 | 23b | 740 | 31Jak91 | 0.0050 | 250 | 0.058 | 154 | 0.299 | 0.074 |
| 365 | HIRS SPIKR-9 | 741 | 3154191 | 0.0159 | 100 | 0.074 | \|4384 | 9.271 | 0.058 |
| 366 | 23 c | 742 | 31J1H91 | 0.0036 | 250 | 0.042 | 137 | 0.351 | 0.103 |
| 367 | DORA-1-5 | 785 | 22J1191 | 0.1015 | 250 | 1.187 | \|7529 | 0.803 | 0.004 |
| 368 | 14h | 787 | 22J1.491 | 0.0066 | 250 | 0.077 | 818 | 1.264 | 0.056 |
| 369 | 23d | 789 | 31J1N91 | 0.0039 | 250 | 0.046 | 197 | 0.467 | 0.095 |
| 370 | 23e | 790 | 3151991 | 0.0038 | 250 | 0.044 | 191 | 0.462 | 0.098 |
| 371 | 23 f | 791 | 31711991 | 0.0044 | 250 | 0.051 | 203 | 0.429 | 0.085 |
| 372 | 239 | 792 | 315J1991 | 0.0044 | 250 | 0.051 | 223 | 0.478 | 0.085 |
| 373 | 23h | 793 | 3151191 | 0.0037 | 250 | 0.043 | 237 | 0.610 | 0.101 |
| 374 | $23 i$ | 794 | 3152M91 | 0.0037 | 250 | 0.043 | 226 | 0.578 | 0.101 |
| 375 | 23 j | 795 | 3151991 | 0.0036 | 250 | 0.042 | 276 | 0.745 | 0.103 |
| 376 | HIES SPIK1-9 | 797 | 31411991 | 0.0159 | 100 | 0.074 | \|5773 | 9.850 | 0.058 |
| 377 | 23k | 799 | 31711991 | 0.0039 | 250 | 0.046 | 301 | 0.758 | 0.095 |
| 378 | 231 | 800 | 31721991 | 0.0024 | 250 | 0.028 | 248 | 0.991 | 0.155 |
| 379 | $23!$ | 801 | 31521991 | 0.0034 | 250 | 0.040 | 311 | 0.902 | 0.109 |
| 380 | 237 | 802 | 31J1N91 | 0.0030 | 250 | 0.035 | 325 | 1.073 | 0.124 |
| 381 | UIIES-9 | 803 | 31J11991 | 0.0081 | 250 | 0.095 | \|2894 | 3.857 | 0.046 |
| 382 | 230 | 804 | 31JJ191 | 0.0035 | 250 | 0.041 | 358 | 1.022 | 0.106 |
| 383 | 23p | 805 | 31J1591 | 0.0029 | 250 | 0.034 | 324 | 1.106 | 0.128 |
| 384 | 239 dup | 806 | \| 31J1/991 | 0.0044 | 250 | 0.051 | 232 | 0.501 | 0.085 |

HOHTE SEGTBITAL HAIR AMALYSIS

| SEQ | $\begin{gathered} \text { BATIELLSB } \\ \text { DD } \end{gathered}$ | $\left\|\begin{array}{c} \text { IITBGRATOR } \\ \text { SERI } \end{array}\right\|$ | $\begin{array}{\|c} \text { DIGESTIOM } \\ \text { DATE } \end{array}$ | $\begin{aligned} & \text { DIGBSIIOM } \\ & \text { WI } g \end{aligned}$ | $\left\|\begin{array}{l} \text { SAMPLB VOL } \\ \text { ALALYZED } \end{array}\right\|$ | AMALYZED Mr mg | ARBA | $\sum_{[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}}^{\mathrm{g}}$ | $\left\lvert\, \begin{gathered} \mathrm{NDL} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 385 | HIRS-9 | 818 | 31J2M91 | 0.0081 | 250 | 0.095 | $\mid 3049$ | 4.247 | 0.046 |
| 386 | 24a | 819 | 31511991 | 0.0048 | 250 | 0.056 | 656 | 1.478 | 0.078 |
| 387 | 24b | 820 | 3151591 | 0.0059 | 250 | 0.069 | 621 | 1.135 | 0.063 |
| 388 | 24. | 821 | 315LM91 | 0.0056 | 250 | 0.065 | 604 | 1.161 | 0.066 |
| 389 | 24d | 822 | 31Jan91 | 0.0063 | 250 | 0.074 | 633 | 1.085 | 0.059 |
| 390 | 24 e | 823 | 315aw91 | 0.0049 | 250 | 0.057 | 476 | 1.029 | 0.076 |
| 391 | 24 f | 824 | 3152M91 | 0.0056 | 250 | 0.065 | 538 | 1.027 | 0.066 |
| 392 | 249 | 825 | 315an91 | 0.0051 | 250 | 0.060 | 504 | 1.051 | 0.073 |
| 393 | 24h | 826 | 3154191 | 0.0053 | 250 | 0.062 | 637 | 1.298 | 0.070 |
| 394 | $24 i$ | 827 | 31511991 | 0.0048 | 250 | 0.056 | 673 | 1.519 | 0.078 |
| 395 | $24 j$ | 828 | 31J2/91 | 0.0051 | 250 | 0.060 | 824 | 1.767 | 0.073 |
| 396 | 24k | 829 | 3152\%91 | 0.0044 | 250 | 0.051 | 806 | 2.002 | 0.085 |
| 397 | 241 | 830 | 31JAM91 | 0.0042 | 250 | 0.049 | 773 | 2.007 | 0.089 |
| 398 | 2419 | 831 | 315AM91 | 0.0045 | 250 | 0.053 | 949 | 2.320 | 0.083 |
| 399 | 24n | 832 | 315A1991 | 0.0040 | 250 | 0.047 | 993 | 2.735 | 0.093 |
| 400 | 240 | 833 | 31J1591 | 0.0040 | 250 | 0.047 | 970 | 2.670 | 0.093 |
| 401 | 24p | 834 | 3151191 | 0.0040 | 250 | 0.047 | 1022 | 2.818 | 0.093 |
| 402 | 249 | 835 | 31JN191 | 0.0033 | 250 | 0.039 | 1161 | 3.896 | 0.113 |
| 403 | 245 | 836 | 31JLM91 | 0.0030 | 250 | 0.035 | 1030 | 3.788 | 0.124 |
| 404 | 24 i dup | 837 | 31J3\%91 | 0.0048 | 250 | 0.056 | 646 | 1.455 | 0.078 |
| 405 | DORU-9 | 838 | 3153M91 | 0.0281 | 250 | 0.329 | \|2133 | 0.852 | 0.013 |
| 406 | DORT-1-10 | 849 | $8 \mathrm{PKB91}$ | 0.0275 | 100 | 0.129 | 862 | 0.948 | 0.034 |

B.1-18

MOHR SEGYRTTAL HAIR ANALYSIS

| SEQ | $\begin{aligned} & \text { BATTELLEB } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { DITRGRATOR } \\ \text { SEQI } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DATE } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESTIOM } \\ & \text { WI } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{ll} S A M P L R & \nabla O L \\ A M L Y Z B D & \mu 1 \end{array}\right\|$ | ABALYEED in 19 | \|aREA | $\begin{gathered} \Sigma \mathrm{EHg} \\ {[\mathrm{Hq}] \mathrm{mg} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \mathrm{YDL} \\ {[\mathrm{Hg}]} \end{gathered} \mathrm{\mu g} / \mathrm{g}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 407 | MIES-10 | 850 | 8P8B91 | 0.0143 | 250 | 0.167 | $\mid 5319$ | 4.620 | 0.026 |
| 408 | MIES SPIKR-10 | 851 | 8 FKB91 | 0.0154 | 100 | 0.072 | \|5096 | 10.273 | 0.060 |
| 409 | 25a | 853 | 878891 | 0.0049 | 250 | 0.057 | 773 | 1.901 | 0.076 |
| 410 | 25b | 854 | 873891 | 0.0042 | 250 | 0.049 | 552 | 1.560 | 0.089 |
| 411 | 25 c | 855 | $8 \mathrm{PBB91}$ | 0.0035 | 250 | 0.041 | 384 | 1.273 | 0.106 |
| 412 | 25d | 856 | 878B91 | 0.0038 | 250 | 0.044 | 352 | 1.068 | 0.098 |
| 413 | 254 | 857 | 878391 | 0.0040 | 250 | 0.047 | 363 | 1.049 | 0.093 |
| 414 | $25 f$ | 858 | 87 BB 91 | 0.0035 | 250 | 0.041 | 385 | 1.277 | 0.106 |
| 415 | 259 | 859 | 873391 | 0.0022 | 250 | 0.026 | 303 | 1.566 | 0.169 |
| 416 | 25h | 860 | 878391 | 0.0029 | 250 | 0.034 | 330 | 1.304 | 0.128 |
| 417 | $25 i$ | 861 | 873B91 | 0.0023 | 250 | 0.027 | 327 | 1.628 | 0.162 |
| 418 | 25j | 862 | 873891 | 0.0019 | 250 | 0.022 | 287 | 1.708 | 0.196 |
| 419 | 25k | 863 | 876891 | 0.0017 | 250 | 0.020 | 281 | 1.865 | 0.219 |
| 420 | 251 | 864 | 878891 | 0.0016 | 250 | 0.019 | 257 | 1.795 | 0.233 |
| 421 | 25m | 865 | 82891 | 0.0019 | 250 | 0.022 | 259 | 1.524 | 0.196 |
| 422 | 25n | 866 | 873891 | 0.0013 | 250 | 0.015 | 232 | 1.969 | 0.286 |
| 423 | 250 | 867 | 876391 | 0.0013 | 250 | 0.015 | 226 | 1.911 | 0.286 |
| 424 | $25 p$ | 868 | 87 T 991 | 0.0010 | 250 | 0.012 | 220 | 2.409 | 0.372 |
| 425 | $25 c$ dup | 869 | 898891 | 0.0035 | 250 | 0.041 | 371 | 1.227 | 0.106 |
| 426 | 251 dup | 870 | 878891 | 0.0016 | 250 | 0.019 | 252 | 1.755 | 0.233 |
| 427 | DORH-1-10 | 873 | 873891 | 0.0275 | 250 | 0.322 | 12029 | 0.909 | 0.014 |
| 428 | IIES-10 | 874 | 876 BP 1 | 0.0143 | 250 | 0.167 | 15378 | 4.671 | 0.026 |

HOHE SEGHETTAL HAIR ANALYSIS

| SEOP | $\begin{gathered} \text { BATTELLEB } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{cc} \text { DIIEGRATOR } \\ - & \text { SECA } \end{array}\right\|$ | $\begin{array}{\|c} \text { DIGESIIOM } \\ \text { DARE } \end{array}$ | DIGESTIOM Tr 9 |  | AMALYEBD WI Ig | AREA | $\underset{[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}}{\mathrm{E}}$ | $\left\lvert\, \begin{gathered} \mathrm{KDL} \\ {[\mathrm{Bg}] \mathrm{\mu g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 429 | DOP\%-1-10 | 886 | 873891 | 0.0275 | 250 | 0.322 | \|2074 | 0.810 | 0.014 |
| 430 | 263 | 887 | 8F8B91 | 0.0059 | 250 | 0.069 | 539 | 0.936 | 0.063 |
| 431 | 26b | 889 | $8 \mathrm{FSB91}$ | 0.0058 | 250 | 0.068 | 461 | 0.805 | 0.064 |
| 432 | 26 C | 890 | 878691 | 0.0056 | 250 | 0.065 | 406 | 0.727 | 0.066 |
| 433 | 26d | 891 | $8 \mathrm{PRB91}$ | 0.0060 | 250 | 0.070 | 469 | 0.793 | 0.062 |
| 434 | 260 | 892 | 87 BB 91 | 0.0066 | 250 | 0.077 | 543 | 0.843 | 0.056 |
| 435 | 269 | 893 | 87 BB 91 | 0.0065 | 250 | 0.076 | 603 | 0.957 | 0.057 |
| 436 | 269 | 894 | 8 FEB91 | 0.0082 | 250 | 0.096 | 818 | 1.044 | 0.045 |
| 437 | 26n | 895 | $88 \mathrm{BB91}$ | 0.0056 | 250 | 0.065 | 658 | 1.218 | 0.066 |
| 438 | 261 | 89 | 8PEB91 | 0.0064 | 250 | 0.075 | 745 | 1.214 | 0.058 |
| 439 | 26 j | 897 | $88 \mathrm{BB91}$ | 0.0061 | 250 | 0.071 | 656 | 1.114 | 0.061 |
| 440 | 26. | 898 | 876891 | 0.0062 | 250 | 0.073 | 689 | 1.154 | 0.060 |
| 44 | 261 | 899 | 8PKB91 | 0.0069 | 250 | 0.081 | 723 | 1.091 | 0.054 |
| 442 | DOSH-1-10 | 901 | 876891 | 0.0275 | 250 | 0.322 | 2110 | 0.824 | 0.014 |
| 443 | MIES-10 | 914 | $82 \mathrm{BP91}$ | 0.0143 | 250 | 0.167 | 5564 | 4.185 | 0.026 |
| 444 | 26 dup | 915 | 878691 | 0.0059 | 250 | 0.069 | 593 | 1.042 | 0.063 |
| 445 | 261 dup | 916 | 878891 | 0.0064 | 250 | 0.075 | 790 | 1.293 | 0.058 |
| 446 | 261 | 917 | 878391 | 0.0058 | 250 | 0.068 | 586 | 1.047 | 0.064 |
| 447 | $26 n$ | 918 | 873891 | 0.0056 | 250 | 0.065 | 626 | 1.161 | 0.066 |
| 448 | 260 | 919 | 8 P 8 P 91 | 0.0047 | 250 | 0.055 | 474 | 1.034 | 0.079 |
| 449 | 26p | 920 | $87 \mathrm{FB91}$ | 0.0048 | 250 | 0.056 | 513 | 1.100 | 0.078 |
| 450 | 269 | 921 | \| 8PBE91 | 0.0043 | 250 | \| 0.050 | 438 | 1.040 | 0.087 |

HOHE SEGHBITAL HAIR AMALYSIS

| SEQ | $\begin{gathered} \text { BATTEILLE } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { ITIEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DATE } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESTIOM } \\ & \text { WT g } \end{aligned}$ | $\left\|\begin{array}{ll} \text { SAMPLE } & \text { VOL } \\ \text { AHALYZED } & \text { P1 } \end{array}\right\|$ | AMALYZED WI 19 | AREA | $\underset{[\mathrm{Bq}] \mathrm{Hg} / \mathrm{g} / \mathrm{g}}{ }$ | $\left\lvert\, \begin{aligned} & \mathrm{NDL} \\ & {[\mathrm{Hg}]} \end{aligned}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 451 | 26 r | 922 | 8 PEB91 | 0.0041 | 250 | 0.048 | 462 | 1.154 | 0.091 |
| 452 | 26s | 923 | 87 B891 | 0.0046 | 250 | 0.054 | 469 | 1.045 | 0.081 |
| 453 | 26 t | 924 | 8 PEB91 | 0.0041 | 250 | 0.048 | 458 | 1.143 | 0.091 |
| 454 | 264 | 925 | 8PEB91 | 0.0036 | 250 | 0.042 | 450 | 1.278 | 0.103 |
| 455 | 26 V | 926 | 88 BB 91 | 0.0041 | 250 | 0.048 | 492 | 1.233 | 0.091 |
| 456 | MIES-10 | 927 | $8 \mathrm{PEB91}$ | 0.0143 | 250 | 0.167 | \|5646 | 4.247 | 0.026 |
| 457 | DORH-1-11 | 929 | $12 \mathrm{P} 8 \mathrm{B9} 1$ | 0.0319 | 250 | 0.373 | \| 2402 | 0.804 | 0.012 |
| 458 | 27a | 932 | $12 \mathrm{PEB91}$ | 0.0058 | 250 | 0.068 | 312 | 0.527 | 0.064 |
| 459 | 27b | 933 | $12 \mathrm{FBB91}$ | 0.0057 | 250 | 0.067 | 300 | 0.514 | 0.065 |
| 460 | 27c | 934 | $12 \mathrm{PBB91}$ | 0.0058 | 250 | 0.068 | 278 | 0.464 | 0.064 |
| 461 | MISS-11 | 935 | $12 \mathrm{FBB91}$ | 0.0098 | 250 | 0.115 | \|3643 | 3.984 | 0.038 |
| 462 | MIES SPIEX-11 | 936 | 1278891 | 0.0110 | 100 | 0.052 | \|4197 | 10.324 | 0.009 |
| 463 | 27d | 937 | 1275891 | 0.0061 | 250 | 0.071 | 272 | 0.430 | 0.061 |
| 464 | 27 e | 938 | 1278391 | 0.0050 | 250 | 0.058 | 220 | 0.413 | 0.074 |
| 465 | MISS-11 | 951 | 1271891 | 0.0098 | 250 | 0.115 | \| 3692 | | 4.011 | 0.038 |
| 466 | 27a dup | 952 | 12 F 8891 | 0.0058 | 250 | 0.068 | 292 | 0.494 | 0.064 |
| 467 | 271 | 953 | 1275891 | 0.0061 | 250 | 0.071 | 270 | 0.431 | 0.061 |
| 468 | 278 dup | 954 | 12PEB91 | 0.0061 | 250 | 0.071 | 257 | 0.408 | 0.061 |
| 469 | 279 | 955 | 1275891 | 0.0049 | 250 | 0.057 | 232 | 0.454 | 0.076 |
| 470 | 27 h | 956 | 127E891 | 0.0048 | 250 | 0.056 | 241 | 0.483 | 0.078 |
| 471 | 27i | 957 | 12P8891 | 0.0043 | 250 | 0.050 | 226 | 0.502 | 0.087 |
| 472 | 27j | 958 | 127B891 | 0.0046 | 250 | 0.054 | \| 259 | 0.546 | 0.081 |

WOVR SBGISHITAL HAIR AMALYSIS

| SEOf | $\begin{aligned} & \text { BAITELLEB } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { IITEGGRTOR } \\ \text { SER! } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESITOB } \\ \text { DAPR } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESTIO } \\ & \text { Wi g } \end{aligned}$ | $\left\|\begin{array}{l}\text { SANPIR DOL } \\ \text { AMALYESD } \\ \text { al }\end{array}\right\|$ | $\begin{aligned} & \text { ABRLYZED } \\ & \text { Wr } \mathrm{mg} \end{aligned}$ | \|ARRA | $\underset{[\mathrm{Hg}] \mathrm{Hg} / \mathrm{g}}{ }$ | $\begin{aligned} & \mathrm{MDL} \\ & {[\mathrm{Eg}] \mu \mathrm{kg} / \mathrm{g}} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 473 | 27k | 959 | 12 PB 891 | 0.0041 | 250 | 0.048 | 2431 | 0.571 | 0.091 |
| 474 | 271 | 960 | $12 \mathrm{PEB91}$ | 0.0046 | 250 | 0.054 | 301 | 0.644 | 0.081 |
| 475 | 27 | 961 | $12 \mathrm{PB891}$ | 0.0029 | 250 | 0.034 | 302 | 1.026 | 0.128 |
| 476 | 29a | 962 | 12 FB 391 | 0.0065 | 250 | 0.076 | 508 | 0.797 | 0.057 |
| 477 | 29b | 963 | $12 \mathrm{Pr891}$ | 0.0067 | 250 | 0.078 | 468 | 0.709 | 0.056 |
| 478 | 29 c | 964 | $12 \mathrm{FEB91}$ | 0.0062 | 250 | 0.073 | 489 | 0.803 | 0.060 |
| 479 | 298 | 965 | 12P8891 | 0.0062 | 250 | 0.073 | 453 | 0.741 | 0.060 |
| 480 | 29C dup | 966 | 12 P 8891 | 0.0062 | 250 | 0.073 | 513 | 0.844 | 0.060 |
| 481 | 29e | 967 | 12P8891 | 0.0063 | 250 | 0.074 | 466 | 0.751 | 0.059 |
| 482 | 299 | 968 | 12 P 3891 | 0.0060 | 250 | 0.070 | 475 | 0.805 | 0.062 |
| 483 | 299 | 969 | $12 \mathrm{FRB91}$ | 0.0056 | 250 | 0.065 | 502 | 0.914 | 0.066 |
| 484 | 29b | 970 | 1273891 | 0.0051 | 250 | 0.060 | 479 | 0.955 | 0.073 |
| 485 | 291 | 971 | 12PEB91 | 0.0052 | 250 | 0.061 | 508 | 0.996 | 0.072 |
| 486 | IIRS-11 | 973 | $12 \mathrm{PrB91}$ | 0.0098 | 250 | 0.115 | 13669 | 3.986 | 0.038 |
| 487 | 29j | 974 | 1275391 | 0.0049 | 250 | 0.057 | 575 | 1.204 | 0.076 |
| 488 | 29k | 975 | 1278891 | 0.0036 | 250 | 0.042 | 590 | 1.683 | 0.103 |
| 489 | 291 | 976 | 12P8891 | 0.0028 | 250 | 0.033 | 549 | 2.008 | 0.133 |
| 490 | 29. | 977 | $12 \mathrm{PBB91}$ | 0.0025 | 250 | 0.029 | 613 | 2.523 | 0.149 |
| 491 | 29n dup | 978 | 12FEB91 | 0.0025 | 250 | 0.029 | 647 | 2.669 | 0.149 |
| 492 | 29g dup | 979 | 12PEB91 | 0.0056 | 250 | 0.065 | 472 | 0.856 | 0.066 |
| 493 | DORH-1-12 | 1243 | 14PEB91 | 0.0162 | 100 | 0.076 | 574 | 0.743 | 0.057 |
| 494 | MIES-12 | 1244 | 14PE691 | 0.0094 | 250 | 0.110 | \| 3764 | 3.716 | 0.040 |

HOKE SBGIBHIAL GAIR AHALYSIS

| SEQ | $\begin{gathered} \text { BATTELLLR } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { IFTEGRATOR } \\ \text { SEQt } \end{array}\right\|$ | $\left.\right\|_{\text {DIGRSTIOM }} ^{\text {DIT }}$ | $\begin{aligned} & \text { DIGRSIIOM } \\ & \text { WI } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{ll} S A M P L B & \text { VOL } \\ A M A L Y Z B D & \mu 1 \end{array}\right\|$ | AMALYZED Wing | ARES | $\underset{[\mathrm{Bg}] \mathrm{Hg} / \mathrm{g}}{ }$ | $\begin{gathered} \text { MDL } \\ \text { [ } \mathrm{Hg} \text { ] } \mathrm{mg} / \mathrm{g} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 495 | 28a | 1246 | 1478391 | 0.0088 | 250 | 0.103 | 699 | 0.681 | 0.042 |
| 496 | 28b | 1247 | $14 \mathrm{Pr891}$ | 0.0071 | 250 | 0.083 | 682 | 0.822 | 0.052 |
| 497 | 28 C | 1249 | 14PEB91 | 0.0070 | 250 | 0.082 | 830 | 1.033 | 0.053 |
| 498 | 28d | 1250 | 1478891 | 0.0065 | 250 | 0.076 | 1032 | 1.406 | 0.057 |
| 499 | 30a | 1251 | 14 FBB91 | 0.0076 | 250 | 0.089 | 687 | 0.774 | 0.049 |
| 500 | 30b | 1252 | 14P8991 | 0.0081 | 250 | 0.095 | 747 | 0.79 | 0.046 |
| 501 | 30 c | 1253 | 1476891 | 0.0071 | 250 | 0.083 | 673 | 0.810 | 0.052 |
| 502 | 30 d | 1254 | 1478891 | 0.0062 | 250 | 0.073 | 641 | 0.879 | 0.060 |
| 503 | 30e | 1255 | 1476891 | 0.0064 | 250 | 0.075 | 976 | 1.345 | 0.058 |
| 504 | 301 | 1256 | 1478891 | 0.0055 | 250 | 0.064 | 1249 | 2.034 | 0.068 |
| 505 | 309 | 1257 | 14 FB 391 | 0.0043 | 250 | 0.050 | 937 | 1.917 | 0.087 |
| 506 | 30h | 1258 | 1478891 | 0.0044 | 250 | 0.051 | \|1353 | 2.766 | 0.085 |
| 507 | 30 i | 1259 | 147EB91 | 0.0036 | 250 | 0.042 | \|1359 | 3.396 | 0.103 |
| 508 | IIRS SPIKP-12 | 1260 | 1478391 | 0.0079 | 100 | 0.037 | \| 4262 | 12.542 | 0.118 |
| 509 | MISS-12 | 1262 | 1476391 | 0.0094 | 250 | 0.110 | 3838 | 3.790 | 0.040 |
| 510 | DOP2-1-12 | 1263 | 1475391 | 0.0162 | 250 | 0.189 | \|1379 | 0.766 | 0.023 |
| 511 | 30 dup | 1264 | 1475091 | 0.0076 | 250 | 0.089 | 711 | 0.804 | 0.049 |
| 512 | 28d dup | 1265 | 147R391 | 0.0065 | 250 | 0.076 | \|1004 | 1.365 | 0.057 |
| 513 | 31 a | 1266 | 147E391 | 0.0064 | 250 | 0.075 | \|1053 | 1.459 | 0.058 |
| 514 | 31b | 1267 | 1476891 | 0.0053 | 250 | 0.062 | 921 | 1.527 | 0.070 |
| 515 | 316 | 1268 | 1478891 | 0.0053 | 250 | 0.062 | 945 | 1.569 | 0.070 |
| 516 | 31d | 1269 | \| 1475891 | 0.0046 | 1250 | 0.054 | 727 | 1.361 | 0.081 |

Hovir SEGiratal mair hmalysis

| SEOA | $\begin{gathered} \text { BAFTELLB } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { CITEGRATOR } \\ \text { SEOP } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DATE } \end{gathered}\right.$ | $\begin{gathered} \text { DIGESIIOM } \\ \text { WI } g \end{gathered}$ | $\left\|\begin{array}{ll} S A M P L R & \text { VOL } \\ A M R L Y Z B D & \mu 1 \end{array}\right\|$ | AMEYZED WI Eg | \|AREA | $[\mathrm{Bq}] \mathrm{\mu g} / \mathrm{g}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 517 | 312 | 1270 | 14P8B91 | 0.0050 | 250 | 0.058 | 731 | 1.259 | 0.074 |
| 518 | 318 | 1271 | 14PE891 | 0.0042 | 250 | 0.049 | 777 | 1.603 | 0.089 |
| 519 | 319 | 1272 | $14 \mathrm{PB891}$ | 0.0045 | 250 | 0.053 | 753 | 1.445 | 0.083 |
| 520 | 319 dup | 1273 | 14P8391 | 0.0045 | 250 | 0.053 | 731 | 1.399 | 0.083 |
| 521 | 31h | 1274 | 1478691 | 0.0040 | 250 | 0.047 | 678 | 1.449 | 0.093 |
| 522 | 311 | 1275 | 14PEB91 | 0.0043 | 250 | 0.050 | 749 | 1.504 | 0.087 |
| 523 | 31 j | 1276 | 1478891 | 0.0040 | 250 | 0.047 | 755 | 1.631 | 0.093 |
| 524 | 31k | 1277 | 14P8891 | 0.0032 | 250 | 0.037 | 667 | 1.779 | 0.116 |
| 525 | 311 | 1278 | 1473891 | 0.0030 | 250 | 0.035 | 751 | 2.162 | 0.124 |
| 526 | 311 | 1279 | 1478891 | 0.0029 | 250 | 0.034 | 946 | 2.871 | 0.128 |
| 527 | 31n | 1290 | 1478891 | 0.0029 | 250 | 0.034 | 966 | 3.019 | 0.128 |
| 528 | 310 | 1291 | $14 \mathrm{PKB91}$ | 0.0024 | 250 | 0.028 | 1156 | 4.386 | 0.155 |
| 529 | 30h dup | 1298 | 1478891 | 0.0040 | 250 | 0.047 | 1262 | 2.879 | 0.093 |
| 530 | 311 dup | 1299 | 1478391 | 0.0029 | 250 | 0.034 | \|1024 | 3.205 | 0.128 |
| 531 | MIRS-12 | 1293 | $14 \mathrm{PBB91}$ | 0.0094 | 250 | 0.110 | \|3969 | 3.913 | 0.040 |
| 532 | DORK-1-13 | 1295 | 2078391 | 0.0422 | 250 | 0.493 | \|3537 | 0.777 | 0.009 |
| 533 | IIES-13 | 1296 | 20 FEB91 | 0.0061 | 250 | 0.071 | \|2646 | 4.011 | 0.061 |
| 534 | HIES SPIKP-13 | 1297 | 2078B91 | 0.0081 | 100 | 0.038 | \|3914 | 11.205 | 0.115 |
| 535 | 32a | 1300 | 208 PB 91 | 0.0079 | 250 | 0.092 | \|1366 | 1.585 | 0.047 |
| 536 | 32b | 1301 | 20 PEB91 | 0.0085 | 250 | 0.099 | 1695 | 1.835 | 0.044 |
| 537 | 32c | 1302 | 20 PBB91 | 0.0093 | 250 | 0.109 | \|1683 | 1.665 | 0.040 |
| 538 | 32d | 1303 | 20 FB691 | 0.0090 | 250 | 0.105 | 1006 | 1.018 | 0.041 |

HONR SEGHETTAL EAIR ANALYSIS

| SEQ | $\begin{aligned} & \text { BATPELLSB } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { HiTRECRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DATE } \end{gathered}\right.$ | $\begin{gathered} \text { DIGESTIOM } \\ W \mathbb{g} \end{gathered}$ | $\left\|\begin{array}{l}\text { SAMPIR VOL } \\ \text { AHALYZED } \\ \text { pl }\end{array}\right\|$ | AMALYZED WI Ig | arra | $\stackrel{\text { ERg }}{[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}}$ | $\left\lvert\, \begin{gathered} \mathrm{MDL} \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 539 | 32e | 1304 | $20 \mathrm{PBB91}$ | 0.0081 | 250 | 0.095 | 723 | 0.805 | 0.046 |
| 540 | 32 f | 1305 | 208 PB 91 | 0.0063 | 250 | 0.074 | 572 | 0.812 | 0.059 |
| 541 | 329 | 1306 | $20 \mathrm{PBB91}$ | 0.0074 | 250 | 0.087 | 660 | 0.802 | 0.050 |
| 542 | 32h | 1307 | 2078891 | 0.0065 | 250 | 0.076 | 639 | 0.883 | 0.057 |
| 543 | 32 i | 1308 | 2078891 | 0.0053 | 250 | 0.062 | 608 | 1.028 | 0.070 |
| 544 | 32j | 1309 | $20 \mathrm{PB891}$ | 0.0046 | 250 | 0.054 | 573 | 1.114 | 0.081 |
| 545 | 32k | 1310 | 20 PB 891 | 0.0045 | 250 | 0.053 | 598 | 1.190 | 0.083 |
| 546 | 321 | 1311 | 2076891 | 0.0032 | 250 | 0.037 | 471 | 1.304 | 0.116 |
| 547 | 32b dup | 1314 | 2075891 | 0.0085 | 250 | 0.099 | \|1613 | 1.745 | 0.044 |
| 548 | 32h dup | 1315 | 207 Fb 91 | 0.0065 | 250 | 0.076 | 627 | 0.866 | 0.057 |
| 549 | 33 a | 1312 | 20FE691 | 0.0098 | 250 | 0.115 | \|2069 | 1.947 | 0.038 |
| 550 | 33b | 1313 | 2088691 | 0.0101 | 250 | 0.118 | 12633 | 2.411 | 0.037 |
| 551 | 33 C | 1316 | 20F5691 | 0.0076 | 250 | 0.089 | \|2738 | 3.333 | 0.049 |
| 552 | 34a | 1320 | 20713891 | 0.0100 | 250 | 0.117 | \|1489 | 1.367 | 0.037 |
| 553 | 34c | 1321 | 2015891 | 0.0087 | 250 | 0.102 | 993 | 1.039 | 0.043 |
| 554 | 34d | 1322 | 20F4391 | 0.0111 | 250 | 0.130 | 1115 | 0.917 | 0.034 |
| 555 | 348 | 1323 | 20718391 | 0.0093 | 250 | 0.109 | 859 | 0.838 | 0.040 |
| 556 | 342 | 1324 | $20 \mathrm{PBB91}$ | 0.0092 | 250 | 0.108 | 833 | 0.821 | 0.040 |
| 557 | 349 | 1325 | 2014392 | 0.0082 | 250 | 0.096 | 821 | 0.907 | 0.045 |
| 558 | MIPS-13 | 1326 | 2018391 | 0.0061 | 250 | 0.071 | $\mid 2692$ | 4.082 | 0.061 |
| 559 | MIES SPLKP-13 | 1327 | 2015691 | 0.0081 | 100 | 0.038 | \| 3951 | 11.311 | 0.115 |
| 560 | MISS-13 | 1339 | 2017391 | 0.0061 | 250 | 0.071 | \|2667 | 4.090 | 0.061 |

B.1-25

HOTE SEGFITITLL HAIR AHALYSIS

| SEOf | $\begin{aligned} & \text { BATIELLS } \\ & \text { ID } \end{aligned}$ |  | $\begin{gathered} \text { DIGESIIOM } \\ \text { DATE } \end{gathered}$ | $\begin{gathered} \text { DIGBSIIOM } \\ \text { WI } 9 \end{gathered}$ | $\left\|\begin{array}{lll} \text { SAIPRLB POL } \\ A M C Y Z E D & \text { Pl } \end{array}\right\|$ |  | \|AREA | $\underset{[\mathrm{Eg}] \mathrm{mg} / \mathrm{g}}{\mathrm{En}}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 561 | IIRS SPIKR-13 | 1340 | 20 PEB91 | 0.0081 | 100 | 0.038 | \| 4100 | 11.876 | 0.115 |
| 562 | 34h | 1341 | 20 PEB91 | 0.0107 | 250 | 0.125 | \|1388 | 1.203 | 0.035 |
| 563 | 34 i | 1342 | $20 \mathrm{PRB91}$ | 0.0094 | 250 | 0.110 | \|1508 | 1.490 | 0.040 |
| 564 | 34j | 1343 | $20 \mathrm{PRB91}$ | 0.0102 | 250 | 0.119 | $\mid 1761$ | 1.608 | 0.036 |
| 565 | 34k | 1344 | 20 PE891 | 0.0097 | 250 | 0.113 | \|1948 | 1.873 | 0.038 |
| 566 | 341 | 1345 | 2078691 | 0.0079 | 250 | 0.092 | \| 1460 | 1.716 | 0.047 |
| 567 | 341 | 1346 | $20 \mathrm{rgB91}$ | 0.0087 | 250 | 0.102 | \| 1608 | 1.719 | 0.043 |
| 568 | 3411 | 1347 | $20 \mathrm{PEB91}$ | 0.0089 | 250 | 0.104 | 1605 | 1.677 | 0.042 |
| 569 | 340 | 1348 | 20 PR891 | 0.0087 | 250 | 0.102 | \| 1484 | 1.584 | 0.043 |
| 570 | 34p | 1349 | 20 PE891 | 0.0098 | 250 | 0.115 | \|1651 | 1.567 | 0.038 |
| 571 | 34 q | 1350 | 20 PB891 | 0.0036 | 250 | 0.042 | 726 | 1.841 | 0.103 |
| 572 | 31r | 1351 | 2078391 | 0.0036 | 250 | 0.042 | 799 | 2.032 | 0.103 |
| 573 | 348 | 1352 | 2073891 | 0.0033 | 250 | 0.039 | 789 | 2.188 | 0.113 |
| 574 | $34 t$ | 1353 | 207 FB 91 | 0.0040 | 250 | 0.047 | \| 1042 | 2.403 | 0.093 |
| 575 | DORH-13 | 1355 | 2085891 | 0.0422 | 250 | 0.493 | \| 3612 | 0.803 | 0.009 |
| 576 | 34u | 1356 | 20PB891 | 0.0036 | 250 | 0.042 | \| 1089 | 2.793 | 0.103 |
| 577 | 34V | 1357 | 207 PB 91 | 0.0036 | 250 | 0.042 | 997 | 2.552 | 0.103 |
| 578 | 3411 | 1358 | 2078391 | 0.0036 | 250 | 0.042 | 959 | 2.452 | 0.103 |
| 579 | 34 x | 1359 | $2078 B 91$ | 0.0040 | 250 | 0.047 | 1125 | 2.598 | 0.093 |
| 580 | 34Y | 1360 | 20 FBB91 | 0.0037 | 250 | 0.043 | \|1007 | 2.508 | 0.101 |
| 581 | 342 | 1361 | 2081891 | 0.0038 | 250 | 0.044 | 1175 | 2.859 | 0.098 |
| 582 | 34c dup | 1362 | 20 PB391 | 0.0087 | 250 | 0.102 | 976 | 1.033 | 0.043 |

HOUR SEGYBMTAL RAIR AMALYSIS

| SEQ $\ddagger$ | $\begin{gathered} \text { BAITIBLL® } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { LITEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGRSTIOI } \\ \text { DATB } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESTIOM } \\ & \text { WI } g \end{aligned}$ | $\left.\left\lvert\, \begin{array}{l} S A M P L R \\ \text { VOL } \\ A M A L Y Z B D \end{array}\right.\right] \mid$ | AHALYZED WI Ig | AREA | $\underset{[\mathrm{Bg}][\mu \mathrm{g} / \mathrm{g}}{\mathrm{Eg}}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 583 | 34 q dup | 1363 | 208 FB 91 | 0.0036 | 250 | 0.042 | 699 | 1.770 | 0.103 |
| 584 | MISS-14 | 1364 | 4HAR91 | 0.0101 | 250 | 0.118 | \|4669 | 4.342 | 0.037 |
| 585 | NTES SPIKR-14 | 1365 | 4.4ar91 | 0.0094 | 100 | 0.044 | 4746 | 11.856 | 0.099 |
| 586 | DORH-1-14 | 1367 | 4112R91 | 0.0429 | 250 | 0.502 | 3888 | 0.850 | 0.009 |
| 587 | C2a | 1368 | 4MAR91 | 0.0116 | 250 | 0.136 | 749 | 0.590 | 0.032 |
| 588 | C2b | 1369 | 41aR91 | 0.0094 | 250 | 0.110 | 827 | 0.806 | 0.040 |
| 589 | C2c | 1370 | 4)AR91 | 0.0113 | 250 | 0.132 | 1038 | 0.847 | 0.033 |
| 590 | C2d | 1371 | 4MAR91 | 0.0101 | 250 | 0.118 | 1029 | 0.939 | 0.037 |
| 591 | C2e | 1372 | 41aR91 | 0.0106 | 250 | 0.124 | \|1013 | 0.881 | 0.035 |
| 592 | C2f | 1373 | 4TAR91 | 0.0087 | 250 | 0.102 | 650 | 0.679 | 0.043 |
| 593 | C29 | 1374 | 414P91 | 0.0104 | 250 | 0.122 | 711 | 0.624 | 0.036 |
| 594 | C2b | 1375 | 4 4 AR91 | 0.0100 | 250 | 0.117 | 649 | 0.590 | 0.037 |
| 595 | C2I | 1376 | 4Hap91 | 0.0103 | 250 | 0.120 | 710 | 0.629 | 0.036 |
| 596 | C2j | 1377 | 4Hap91 | 0.0093 | 250 | 0.109 | 955 | 0.945 | 0.040 |
| 597 | MISS-14 | 1390 | 4 4 12 P 9 | 0.0101 | 250 | 0.118 | 4623 | 4.245 | 0.037 |
| 598 | C2k | 1391 | 4 HP 91 | 0.0088 | 250 | 0.103 | 1086 | 1.107 | 0.042 |
| 599 | C21 | 1392 | $414 \mathrm{P91}$ | 0.0089 | 250 | 0.104 | \|1303 | 1.323 | 0.042 |
| 600 | C23 | 1393 | 4Hap91 | 0.0087 | 250 | 0.102 | \|1312 | 1.363 | 0.043 |
| 601 | C2n | 1394 | $4 \mathrm{Hap91}$ | 0.0063 | 250 | 0.074 | 964 | 1.365 | 0.059 |
| 602 | C20 | 1395 | 4!1891 | 0.0054 | 250 | 0.063 | 923 | 1.521 | 0.069 |
| 603 | C2d dup | 1396 | 4 412901 | 0.0101 | 250 | 0.118 | 1092 | 0.970 | 0.037 |
| 604 | C2k dup | 1398 | 41:AR91 | 0.0088 | 250 | 0.103 | \|1117 | 1.140 | 0.042 |

HOHR SEGIBITAL RAIR MMALYSIS

| SEQ | $\begin{aligned} & \text { BAITELLEB } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { HIBGRATOR } \\ \text { SERI } \end{array}\right\|$ | $\left.\right\|_{\text {DITERI }} ^{\text {DIGEII }}$ | DIGRSTIO in 9 | $\left\|\begin{array}{l} \text { SAMPLE VOL } \\ A M A L Y E D \end{array}\right\|$ | AMALYRED in Ig | \|arEA | $\underset{[\mathrm{Hg}] \mathrm{Hg} / \mathrm{g}}{\mathrm{~g}}$ | $\left\lvert\, \begin{aligned} & \mathrm{MDL} \\ & {[\mathrm{Bg}]} \end{aligned} \mathrm{Mg} / \mathrm{g}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 605 | 35a | 1399 | 414R91 | 0.0074 | 250 | 0.087 | 453 | 0.515 | 0.050 |
| 606 | 35b | 1400 | 41412891 | 0.0067 | 250 | 0.078 | 495 | 0.628 | 0.056 |
| 607 | 35 C | 1401 | 414891 | 0.0066 | 250 | 0.077 | 463 | 0.592 | 0.056 |
| 608 | 35d | 1402 | 4tar91 | 0.0063 | 250 | 0.074 | 499 | 0.674 | 0.059 |
| 609 | 35 e | 1403 | 412R91 | 0.0071 | 250 | 0.083 | 579 | 0.703 | 0.052 |
| 610 | $35 f$ | 1404 | 4tare1 | 0.0064 | 250 | 0.075 | 667 | 0.909 | 0.058 |
| 611 | 359 | 1405 | 4tarel | 0.0052 | 250 | 0.061 | 681 | 1.144 | 0.072 |
| 612 | 35h | 1406 | 41ar91 | 0.0058 | 250 | 0.068 | 829 | 1.265 | 0.064 |
| 613 | 351 | 1407 | 4tar91 | 0.0042 | 250 | 0.049 | 784 | 1.646 | 0.089 |
| 614 | 35j | 1408 | 410891 | 0.0039 | 250 | 0.046 | 750 | 1.691 | 0.095 |
| 615 | IIES SPIKP-14 | 1409 | 4712891 | 0.0094 | 100 | 0.044 | $\mid 5008$ | 12.363 | 0.099 |
| 616 | DORH-1-14 | 1410 | 4apal | 0.0429 | 250 | 0.502 | \|3891 | 0.840 | 0.009 |
| 617 | 35k | 1411 | 41aR91 | 0.0038 | 250 | 0.044 | \|1061 | 2.502 | 0.098 |
| 618 | 351 | 1412 | 44ar91 | 0.0033 | 250 | 0.039 | \|1126 | 3.066 | 0.113 |
| 619 | 35a dup | 1413 | 412 R 91 | 0.0074 | 250 | 0.087 | 472 | 0.539 | 0.050 |
| 620 | 35j dup | 1414 | 414R91 | 0.0039 | 250 | 0.046 | 822 | 1.864 | 0.095 |
| 621 | 36a | 1415 | 412R91 | 0.0061 | 250 | 0.071 | 224 | 0.273 | 0.061 |
| 622 | 36b | 1416 | 4:1aR91 | 0.0056 | 250 | 0.065 | 196 | 0.251 | 0.066 |
| 623 | 36 C | 1417 | 414R91 | 0.0048 | 250 | 0.056 | 205 | 0.310 | 0.078 |
| 624 | 36d | 1418 | 44ar91 | 0.0041 | 250 | 0.048 | 209 | 0.372 | 0.091 |
| 625 | $36 e$ | 1419 | 41RR91 | 0.0036 | 250 | 0.042 | 203 | 0.409 | 0.103 |
| 626 | 361 | 1420 | 4MAR91 | 0.0020 | 250 | 0.023 | 192 | 0.684 | 0.186 |

HOMR SEGHEITAL HAIR MMALYSIS

| SEQ $\ddagger$ | $\begin{gathered} \text { BAITEBLLB } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { ITTEGRATOR } \\ \text { SRQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGBSTIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\begin{gathered} \text { DIGESTIOM } \\ \text { WI } g \end{gathered}$ | $\left\|\begin{array}{l} S A M P L E \\ A B A L Y Z S D \\ A 1 \end{array}\right\|$ | AMALYZED $\text { ing } \mathrm{Ig}$ | AREA |  | $\left\lvert\, \begin{gathered} \mathrm{MDL} \\ {[\mathrm{Bg}][\mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 627 | 36C dup | 1421 | 4MAR91 | 0.0048 | 250 | 0.056 | 199 | 0.299 | 0.078 |
| 628 | DORH-1-15 | 1423 | 541821 | 0.0225 | 250 | 0.263 | \|2089 | 0.852 | 0.017 |
| 629 | MIRS-15 | 1424 | 5H1R91 | 0.0122 | 250 | 0.143 | 15436 | 4.142 | 0.030 |
| 630 | MIRS SPIRE-15 | 1425 | 54ap91 | 0.0091 | 100 | 0.043 | \|5176 | 13.213 | 0.102 |
| 631 | 37a | 1426 | 5414R91 | 0.0094 | 250 | 0.110 | 418 | 0.375 | 0.040 |
| 632 | 37b | 1427 | 54ar91 | 0.0110 | 250 | 0.129 | 480 | 0.373 | 0.034 |
| 633 | 37c | 1428 | 54aR91 | 0.0097 | 250 | 0.113 | 435 | 0.380 | 0.038 |
| 634 | MIES-15 | 1440 | 540R91 | 0.0122 | 250 | 0.143 | $\mid 5285$ | 4.054 | 0.030 |
| 635 | 37d | 1441 | 501391 | 0.0100 | 250 | 0.117 | 458 | 0.397 | 0.037 |
| 636 | 37e | 1442 | 540891 | 0.0085 | 250 | 0.099 | 429 | 0.435 | 0.044 |
| 637 | 37 f | 1443 | 54, 291 | 0.0089 | 250 | 0.104 | 594 | 0.590 | 0.042 |
| 638 | 37 g | 1444 | 514291 | 0.0091 | 250 | 0.106 | 647 | 0.632 | 0.041 |
| 639 | 37h | 1445 | 54ap91 | 0.0076 | 250 | 0.089 | 555 | 0.642 | 0.049 |
| 640 | 371 | 1446 | 501891 | 0.0052 | 250 | 0.061 | 457 | 0.761 | 0.072 |
| 641 | 371 | 1447 | 501491 | 0.0062 | 250 | 0.073 | 502 | 0.707 | 0.060 |
| 642 | 37k | 1448 | 54, 291 | 0.0045 | 250 | 0.053 | 558 | 1.091 | 0.083 |
| 643 | 38a | 1449 | 540891 | 0.0090 | 250 | 0.105 | 936 | 0.941 | 0.041 |
| 644 | 38b | 1450 | 514891 | 0.0081 | 250 | 0.095 | 610 | 0.667 | 0.046 |
| 645 | 38 C | 1451 | 5414891 | 0.0073 | 250 | 0.085 | 657 | 0.800 | 0.051 |
| 646 | 38d | 1452 | 514P91 | 0.0053 | 250 | 0.062 | 555 | 0.921 | 0.070 |
| 647 | 38 e | 1453 | 54ap91 | 0.0042 | 250 | 0.049 | 507 | 1.055 | 0.089 |
| 648 | 388 | 1454 | \| 541891 | 0.0035 | 1250 | 0.041 | 628 | 1.591 | 0.106 |

HOVIR SEGIBTIAL HAIR AMALYSIS

| SEQ ${ }_{\text {d }}$ | $\begin{gathered} \text { BATIELLE } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { IIIBERATOR } \\ -\quad \text { SERA } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGRSIIOI } \\ \text { DAII } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGSSIIOM } \\ & \text { Wi } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{l} \text { SARPRES POL } \\ \text { AMLYEBD } \mu 1 \end{array}\right\|$ | AMALYZZD N: Eg | \|AREA | $\underset{[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}}{\mathrm{E}}$ | $\left\lvert\, \begin{gathered} \mathrm{VDL} \\ {[\mathrm{Bg}]} \end{gathered} \mathrm{\mu g} / \mathrm{g}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 649 | DORH-1-15 | 1456 | 54a891 | 0.0225 | 250 | 0.263 | \|2069 | 0.851 | 0.017 |
| 650 | IIRS SPIKP-15 | 1457 | 54ar91 | 0.0091 | 100 | 0.043 | 15054 | 12.990 | 0.102 |
| 651 | C3a | 1458 | 54ar91 | 0.0200 | 250 | 0.234 | 446 | 0.193 | 0.019 |
| 652 | c3b | 1459 | 541891 | 0.0195 | 250 | 0.228 | 401 | 0.176 | 0.019 |
| 653 | C3c | 1460 | 5414891 | 0.0193 | 250 | 0.226 | 372 | 0.164 | 0.019 |
| 654 | C3d | 1461 | 548891 | 0.0176 | 250 | 0.206 | 368 | 0.177 | 0.021 |
| 655 | C3e | 1462 | 54AP91 | 0.0168 | 250 | 0.196 | 361 | 0.182 | 0.022 |
| 656 | C3f | 1463 | 5414P91 | 0.0220 | 250 | 0.257 | 521 | 0.207 | 0.017 |
| 657 | C3g | 1464 | 54ar91 | 0.0187 | 250 | 0.219 | 496 | 0.231 | 0.020 |
| 658 | C3h | 1465 | 54ar91 | 0.0135 | 250 | 0.158 | 482 | 0.311 | 0.028 |
| 659 | C3i | 1466 | 54aR91 | 0.0143 | 250 | 0.167 | 646 | 0.401 | 0.026 |
| 660 | C3j | 1467 | 5418891 | 0.0135 | 250 | 0.158 | 770 | 0.512 | 0.028 |
| 661 | C3k | 1468 | 540R91 | 0.0091 | 250 | 0.106 | 648 | 0.633 | 0.041 |
| 662 | C1 | 1469 | 54AR91 | 0.0068 | 250 | 0.080 | 537 | 0.693 | 0.055 |
| 663 | C3I | 1470 | 541891 | 0.0068 | 250 | 0.080 | 618 | 0.805 | 0.055 |
| 664 | 37 c dup | 1471 | 54aR91 | 0.0097 | 250 | 0.113 | 425 | 0.377 | 0.038 |
| 665 | 37j dup | 1472 | 54AR91 | 0.0062 | 250 | 0.073 | 577 | 0.821 | 0.060 |
| 666 | 38 a | 1485 | 5414891 | 0.0090 | 250 | 0.105 | 919 | 0.890 | 0.041 |
| 667 | C3a | 1486 | 540891 | 0.0200 | 250 | 0.234 | 422 | 0.175 | 0.019 |
| 668 | C3f | 1487 | 5412R91 | 0.0220 | 250 | 0.257 | 525 | 0.202 | 0.017 |
| 669 | DORH-1-16 | 1489 | 6HAR91 | 0.0413 | 250 | 0.483 | 4049 | 0.880 | 0.009 |
| 670 | MIES-16 | 1490 | 61ar91 | 0.0090 | 250 | 0.105 | \|4326 | 4.315 | 0.041 |

HONR SEGTETTAL HAIR ANALYSIS

| SEO 4 | $\begin{gathered} \text { BATPELLS } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { LITEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\begin{gathered} \text { DIGSSIIOM } \\ \text { WI } g \end{gathered}$ | $\left\|\begin{array}{l}\text { SAMPLE VOL } \\ \text { AERLYZED P1 }\end{array}\right\|$ | $\begin{aligned} & \text { ARALYZED } \\ & \text { WI Ig } \end{aligned}$ | \|ARBA | $\stackrel{\mathrm{Bgg}}{[\mathrm{Bg}] \mathrm{Hg} / \mathrm{g}}$ | $\left\lvert\, \begin{gathered} \mathrm{MDL} \\ {[\mathrm{Bg}]} \end{gathered} \mathrm{Mg} / \mathrm{g}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 671 | MIES SPIRE-16 | 1491 | 6HAR91 | 0.0132 | 100 | 0.062 | \|5581 | 9.508 | 0.070 |
| 672 | 39a | 1492 | 64AR91 | 0.0057 | 250 | 0.067 | 544 | 0.802 | 0.065 |
| 673 | 39b | 1493 | 64AR91 | 0.0055 | 250 | 0.064 | 491 | 0.744 | 0.068 |
| 674 | 398 | 1494 | 64AR91 | 0.0047 | 250 | 0.055 | 388 | 0.672 | 0.079 |
| 675 | 39d | 1495 | 6HAR91 | 0.0051 | 250 | 0.060 | 408 | 0.655 | 0.073 |
| 676 | 39e | 1496 | G1ar91 | 0.0054 | 250 | 0.063 | 414 | 0.628 | 0.069 |
| 677 | $39 f$ | 1497 | 6HaR91 | 0.0043 | 250 | 0.050 | 338 | 0.629 | 0.087 |
| 678 | 399 | 1498 | 64ar91 | 0.0037 | 250 | 0.043 | 341 | 0.738 | 0.101 |
| 679 | 39h | 1499 | 64ar91 | 0.0037 | 250 | 0.043 | 336 | 0.726 | 0.101 |
| 680 | 391 | 1500 | 641891 | 0.0035 | 250 | 0.041 | 307 | 0.692 | 0.106 |
| 681 | 39j | 1501 | 64RP91 | 0.0036 | 250 | 0.042 | 292 | 0.635 | 0.103 |
| 682 | 39k | 1502 | 6414891 | 0.0032 | 250 | 0.037 | 269 | 0.650 | 0.116 |
| 683 | MIES-16 | 1504 | 64ap91 | 0.0090 | 250 | 0.105 | \| 4558 | 4.548 | 0.041 |
| 684 | 391 | 1505 | 61ap91 | 0.0035 | 250 | 0.041 | 285 | 0.635 | 0.106 |
| 685 | 394 | 1506 | 614891 | 0.0022 | 250 | 0.026 | 264 | 0.924 | 0.169 |
| 686 | 390 | 1507 | 6, 2101 | 0.0027 | 250 | 0.032 | 224 | 0.619 | 0.138 |
| 687 | 390 | 1508 | 61ap91 | 0.0024 | 250 | 0.028 | 284 | 0.923 | 0.155 |
| 688 | 399 | 1509 | 612891 | 0.0025 | 250 | 0.029 | 253 | 0.774 | 0.149 |
| 689 | 400 | 1510 | 64ar91 | 0.0091 | 250 | 0.106 | 943 | 0.899 | 0.041 |
| 690 | 40b | 1511 | 641891 | 0.0088 | 250 | 0.103 | 1005 | 0.994 | 0.042 |
| 691 | 40 C | 1512 | 641291 | 0.0089 | 250 | 0.104 | 817 | 0.791 | 0.042 |
| 692 | 40d | 1513 | guap91 | 0.0053 | 250 | 0.062 | \| 465 | 0.727 | 0.070 |

HoHe SEGTITTLL HAIR AMALYSIS

| SEO $\ddagger$ | $\begin{gathered} \text { BafteliLs } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { Inrsgrator } \\ \text { SERif } \end{array}\right\|$ | $\left.\right\|_{\text {DAIGESIIO }}$ | DIGESTIOM WI $g$ | $\left\|\begin{array}{l} \text { SAIPLE } \\ \text { AUALYZED } \\ \hline 1 \end{array}\right\|$ | ATMLYEED WI Ig | \|AREA | $\mathrm{ENg}_{\text {[Hg] }}^{\text {[img/g }}$ | $\left\lvert\, \begin{gathered} \mathrm{ndL} \\ {[\mathrm{Bg}] \mathrm{gg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 693 | MIES SPIKB-16 | 1514 | 64ar91 | 0.0132 | 100 | 0.062 | $\mid 4892$ | 8.326 | 0.070 |
| 694 | 39 cdup | 1515 | 64ar91 | 0.0047 | 250 | 0.055 | 401 | 0.697 | 0.079 |
| 695 | 39n dup | 1516 | 64ar91 | 0.0027 | 250 | 0.032 | 232 | 0.646 | 0.138 |
| 696 | 40c dup | 1517 | 64ap91 | 0.0089 | 250 | 0.104 | 819 | 0.793 | 0.042 |
| 697 | DORH-1-16 | 1518 | 6Har91 | 0.0413 | 250 | 0.483 | \|3836 | 0.833 | 0.009 |
| 698 | HIES-16 | 1530 | 641891 | 0.0090 | 250 | 0.105 | 14482 | 4.402 | 0.041 |
| 699 | 41a | 1531 | 64P91 | 0.0067 | 250 | 0.078 | 785 | 0.992 | 0.056 |
| 700 | 416 | 1532 | 6uar91 | 0.0060 | 250 | 0.070 | 920 | 1.309 | 0.062 |
| 701 | 41 C | 1535 | 6uar91 | 0.0071 | 250 | 0.083 | 832 | 0.995 | 0.052 |
| 702 | 41d | 1536 | 64ap91 | 0.0081 | 250 | 0.095 | \|1053 | 1.116 | 0.046 |
| 703 | 41e | 1537 | 641481 | 0.0067 | 250 | 0.078 | \|1119 | 1.437 | 0.056 |
| 704 | 417 | 1538 | $64 \mathrm{AR91}$ | 0.0066 | 250 | 0.077 | \|1179 | 1.540 | 0.056 |
| 705 | 41 g | 1539 | 6uar91 | 0.0071 | 250 | 0.083 | \|1529 | 1.871 | 0.052 |
| 706 | 41 h | 1540 | 64ar91 | 0.0057 | 250 | 0.067 | \|1486 | 2.263 | 0.065 |
| 707 | 41 i | 1541 | 6HAR91 | 0.0056 | 250 | 0.065 | \|1471 | 2.280 | 0.066 |
| 708 | 41 j | 1542 | 614891 | 0.0055 | 250 | 0.064 | \|1538 | 2.430 | 0.068 |
| 709 | 1034-1-16 | 1544 | 610891 | 0.0413 | 250 | 0.483 | 13743 | 0.800 | 0.009 |
| 710 | 412 | 1545 | 64aR91 | 0.0059 | 250 | 0.069 | \|1708 | 2.522 | 0.063 |
| 711 | 411 | 1546 | 6HAR91 | 0.0049 | 250 | 0.057 | 11673 | 2.973 | 0.076 |
| 712 | 411 | 1547 | 64aR91 | 0.0048 | 250 | 0.056 | 1653 | 2.998 | 0.078 |
| 713 | 41n | 1548 | 6HaR91 | 0.0045 | 250 | 0.053 | 11369 | 2.635 | 0.083 |
| 714 | 410 | 1549 | 641891 | 0.0044 | 250 | 0.051 | \| 1368 | 2.693 | 0.085 |

HOHR SEGTIMTAL HAIR AMALYSIS

| SEQ 1 | $\begin{aligned} & \text { BATPELLB } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { ITTEGRATOR } \\ \text { SEQ } f \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DATE } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESITOM } \\ & \text { WI } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{ll} S A M P L B & V O L \\ A M L Y Z E D & \mu 1 \end{array}\right\|$ | AIMLYZED解 gg | \|AREA | $\underset{[\mathrm{Hg}] \mathrm{mg} / \mathrm{g} / \mathrm{g}}{ }$ | $\left\lvert\, \begin{gathered} \mathrm{KDL} \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 715 | 41p | 1550 | 64ar91 | 0.0040 | 250 | 0.047 | 768 | 1.624 | 0.093 |
| 716 | 119 | 1552 | 64ar91 | 0.0037 | 250 | 0.043 | \|1063 | 2.467 | 0.101 |
| 717 | 41 r | 1553 | 641R91 | 0.0044 | 250 | 0.051 | \| 1014 | 1.975 | 0.085 |
| 718 | 418 | 1554 | 6HAR91 | 0.0038 | 250 | 0.044 | 851 | 1.904 | 0.098 |
| 719 | 41 t | 1555 | 6HAR91 | 0.0043 | 250 | 0.050 | 887 | 1.758 | 0.087 |
| 720 | 414 | 1556 | 6HAR91 | 0.0039 | 250 | 0.046 | 740 | 1.602 | 0.095 |
| 721 | 41V | 1557 | 64AP91 | 0.0031 | 250 | 0.036 | 652 | 1.762 | 0.120 |
| 722 | 41e dup | 1558 | 64AR91 | 0.0067 | 250 | 0.078 | \|1128 | 1.449 | 0.056 |
| 723 | 41p dup | 1559 | 6HAR91 | 0.0040 | 250 | 0.047 | 761 | 1.609 | 0.093 |
| 724 | DORH-1-17 | 1574 | 11112R91 | 0.0111 | 250 | 0.130 | \| 1095 | 0.867 | 0.034 |
| 725 | MIES-17 | 1575 | 11/1RR91 | 0.0145 | 250 | 0.170 | \|7065 | 4.412 | 0.026 |
| 726 | MIES SPIKP-17 | 1576 | 11HAR91 | 0.0062 | 100 | 0.029 | $\mid 4095$ | 14.894 | 0.150 |
| 727 | 42a | 1577 | 11HAR91 | 0.0070 | 250 | 0.082 | 318 | 0.365 | 0.053 |
| 728 | 42b | 1578 | 1114P91 | 0.0078 | 250 | 0.091 | 419 | 0.445 | 0.048 |
| 729 | 42C | 1579 | 1114R21 | 0.0069 | 250 | 0.081 | 337 | 0.395 | 0.054 |
| 730 | 42d | 1580 | 11710P91 | 0.0067 | 250 | 0.078 | 379 | 0.464 | 0.056 |
| 731 | 420 | 1581 | 1114P91 | 0.0079 | 250 | 0.092 | 512 | 0.547 | 0.047 |
| 732 | 42 | 1582 | 1114RR91 | 0.0051 | 250 | 0.060 | 381 | 0.613 | 0.073 |
| 733 | 429 | 1583 | 1110R21 | 0.0072 | 250 | 0.084 | 436 | 0.504 | 0.052 |
| 734 | 42h | 1584 | 1110891 | 0.0066 | 250 | 0.077 | 411 | 0.515 | 0.056 |
| 735 | 421 | 1585 | 1114R91 | 0.0063 | 250 | 0.074 | 479 | 0.638 | 0.059 |
| 736 | 42j | 1586 | 114aR91 | 0.0055 | 250 | 0.064 | 525 | 0.807 | 0.068 |

HOHE SEGIBITAL HAIR AMALYSIS

| SEQ $\ddagger$ | $\begin{gathered} \text { BIITELLE } \\ \text { DD } \end{gathered}$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SERf } \end{array}\right\|$ | $\left.\right\|_{\text {DIGESIIO }}$ | $\begin{gathered} \text { DIGESIIOM } \\ \text { WI } g \end{gathered}$ | $\left\|\begin{array}{ll} \text { SAIPRLE } & \text { VOL } \\ \text { AMALYZED } & \text { P1 } \end{array}\right\|$ | AMalyzed W mg | \|AREA | $\underset{[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}}{\mathrm{E}}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 737 | 42k | 1587 | $1110 R 91$ | 0.0058 | 250 | 0.068 | 522 | 0.760 | 0.064 |
| 738 | IIRS SPIKR-17 | 1589 | 11HAR91 | 0.0062 | 100 | 0.029 | 1422 | 16.094 | 0.150 |
| 739 | 421 | 1590 | $11 / 12 R 91$ | 0.0052 | 250 | 0.061 | 418 | 0.666 | 0.072 |
| 740 | 421 | 1591 | $11 \mathrm{HaR91}$ | 0.0054 | 250 | 0.063 | 395 | 0.603 | 0.069 |
| 741 | 42n | 1592 | 11:12R91 | 0.0049 | 250 | 0.057 | 397 | 0.668 | 0.076 |
| 742 | 420 | 1593 | $11 \mathrm{HaR91}$ | 0.0047 | 250 | 0.055 | 339 | 0.584 | 0.079 |
| 743 | 42p | 1594 | 11H1R291 | 0.0050 | 250 | 0.058 | 382 | 0.627 | 0.074 |
| 744 | 42c dup | 1596 | 11HAR91 | 0.0069 | 250 | 0.081 | 374 | 0.444 | 0.054 |
| 745 | 42n dup | 1597 | 11HAR91 | 0.0054 | 250 | 0.063 | 400 | 0.611 | 0.069 |
| 746 | 43a | 1598 | 11HAR91 | 0.0078 | 250 | 0.091 | 745 | 0.826 | 0.048 |
| 747 | 43b | 1599 | 11HAR91 | 0.0070 | 250 | 0.082 | 666 | 0.817 | 0.053 |
| 748 | 43 C | 1600 | 11HAR91 | 0.0055 | 250 | 0.064 | 600 | 0.931 | 0.068 |
| 749 | 43d | 1601 | $11 / 14891$ | 0.0053 | 250 | 0.062 | 576 | 0.925 | 0.070 |
| 750 | 43 e | 1602 | 11HAR91 | 0.0057 | 250 | 0.067 | 572 | 0.854 | 0.065 |
| 751 | 43 f | 1603 | 11HRR91 | 0.0057 | 250 | 0.067 | 559 | 0.833 | 0.065 |
| 752 | IIISS SPIKR-17 | 1605 | 11HAR91 | 0.0062 | 100 | 0.029 | 4403 | 16.024 | 0.150 |
| 753 | 42q dup | 1606 | 11112891 | 0.0052 | 250 | 0.061 | 381 | 0.601 | 0.072 |
| 754 | 439 | 1607 | 111:3P91 | 0.0052 | 250 | 0.061 | 574 | 0.939 | 0.072 |
| 755 | 43h | 1608 | 11HAR91 | 0.0044 | 250 | 0.051 | 557 | 1.075 | 0.085 |
| 756 | $43 i$ | 1609 | 11HaR91 | 0.0040 | 250 | 0.047 | 540 | 1.144 | 0.093 |
| 757 | 43j | 1610 | 1114R91 | 0.0042 | 250 | 0.049 | 591 | 1.200 | 0.089 |
| 758 | 43k | 1611 | 114AR91 | 0.0031 | 250 | 0.036 | 446 | 1.200 | 0.120 |

HOVRE SEGTITITAL HAIR ANALYSIS

| SEOI | $\begin{gathered} \text { BATTBLLE } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { MITRERATOR } \\ \text { SEO } f \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAIE } \end{gathered}\right.$ | DIGBSTIOM WI 9 | $\left\|\begin{array}{l}\text { SAMPLE VOL } \\ \text { AMALYZZD }\end{array}\right\|$ | Ahacyzed WI mg | \|AREA | IIg [ Hg ] $\mathrm{Hg} / \mathrm{g}$ | $\left\lvert\, \begin{gathered} \mathrm{VDL} \\ {[\mathrm{Bg}]} \end{gathered} \mathrm{\mu g} / \mathrm{g}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 759 | 431 | 1612 | 11HAR91 | 0.0036 | 250 | 0.042 | 586 | 1.387 | 0.103 |
| 760 | 43 | 1613 | 1140R91 | 0.0028 | 250 | 0.033 | 526 | 1.588 | 0.133 |
| 761 | 43n | 1614 | $11 \mathrm{Hap91}$ | 0.0032 | 250 | 0.037 | 600 | 1.600 | 0.116 |
| 762 | 430 | 1615 | 11HAR91 | 0.0027 | 250 | 0.032 | 476 | 1.478 | 0.138 |
| 763 | HISS-17 | 1672 | 1140891 | 0.0145 | 250 | 0.170 | \|4974 | 4.215 | 0.026 |
| 764 | 43n dup | 1673 | $11 \mathrm{Lar91}$ | 0.0032 | 250 | 0.037 | 471 | 1.689 | 0.116 |
| 765 | 430 dup | 1674 | 11HAR91 | 0.0027 | 250 | 0.032 | 554 | 2.383 | 0.138 |
| 766 | 43p | 1679 | 1140891 | 0.0021 | 250 | 0.025 | 430 | 2.333 | 0.177 |
| 767 | 43 r | 1680 | 11HAR91 | 0.0017 | 250 | 0.020 | 381 | 2.525 | 0.219 |
| 768 | 43q | 1681 | 1114891 | 0.0017 | 250 | 0.020 | 354 | 2.329 | 0.219 |
| 769 | 43 Cdup | 1682 | 1114891 | 0.0055 | 250 | 0.064 | 453 | 0.942 | 0.068 |
| 770 | 43k dup | 1683 | 1114891 | 0.0031 | 250 | 0.036 | 379 | 1.377 | 0.120 |
| 771 | DOSH-1-18 | 1685 | 1214891 | 0.0231 | 250 | 0.270 | \|1669 | 0.877 | 0.016 |
| 772 | MIES-18 | 1686 | 12101891 | 0.0093 | 250 | 0.109 | 13241 | 4.269 | 0.040 |
| 773 | IIES SPIKT-18 | 1687 | 12101891 | 0.0069 | 100 | 0.032 | 13384 | 15.025 | 0.135 |
| 774 | 44 | 1688 | 12414891 | 0.0056 | 250 | 0.065 | 313 | 0.621 | 0.066 |
| 775 | 44b | 1689 | 12101991 | 0.0050 | 250 | 0.058 | 270 | 0.589 | 0.074 |
| 776 | 446 | 1690 | 12111291 | 0.0049 | 250 | 0.057 | 264 | 0.586 | 0.076 |
| 777 | 44 | 1691 | 12101891 | 0.0051 | 250 | 0.060 | 238 | 0.500 | 0.073 |
| 778 | 44 e | 1692 | 12101991 | 0.0046 | 250 | 0.054 | 204 | 0.463 | 0.081 |
| 779 | 441 | 1693 | 12141291 | 0.0044 | 250 | 0.051 | 205 | 0.486 | 0.085 |
| 780 | 44 g | 1694 | 121:1891 | 0.0042 | 250 | 0.049 | 185 | 0.451 | 0.089 |

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| SEQ | $\begin{aligned} & \text { BATPELLEB } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { LIIEGRATOR } \\ \text { SEQ: } \end{array}\right\|$ | $\begin{gathered} \text { DIGESTIOM } \\ \text { DATE } \end{gathered}$ | $\begin{gathered} \text { DIGESIIOM } \\ \text { WI } \mathrm{g} \end{gathered}$ | $\left\|\begin{array}{l} \text { SAIPLEB POL } \\ \text { ABLYZED } \end{array}\right\|$ | AMLIESED Tin mg | \|AREA | $\underset{[\mathrm{Bq}] \mathrm{Mg} / \mathrm{g}}{\mathrm{Mig}}$ | $\left\lvert\, \begin{gathered} \mathrm{MDL} \\ {[\mathrm{Eg}]} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 781 | 441 | 1695 | 1214R91 | 0.0051 | 250 | 0.060 | 273 | 0.585 | 0.073 |
| 782 | 441 | 169 | 121aR91 | 0.0039 | 250 | 0.046 | 217 | 0.587 | 0.095 |
| 783 | 44 | 1697 | 12148121 | 0.0044 | 250 | 0.051 | 277 | 0.689 | 0.085 |
| 784 | 44k | 1698 | 12:14891 | 0.0044 | 250 | 0.051 | 327 | 0.829 | 0.085 |
| 785 | 441 | 1699 | $12 \mathrm{nap91}$ | 0.0051 | 250 | 0.060 | 375 | 0.832 | 0.073 |
| 786 | 411 | 1700 | 1241821 | 0.0044 | 250 | 0.051 | 310 | 0.782 | 0.085 |
| 787 | 44d dup | 1701 | 1214121 | 0.0051 | 250 | 0.060 | 221 | 0.458 | 0.073 |
| 788 | DOPM-1-18 | 1702 | 121AR91 | 0.0231 | 250 | 0.270 | 1779 | 0.920 | 0.016 |
| 789 | MISS-18 | 1714 | 121aR91 | 0.0093 | 250 | 0.109 | 13785 | 4.966 | 0.040 |
| 790 | 441 | 1715 | 1210R91 | 0.0037 | 500 | 0.087 | 642 | 0.980 | 0.050 |
| 791 | 440 | 1716 | 1214R91 | 0.0036 | 500 | 0.084 | 560 | 0.866 | 0.052 |
| 792 | 44p | 1717 | 12 AR 21 | 0.0028 | 500 | 0.065 | 490 | 0.959 | 0.066 |
| 793 | Cab | 1720 | 1214R91 | 0.0080 | 500 | 0.187 | 681 | 0.483 | 0.023 |
| 794 | C4C | 1721 | 1214R91 | 0.0070 | 500 | 0.164 | 779 | 0.639 | 0.027 |
| 795 | C4a | 1722 | 1214R91 | 0.0085 | 500 | 0.199 | 643 | 0.427 | 0.022 |
| 796 | 440 dup | 1723 | 1214R91 | 0.0036 | 500 | 0.084 | 471 | 0.713 | 0.052 |
| 797 | C4d | 1724 | 1214891 | 0.0076 | 500 | 0.178 | 1092 | 0.844 | 0.024 |
| 798 | C4e | 1725 | 12HAR91 | 0.0069 | 500 | 0.161 | \|1136 | 0.969 | 0.027 |
| 799 | C4f | 1726 | 1214R21 | 0.0059 | 500 | 0.138 | 1059 | 1.052 | 0.032 |
| 800 | C4g | 1727 | 12HAR91 | 0.0057 | 500 | 0.133 | 944 | 0.964 | 0.033 |
| 801 | C4h | 1728 | 1214R91 | 0.0053 | 500 | 0.124 | 826 | 0.899 | 0.035 |
| 802 | C4i | 1729 | 1214R91 | 0.0046 | 500 | 0.108 | 1601 | 0.733 | 0.040 |

HOUR SEGHBYTAL HAIR AMALYSIS

| SEOI | $\begin{gathered} \text { BaITELLSB } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { ITITEGRATOR } \\ : \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGISIIOM } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGRSPIOM } \\ & \text { WI } g \end{aligned}$ | $\left\|\begin{array}{ll} \text { SAMPLE POL } \\ \text { AMALYZBD } & \beta 1 \end{array}\right\|$ | ABALYZED WI 19 | \|arba | $\underset{[\mathrm{Eg}] \mathrm{mg} / \mathrm{g}}{\mathrm{El}}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Eg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 803 | DORH-1-18 | 1731 | 1214R91 | 0.0231 | 500 | 0.540 | \| 3712 | 0.980 | 0.008 |
| 804 | C4j | 1732 | 12HAR93 | 0.0041 | 500 | 0.096 | 524 | 0.706 | 0.045 |
| 805 | C4k | 1733 | 12HAR91 | 0.0040 | 500 | 0.094 | 653 | 0.924 | 0.047 |
| 806 | C41 | 1734 | 12HAR91 | 0.0029 | 500 | 0.068 | 544 | 1.041 | 0.064 |
| 807 | C41 | 1735 | 1210R291 | 0.0024 | 500 | 0.056 | 534 | 1.232 | 0.078 |
| 808 | C4n | 1736 | 121:AR91 | 0.0016 | 500 | 0.037 | 403 | 1.341 | 0.116 |
| 809 | C4g dup | 1737 | 12141291 | 0.0057 | 500 | 0.133 | 992 | 1.016 | 0.033 |
| 810 | C4I dup | 1738 | 121AR91 | 0.0024 | 500 | 0.056 | 503 | 1.152 | 0.078 |
| 811 | ITES SPIKT-18 | 1739 | 12H0R91 | 0.0069 | 100 | 0.032 | \| 3684 | 16.279 | 0.135 |
| 812 | UISS-19 | 1740 | 13HAR91 | 0.0032 | 500 | 0.075 | \| 2557 | 4.839 | 0.058 |
| 813 | DORH-1-19 | 1741 | 134AR91 | 0.0244 | 500 | 0.571 | \| 3567 | 0.891 | 0.008 |
| 814 | MIRS SPIKR-19 | 1743 | 13HAR91 | 0.0049 | 100 | 0.023 | \|3150 | 19.549 | 0.190 |
| 815 | 45a | 1744 | 1314R291 | 0.0186 | 500 | 0.435 | \|2566 | 0.836 | 0.010 |
| 816 | 45b | 1745 | 13HAP91 | 0.0164 | 500 | 0.384 | \|1949 | 0.715 | 0.011 |
| 817 | 46a | 1746 | 1314891 | 0.0102 | 500 | 0.239 | 809 | 0.457 | 0.018 |
| 818 | 46b | 1747 | 1342891 | 0.0095 | 500 | 0.222 | 866 | 0.528 | 0.020 |
| 819 | 460 | 1748 | 13:12P91 | 0.0089 | 500 | 0.208 | 902 | 0.588 | 0.021 |
| 820 | 460 | 1749 | 13MAR91 | 0.0077 | 500 | 0.180 | 916 | 0.691 | 0.024 |
| 821 | MISS-19 | 1882 | 134AR91 | 0.0032 | 250 | 0.037 | 824 | 5.235 | 0.116 |
| 822 | 46 e | 1883 | 13H1891 | 0.0084 | 500 | 0.196 | 464 | 0.544 | 0.022 |
| 823 | 468 | 1884 | 13H1R21 | 0.0073 | 500 | 0.171 | 388 | 0.517 | 0.025 |
| 824 | 46 edup | 1885 | 13HAR91 | 0.0084 | 500 | 0.196 | 486 | 0.572 | 0.022 |

HONE SEGIEITYAL BAIR AMALYSIS

| SEOA | $\begin{aligned} & \text { BATIELLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { IITBGRATOR } \\ \text { SEQ } \end{gathered}\right.$ | \|DIGESTIOM | $\begin{aligned} & \text { DIGRSIIOM } \\ & \text { WI } g \end{aligned}$ | $\left\|\begin{array}{l\|l} S A P P L E & \text { VOL } \\ A H A L Y Z B D & \text { Pl } \end{array}\right\|$ | AMALYZED mT mg | \|AREA | $\underset{[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}}{\mathrm{~g}}$ | ${\underset{[\mathrm{Hg}}{\mathrm{KDL}} \mathrm{\mu g} / \mathrm{g}}^{\text {g }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 825 | 469 | 1886 | 13MAR21 | 0.0074 | 500 | 0.173 | 545 | 0.734 | 0.025 |
| 826 | MIES-19 | 1887 | 13HAR91 | 0.0032 | 500 | 0.075 | \|1683 | 5.453 | 0.058 |
| 827 | 46h | 1888 | 13HAR91 | 0.0074 | 500 | 0.173 | 601 | 0.814 | 0.025 |
| 828 | 47a | 1889 | 13HAR91 | 0.0076 | 500 | 0.178 | 746 | 0.994 | 0.024 |
| 829 | 47b | 1890 | $13412 R 91$ | 0.0070 | 500 | 0.164 | 594 | 0.850 | 0.027 |
| 830 | 47c | 1891 | 13HAR91 | 0.0072 | 500 | 0.168 | 678 | 0.949 | 0.026 |
| 831 | 47d | 1892 | 13H14R91 | 0.0058 | 500 | 0.136 | 615 | 1.064 | 0.032 |
| 832 | DORH-1-19 | 1894 | 13HAR91 | 0.0244 | 500 | 0.571 | 1710 | 0.727 | 0.008 |
| 833 | 47e | 1895 | 13HAR91 | 0.0066 | 500 | 0.154 | 593 | 0.899 | 0.028 |
| 834 | 47 f | 1896 | 13HAR91 | 0.0059 | 500 | 0.138 | 726 | 1.244 | 0.032 |
| 835 | 47g | 1897 | 1314R91 | 0.0047 | 500 | 0.110 | 712 | 1.530 | 0.040 |
| 836 | 47 L | 1898 | 1314R91 | 0.0036 | 500 | 0.084 | 583 | 1.620 | 0.052 |
| 837 | 47 i | 1899 | 13HAR91 | 0.0025 | 500 | 0.058 | 419 | 1.639 | 0.074 |
| 838. | 17j | 1900 | 13MAR91 | 0.0021 | 500 | 0.049 | 390 | 1.806 | 0.089 |
| 839 | 47b dup | 1901 | 13HAR91 | 0.0070 | 500 | 0.164 | 529 | 0.751 | 0.027 |
| 840 | HIES-20 | 1911 | 2110R91 | 0.0035 | 500 | 0.082 | \|1508 | 4.830 | 0.053 |
| 841 | DOSH-1-20 | 1913 | 21HAR91 | 0.0682 | 250 | 0.798 | \|2499 | 0.828 | 0.005 |
| 842 | MIES SPIKE-20 | 1914 | 21HAR91 | 0.0048 | 250 | 0.056 | $\mid 4583$ | 21.703 | 0.078 |
| 843 | 48b | 1916 | 21HAR91 | 0.0147 | 500 | 0.344 | \|5003 | 3.882 | 0.013 |
| 844 | 48 C | 1917 | $2114 A R 91$ | 0.0141 | 500 | 0.330 | $\mid 3089$ | 2.482 | 0.013 |
| 845 | 48d | 1918 | 2114R91 | 0.0134 | 500 | 0.313 | \|1907 | 1.602 | 0.014 |
| 846 | 48e | \| 1919 | 21HAR91 | 0.0073 | 500 | 0.171 | 960 | 1.457 | 0.025 |

HONE SEGIEFTAL HAIR MIALYSIS

| SEO 1 | $\begin{gathered} \text { BATPZLLE } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { MITEGRATOR } \\ \text { SER } \end{array}\right\|$ | $\left.\right\|_{\text {DIGRSTIOM }} ^{\text {DAFB }}$ | $\begin{aligned} & \text { DIGESIIOM } \\ & \text { WT } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{ll} \text { SAIPPLE VOL } \\ \text { MMLYLZBD } & \mu 1 \end{array}\right\|$ | andlyzed W 1 ng | AREA | $\underset{[\mathrm{ERg}]}{\underset{\mathrm{Eg} / \mathrm{g}}{ }}$ | $\left\lvert\, \begin{gathered} \mathrm{RDL} \\ {[\mathrm{Hg}]} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 847 | 48 f | 1920 | 21HAR91 | 0.0040 | 500 | 0.094 | 573 | 1.552 | 0.047 |
| 848 | 49a | 1921 | 214AR91 | 0.0125 | 500 | 0.292 | 1531 | 1.373 | 0.015 |
| 849 | 48a | 1922 | 21HAR91 | 0.0164 | 250 | 0.192 | 3263 | 4.532 | 0.023 |
| 850 | 49b | 1923 | 21HAR91 | 0.0108 | 500 | 0.253 | 1645 | 1.710 | 0.017 |
| 851 | 490 | 1924 | $21 / 14 R 91$ | 0.0107 | 500 | 0.250 | 1480 | 1.550 | 0.017 |
| 852 | 498 | 1925 | 2114R291 | 0.0085 | 500 | 0.199 | \|1180 | 1.547 | 0.022 |
| 853 | 49a dup | 1926 | 2114RP91 | 0.0125 | 500 | 0.292 | \|1475 | 1.322 | 0.015 |
| 854 | 50a | 1927 | 2114801 | 0.0141 | 500 | 0.330 | 2146 | 1.717 | 0.013 |
| 855 | 50b | 1928 | 21HMR91 | 0.0122 | 500 | 0.285 | \|2081 | 1.923 | 0.015 |
| 856 | 50 C | 1929 | 21H1491 | 0.0124 | 500 | 0.290 | \|1672 | 1.515 | 0.015 |
| 857 | 508 | 1931 | 21HAPO1 | 0.0120 | 500 | 0.281 | \|1645 | 1.539 | 0.016 |
| 858 | 50e | 1932 | 2114P91 | 0.0128 | 500 | 0.299 | \|1599 | 1.402 | 0.015 |
| 859 | $50 ¢$ | 1933 | 2114891 | 0.0101 | 500 | 0.236 | \|1327 | 1.469 | 0.018 |
| 860 | 50 g | 1934 | 2141891 | 0.0111 | 500 | 0.260 | \|1614 | 1.632 | 0.017 |
| 861 | 50h | 1935 | 21108P91 | 0.0118 | 500 | 0.246 | \|1590 | 1.698 | 0.018 |
| 862 | 50 i | 1936 | 2114R91 | 0.0097 | 500 | 0.227 | \|1643 | 1.902 | 0.019 |
| 863 | 50j | 1937 | 2114891 | 0.0095 | 500 | 0.222 | \|1448 | 1.707 | 0.020 |
| 864 | 50\% | 1938 | 2114891 | 0.0093 | 500 | 0.218 | \|1319 | 1.585 | 0.020 |
| 865 | 501 | 1939 | 21/10891 | 0.0075 | 500 | 0.175 | 1086 | 1.610 | 0.025 |
| 866 | 48b dup | 1940 | 21H11891 | 0.0147 | 250 | 0.172 | \| 2718 | 4.207 | 0.025 |
| 867 | 50b dup | 1941 | 21418991 | 0.0122 | 500 | 0.285 | \|1860 | 1.716 | 0.015 |
| 868 | MIRS-20 | 1955 | 21HAP91 | 0.0035 | 500 | 0.082 | \|1572 | | 4.829 | 0.053 |

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| SEOf | $\begin{gathered} \text { BATrELLLE } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{l} \text { IIIEGRATOR } \\ -\operatorname{SEQ} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGRSTIOM } \\ & \text { WI } 9 \end{aligned}$ | $\left\|\begin{array}{l} \text { SANPLE } \\ \text { AMALYZED } \\ \text { PI } \end{array}\right\|$ | $\begin{aligned} & \text { A!LILYZED } \\ & \text { WT Eg } \end{aligned}$ | \|arba | $\underset{[\mathrm{Bg}] \mathrm{Hg} / \mathrm{g}}{\mathrm{E}}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 869 | 50j dup | 1956 | 21HAR91 | 0.0095 | 500 | 0.222 | \|1372 | 1.549 | 0.020 |
| 870 | C5a | 1957 | 214arg1 | 0.0078 | 500 | 0.182 | 419 | 0.550 | 0.024 |
| 871 | c5b | 1958 | 214AR91 | 0.0083 | 500 | 0.194 | 588 | 0.740 | 0.022 |
| 872 | C5c | 1959 | 21Mar91 | 0.0084 | 500 | 0.196 | 916 | 1.158 | 0.022 |
| 873 | C5d | 1960 | 214AR91 | 0.0091 | 500 | 0.213 | 1085 | 1.272 | 0.020 |
| 874 | C5e | 1961 | 21 Har91 | 0.0085 | 500 | 0.199 | 851 | 1.061 | 0.022 |
| 875 | C5f | 1962 | $21 / 4 \mathrm{R} 91$ | 0.0069 | 500 | 0.161 | 430 | 0.639 | 0.027 |
| 876 | Csg | 1963 | $21 / 4 \mathrm{R} 91$ | 0.0074 | 500 | 0.173 | 384 | 0.528 | 0.025 |
| 877 | C5h | 1964 | 21HAR91 | 0.0079 | 500 | 0.185 | 396 | 0.511 | 0.024 |
| 878 | ${ }^{5} 5$ | 1965 | 21HAR91 | 0.0076 | 500 | 0.178 | 432 | 0.583 | 0.024 |
| 879 | c5j | 1966 | 21HAR91 | 0.0073 | 500 | 0.171 | 473 | 0.669 | 0.025 |
| 880 | Csc dup | 1967 | 21HAR91 | 0.0084 | 500 | 0.196 | 828 | 1.043 | 0.022 |
| 881 | C5h dup | 1968 | 2114R21 | 0.0079 | 500 | 0.185 | 370 | 0.475 | 0.024 |
| 882 | DORH-1-21 | 1971 | 2240R91 | 0.0307 | 500 | 0.718 | $\mid 3070$ | 1.078 | 0.006 |
| 883 | UIRS-21 | 1972 | 2214R91 | 0.0073 | 250 | 0.085 | \|1591 | 4.636 | 0.051 |
| 884 | HIES SPIRP-21 | 1973 | 22414R91 | 0.0079 | 100 | 0.037 | \|2003 | 13.562 | 0.118 |
| 885 | 51a | 1974 | 2214R91 | 0.0080 | 500 | 0.187 | 959 | 1.251 | 0.023 |
| 886 | 51b | 1975 | 2214R91 | 0.0075 | 500 | 0.175 | 1010 | 1.409 | 0.025 |
| 887 | 51 c | 1976 | 221AR91 | 0.0072 | 500 | 0.168 | 1070 | 1.559 | 0.026 |
| 888 | 51d | 1977 | 221aR91 | 0.0065 | 500 | 0.152 | \|1021 | 1.644 | 0.029 |
| 889 | 51e | 1978 | 221ARP91 | 0.0067 | 500 | 0.157 | 955 | 1.488 | 0.028 |
| 890 | 517 | 1979 | 221412 P 91 | 0.0059 | 500 | 0.138 | 803 | 1.408 | 0.032 |

HOHR SEGREIFTAL BAIR AMALYSIS

| SEQ | $\begin{aligned} & \text { BATYELLSK } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { HFEGRATOR } \\ \text { SEOA } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\begin{gathered} \text { DIGESTIOM } \\ \text { WI } \mathrm{g} \end{gathered}$ | $\left\|\begin{array}{l}\text { SNAPLR VOL } \\ \text { AMALYZED } \mu \mathrm{L}\end{array}\right\|$ | $\begin{aligned} & \text { AMALYZED } \\ & \text { WI } \mathrm{mg} \end{aligned}$ | AREA | $\begin{aligned} & \text { EHg } \\ & {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 891 | DORH-1-21 | 1981 | 221AR91 | 0.0307 | 250 | 0.359 | \|1605 | 1.112 | 0.012 |
| 892 | 519 | 1982 | 22HAR91 | 0.0046 | 500 | 0.108 | 675 | 1.501 | 0.040 |
| 893 | 51h | 1983 | 22MAR91 | 0.0047 | 500 | 0.110 | 648 | 1.406 | 0.040 |
| 894 | 51 i | 1984 | 22MAR91 | 0.0035 | 500 | 0.082 | 505 | 1.442 | 0.053 |
| 895 | 51 j | 1985 | 22414R91 | 0.0038 | 500 | 0.089 | 508 | 1.337 | 0.049 |
| 896 | NIES-21 | 1997 | 221:1R21 | 0.0073 | 500 | 0.171 | 13374 | 4.877 | 0.025 |
| 897 | 51k | 1998 | 22414891 | 0.0038 | 500 | 0.089 | 479 | 1.276 | 0.049 |
| 898 | 511 | 1999 | 2241891 | 0.0033 | 500 | 0.077 | 406 | 1.234 | 0.056 |
| 899 | 51. | 2000 | 224AR91 | 0.0030 | 500 | 0.070 | 371 | 1.234 | 0.062 |
| 900 | 51e dup | 2001 | 2211R891 | 0.0067 | 500 | 0.157 | 1076 | 1.670 | 0.028 |
| 901 | 511 dup | 2002 | 221:1R91 | 0.0033 | 500 | 0.077 | 383 | 1.160 | 0.056 |
| 902 | DORH-1-21 | 2003 | 221:1R91 | 0.0307 | 500 | 0.718 | \| 3295 | 1.132 | 0.006 |
| 903 | 52a | 2004 | 221AR91 | 0.0085 | 500 | 0.199 | \|1313 | 1.613 | 0.022 |
| 904 | 52b | 2005 | 221:1891 | 0.0083 | 500 | 0.194 | 996 | 1.246 | 0.022 |
| 905 | 52c | 2006 | 22101891 | 0.0085 | 500 | 0.199 | 620 | 0.747 | 0.022 |
| 906 | 52d | 2007 | 221AR91 | 0.0081 | 500 | 0.189 | 455 | 0.567 | 0.023 |
| 907 | 520 | 2008 | 22101291 | 0.0079 | 500 | 0.185 | 400 | 0.508 | 0.024 |
| 908 | $52 \%$ | 2009 | 22101891 | 0.0080 | 500 | 0.187 | 493 | 0.625 | 0.023 |
| 909 | 529 | 2011 | 22418P91 | 0.0084 | 500 | 0.196 | 446 | 0.536 | 0.022 |
| 910 | 52h | 2012 | 221.1.991 | 0.0090 | 500 | 0.210 | 519 | 0.586 | 0.021 |
| 911 | 52i | 2013 | 22:11891 | 0.0081 | 500 | 0.189 | 490 | 0.613 | 0.023 |
| 912 | 52j | 2014 | 22014P91 | 0.0072 | 500 | 0.168 | 482 | 0.678 | 0.026 |

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HONE SECIBITILL RAIR AMALYSIS

| SEQ | $\begin{gathered} \text { BAITELLB } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { IITBGRATOR } \\ \text { SERA } \end{array}\right\|$ | $\begin{array}{\|c} \text { DIGESIIOI } \\ \text { DAFE } \end{array}$ | $\begin{gathered} \text { DIGRSITIM } \\ \mathrm{F} \end{gathered}$ | $\left\|\begin{array}{ll} \text { SAIPLB } & \text { VOL } \\ \text { AKLLYZEDD } & \mu 1 \end{array}\right\|$ | ABALYESD ㄴํ 19 | \|AREA | $\stackrel{\Sigma: g g}{[\mathrm{~Bq}] \mathrm{mg} / \mathrm{g}}$ | YDL <br> [ Hg g ] $\mathrm{Hg} / \mathrm{g}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 913 | 52k | 2015 | 22HAR91 | 0.0068 | 500 | 0.159 | 476 | 0.708 | 0.027 |
| 914 | 521 | 2016 | 2240891 | 0.0056 | 500 | 0.131 | 573 | 1.044 | 0.033 |
| 915 | 52 | 2017 | 2210R91 | 0.0036 | 500 | 0.084 | 519 | 1.465 | 0.052 |
| 916 | 52c dup | 2018 | 22 TaP91 | 0.0085 | 500 | 0.199 | 675 | 0.815 | 0.022 |
| 917 | 52k dup | 2019 | 2214R91 | 0.0068 | 500 | 0.159 | 584 | 0.877 | 0.027 |
| 918 | MIRS-22 | 2020 | 25414891 | 0.0064 | 250 | 0.075 | \|1499 | 4.896 | 0.058 |
| 919 | IIES SPIKR-22 | 2021 | 254AP91 | 0.0070 | 250 | 0.082 | \|4951 | 14.954 | 0.053 |
| 920 | DO3E-1-22 | 2023 | 25412891 | 0.0159 | 250 | 0.186 | 623 | 0.800 | 0.023 |
| 921 | 53a | 2024 | 2514R91 | 0.0159 | 250 | 0.186 | 229 | 0.274 | 0.023 |
| 922 | 53b | 2025 | 25HAR91 | 0.0159 | 250 | 0.186 | 259 | 0.314 | 0.023 |
| 923 | 53 C | 2026 | 254AR91 | 0.0154 | 250 | 0.180 | 222 | 0.273 | 0.024 |
| 924 | 53d | 2027 | 2541R21 | 0.0129 | 250 | 0.151 | 157 | 0.219 | 0.029 |
| 925 | 53 e | 2029 | 2514891 | 0.0145 | 500 | 0.339 | 316 | 0.214 | 0.013 |
| 926 | 539 | 2031 | 251AR91 | 0.0141 | 500 | 0.330 | 340 | 0.238 | 0.013 |
| 927 | IIRS-22 | 2043 | 25HAR91 | 0.0064 | 500 | 0.150 | 3277 | 4.820 | 0.029 |
| 928 | $53 f$ | 2044 | 2514R91 | 0.0169 | 500 | 0.395 | 435 | 0.228 | 0.011 |
| 929 | 53b | 2045 | 2541491 | 0.0158 | 500 | 0.370 | 377 | 0.209 | 0.012 |
| 930 | 53j | 2047 | 2544891 | 0.0159 | 500 | 0.372 | 487 | 0.274 | 0.012 |
| 931 | 53k | 2048 | 25H4R91 | 0.0114 | 500 | 0.267 | 402 | 0.311 | 0.016 |
| 932 | 531 | 2049 | 25HaR91 | 0.0110 | 500 | 0.257 | 434 | 0.350 | 0.017 |
| 933 | 531 | 2050 | 2514R91 | 0.0066 | 500 | 0.154 | 293 | 0.380 | 0.028 |
| 934 | 531 | 2051 | 25HRR91 | 0.0149 | 500 | 0.348 | 395 | 0.233 | 0.012 |

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HOHE SEGHETTLL HAIR ANALYSIS

| SEQ $\ddagger$ | $\begin{gathered} \text { BMTTBLLS } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { ITRECRATOR } \\ \text { SEQ } \end{array}\right\|$ | DIGRSTIO: | $\begin{gathered} \text { DIGESTIOM } \\ \text { in } g \end{gathered}$ | $\left\|\begin{array}{l} \text { SAIPPLB VOL } \\ \text { AMALYZED } \end{array}\right\|$ | AMALYZED WI mg | ARBA | $\begin{gathered} \text { Eigg } \\ {[\mathrm{Hg}] \mathrm{pg} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { NDL } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 935 | 53c dup | 2052 | 2514.1891 | 0.0154 | 500 | 0.360 | 497 | 0.289 | 0.012 |
| 936 | 53k dup | 2053 | 25HMR91 | 0.0114 | 500 | 0.267 | 381 | 0.293 | 0.016 |
| 937 | 54a | 2054 | 25HAR91 | 0.0084 | 500 | 0.196 | 563 | 0.604 | 0.022 |
| 938 | 54b | 2055 | 25H14R91 | 0.0088 | 500 | 0.206 | 486 | 0.493 | 0.021 |
| 939 | 54c | 2056 | 2514R91 | 0.0087 | 500 | 0.203 | 422 | 0.429 | 0.021 |
| 940 | 54d | 2057 | 254AR91 | 0.0083 | 500 | 0.194 | 442 | 0.473 | 0.022 |
| 941 | 54 e | 2058 | 2514R91 | 0.0073 | 500 | 0.171 | 420 | 0.509 | 0.025 |
| 942 | 549 | 2059 | 254ar91 | 0.0077 | 500 | 0.180 | 452 | 0.522 | 0.024 |
| 943 | DORH-1-22 | 2061 | 251AR91 | 0.0159 | 500 | 0.372 | \|1485 | 0.870 | 0.012 |
| 944 | 549 | 2062 | 2510R91 | 0.0070 | 500 | 0.164 | 551 | 0.708 | 0.027 |
| 945 | 54h | 2063 | 251MR91 | 0.0075 | 500 | 0.175 | 587 | 0.707 | 0.025 |
| 946 | 54i | 2064 | 2514R21 | 0.0073 | 500 | 0.171 | 562 | 0.693 | 0.025 |
| 947 | 54j | 2065 | 2514.AP91 | 0.0071 | 500 | 0.166 | 501 | 0.631 | 0.026 |
| 948 | 54k | 2066 | 251AR91 | 0.0060 | 500 | 0.140 | 459 | 0.681 | 0.031 |
| 949 | 541 | 2067 | 2514R91 | 0.0065 | 500 | 0.152 | 524 | 0.723 | 0.029 |
| 950 | 54! | 2068 | 2514P91 | 0.0057 | 500 | 0.133 | 507 | 0.796 | 0.033 |
| 951 | 54n | 2069 | 2514891 | 0.0054 | 500 | 0.126 | 526 | 0.874 | 0.034 |
| 952 | 540 | 2070 | 2514R21 | 0.0028 | 500 | 0.065 | 385 | 1.207 | 0.066 |
| 953 | 54p | 2071 | 2514.191 | 0.0035 | 500 | 0.082 | 469 | 1.194 | 0.053 |
| 954 | 54 q | 2072 | 2514891 | 0.0032 | 500 | 0.067 | 337 | 1.026 | 0.065 |
| 955 | 54r | 2073 | 25101291 | 0.0031 | 500 | 0.073 | 373 | 1.054 | 0.060 |
| 956 | 548 | 2074 | 25:4R91 | 0.0030 | 500 | 0.070 | 397 | 1.165 | 0.062 |

HOVR SBGIBITAL BAIR AMALYSIS

| SEXI | $\begin{aligned} & \text { BAITRLLS } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { CIRBGRAORR } \\ \text { SERH: } \end{array}\right\|$ | $\begin{gathered} \text { DIGESTIOM } \\ \text { DATE } \end{gathered}$ | $\begin{gathered} \text { DIGESTIOM } \\ \text { WI } g \end{gathered}$ | $\left\|\begin{array}{l}\text { SAYPLZ DOL } \\ \text { ABLYYZED } \\ \text { P1 }\end{array}\right\|$ | $\begin{aligned} & \text { ABALYZEDD } \\ & \text { WI Eg } \end{aligned}$ | ARBA | $\begin{gathered} \mathrm{nHg} \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { IML } \\ {[\mathrm{Hg}] / \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 957 | 54t | 2075 | 2540R91 | 0.0035 | 500 | 0.082 | 406 | 1.023 | 0.053 |
| 958 | 544 | 2076 | 25HARP1 | 0.0037 | 500 | 0.087 | 409 | 0.975 | 0.050 |
| 959 | 54V | 2077 | 25HAR91 | 0.0033 | 500 | 0.077 | 363 | 0.961 | 0.056 |
| 960 | MIES-22 | 2089 | 25H1,R91 | 0.0064 | 500 | 0.150 | \| 3338 | 4.879 | 0.029 |
| 961 | 541\% | 2090 | 2514R21 | 0.0027 | 500 | 0.063 | 396 | 1.242 | 0.069 |
| 962 | 54x | 2091 | 25HAR91 | 0.0024 | 500 | 0.056 | 343 | 1.188 | 0.078 |
| 963 | 54 b dup | 2092 | 2514P91 | 0.0088 | 500 | 0.206 | 527 | 0.522 | 0.021 |
| 964 | 54k dup | 2093 | 25H14R91 | 0.0060 | 500 | 0.140 | 475 | 0.684 | 0.031 |
| 965 | 54t dup | 2096 | 251, R291 | 0.0035 | 500 | 0.082 | 443 | 1.085 | 0.053 |
| 966 | DORH-1-23 | 2097 | 264aR91 | 0.0280 | 500 | 0.655 | \|2575 | 0.857 | 0.007 |
| 967 | HIES-23 | 2098 | 2614R91 | 0.0072 | 500 | 0.168 | \| 3369 | | 4.376 | 0.026 |
| 968 | MIES SPIKR-23 | 2099 | 2614R291 | 0.0071 | 100 | 0.033 | \| 2306 | 15.098 | 0.131 |
| 969 | 55. | 2100 | 2614R21 | 0.0062 | 500 | 0.145 | \|1605 | 2.387 | 0.030 |
| 970 | 55b | 2101 | 2614R91 | 0.0060 | 500 | 0.140 | 1189 | 2.283 | 0.031 |
| 971 | 55c | 2102 | 26H1R21 | 0.0059 | 500 | 0.138 | \|1395 | 2.171 | 0.032 |
| 972 | 55d | 2103 | 2614291 | 0.0055 | 500 | 0.129 | 11075 | 1.778 | 0.034 |
| 973 | 55 | 2104 | 26HAR91 | 0.0043 | 500 | 0.101 | 773 | 1.608 | 0.043 |
| 974 | $55 f$ | 2105 | 26HAR91 | 0.0044 | 500 | 0.103 | 589 | 1.176 | 0.042 |
| 975 | 559 | 2106 | 26HAR91 | 0.0046 | 500 | 0.108 | 666 | 1.283 | 0.040 |
| 976 | 55b | 2107 | $26142 R 91$ | 0.0048 | 500 | 0.112 | 749 | 1.393 | 0.039 |
| 977 | 55g dup | 2110 | 26HAR91 | 0.0046 | 500 | 0.108 | 638 | 1.225 | 0.040 |
| 978 | 56a | 2111 | 26HAR91 | 0.0062 | 500 | 0.145 | 955 | 1.394 | 0.030 |

HOHR SEGRETTAL BAIR AMALYSIS

| SEQ | $\begin{aligned} & \text { BATTELLE } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SEQ } A \end{array}\right\|$ | $\begin{gathered} \text { DIGESTIOM } \\ \text { DAIE } \end{gathered}$ | $\begin{gathered} \text { digestion } \\ \text { WI } \mathrm{g} \end{gathered}$ | $\left\|\begin{array}{l} \text { SAMPLZ } \\ \text { DMALYZED } \\ \hline 1 \end{array}\right\|$ | AMALYZED Wr mg | \|AREA | $\begin{gathered} \text { Eig } \\ {[\mathrm{Hg}] \mathrm{pg} / \mathrm{g}} \end{gathered}$ | $\begin{aligned} & \mathrm{KDL} \\ & {[\mathrm{Hg}]_{\mathrm{Mg} / \mathrm{g}}} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 979 | 56b | 2112 | 2614R91 | 0.0058 | 500 | 0.136 | \|1112 | 1.746 | 0.032 |
| 980 | HIES-23 | 2114 | 26HAR91 | 0.0072 | 500 | 0.168 | \|3036 | 3.938 | 0.026 |
| 981 | 56 C | 2115 | 26HRR91 | 0.0040 | 500 | 0.094 | \| 1077 | 2.449 | 0.047 |
| 982 | 56 d | 2116 | 2614R91 | 0.0046 | 500 | 0.108 | 1319 | 2.628 | 0.040 |
| 983 | 56b dup | 2117 | 26414291 | 0.0058 | 500 | 0.136 | 1203 | 1.895 | 0.032 |
| 984 | 55b dup | 2118 | 261AR91 | 0.0060 | 500 | 0.140 | 11475 | 2.261 | 0.031 |
| 985 | C6a | 2119 | 264RP91 | 0.0127 | 500 | 0.297 | 377 | 0.249 | 0.015 |
| 986 | C6b | 2120 | 2610R91 | 0.0147 | 500 | 0.344 | 537 | 0.318 | 0.013 |
| 987 | DOR3-1-23 | 2141 | 2641R21 | 0.0280 | 500 | 0.655 | \|2456 | 0.810 | 0.007 |
| 988 | C6h | 2142 | 26141891 | 0.0118 | 500 | 0.276 | 635 | 0.479 | 0.016 |
| 989 | C6j | 2143 | 264AR91 | 0.0103 | 500 | 0.241 | 556 | 0.477 | 0.018 |
| 990 | C6i | 2144 | 2614R91 | 0.0117 | 500 | 0.274 | 697 | 0.533 | 0.016 |
| 991 | C6K | 2145 | 2641891 | 0.0105 | 500 | 0.246 | 476 | 0.397 | 0.018 |
| 992 | cob dup | 2146 | 26418191 | 0.014 | 500 | 0.344 | 557 | 0.335 | 0.013 |
| 993 | Coh dup | 2147 | 26111891 | 0.0118 | 500 | 0.276 | 730 | 0.555 | 0.016 |
| 994 | C61 | 2148 | 2641891 | 0.0048 | 500 | 0.112 | 282 | 0.491 | 0.039 |
| 995 | C6I | 2149 | 264891 | 0.0040 | 500 | 0.094 | 215 | 0.432 | 0.047 |
| 996 | C6n dup | 2150 | 2610191 | 0.0040 | 500 | 0.094 | 208 | 0.416 | 0.047 |
| 997 | C6a | 2151 | 2614P91 | 0.0031 | 500 | 0.073 | 228 | 0.597 | 0.060 |
| 998 | MISS-23 | 2153 | 2614891 | 0.0072 | 500 | 0.168 | \| 3466 | 4.461 | 0.026 |
| 999 | C6c | 2154 | 2641891 | 0.0135 | 500 | 0.316 | 756 | 0.503 | 0.014 |
| 1000 | c6d | 2155 | 264AP91 | 0.0150 | 500 | 0.351 | 974 | 0.588 | 0.012 |

HONTE SEGISTITLL HAIR MNLYSIS

| SEQ $\ddagger$ | $\begin{gathered} \text { BAITIELLIS } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { MIEGERAOR } \\ \text { SER } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGRSITOM } \\ \text { DATB } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESTIOM } \\ & \text { WI } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{ll} S A M P L B & \text { VOL } \\ A M A L Y Z E D & \mu l \end{array}\right\|$ | $\begin{aligned} & \text { MMALYZBD } \\ & \text { WI Mg } \end{aligned}$ | AREA | $\stackrel{\mathrm{Zgg}}{[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}}$ | $\underset{[\mathrm{Bg}] \mathrm{Hg} / \mathrm{g}}{\mathrm{MDL}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1001 | C6e | 2156 | 2640R91 | 0.0135 | 500 | 0.316 | 824 | 0.550 | 0.014 |
| 1002 | c6f | 2157 | 2640891 | 0.0131 | 500 | 0.306 | 699 | 0.477 | 0.014 |
| 1003 | C6g | 2158 | 2614R91 | 0.0115 | 500 | 0.269 | 671 | 0.521 | 0.016 |
| 1004 | MIES SPIRE-24 | 2162 | $274 \mathrm{arg1}$ | 0.0082 | 100 | 0.038 | \| 2405 | | 13.548 | 0.113 |
| 1005 | 57a | 2163 | 2714R91 | 0.0079 | 500 | 0.185 | \|1298 | 1.503 | 0.024 |
| 1006 | DOR4-24 | 2164 | 271aR91 | 0.0794 | 250 | 0.929 | \|3594 | 0.840 | 0.005 |
| 1007 | MISS-24 | 2165 | 2714891 | 0.0120 | 250 | 0.140 | \|2851 | 4.398 | 0.031 |
| 1008 | 57b | 2166 | 2714R91 | 0.0056 | 500 | 0.131 | 962 | 1.559 | 0.033 |
| 1009 | 57c | 2167 | $2714 \mathrm{P91}$ | 0.0059 | 500 | 0.138 | 936 | 1.439 | 0.032 |
| 1010 | 57d | 2168 | 2714R21 | 0.0041 | 500 | 0.096 | 825 | 1.817 | 0.045 |
| 1011 | 57e | 2169 | 271aR91 | 0.0049 | 500 | 0.115 | 710 | 1.301 | 0.038 |
| 1012 | 57 f | 2170 | 2714R91 | 0.0037 | 500 | 0.087 | 562 | 1.349 | 0.050 |
| 1013 | 579 | 2172 | 2714R91 | 0.0032 | 500 | 0.075 | 437 | 1.195 | 0.058 |
| 1014 | 57b | 2173 | 2714R91 | 0.0025 | 500 | 0.058 | 368 | 1.271 | 0.074 |
| 1015 | 57i | 2174 | 2714R91 | 0.0025 | 500 | 0.058 | 400 | 1.391 | 0.074 |
| 1016 | 57j | 2175 | 2714R91 | 0.0023 | 500 | 0.054 | 497 | 1.906 | 0.081 |
| 1017 | HIES-24 | 2187 | 271aR91 | 0.0120 | 250 | 0.140 | 2770 | 4.066 | 0.031 |
| 1018 | 57\% | 2188 | 274aR91 | 0.0024 | 500 | 0.056 | 458 | 1.594 | 0.078 |
| 1019 | 571 | 2189 | 271AR91 | 0.0016 | 500 | 0.037 | 446 | 2.324 | 0.116 |
| 1020 | 57 b dup | 2190 | 274AR91 | 0.0056 | 500 | 0.131 | 902 | 1.388 | 0.033 |
| 1021 | 57j dup | 2191 | 271AR91 | 0.0023 | 500 | 0.054 | 505 | 1.845 | 0.081 |
| 1022 | 60a | 2192 | 2714R91 | 0.0110 | 500 | 0.257 | 11344 | 1.064 | 0.017 |

HONE SEGTRTMAL HAIR AHALYSIS

| SEQ $\ddagger$ | $\begin{gathered} \text { BATTELLEB } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { पITRCRATOR } \\ \text { SEO } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGRSTIOM } \\ \text { DATE } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESTIOII } \\ & \text { WI } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{ll} S A M P L B & V O L \\ A H A L Y Z E D & 1 \end{array}\right\|$ | AMALYZED WI gg | AREA | $\begin{gathered} 2 \mathrm{Hgg} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \mathrm{MDL} \\ {[\mathrm{Hg}] \mathrm{Hg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1023 | 60b | 2193 | 2714R91 | 0.0111 | 500 | 0.260 | 1146 | 0.896 | 0.017 |
| 1024 | 60 c | 2194 | 2714 R 91 | 0.0110 | 500 | 0.257 | 912 | 0.715 | 0.017 |
| 1025 | 60 d | 2195 | $2741 \mathrm{R91}$ | 0.0110 | 500 | 0.257 | 725 | 0.564 | 0.017 |
| 1026 | 60 e | 2196 | 27MAR91 | 0.0115 | 500 | 0.269 | 858 | 0.642 | 0.016 |
| 1027 | 60 f | 2197 | 2714R91 | 0.0080 | 500 | 0.187 | 557 | 0.588 | 0.023 |
| 1028 | 60b dup | 2198 | $2714 R 91$ | 0.0111 | 500 | 0.260 | \|1185 | 0.927 | 0.017 |
| 1029 | 75 a | 2200 | 2714R91 | 0.0191 | 500 | 0.447 | 698 | 0.312 | 0.010 |
| 1030 | 75b | 2201 | 2710R91 | 0.0144 | 500 | 0.337 | 550 | 0.322 | 0.013 |
| 1031 | 75a dup | 2202 | 27 ar 21 | 0.0191 | 500 | 0.447 | 684 | 0.306 | 0.010 |
| 1032 | MIRS-24 | 2203 | 2914R21 | 0.0120 | 250 | 0.140 | \|2864 | 4.205 | 0.031 |
| 1033 | DOP4-1-25 | 2205 | 2941 P 91 | 0.0454 | 250 | 0.531 | $\mid 2171$ | 0.833 | 0.008 |
| 1034 | MIES-25 | 2206 | 291.1.191 | 0.0039 | 500 | 0.091 | \|2059 | 4.593 | 0.048 |
| 1035 | IIES SPIKP-25 | 2207 | 29019P91 | 0.0067 | 100 | 0.031 | 2346 | 15.273 | 0.139 |
| 1036 | 58a | 2208 | 29nlir91 | 0.0033 | 500 | 0.218 | 467 | 0.403 | 0.020 |
| 1037 | 58b | 2209 | 2910891 | 0.0101 | 500 | 0.236 | 426 | 0.335 | 0.018 |
| 1038 | 58C | 2210 | 2914R21 | 0.0097 | 500 | 0.227 | 392 | 0.318 | 0.019 |
| 1039 | 58d | 2211 | 2910.191 | 0.0101 | 500 | 0.236 | 426 | 0.335 | 0.018 |
| 1040 | 58. | 2212 | 2910891 | 0.0092 | 500 | 0.215 | 371 | 0.315 | 0.020 |
| 1041 | 582 | 2213 | 2914R91 | 0.0094 | 500 | 0.220 | 392 | 0.328 | 0.020 |
| 1042 | 589 | 2214 | 29141991 | 0.0101 | 500 | 0.236 | 440 | 0.347 | 0.018 |
| 1043 | 58h | 2235 | 2914R91 | 0.0089 | 500 | 0.208 | 526 | 0.480 | 0.021 |
| 1044 | 581 | 2216 | 29414P91 | 0.0061 | 500 | 0.143 | 471 | 0.621 | 0.030 |

HONR SEGTBTILL HAIR ARALYSIS

| SEQ | $\begin{gathered} \text { BATRELLS } \\ \text { ID } \end{gathered}$ | $\begin{array}{\|c} \text { IITEGRATOR } \\ \text { SEQA } \end{array}$ | $\left\lvert\, \begin{gathered} \text { DIGRSIIOM } \\ \text { DAIEE } \end{gathered}\right.$ | $\begin{gathered} \text { DIGESTIOM } \\ \text { WI } g \end{gathered}$ | SAMPLR POL AHLLYZED 11 | AMALYESD WI Eg | ARRA | $\underset{[\mathrm{Hg}] \mathrm{gig} / \mathrm{g}}{\mathrm{~m}}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1045 | 58j | 2217 | 2914R91 | 0.0050 | 500 | 0.117 | 441 | 0.704 | 0.037 |
| 1046 | 58b dup | 2218 | 2914R291 | 0.0101 | 500 | 0.236 | 402 | 0.314 | 0.018 |
| 1047 | 58b dup | 2219 | 29H4R91 | 0.0089 | 500 | 0.208 | 514 | 0.468 | 0.021 |
| 1048 | 59a | 2220 | 29118891 | 0.0107 | 500 | 0.250 | $\mid 2481$ | 2.025 | 0.017 |
| 1049 | 59b | 2221 | 2914891 | 0.0106 | 500 | 0.248 | $\mid 2505$ | 2.064 | 0.018 |
| 1050 | 3IES-25 | 2223 | 2914R891 | 0.0039 | 500 | 0.091 | \|2082 | 4.646 | 0.048 |
| 1051 | 59C | 2224 | 2914R91 | 0.0063 | 500 | 0.147 | \|1597 | 2.191 | 0.030 |
| 1052 | 59d | 2225 | 2914R291 | 0.0026 | 500 | 0.061 | 666 | 2.123 | 0.072 |
| 1053 | HIES-25 | 2247 | 2914891 | 0.0039 | 500 | 0.091 | 12203 | 4.988 | 0.048 |
| 1054 | 59C dup | 2218 | 29410891 | 0.0063 | 500 | 0.147 | \|1389 | 1.928 | 0.030 |
| 1055 | 61a | 2249 | 29114891 | 0.0060 | 500 | 0.140 | $\mid 1729$ | 2.533 | 0.031 |
| 1056 | 61b | 2250 | 2914R91 | 0.0060 | 500 | 0.140 | \|1184 | 1.718 | 0.031 |
| 1057 | 61 c | 2251 | 2910R291 | 0.0054 | 500 | 0.126 | 545 | 0.847 | 0.034 |
| 1058 | 61d | 2252 | 2914891 | 0.0040 | 500 | 0.094 | 431 | 0.887 | 0.047 |
| 1059 | 61e | 2253 | 2940891 | 0.0031 | 500 | 0.073 | 358 | 0.934 | 0.060 |
| 1060 | 61b dup | 2254 | 2914891 | 0.0060 | 500 | 0.140 | \|1066 | 1.541 | 0.031 |
| 1061 | 63a | 2255 | $2914 \mathrm{RP91}$ | 0.0123 | 500 | 0.288 | 12540 | 1.827 | 0.015 |
| 1062 | 63b | 2256 | 294ar91 | 0.0121 | 500 | 0.283 | \|3123 | 2.290 | 0.015 |
| 1063 | 63 C | 2257 | 2914R21 | 0.0118 | 500 | 0.276 | \|3005 | 2.258 | 0.016 |
| 1064 | 63d | 2258 | 2914R91 | 0.0091 | 500 | 0.213 | \|1976 | 1.914 | 0.020 |
| 1065 | 63e | 2259 | 2914R21 | 0.0054 | 500 | 0.126 | \|1037 | 1.664 | 0.034 |
| 1066 | 63b dup | 2260 | 2914R91 | 0.0121 | 500 | 0.283 | \|3107 | 2.278 | 0.015 |

HOHR SEGHETILL HAIR AHALYSIS

| SEQ $\ddagger$ | $\begin{gathered} \text { BATPELLS } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { DITEGRATOR } \\ \text { SERQ } \end{array}\right\|$ | $\begin{gathered} \text { DIGESTIOM } \\ \text { DAFE } \end{gathered}$ | $\begin{gathered} \text { DIGSSTIOM } \\ \text { MT g } \end{gathered}$ | $\left\lvert\, \begin{aligned} & \text { SANPLR VOL } \\ & \text { AHALYZED } \mu 1\end{aligned}\right.$ | AMALYZED in mg | ARBA | $\underset{[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}}{ }$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1067 | 67a | 2261 | 29HAR91 | 0.0085 | 500 | 0.199 | \|1018 | 1.037 | 0.022 |
| 1068 | 67b | 2262 | 29HAR91 | 0.0075 | 500 | 0.175 | \|1409 | 1.643 | 0.025 |
| 1069 | 67c | 2263 | 29HAR91 | 0.0075 | 500 | 0.175 | \|1555 | 1.818 | 0.025 |
| 1070 | 67c dup | 2266 | 2910R91 | 0.0075 | 500 | 0.175 | \|1508 | 1.762 | 0.025 |
| 1071 | DOSH-25 | 2267 | 2911RR91 | 0.0454 | 500 | 1.062 | \|4661 | 0.914 | 0.004 |
| 1072 | DORH-26 | 2268 | 2APR91 | 0.0371 | 500 | 0.868 | \|3910 | 0,935 | 0.005 |
| 1073 | MIES-26 | 2269 | 1 P 291 | 0.0063 | 500 | 0.147 | \|3684 | 5.186 | 0.030 |
| 1074 | MIES SPIKP-26 | 2270 | 14PR91 | 0.0048 | 100 | 0.022 | \|2202 | 20.182 | 0.194 |
| 1075 | 73a | 2271 | $19 P 891$ | 0.0080 | 500 | 0.187 | 417 | 0.420 | 0.023 |
| 1076 | HISS-26 | 2283 | 14P891 | 0.0063 | 500 | 0.147 | \|3626 | 4.937 | 0.030 |
| 1077 | 73b | 2284 | 14PR91 | 0.0098 | 500 | 0.229 | 730 | 0.614 | 0.019 |
| 1078 | 73c | 2285 | 1 PP 91 | 0.0071 | 500 | 0.166 | 686 | 0.794 | 0.026 |
| 1079 | 73b dup | 2286 | $119 P 91$ | 0.0098 | 500 | 0.229 | 746 | 0.628 | 0.019 |
| 1080 | 749 | 2287 | $1 \mathrm{PPP91}$ | 0.0053 | 500 | 0.124 | 814 | 1.273 | 0.035 |
| 1081 | 74b | 2288 | 14P891 | 0.0051 | 500 | 0.119 | 648 | 1.041 | 0.036 |
| 1082 | 74 C | 2289 | $14 \mathrm{PR91}$ | 0.0036 | 500 | 0.084 | 520 | 1.167 | 0.052 |
| 1083 | 74d | 2290 | 1aprel | 0.0034 | 500 | 0.080 | 568 | 1.358 | 0.055 |
| 1084 | 74 b dep | 2291 | 1 PP 291 | 0.0051 | 500 | 0.119 | 633 | 1.016 | 0.036 |
| 1085 | C7a-1 | 2292 | 14 PP 91 | 0.0094 | 500 | 0.220 | 502 | 0.430 | 0.020 |
| 1086 | C7b-1 | 2293 | 1 PP 91 | 0.0102 | 500 | 0.239 | 668 | 0.538 | 0.018 |
| 1087 | C7c-1 | 2294 | LAPR91 | 0.0080 | 500 | 0.187 | 596 | 0.607 | 0.023 |
| 1088 | C7d-1 | 22951 | 14PR29 | 0.0086 | 500 | 0.201 | 851 | 0.822 | 0.022 |

HONR SEGIBTTAL BAIR AMALYSIS

| SEOP | $\begin{aligned} & \text { Barriglid } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { DREGRATOR } \\ \text { SEQ } \end{array}\right\|$ | \|DIGESIIOM | $\begin{aligned} & \text { DIGESTIOM } \\ & \text { WI } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{l} \text { SAMPLE VOL } \\ A M A L Y Z B D \\ A 1 \end{array}\right\|$ | Mabyexd调 19 | ARRA | $\begin{gathered} \frac{\mathrm{Eig}}{[\mathrm{ig}]} \mathrm{mg} / \mathrm{g} \end{gathered}$ | $\left\lvert\, \begin{gathered} \mathrm{MDL} \\ {[\mathrm{Bg}]^{\prime} \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1089 | C7e-1 | 2296 | 1apR91 | 0.0087 | 500 | 0.203 | 903 | 0.864 | 0.021 |
| 1090 | C7f-1 | 2297 | 14PR91 | 0.0088 | 500 | 0.206 | \|1133 | 1.081 | 0.021 |
| 1091 | C7g-1 | 2298 | $14 \mathrm{PR91}$ | 0.0069 | 500 | 0.161 | 978 | 1.184 | 0.027 |
| 1092 | C7h-1 | 2299 | 14PR91 | 0.0075 | 500 | 0.175 | 978 | 1.089 | 0.025 |
| 1093 | DORH-1-26 | 2301 | LapR91 | 0.0371 | 500 | 0.868 | 14003 | 0.926 | 0.005 |
| 1094 | C71-1 | 2302 | 14PR91 | 0.0070 | 500 | 0.164 | 867 | 1.030 | 0.027 |
| 1095 | C7j-1 | 2303 | 14PR91 | 0.0086 | 500 | 0.201 | 930 | 0.901 | 0.022 |
| 1096 | C7k-1 | 2304 | 14PR91 | 0.0062 | 500 | 0.145 | 771 | 1.028 | 0.030 |
| 1097 | c7b-1 dup | 2305 | 1 P P91 | 0.0102 | 500 | 0.239 | 658 | 0.529 | 0.018 |
| 1098 | C7g-1 dup | 2306 | 1aprel | 0.0069 | 500 | 0.161 | 968 | 1.171 | 0.027 |
| 1099 | C7j-1 dup | 2307 | 14PR91 | 0.0086 | 500 | 0.201 | 988 | 0.960 | 0.022 |
| 1100 | C7a-2 | 2308 | 12PR91 | 0.0118 | 500 | 0.276 | 569 | 0.392 | 0.016 |
| 1201 | C7b-2 | 2309 | 14PR91 | 0.0122 | 500 | 0.285 | 776 | 0.526 | 0.015 |
| 1102 | C7c-2 | 2310 | 14 PR 91 | 0.0085 | 500 | 0.199 | 587 | 0.563 | 0.022 |
| 1103 | C7d-2 | 2311 | 14PR91 | 0.0103 | 500 | 0.241 | 893 | 0.722 | 0.018 |
| 1104 | HIES-26 | 2324 | $11 \mathrm{PR91}$ | 0.0063 | 500 | 0.147 | \|3493 | 4.856 | 0.030 |
| 1105 | C7e-2 | 2326 | $14 \mathrm{PR91}$ | 0.0109 | 500 | 0.255 | \|1113 | 0.878 | 0.017 |
| 1106 | C7f-2 | 2327 | 14PR91 | 0.0093 | 500 | 0.218 | 1126 | 1.041 | 0.020 |
| 1107 | C7g-2 | 2328 | 1APR91 | 0.0098 | 500 | 0.229 | \|1305 | 1.149 | 0.019 |
| 1108 | C7h-2 | 2329 | $1 \mathrm{APR91}$ | 0.0086 | 500 | 0.201 | 993 | 0.989 | 0.022 |
| 1109 | C7i-2 | 2330 | 14PR91 | 0.0091 | 500 | 0.213 | 962 | 0.905 | 0.020 |
| 1110 | C7j-2 | 2331 | $1 \mathrm{PPR91}$ | 0.0112 | 500 | 0.262 | \|1269 | 0.977 | 0.017 |

HOME SEGHRTTAL HAIR AMALYSIS

| SEQf | $\begin{gathered} \text { BATYELLR } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { IFIEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DATB } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESITOM } \\ & \text { WI } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{l} \text { SAAPLE VOL } \\ \text { AMALYZED } \\ \hline 1 \end{array}\right\|$ | $\begin{aligned} & \text { AMALYZED } \\ & \text { WT Eg } \end{aligned}$ | AREA | $\stackrel{\Sigma 8 \mathrm{gg}}{[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Hg}] \mathrm{Rg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1111 | C7k-2 | 2332 | $14 \mathrm{PR91}$ | 0.0083 | 500 | 0.194 | \|1094 | 1.132 | 0.022 |
| 1112 | C7b-2 dup | 2333 | 14PR91 | 0.0122 | 500 | 0.285 | 752 | 0.523 | 0.015 |
| 1113 | C7f-2 dup | 2334 | 12PR91 | 0.0093 | 500 | 0.218 | $\mid 1204$ | 1.115 | 0.020 |
| 1114 | C7i-2 dup | 2335 | 1APR91 | 0.0091 | 500 | 0.213 | 994 | 0.936 | 0.020 |
| 1115 | DORH-1-26 | 2338 | 14PR91 | 0.0371 | 500 | 0.868 | \|3777 | 0.892 | 0.005 |
| 1116 | DORH-1-27 | 2339 | 2APR91 | 0.0397 | 500 | 0.929 | \| 3522 | 0.778 | 0.005 |
| 1117 | MIES-27 | 2340 | 2APP91 | 0.0056 | 500 | 0.131 | $\mid 2712$ | 4.237 | 0.033 |
| 1118 | MIES SPIKE-27 | 2341 | 2APR91 | 0.0075 | 100 | 0.035 | 2643 | 15.412 | 0.124 |
| 1119 | 64a | 2343 | 2APR91 | 0.0076 | 500 | 0.178 | 963 | 1.089 | 0.024 |
| 1120 | 64b | 2344 | 21PR91 | 0.0071 | 500 | 0.166 | 780 | 0.938 | 0.026 |
| 1121 | 646 | 2345 | 2APR91 | 0.0056 | 500 | 0.131 | 644 | 0.975 | 0.033 |
| 1122 | 64d | 2346 | 2APR91 | 0.0063 | 500 | 0.147 | 604 | 0.810 | 0.030 |
| 1123 | 64 e | 2347 | 28PR91 | 0.0065 | 500 | 0.152 | 550 | 0.712 | 0.029 |
| 1124 | $64 f$ | 2348 | 2APR91 | 0.0061 | 500 | 0.143 | 628 | 0.872 | 0.030 |
| 1125 | 649 | 2349 | $2 \mathrm{PPPO1}$ | 0.0058 | 500 | 0.136 | 590 | 0.859 | 0.032 |
| 1126 | 64h | 2350 | $24 \mathrm{PR91}$ | 0.0055 | 500 | 0.129 | 508 | 0.774 | 0.034 |
| 1127 | $64 i$ | 2351 | 24P891 | 0.0051 | 500 | 0.119 | 550 | 0.908 | 0.036 |
| 1128 | 64j | 2352 | 2AP191 | 0.0048 | 500 | 0.112 | 489 | 0.852 | 0.039 |
| 1129 | 64k | 2353 | 24P191 | 0.0044 | 500 | 0.103 | 551 | 1.054 | 0.042 |
| 1130 | 641 | 2355 | 24P991 | 0.0045 | 500 | 0.105 | 583 | 1.093 | 0.041 |
| 1131 | 641 | 2356 | 24P891 | 0.0040 | 500 | 0.094 | 541 | 1.137 | 0.047 |
| 1132 | 64II | 2357 | 24PR91 | 0.0046 | 500 | 0.108 | 515 | 0.939 | 0.040 |

HOUR SBGIBITAL EAIR AMALYSIS

| SEOP | $\begin{gathered} \text { BMTTELLR } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { IIITEGRAYOR } \\ \text { SERA } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESITOM } \\ \text { DAIE } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGRSTIOM } \\ & \text { WI } g \end{aligned}$ | $\left\|\begin{array}{l\|l} S A M P L R & V O L \\ A M L L Y Z E D & \beta 1 \end{array}\right\|$ | AMALYEXD WI Eg | \|area | $\underset{[\mathrm{Bq}] \mathrm{Hg} / \mathrm{g}}{\mathrm{~g}}$ | $\left\lvert\, \begin{aligned} & \mathrm{VDL} \\ & {[\mathrm{Bg}]} \end{aligned} \mathrm{\mu g} / \mathrm{g}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1133 | HIES-27 | 2369 | 24PR91 | 0.0056 | 500 | 0.131 | \|2764 | 4.286 | 0.033 |
| 1134 | 640 | 2370 | 2APR91 | 0.0038 | 500 | 0.089 | 466 | 1.014 | 0.049 |
| 1135 | 64p | 2371 | 24PR91 | 0.0036 | 500 | 0.084 | 399 | 0.907 | 0.052 |
| 1136 | 649 | 2372 | 2APR91 | 0.0040 | 500 | 0.094 | 457 | 0.944 | 0.047 |
| 1137 | 64 r | 2373 | 22PR91 | 0.0029 | 500 | 0.068 | 397 | 1.120 | 0.064 |
| 1138 | 64 s | 2375 | 2APR91 | 0.0030 | 500 | 0.070 | 408 | 1.115 | 0.062 |
| 1139 | $64 t$ | 2376 | 24P891 | 0.0032 | 500 | 0.075 | 444 | 1.144 | 0.058 |
| 1140 | 644 | 2377 | 24PR91 | 0.0028 | 500 | 0.065 | 420 | 1.232 | 0.066 |
| 1141 | 64b dup | 2378 | 2APR91 | 0.0071 | 500 | 0.166 | 733 | 0.873 | 0.026 |
| 1142 | 64k dup | 2379 | 2APR91 | 0.0044 | 500 | 0.103 | 508 | 0.960 | 0.042 |
| 1143 | $64 t$ dup | 2380 | 2APR91 | 0.0032 | 500 | 0.075 | 465 | 1.202 | 0.058 |
| 1144 | 65b | 2382 | 2APR91 | 0.0071 | 500 | 0.166 | 927 | 1.112 | 0.026 |
| 1145 | 65 c | 2383 | 2APR91 | 0.0074 | 500 | 0.173 | 832 | 0.954 | 0.025 |
| 1146 | 65d | 2384 | 2APR91 | 0.0080 | 500 | 0.187 | 916 | 0.975 | 0.023 |
| 1147 | 65e | 2385 | 2APR91 | 0.0068 | 500 | 0.159 | 815 | 1.017 | 0.027 |
| 1148 | DORH-1-27 | 2387 | 21.PR91 | 0.0397 | 500 | 0.929 | \|3494 | 0.766 | 0.005 |
| 1149 | $65 f$ | 2388 | 24PR91 | 0.0064 | 500 | 0.150 | 958 | 1.276 | 0.029 |
| 1150 | 659 | 2389 | 24P891 | 0.0056 | 500 | 0.131 | 1153 | 1.764 | 0.033 |
| 1151 | 65b dup | 2390 | 24PR91 | 0.0071 | 500 | 0.166 | 902 | 1.081 | 0.026 |
| 1152 | $65 f$ dup | 2391 | 2APR91 | 0.0064 | 500 | 0.150 | 964 | 1.284 | 0.029 |
| 1153 | 65a | 2392 | 2APR91 | 0.0070 | 500 | 0.164 | 1052 | 1.285 | 0.027 . |
| 1154 | 66a | 2393 | 2APR91 | 0.0136 | 500 | 0.318 | $\mid 3217$ | 2.057 | 0.014 |

HOVR SBGERTILL HAIR AMALYSIS

| SEQ | $\begin{aligned} & \text { BATrgLLE } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SER: } \end{array}\right\|$ | $\begin{array}{\|c} \text { DIGESTIOM } \\ \text { DATE } \end{array}$ | $\begin{gathered} \text { DIGESIIOM } \\ \text { WI } g \end{gathered}$ | $\left\|\begin{array}{ll} \text { SAMPLE } & \text { VOL } \\ \text { AHALYZED } & \mu l \end{array}\right\|$ | $\begin{aligned} & \text { AMLYLYED } \\ & \text { WI mg } \end{aligned}$ | \| 2 REA | $\underset{[\mathrm{Eg}] \mathrm{mg} / \mathrm{g}}{\mathrm{~g}}$ | $\left\lvert\, \begin{gathered} \mathrm{nDL} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1155 | 66b | 2394 | 24PR91 | 0.0141 | 500 | 0.330 | \| 3367 | 2.077 | 0.013 |
| 1156 | 66 C | 2395 | 2APR91 | 0.0135 | 500 | 0.316 | \|3255 | 2.097 | 0.014 |
| 1157 | 66 d | 2396 | $24 \mathrm{PR91}$ | 0.0129 | 500 | 0.302 | $\mid 3030$ | 2.042 | 0.014 |
| 1158 | 66 e | 2397 | 2APR91 | 0.0115 | 500 | 0.269 | 12805 | 2.119 | 0.016 |
| 1159 | 665 | 2398 | 2 P PR91 | 0.0110 | 500 | 0.257 | \|3297 | 2.607 | 0.017 |
| 1160 | 669 | 2399 | $24 \mathrm{PR91}$ | 0.0088 | 500 | 0.206 | 12399 | 2.364 | 0.021 |
| 1161 | 66 n | 2400 | 20PR91 | 0.0041 | 500 | 0.096 | (1482 | 3.113 | 0.045 |
| 1162 | 66b dup | 2401 | 2APR91 | 0.0141 | 500 | 0.330 | \| 3283 | 2.025 | 0.013 |
| 1163 | DOSM-1-28 | 2413 | 418891 | 0.0205 | 500 | 0.479 | \|2184 | 0.913 | 0.009 |
| 1164 | UIES-28 | 2414 | 41PR91 | 0.0036 | 500 | 0.084 | 2030 | 4.829 | 0.052 |
| 1165 | MTRS SPIKR-28 | 2415 | 41PR91 | 0.0067 | 100 | 0.031 | \| 2299 | 14.718 | 0.139 |
| 1166 | 68a | 2416 | 41P291 | 0.0049 | 500 | 0.115 | 820 | 1.402 | 0.038 |
| 1167 | 68b | 2417 | 41PR91 | 0.0057 | 500 | 0.133 | 677 | 0.987 | 0.033 |
| 1168 | 68 C | 218 | 41P891 | 0.0044 | 500 | 0.103 | 494 | 0.917 | 0.042 |
| 1169 | 680 | 2419 | 419891 | 0.0045 | 500 | 0.105 | 376 | 0.669 | 0.041 |
| 1170 | 688 | 2420 | 41P901 | 0.0040 | 500 | 0.094 | 311 | 0.612 | 0.047 |
| 1171 | 685 | 2421 | 42PP91 | 0.0040 | 500 | 0.094 | 294 | 0.575 | 0.047 |
| 1172 | 689 | 2422 | 418891 | 0.0044 | 500 | 0.103 | 303 | 0.540 | 0.042 |
| 1173 | 684 | 2423 | $4 \mathrm{APR91}$ | 0.0045 | 500 | 0.105 | 346 | 0.611 | 0.041 |
| 1174 | 681 | 2424 | 418991 | 0.0033 | 500 | 0.077 | 346 | 0.833 | 0.056 |
| 1175 | $68 j$ | 2425 | 41P891 | 0.0039 | 500 | 0.091 | 402 | 0.830 | 0.048 |
| 1176 | 68k | 2426 | 4AP991 | 0.0031 | 500 | 0.073 | 379 | 0.980 | 0.060 |

HONIE SEGINTTAL RAIR AHALYSIS

| SEQ 4 | $\begin{aligned} & \text { BATTELLE } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SER! } \end{array}\right\|$ | $\left\{\begin{array}{c} \text { DIGESIIOM } \\ \text { DAFB } \end{array}\right.$ | $\begin{gathered} \text { DIGSSTIOM } \\ \text { WI } 9 . \end{gathered}$ | $\left\|\begin{array}{l}\text { SAMPIE VOL } \\ \text { AMALYZED P1 }\end{array}\right\|$ | AHALYEED ort mg | \|AREA | $\stackrel{\text { Eigg }}{[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}}$ | $\left\lvert\, \begin{gathered} \text { NDL } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1177 | 681 | 2427 | 418891 | 0.0032 | 500 | 0.075 | 385 | 0.965 | 0.058 |
| 1178 | 68b dup | 2428 | 4148991 | 0.0057 | 500 | 0.133 | 657 | 0.957 | 0.033 |
| 1179 | 68 g dup | 2429 | 41PR91 | 0.0044 | 500 | 0.103 | 328 | 0.590 | 0.042 |
| 1180 | MIES-28 | 2431 | 4APR91 | 0.0036 | 500 | 0.084 | \|1970 | 4.684 | 0.052 |
| 1181 | 69a | 2432 | 4APR91 | 0.0064 | 500 | 0.150 | 444 | 0.563 | 0.029 |
| 1182 | 69b | 2433 | 41PR91 | 0.0062 | 500 | 0.145 | 511 | 0.675 | 0.030 |
| 1183 | 69 | 2434 | 4APR91 | 0.0057 | 500 | 0.133 | 473 | 0.676 | 0.033 |
| 1184 | 69d | 2435 | 41PR91 | 0.0055 | 500 | 0.129 | 531 | 0.792 | 0.034 |
| 1185 | 69e | 2436 | 41PR91 | 0.0050 | 500 | 0.117 | 533 | 0.875 | 0.037 |
| 1186 | 699 | 2437 | 4 1 PR91 | 0.0049 | 500 | 0.115 | 662 | 1.122 | 0.038 |
| 1187 | 699 | 2438 | 41PR91 | 0.0047 | 500 | 0.110 | 593 | 1.042 | 0.040 |
| 1188 | 69h | 2439 | 4APR91 | 0.0044 | 500 | 0.103 | 649 | 1.224 | 0.042 |
| 1189 | 69b dup | 2440 | 41PR91 | 0.0062 | 500 | 0.145 | 491 | 0.647 | 0.030 |
| 1190 | 70a | 2441 | $4 \mathrm{4PR91}$ | 0.0098 | 500 | 0.229 | 893 | 0.766 | 0.019 |
| 1191 | 70b | 2442 | 42P891 | 0.0079 | 500 | 0.185 | 476 | 0.491 | 0.024 |
| 1192 | 70c | 2443 | 44PR91 | 0.0085 | 500 | 0.199 | 467 | 0.447 | 0.022 |
| 1193 | 70d | 2444 | 4APR91 | 0.0090 | 500 | 0.210 | 385 | 0.343 | 0.021 |
| 1194 | 70e | 2445 | 41PR91 | 0.0074 | 500 | 0.173 | 218 | 0.221 | 0.025 |
| 1195 | 70a dup | 2446 | 4 4 PR91 | 0.0098 | 500 | 0.229 | 902 | 0.774 | 0.019 |
| 1196 | 699 dup | 2447 | 41PR91 | 0.0047 | 500 | 0.110 | 612 | 1.077 | 0.040 |
| 1197 | DORH-1-29 | 2616 | 94PR91 | 0.0528 | 500 | 1.235 | 7211 | 0.840 | 0.004 |
| 1198 | HIES-29 | 2617 | 9APR91 | 0.0034 | 500 | 0.080 | 12660 | 4.769 | 0.055 |

morr sfgigrtal mair analysis

| SEQ | $\begin{gathered} \text { BATYELLS } \\ \text { ID } \end{gathered}$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DAFE } \end{gathered}\right.$ | $\begin{aligned} & \text { DIGESIIOM } \\ & \text { WI } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{l}\text { SAMPLE VOL } \\ \text { AMALYZED }\end{array}\right\|$ | AHALYZED $\mathrm{Wr} \mathrm{Ig}$ | AREA | $\begin{aligned} & \text { [ } \mathrm{Bg} \mathrm{gig}] \mathrm{gg} / \mathrm{g} \end{aligned}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Hg}] \mathrm{Hg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1199 | MIES SPIKR-29 | 2618 | $9 \mathrm{PPR91}$ | 0.0044 | 100 | 0.021 | \|5262 | 36.701 | 0.211 |
| 1200 | 62a | 2619 | 98PR91 | 0.0070 | 500 | 0.164 | 1060 | 0.903 | 0.027 |
| 1201 | 62 b | 2620 | 91P891 | 0.0066 | 500 | 0.154 | \|1404 | 1.280 | 0.028 |
| 1202 | 62c | 2622 | 98PR91 | 0.0074 | 500 | 0.173 | 1460 | 1.189 | 0.025 |
| 1203 | 62d | 2623 | 91PR91 | 0.0056 | 500 | 0.131 | 981 | 1.042 | 0.033 |
| 1204 | 62e | 2624 | 9APR91 | 0.0068 | 500 | 0.159 | 1141 | 1.004 | 0.027 |
| 1205 | $62 \pm$ | 2625 | 9APR91 | 0.0050 | 500 | 0.117 | 713 | 0.836 | 0.037 |
| 1206 | 62b dup | 2626 | 94PR91 | 0.0066 | 500 | 0.154 | 1265 | 1.150 | 0.028 |
| 1207 | 712 | 2627 | 91PR91 | 0.0113 | 500 | 0.264 | 921 | 0.484 | 0.016 |
| 1208 | 71b | 2628 | 91PP91 | 0.0111 | 500 | 0.260 | 684 | 0.360 | 0.017 |
| 1209 | 716 | 2629 | 91PP91 | 0.0096 | 500 | 0.225 | 562 | 0.338 | 0.019 |
| 1210 | 71d | 2630 | 91P801 | 0.0110 | 500 | 0.257 | 661 | 0.351 | 0.017 |
| 1211 | 71e | 2631 | $9 \mathrm{PPPO1}$ | 0.0100 | 500 | 0.234 | 732 | 0.430 | 0.019 |
| 1212 | 711 | 2632 | 91PP91 | 0.0093 | 500 | 0.218 | 916 | 0.584 | 0.020 |
| 1213 | IISS-29 | 2633 | 91P201 | 0.0034 | 500 | 0.080 | \|2708 | 4.856 | 0.055 |
| 1214 | 719 | 2634 | 91P301 | 0.0067 | 500 | 0.157 | 767 | 0.673 | 0.028 |
| 1215 | 7h | 2635 | 981991 | 0.0055 | 500 | 0.129 | \|1031 | 1.117 | 0.034 |
| 1216 | 71 | 2636 | 9APPE1 | 0.0038 | 500 | 0.089 | 934 | 1.459 | 0.049 |
| 1217 | 71d dip | 2637 | 94P991 | 0.0110 | 500 | 0.257 | 593 | 0.312 | 0.017 |
| 1218 | MIES SPIKB-29 | 2638 | 92PP91 | 0.0044 | 100 | 0.021 | \| 4818 | 33.583 | 0.211 |
| 1219 | 72a | 2639 | 98PP91 | 0.0103 | 500 | 0.241 | \|3244 | 1.925 | 0.018 |
| 1220 | 72b | 2640 | 91preg | 0.0096 | 500 | 0.225 | \|2677 | 1.700 | 0.019 |

nOVR SEGIMTAL HAIR halySIS

| SEQf | $\begin{aligned} & \text { BATIELLIR } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { MIEGRATOR } \\ \text { SEQf } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAFE } \end{gathered}\right.$ | $\begin{gathered} \text { DIGESIIOM } \\ \text { W g } \end{gathered}$ | $\left\|\begin{array}{l} \text { SAYPLZ POL } \\ \text { AMALYZED } \end{array}\right\|$ | AMALYZED WI 19 | LRRA | $\begin{gathered} \text { EHg } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1221 | 72 c | 2641 | $9 \mathrm{APR91}$ | 0.0090 | 500 | 0.210 | $\mid 2509$ | 1.698 | 0.021 |
| 1222 | 72d | 2642 | 9APR91 | 0.0079 | 500 | 0.185 | \|2449 | 1.887 | 0.024 |
| 1223 | 72e | 2643 | $9 \mathrm{PPR91}$ | 0.0089 | 500 | 0.208 | \|3104 | 2.130 | 0.021 |
| 1224 | 72 f | 2644 | 91PR91 | 0.0050 | 500 | 0.117 | $\mid 2126$ | 2.583 | 0.037 |
| 1225 | 72c dup | 2645 | 98PR91 | 0.0090 | 500 | 0.210 | $\mid 2618$ | 1.773 | 0.021 |
| 1226 | HISS-30 | 2658 | 174PR91 | 0.0046 | 500 | 0.108 | \|3397 | 4.347 | 0.040 |
| 1227 | DORH-1-30 | 2659 | 174P891 | 0.0262 | 500 | 0.613 | \|4539 | 1.023 | 0.007 |
| 1228 | MIES SPIKR-30 | 2660 | 1714PR91 | 0.0055 | 100 | 0.026 | \|3426 | 18.337 | 0.169 |
| 1229 | 76 a | 2661 | 174PR91 | 0.0071 | 500 | 0.166 | \|1109 | 0.895 | 0.026 |
| 1230 | 76b | 2662 | 174P991 | 0.0062 | 500 | 0.145 | 715 | 0.647 | 0.030 |
| 1231 | 76 C | 2663 | 171PP991 | 0.0065 | 500 | 0.152 | 654 | 0.561 | 0.029 |
| 1232 | 76 d | 2664 | $174 \mathrm{PR91}$ | 0.0071 | 500 | 0.166 | 813 | 0.647 | 0.026 |
| 1233 | 76 e | 2665 | 171PR91 | 0.0058 | 500 | 0.136 | 746 | 0.723 | 0.032 |
| 1234 | $76 f$ | 2666 | 172PR91 | 0.0063 | 500 | 0.147 | 918 | 0.828 | 0.030 |
| 1235 | 76c dup | 2667 | 171PR91 | 0.0065 | 500 | 0.152 | 587 | 0.499 | 0.029 |
| 1236 | 78 a | 2668 | 17APR91 | . 0.0078 | 500 | 0.182 | \|2054 | 1.537 | 0.024 |
| 1237 | DOPR-1-30 | 2670 | 171PR91 | 0.0262 | 500 | 0.613 | $\mid 5029$ | 1.135 | 0.007 |
| 1238 | 78b | 2671 | 17APR91 | 0.0081 | 500 | 0.189 | \|1825 | 1.312 | 0.023 |
| 1239 | 78 C | 2672 | 17APR91 | 0.0072 | 500 | 0.168 | \|1150 | 0.917 | 0.026 |
| 1240 | 78. | 2673 | 174PR91 | 0.0078 | 500 | 0.182 | \|1216 | 0.897 | 0.024 |
| 1241 | 78 e | 2674 | 174PR91 | 0.0075 | 500 | 0.175 | \|1310 | 1.007 | 0.025 |
| 1242 | 789 | 2675 | 17APR91 | 0.0065 | 500 | 0.152 | \|1141 | 1.007 | 0.029 |

HOHR SEGHITILL HAIR ARALYSIS

| SEP\% | $\begin{aligned} & \text { BAITELLE } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \text { InIEGRATOR } \\ \text { SER } f \end{array}\right\|$ | $\begin{array}{\|c} \text { DIGESITOM } \\ \text { DATE } \end{array}$ | $\begin{aligned} & \text { DIGBSTIOM } \\ & \text { WI } \mathrm{g} \end{aligned}$ | $\left\|\begin{array}{l}\text { SAMPLR VOL } \\ \text { AHALYZED } \mu 1\end{array}\right\|$ | A:ALYzED in ${ }^{1} \mathrm{mg}$ | AREA | $\underset{[\underline{E g}] \mathrm{mg} / \mathrm{g}}{ }$ | $\left.\right\|_{[\mathrm{Eg} \mid \mathrm{mg} / \mathrm{g}} ^{\mathrm{nin}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1243 | 78 g | 2676 | 174PR91 | 0.0071 | 500 | 0.166 | \|1218 | 0.987 | 0.026 |
| 1244 | 78h | 2677 | 174PR91 | 0.0075 | 500 | 0.175 | \|1115 | 0.852 | 0.025 |
| 1245 | 781 | 2678 | 174PR91 | 0.0064 | 500 | 0.150 | 980 | 0.873 | 0.029 |
| 1246 | $78 j$ | 2680 | $174 \mathrm{PR91}$ | 0.0056 | 500 | 0.131 | \|1006 | 1.026 | 0.033 |
| 1247 | 78k | 2681 | 171PR91 | 0.0058 | 500 | 0.136 | \|103 | 1.090 | 0.032 |
| 1248 | 781 | 2682 | 174P891 | 0.0062 | 500 | 0.145 | $\mid 1390$ | 1.296 | 0.030 |
| 1249 | 781 | 2683 | 174PR91 | 0.0057 | 500 | 0.133 | \|1356 | 1.374 | 0.033 |
| 1250 | 78n | 2684 | 177.12991 | 0.0044 | 500 | 0.103 | 1150 | 1.501 | 0.042 |
| 1251 | 780 | 2685 | 174 PR91 | 0.0043 | 500 | 0.101 | 1021 | 1.357 | 0.043 |
| 1252 | 78p | 2686 | 171PR291 | 0.0040 | 500 | 0.094 | 815 | 1.151 | 0.047 |
| 1253 | 789 | 2687 | 174PR91 | 0.0031 | 500 | 0.073 | 504 | 0.887 | 0.060 |
| 1254 | 788 | 2688 | 1714P891 | 0.0026 | 500 | 0.061 | 450 | 0.934 | 0.072 |
| 1255 | 788 | 2689 | 174P891 | 0.0027 | 500 | 0.063 | 433 | 0.862 | 0.069 |
| 1256 | $78 t$ | 2690 | 171PP91 | 0.0021 | 500 | 0.049 | 432 | 1.106 | 0.089 |
| 1257 | UIES-30 | 2702 | 171P391 | 0.0046 | 500 | 0.108 | 3903 | 4.398 | 0.040 |
| 1258 | 78d dup | 2703 | 174PR91 | 0.0078 | 500 | 0.182 | 1304 | 0.845 | 0.024 |
| 1259 | 78k dip | 2704 | 174P891 | 0.0058 | 500 | 0.136 | 1177 | 1.022 | 0.032 |
| 1260 | D03:-1-31 | 2705 | 181P991 | 0.0393 | 500 | 0.919 | 16414 | 0.849 | 0.005 |
| 1261 | MISS-31 | 2706 | 181PP91 | 0.0040 | 500 | 0.094 | 3570 | 4.613 | 0.047 |
| 1262 | IITES SPIES-31 | 2708 | 182P891 | 0.0055 | 100 | 0.026 | 4281 | 20.164 | 0.169 |
| 1263 | 77a | 2709 | 1818 P 91 | 0.0086 | 500 | 0.201 | 470 | 0.254 | 0.022 |
| 1264 | 77 b | 2710 | 184PR91 | 0.0081 | 500 | 0.189 | 473 | 0.272 | 0.023 |

HOVE SEGTETTAL HAIR MALLYSIS

| SEQ | $\begin{gathered} \text { BATIELLEB } \\ \text { DD } \end{gathered}$ | $\left\|\begin{array}{c} \text { MIBGRAIOR } \\ \text { SEOf: } \end{array}\right\|$ | $\left.\right\|_{\text {DIGESTIOM }}$ | $\begin{gathered} \text { DIGBSIIOM } \\ \text { WI g } \end{gathered}$ | $\left\|\begin{array}{ll} \text { SAIPLER VOL } \\ \text { AMALYZED } & \mu 1 \end{array}\right\|$ | $\begin{aligned} & \text { AMLIIEED } \\ & \text { WI Eg } \end{aligned}$ | \|ARRA | $\underset{[\mathrm{Eg}] \mathrm{gg} / \mathrm{g}}{\mathrm{~g}}$ | $\left\lvert\, \begin{gathered} \text { KDL } \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1265 | 77 c | 2711 | 18APR91 | 0.0076 | 500 | 0.178 | 449 | 0.273 | 0.024 |
| 1266 | 77d | 2712 | 181PR91 | 0.0070 | 500 | 0.164 | 394 | 0.256 | 0.027 |
| 1267 | 77e | 2713 | 18APR91 | 0.0069 | 500 | 0.161 | 474 | 0.320 | 0.027 |
| 1268 | 77 f | 2714 | 181PR91 | 0.0066 | 500 | 0.154 | 549 | 0.394 | 0.028 |
| 1269 | 779 | 2715 | 181PR91 | 0.0071 | 500 | 0.166 | 650 | 0.441 | 0.026 |
| 1270 | 77 h | 2716 | 18APR91 | 0.0060 | 500 | 0.140 | 653 | 0.525 | 0.031 |
| 1271 | 77 j | 2718 | 184PR91 | 0.0059 | 500 | 0.138 | 829 | 0.690 | 0.032 |
| 1272 | HIES-31 | 2720 | 18APR91 | 0.0040 | 500 | 0.094 | \| 3449 | | 4.454 | 0.047 |
| 1273 | 77k | 2721 | 181PR91 | 0.0052 | 500 | 0.122 | \|1142 | 1.099 | 0.036 |
| 1274 | 771 | 2722 | 181P891 | 0.0035 | 500 | 0.082 | \| 2245 | 1.787 | 0.053 |
| 1275 | 77 b dup | 2723 | 18APR91 | 0.0081 | 500 | 0.189 | 420 | 0.238 | 0.023 |
| 1276 | 77 i | 2724 | 181PR91 | 0.0057 | 500 | 0.133 | 736 | 0.629 | 0.033 |
| 1277 | 79a | 2725 | 184PR91 | 0.0079 | 500 | 0.185 | \|2469 | 1.604 | 0.024 |
| 1278 | 79b | 2726 | 18APR91 | 0.0067 | 500 | 0.157 | \|1863 | 1.417 | 0.028 |
| 1279 | 79b dup | 2727 | 18גPR91 | 0.0067 | 500 | 0.157 | \| 1770 | 1.344 | 0.028 |
| 1280 | 80a | 2728 | 18APR91 | 0.0051 | 500 | 0.119 | \|1212 | 1.192 | 0.036 |
| 1281 | 80b | 2729 | 181PR91 | 0.0047 | 500 | 0.110 | \|1039 | 1.101 | 0.040 |
| 1282 | 80c | 2730 | 184PR91 | 0.0045 | 500 | 0.105 | 867 | 0.949 | 0.041 |
| 1283 | 80d | 2731 | 18APR91 | 0.0042 | 500 | 0.098 | 992 | 1.173 | 0.044 |
| 1284 | 800 | 2732 | 18APR91 | 0.0045 | 500 | 0.105 | 831 | 0.907 | 0.041 |
| 1285 | HIES-31 | 2744 | 184PR91 | 0.0040 | 500 | 0.094 | \|3612 | 4.629 | 0.047 |
| 1286 | $80 f$ | 2745 | 184PR91 | 0.0037 | 500 | 0.087 | 722 | 0.948 | 0.050 |

HOIR SEGIETTAL RAIR AHALYSIS

| SEQ | $\begin{gathered} \text { BATTELLLE } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { IITEGRATOR } \\ \text { SEQf } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { DIGRSIIOM } \\ \text { DATE } \end{gathered}\right.$ | $\begin{gathered} \text { DIGBSTIOM } \\ \text { WI } g . \end{gathered}$ | $\left\|\begin{array}{ll} S A A P I B & V O L \\ A B A L Y Z X D & \mu l \end{array}\right\|$ | amacyezd int ng | \|ARBA | $\begin{gathered} \text { EHg } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \mathrm{MDL} \\ {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1287 | 80 g | 2746 | 181PR891 | 0.0044 | 500 | 0.103 | 612 | 0.667 | 0.042 |
| 1288 | 80h | 2747 | 181PR91 | 0.0045 | 500 | 0.105 | 494 | 0.516 | 0.041 |
| 1289 | 801 | 2748 | 184PR91 | 0.0044 | 500 | 0.103 | 591 | 0.643 | 0.042 |
| 1290 | 80j | 2749 | 184PR91 | 0.0042 | 500 | 0.098 | 562 | 0.637 | 0.044 |
| 1291 | 80k | 2750 | 184P991 | 0.0045 | 500 | 0.105 | 757 | 0.820 | 0.041 |
| 1292 | 801 | 2751 | $1818 \mathrm{PR91}$ | 0.0043 | 500 | 0.101 | 693 | 0.781 | 0.043 |
| 1293 | 80. | 2752 | 184 PR 91 | 0.0040 | 500 | 0.094 | 681 | 0.824 | 0.047 |
| 1294 | 801 | 2753 | 184P891 | 0.0035 | 500 | 0.082 | 686 | 0.949 | 0.053 |
| 1295 | 800 | 2754 | 181PR91 | 0.0035 | 500 | 0.082 | 647 | 0.891 | 0.053 |
| $12 \%$ | 80p | 2755 | 184P991 | 0.0031 | 500 | 0.073 | 634 | 0.984 | 0.060 |
| 1297 | 809 | 2756 | 188P891 | 0.0021 | 500 | 0.049 | 526 | 1.186 | 0.089 |
| 1298 | 80c dup | 2757 | 184PR91 | 0.0045 | 500 | 0.105 | 860 | 0.939 | 0.041 |
| 1299 | 80j dup | 2758 | 184P991 | 0.0042 | 500 | 0.098 | 628 | 0.719 | 0.044 |
| 1300 | 80p dup | 2759 | 1818991 | 0.0031 | 500 | 0.073 | 647 | 1.006 | 0.060 |
| 1301 | IIRS-31 | 2760 | 182 PP 91 | 0.0040 | 500 | 0.094 | \|3569 | 4.573 | 0.047 |

## APPENDIX C

## RESULT GRAPHS BY PARTICIPANT NUMBER

## [Hg] vs Month <br> Participant Control \#1



PROJECT ID:MOHE SEGIRTTAL AMALYSIS
AMALYSIS: $\overline{Z H g} /$ HALR SAMPLE CBRIS

AHALYST: CITTERHAN/LASORSA
PILE f: HOHSECC1

| $\begin{aligned} & \text { BATTELLEE } \\ & \text { ID } \end{aligned}$ | $\left.\right\|_{\text {SEG }} ^{\text {Morrit }}$ | $\left\|\begin{array}{c} \text { HITEGRAOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAFE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGRSTIOM } \\ \text { Wr } g \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ A H A L Y 2 C D \end{array}\right\|$ | $\left\|\begin{array}{l} \operatorname{AMALYZED} \\ \operatorname{Wrgg} \end{array}\right\|$ | AREA | 2 Bg [ Hg ] $\mathrm{mg} / \mathrm{g}$ | $[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g} \mid$ | $\left\lvert\, \begin{gathered} \text { HENA } \\ {[\mathrm{Bg}] / \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|scalp |  |  |  |  |  |  |  |  |  |
| Cla | JAI | 535 | 23Jan91 | 0.0185 | 250 | 0.216 | 857 | 0.641 | 0.020 | 0.641 |
| Clb | DEC | 541 | 23J2191 | 0.0213 | 250 | 0.249 | 1056 | 0.691 | 0.017 | 0.691 |
| Clic | 1307 | 537 | 23811991 | 0.0198 | 250 | 0.232 | 1095 | 0.772 | 0.019 | 0.772 |
| Cld | OCT | 538 | 2372091 | 0.0203 | 250 | 0.237 | 792 | 0.538 | 0.018 | 0.538 |
| Cle | SEPT | 542 | 2354191 | 0.0186 | 250 | 0.218 | 760 | 0.562 | 0.020 | 0.562 |
| CIf | $1{ }^{\text {d }}$ G | 543 | 2378191 | 0.0197 | 250 | 0.230 | 819 | 0.574 | 0.019 | 0.574 |
| Clg | JULY | 544 | 23531991 | 0.0180 | 250 | 0.210 | 692 | 0.526 | 0.021 | 0.526 |
| Clb | J01 | 558 | 23J1191 | 0.0223 | 250 | 0.261 | 781 | 0.488 | 0.017 | 0.488 |
| Cli | HAY | 559 |  | 0.0189 | 250 | 0.221 | 673 | 0.493 | 0.020 | 0.493 |
| Clj | APR | 561 | 23 JLH 91 | 0.0184 | 250 | 0.215 | 542 | 0.403 | 0.020 | 0.403 |
| Cuk dup | HAR | 571,562 | 2351191 | 0.0180 | 250 | 0.210 | 635 | 0.487 | 0.021 | 0.489 |
| Cll | PEB | 563 | 237179 | 0.0183 | 250 | 0.214 | 668 | 0.505 | 0.020 | 0.505 |
| Clir | JJII | 564 | 23511891 | 0.0147 | 250 | 0.172 | 665 | 0.625 | 0.025 | 0.625 |
| CIn | DSC | 565 | 23JN191 | 0.0162 | 250 | 0.189 | 781 | 0.671 | 0.023 | 0.671 |
| Clo | 100 | 566 | 2370191 | 0.0138 | 250 | 0.161 | 724 | 0.728 | 0.027 | 0.728 |
| Clp | OCT | 567 | 23J1491 | 0.0119 | 250 | 0.139 | 623 | 0.721 | 0.031 | 0.721 |
| Clq | SEPT | 568 | 23Ju191 | 0.0101 | 250 | 0.118 | 493 | 0.663 | 0.037 | 0.663 |
| CIr | 10G | 569 | 23J1491 | 0.0084 | 250 | 0.098 | 431 | 0.691 | 0.044 | 0.691 |
| Cls | \| JULY | 570 | 23 Jali91 | 0.0063 | 250 | 0.074 | 342 | 0.716 | 0.059 | 0.716 |

## [Hg] vs Month Participant Control \#2



PROJECT ID: HONR SBGHETTAL AHALYSIS
AMALYSIS: ERg/EAIR SAMPLEC2

AMALYST: CITTEREAA/LASORSA
PILB : : MOHSECC2

| $\begin{array}{\|c} \text { BMITGULER } \\ \text { ID } \end{array}$ | $\left.\right\|_{\text {HOARII }}$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGBSTIOW } \\ \text { DAFE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESIIOM } \\ \mathrm{m} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu l) \\ \text { AHLYEBED } \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AMALYZBD } \\ \overline{W_{2}} \operatorname{mg} \end{array}\right\|$ | AREA |  | $\left\|\begin{array}{c} \operatorname{MDL} \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { HRAN } \\ {[\mathrm{Hg}] \mathrm{pg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCAIP |  |  |  |  |  |  |  |  |  |
|  | Har |  |  |  |  |  |  |  |  |  |
| C2a | FPB | 1368 | 441291 | 0.0116 | 250 | 0.136 | 749 | 0.590 | 0.032 | 0.590 |
| Cb | JII | 1369 | 410891 | 0.0094 | 250 | 0.110 | 827 | 0.806 | 0.040 | 0.806 |
| C2c | DEC | 1370 | 47a891 | 0.0113 | 250 | 0.132 | 1038 | 0.847 | 0.033 | 0.847 |
| C2d dup | 100 | \|1396,1371 | 4 P 1 P 91 | 0.0101 | 250 | 0.118 | 1092 | 0.998 | 0.037 | 0.969 |
| C2e | OCI | 1372 | 4 mpg 1 | 0.0106 | 250 | 0.124 | 1013 | 0.881 | 0.035 | 0.881 |
| C2f | SEPT | 1373 | 4 APP 1 | 0.0087 | 250 | 0.102 | 650 | 0.679 | 0.043 | 0.679 |
| C2g | IVG | 1374 | $4 \mathrm{nap91}$ | 0.0104 | 250 | 0.122 | 711 | 0.624 | 0.036 | 0.624 |
| Ch | JuL | 1375 | 4 n 191 | 0.0100 | 250 | 0.117 | 649 | 0.590 | 0.037 | 0.590 |
| Qi | JuI | 1376 | 4tap91 | 0.0103 | 250 | 0.120 | 710 | 0.629 | 0.036 | 0.629 |
| C2j | Hay | 1377 | 4 x 891 | 0.0093 | 250 | 0.109 | 955 | 0.945 | 0.040 | 0.945 |
| C2k dup | APR | \|1398,1391 | 410891 | 0.0088 | 250 | 0.103 | 1117 | 1.173 | 0.042 | 1.156 |
| C21 | Mar | 1392 | $4 \mathrm{4xP91}$ | 0.0069 | 250 | 0.104 | 1303 | 1.357 | 0.042 | 1.357 |
| C2I | P6B | 1393 | 4mper | 0.0087 | 250 | 0.102 | 1312 | 1.398 | 0.043 | 1.398 |
| $\mathrm{C}_{2}$ | JM | 1394 | 4nP91 | 0.0063 | 250 | 0.074 | 964 | 1.409 | 0.059 | 1.409 |
| $\mathrm{C}_{2}$ | DEC | 1395 | 412891 | 0.0054 | 250 | 10.063 | 923 | 1.572 | 0.069 | \| 1.572 |

## [Hg] vs Month <br> Participant Control \#3



PROWECT ID:MOTE SBCIBITAL AMALYSIS
ANALYSIS: $2 \mathrm{Eg} / \mathrm{HALR}$ SAYPLR C3

AMALIST: CITTERHAN/LASORSA
PILE 7: HOHSEGC3

| $\begin{gathered} \text { BAITEELLE } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOMIH } \end{gathered}\right.$ | $\begin{gathered} \text { IITBGRATOR } \\ \text { SERIf } \end{gathered}$ | $\left.\right\|_{\text {DIAEB }} ^{\text {DIGESTIOK }}$ | $\left\|\begin{array}{c} \text { DIGESITOM } \\ \mathrm{FI} \\ \mathrm{~g} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ \text { AMLYZED } \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AMALYZZBD } \\ \operatorname{Wing} \mathrm{Eg} \end{array}\right\|$ | AREA | $\stackrel{2 \mathrm{Bg}}{[\mathrm{Eg}] \mathrm{pg} / \mathrm{g}}$ | HDL [ Hg ] $\mathrm{mg} / \mathrm{g}$ | $\begin{aligned} & \text { HRAI } \\ & {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|Schip |  |  |  |  |  |  |  |  |  |
|  | HAR |  |  |  |  |  |  |  |  |  |
| C3a dup | PKB | \|1486,1458 | 414891 | 0.0200 | 250 | 0.234 | 422 | 0.175 | 0.019 | 0.184 |
| c3b | JNI | 1459 | map91 | 0.0195 | 250 | 0.228 | 401 | 0.176 | 0.019 | 0.176 |
| C3c | DSC | 1460 | mapor | 0.0193 | 250 | 0.226 | 372 | 0.164 | 0.019 | 0.164 |
| C3d | 100 | 1461 | 4 n P91 | 0.0176 | 250 | 0.206 | 368 | 0.177 | 0.021 | 0.177 |
| C3e | OCT | 1462 | 4napl | 0.0168 | 250 | 0.196 | 361 | 0.182 | 0.022 | 0.182 |
| C3f dap | STPT | \|1487,1463 | 4npel | 0.0220 | 250 | 0.257 | 525 | 0.202 | 0.017 | 0.205 |
| 09 | 10 G | 1464 | 4ap91 | 0.0187 | 250 | 0.219 | 496 | 0.231 | 0.020 | 0.231 |
| C3h | JuL | 1465 | anper | 0.0135 | 250 | 0.158 | 482 | 0.311 | 0.028 | 0.311 |
| C3i | 50.1 | 1466 | 4 mag 9 | 0.0143 | 250 | 0.167 | 646 | 0.401 | 0.026 | 0.401 |
| Cj | max | 1467 | 4 tapal | 0.0135 | 250 | 0.158 | 770 | 0.512 | 0.028 | 0.512 |
| C3K | 182 | 1468 | 4napg | 0.0091 | 250 | 0.106 | 648 | 0.633 | 0.041 | 0.633 |
| C3l | HaR | 1469 | $4 \mathrm{nP91}$ | 0.0068 | 250 | 0.080 | 537 | 0.693 | 0.055 | 0.693 |
| C31 | \| 788 | 1470 | 4tapel | 0.0068 | 250 | 0.080 | 618 | 0.805 | 0.055 | 0.805 |

## [Hg] vs Month <br> Participant Control \#4



PROJECT ID:MORE SEGHBTIL ANALYSIS
AMALYSIS: EHg/EAIR SAMPLE C4

ANALYST: CITTERHAR/LASORSA
PILR \$: HOMSEGC4

| $\begin{gathered} \text { BATTELLB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { Mon'ri } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { IFTBGRATOR } \\ \text { SERA } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGRSTIOM } \\ \text { DATE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGBSIIOM } \\ \text { mI } g \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ \text { ANLYRED } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AMALYZZBD } \\ W I \mathrm{mg} \end{array}\right\|$ | AREA |  | $\underset{[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}}{\mathrm{MDL}} \mid$ | $\left\lvert\, \begin{gathered} \text { MEAB } \\ {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | PEB |  |  |  |  |  |  |  |  |  |
| C4a | J $\mathrm{LI}^{\text {I }}$ | 1722 | 1210201 | 0.0085 | 500 | 0.199 | 643 | 0.427 | 0.022 | 0.427 |
| C4b | DSC | 1720 | 1210891 | 0.0080 | 500 | 0.187 | 681 | 0.483 | 0.023 | 0.483 |
| C4c | 107 | 1721 | 1201081 | 0.0070 | 500 | 0.164 | 779 | 0.639 | 0.027 | 0.639 |
| C4d | OCT | 1724 | 1211891 | 0.0076 | 500 | 0.178 | 1092 | 0.844 | 0.024 | 0.844 |
| C4e | SEPT | 1725 | 1201091 | 0.0059 | 500 | 0.161 | 1136 | 0.969 | 0.027 | 0.969 |
| C4f | SOG | 1726 | 1241891 | 0.0059 | 500 | 0.138 | 1059 | 1.052 | 0.032 | 1.052 |
| C4g dup | JUL | \|1737,1727 | 1201091 | 0.0057 | 500 | 0.133 | 992 | 1.016 | 0.033 | 0.990 |
| C4h | JOI | 1728 | 1201991 | 0.0053 | 500 | 0.124 | 826 | 0.899 | 0.035 | 0.899 |
| Cil | Hay | 1729 | 12012191 | 0.0046 | 500 | 0.108 | 601 | 0.733 | 0.040 | 0.733 |
| C4j | APR | 1732 | 12:14891 | 0.0041 | 500 | 0.096 | 524 | 0.706 | 0.045 | 0.706 |
| C4k | Has | 1733 | 1201991 | 0.0040 | 500 | 0.094 | 653 | 0.924 | 0.047 | 0.924 |
| C41 | PEB | 1734 | 120apel | 0.0029 | 500 | 0.068 | 544 | 1.041 | 0.064 | 1.041 |
| C4I dup | JuI | 1738,1735 | 1219101 | 0.0024 | 500 | 0.056 | 503 | 1.152 | 0.078 | 1.192 |
| Cnn | DSC | 1736 | 121021 | 0.0016 | - 500 | 0.037 | 403 | 1.341 | 0.116 | 1.341 |

## [Hg] vs Month Participant Control \#5


C.1-9

PROJECT ID:HONR SBETEITAL AMALYSIS

AHALYSIS: $\Sigma$ Ig/MAIR SANPIB C5

AMALYST: CIITERUAN/LASORSA

PILB F: HONSECC5

| $\begin{gathered} \text { BMTIELLS } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \operatorname{mon}_{\text {mint }} \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { MIEERATOR } \\ \text { SERY } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGRSIIO } \\ \text { DATE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { Digessiom } \\ \text { WI } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL ( } 11) \\ \text { AHLYESD } \end{array}\right\|$ |  | AREA | $\text { [ } \mathrm{Hg} \text { ] } \mathrm{mg} / \mathrm{g}$ | $\left\|\begin{array}{c} \mathrm{nDL} \\ {[\mathrm{Bg}]} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \mathrm{KRM} \\ {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mid$ Scalp |  |  |  |  |  |  |  |  |  |
|  | \| MaR |  |  |  |  |  |  |  |  |  |
| C5a | PSB | 1957 | 21H14891 | 0.0078 | 500 | 0.182 | 419 | 0.550 | 0.024 | 0.550 |
| C5b | JuII | 1958 | 2114891 | 0.0083 | 500 | 0.194 | 588 | 0.740 | 0.022 | 0.740 |
| CSC dup | DEC | \|1967,1959 | 21HAR91 | 0.0084 | 500 | 0.196 | 828 | 1.043 | 0.022 | 1.101 |
| C5d | 180 | 1960 | 21114291 | 0.0091 | 500 | 0.213 | 1085 | 1.272 | 0.020 | 1.272 |
| CSE | OCI | 1961 | 21141891 | 0.0085 | 500 | 0.199 | 851 | 1.061 | 0.022 | 1.061 |
| C5f | SEPI | 1962 | 2140891 | 0.0069 | 500 | 0.161 | 430 | 0.639 | 0.027 | 0.639 |
| $\mathrm{Cbg}^{\mathrm{g}}$ | 106 | 1963 | 214AP91 | 0.0074 | 500 | 0.173 | 384 | 0.528 | 0.025 | 0.528 |
| 1 CSh dup | JUL | \|1968,1964 | 2114.191 | 0.0079 | 500 | 0.185 | 370 | 0.475 | 0.024 | 0.493 |
| CSi | J0I | 1965 | 2114.191 | 0.0076 | 500 | 0.178 | 432 | 0.583 | 0.024 | 0.583 |
| C5j | may | 1966 | 2114R91 | 0.0073 | 500 | 0.171 | 473 | 0.669 | 0.025 | 0.669 |

## [Hg] vs Month Participant Control \#6



PROTECT ID:1OMR SECHETAL ARALYSIS
AMALYSIS: Xg/BAIR SAPPLB C6

AMLLYST: CITTIRRMA//LLSORSA
PILR $\boldsymbol{\text { : HOHSECC6 }}$

| $\begin{gathered} \text { BAPTRLLSR } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SRG } \\ \text { HOMII } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { IITPERATOR } \\ \text { SER: } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGRSTIOII } \\ \text { DAIE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { nit } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ A M L Y E S D \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AnLYZZBD } \\ \text { WI } \mathrm{Eg} \end{array}\right\|$ | ARRA | $\underset{[\mathrm{Eg}] \mathrm{Mg} / \mathrm{g}}{\mathrm{E}}$ | $\left\|\begin{array}{c} \text { HDL } \\ {[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & \text { HRAM } \\ & {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{aligned}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCLIP |  |  |  |  |  |  |  |  |  |
|  | MAR |  |  |  |  |  |  |  |  |  |
| cba | Pr8 | 2119 | 2614891 | 0.0127 | 500 | 0.297 | 377 | 0.249 | 0.015 | 0.249 |
| cob dup | J ${ }^{\text {M }}$ | \|2146,2120 | 2614R91 | 0.0147 | 500 | 0.344 | 557 | 0.335 | 0.013 | 0.327 |
| C6C | DIC | 2154 | 26414891 | 0.0135 | 500 | 0.316 | 756 | 0.503 | 0.014 | 0.503 |
| c6d | 100 | 2155 | 2641291 | 0.0150 | 500 | 0.351 | 974 | 0.588 | 0.012 | 0.588 |
| cbe | OCT | 2156 | 26410291 | 0.0135 | 500 | 0.316 | 824 | 0.550 | 0.014 | 0.550 |
| cof | SEPT | 2157 | 2614891 | 0.0131 | 500 | 0.306 | 699 | 0.477 | 0.014 | 0.477 |
| C6g | SOG | 2158 | 2641201 | 0.0115 | 500 | 0.269 | 671 | 0.521 | 0.016 | 0.521 |
| Coh dup | JUI | \|2147,2142 | 2641891 | 0.0118 | 500 | 0.276 | 730 | 0.555 | 0.016 | 0.517 |
| C6i | JUS | 2144 | 2614P91 | 0.0117 | 500 | 0.274 | 697 | 0.533 | 0.016 | 0.533 |
| c6j | hay | 2143 | 2641291 | 0.0103 | 500 | 0.241 | 556 | 0.477 | 0.018 | 0.477 |
| Cok | APS | 2145 | $2614 \mathrm{RP91}$ | 0.0105 | 500 | 0.246 | 476 | 0.397 | 0.018 | 0.397 |
| C61 | HAR | 2148 | 26181891 | 0.0048 | 500 | 0.112 | 282 | 0.491 | 0.039 | 0.491 |
| C6n dup | P38 | \|2150,2149 | 2614291 | 0.0040 | 500 | 0.094 | 208 | 0.416 | 0.047 | 0.424 |
| c6n | JIII | 2151 | 2648891 | 0.0031 | 500 | 0.073 | 228 | 0.597 | 0.060 | 0.597 |

## [Hg] vs Month Participant Control \#7



PRONECI ID:HOHE SEGHRITAL MMALYSIS
AMALYSIS: EHg/HARIR SAMPLR C7

ANALYST: CITTERHAM/LASORSA
PILE f: HOUSEGC7

| $\begin{gathered} \text { BATYELLS } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \text { WOMIT } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { IMTEGRATOR } \\ \text { SERI } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGRSITOM } \\ \text { in } \end{array}\right\|$ | $\left\|\begin{array}{l} \operatorname{VOL}(\mu 1) \\ \operatorname{ABLLYZBD} \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AMLLYZED } \\ \operatorname{lir} \mathrm{Eg} \end{array}\right\|$ | ARBA | $\underset{[\mathrm{Hg}][\mathrm{Mg} / \mathrm{g}}{\mathrm{En}}$ | $\left\|\begin{array}{c} \operatorname{HDL} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ | $\begin{gathered} \text { MERAM } \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCaLP |  |  |  |  |  |  |  |  |  |
|  | har |  |  |  |  |  |  |  |  |  |
| C7a-1 | Pr8 | 2292 | \|14PR91 | 0.0094 | 500 | 0.220 | 502 | 0.430 | 0.020 | 0.430 |
| \|C7b-1 dup | JAM | \|2305,2293 | \|21PR91 | 0.0102 | 500 | 0.239 | 658 | 0.529 | 0.018 | 0.533 |
| C7c-1 | DSC | 2294 | \|14P891 | 0.0080 | 500 | 0.187 | 596 | 0.607 | 0.023 | 0.607 |
| C7d-1 | 107 | 2295 | \|12PR91 | 0.0086 | 500 | 0.201 | 851 | 0.822 | 0.022 | 0.822 |
| C7e-1 | OCT | 2296 | \|14PR91 | 0.0087 | 500 | 0.203 | 903 | 0.864 | 0.021 | 0.864 |
| C7f-1 | SEPT | 2297 | \|L1PRR91 | 0.0088 | 500 | 0.206 | 1133 | 1.081 | 0.021 | 1.081 |
| \|C7g-1 dup | 106 | \|2306,2298 | \|12PR91 | 0.0069 | 500 | 0.161 | 968 | 1.171 | 0.027 | 1.178 |
| Ch-1 | JULY | 2299 | \| 2 APP 91 | 0.0075 | 500 | 0.175 | 978 | 1.089 | 0.025 | 1.089 |
| C7i-1 | Jus | 2302 | \|14PR91 | 0.0070 | 500 | 0.164 | 867 | 1.030 | 0.027 | 1.030 |
| \|C7j-1 dup | HAY | \|2307,2303 | \|LAPE91 | 0.0086 | 500 | 0.201 | 988 | 0.960 | 0.022 | 0.931 |
| C7K-1 | APR | 2304 | \|LAPR91 | 0.0062 | 500 | 0.145 | 771 | 1.028 | 0.030 | 1.028 |

## [Hg] vs Month Participant Control \#7 dup



PROJECT ID:HOTIT SEGIETITAL AMALYSIS

AHALISIS: $8 \mathrm{Eg} / \mathrm{BAIR}$ SANPLE C7 dup

AMALYST: CITTERNAM/LASORSA
PILE : : POHSEC7d

| $\begin{gathered} \text { BATIELLER } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { HOMint } \end{gathered}\right.$ | DITEGRATOR <br> SEQA | $\left\lvert\, \begin{gathered} \text { DIGESIIOMI } \\ \text { DAIE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGRSIIOM } \\ \text { mit g } \end{array}\right\|$ | $\left\|\begin{array}{l} \operatorname{VOL}(\mu 1) \\ A B L Y S E D \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AnALYZZDD } \\ \text { ning } \end{array}\right\|$ | AREA | $\underset{[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}}{\mathrm{ZHg}}$ | $\left\|\begin{array}{c} \text { MDL } \\ {[\mathrm{Bg}]_{\mu \mathrm{M}} / \mathrm{g}} \end{array}\right\|$ | $\begin{gathered} \text { HRAR } \\ {[\mathrm{Bg}] \mu \mathrm{Mg} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | MAR |  |  |  |  |  |  |  |  |  |
| C7a-2 | PEB | 2308 | L14P891 | 0.0118 | 500 | 0.276 | 569 | 0.392 | 0.016 | 0.392 |
| \|C7b-2 dup | Jan | \|2333,2309 | LaPR91 | 0.0122 | 500 | 0.285 | 752 | 0.523 | 0.015 | 0.524 |
| C7c-2 | DEC | 2310 | Lapr91 | 0.0085 | 500 | 0.199 | 587 | 0.563 | 0.022 | 0.563 |
| C7d-2 | 1008 | 2311 | 11P891 | 0.0103 | 500 | 0.241 | 893 | 0.722 | 0.018 | 0.722 |
| C7e-2 | OCI | 2326 | LPPR91 | 0.0109 | 500 | 0.255 | 1113 | 0.878 | 0.017 | 0.878 |
| \|c7f-2 dup | SEPT | \|2334,2327 | $14 \mathrm{PPO1}$ | 0.0093 | 500 | 0.218 | 1204 | 1.115 | 0.020 | 1.078 |
| C7g-2 | 1006 | 2328 | 14PP91 | 0.0098 | 500 | 0.229 | 1305 | 1.149 | 0.019 | 1.149 |
| $\mathrm{Cm}_{3} 2$ | JULI | 2329 | $1 \mathrm{PPR91}$ | 0.0086 | 500 | 0.201 | 993 | 0.989 | 0.022 | 0.989 |
| \|cıi-2 dup | JUS | \|2335,2330 | Laprel | 0.0091 | 500 | 0.213 | 994 | 0.936 | 0.020 | 0.920 |
| C7j-2 | M Al | 2331 | 14PR291 | 0.0112 | 500 | 0.262 | 1269 | 0.977 | 0.017 | 0.977 |
| C7k-2 | APP | 2332 | 14PP91 | \| 0.0083 | 500 | \| 0.194 | 1094 | 1.132 | \| 0.022 | \| 1.132 |

## [Hg] vs Month Participant \#1



PROJECT ID: HOHE SEGGETTAL ANALYSIS
ARLLYSIS: $\mathbb{Z G} /$ HAIR SAMPLE 1

ALALYST: CITTERTAN/LASORSA
PILB \&: MOHSEGO1

| $\begin{gathered} \text { BAITYELLE } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \text { MONTII } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { Dirgecraior } \\ \text { SEOA } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESFIOM } \\ \text { DAFE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \mathrm{gI} \end{array}\right\|$ | $\left\|\begin{array}{l} \mathrm{VOL}(\mu \mathrm{I}) \\ \mathrm{AMNLYESD} \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AMALYEED } \\ \text { WI Eg } \end{array}\right\|$ | ARRA | $\stackrel{\Sigma: \mathrm{g}}{[\mathrm{ig}] \mathrm{mg} / \mathrm{g}}$ | NDL [ Hg ] $\mathrm{mg} / \mathrm{g}$ | $\left\lvert\, \begin{gathered} \text { HRAM } \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
|  | $\triangle 0 G$ |  |  |  |  |  |  |  |  |  |
| 1a dup | JUL | 176,129 | 951991 | 0.0128 | 250 | 0.150 | 996 | 1.157 | 0.029 | \|1.14201 |
| 1 lb dup | गw | 179,131 | SJak91 | 0.0152 | 250 | 0.178 | 1261 | 1.241 | 0.024 | \|1.20421 |
| 1c dup | Hay | 180,132 | SJM191 | 0.0161 | 250 | 0.188 | 1243 | 1.155 | 0.023 | \|1.07796 |
| 1d dup | APR | 182,157 | 9J1491 | 0.0145 | 250 | 0.170 | 1150 | 1.184 | 0.026 | \|1.08536 |
| 1e dup | Has | 183,158 | $9 \mathrm{SNM91}$ | 0.0157 | 250 | 0.184 | 1216 | 1.158 | 0.024 | \|1.09599 |
| If dup | FEB | 184,145 | 9 SN 191 | 0.0163 | 250 | 0.191 | 1192 | 1.093 | 0.023 | \|1.07531 |
| 19 dup | Jall | 185,146 | 97191 | 0.0162 | 250 | 0.189 | 1408 | 1.304 | 0.023 | \|1.16863 |
| Ih dup | DSC | 186,151 | 9ramel | 0.0155 | 250 | 0.181 | 1557 | 1.510 | 0.024 | \|1.42553 |
| 11 dup | 1300 | 187,152 | 9J11991 | 0.0143 | 250 | 0.167 | 1463 | 1.536 | 0.026 | \|1.40136 |
| \| 1 j dup | OCT | 188,171 | 921191 | 0.0140 | 250 | 0.164 | 1662 | 1.786 | 0.027 | \|1.80409 |
| \| 15 dup | SEPT | 189,175 | 951491 | 0.0071 | \| 250 | 0.083 | 1303 | 2.748 | 0.052 | \|2.74373 |

## [Hg] vs Month Participant \#2



PRONECT ID:HONR SEGHETTAL MMLYSIS
AMALYSIS: $\Sigma \mathrm{Zg} / \mathrm{HALR}$ SAMPLE 2

AMALYST: LASORSA/CTTTERUAN
PILE f: MOHSECO2

| $\begin{gathered} \text { BATYBLLLE } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \operatorname{mon}^{2} \mathrm{IH} \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { ITIECRATOR } \\ \text { SERf: } \end{array}\right\|$ | $\left.\right\|_{\text {DAFE }} ^{\text {DIGSTIOM }}$ | $\left\|\begin{array}{c} \text { DIGRSTIOM } \\ \text { WI } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu \mathrm{B}) \\ \text { MWLYEDD } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { ABALYZED } \\ \text { WI Mg } \end{gathered}\right.$ | AREA | $\underset{[\mathrm{Hg}] \mathrm{Kg} / \mathrm{g} / \mathrm{g}}{\mathrm{ERg}}$ | $[\mathrm{Bg}] \mathrm{mg} / \mathrm{g} \mid$ | $\begin{aligned} & \text { HRRAN } \\ & {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
|  | 106 |  |  |  |  |  |  |  |  |  |
| 2a | JULY | 235 | 1 7 J 1191 | 0.0147 | 250 | 0.172 | 1506 | 1.290 | 0.025 | 1.290 |
| 2 b dup | JUS | 271,236 | \|14521691 | 0.0162 | 250 | 0.189 | 1719 | 1.551 | 0.023 | 1.442 |
| 2 c | H 4 I | 237 | 14JaM91 | 0.0161 | 250 | 0.188 | 1978 | 1.612 | 0.023 | 1.612 |
| 2 d | APR | 238 | 14J11991 | 0.0143 | 250 | 0.167 | 1813 | 1.644 | 0.026 | 1.644 |
| 28 | Has | 239 | 14J1991 | 0.0154 | 250 | 0.180 | 2161 | 1.862 | 0.024 | 1.862 |
| 27 | F8B | 240 | 145N1991 | 0.0135 | 250 | 0.158 | 2130 | 2.090 | 0.028 | 2.090 |
| 2 dap | JM | 253,241 | 1451591 | 0.0118 | 250 | 0.138 | 2153 | 2.676 | 0.032 | 2.545 |
| 2 c dup | DSC | 254,242 | 14J1491 | 0.0127 | 250 | 0.149 | 2739 | 3.172 | 0.029 | 3.046 |
| $2 i$ | 100 | 243 | 14J1591 | 0.0113 | 250 | 0.132 | 2583 | 3.091 | 0.033 | 3.091 |
| $2 j$ | OCI | 244 | 14J1591 | 0.0121 | 250 | 0.142 | 3034 | 3.439 | 0.031 | 3.439 |
| 2k | SEPI | 259 | 1471491 | 0.0110 | 250 | 0.129 | 2934 | 3.926 | 0.034 | 3.926 |
| 21 | 206 | 260 | 14511991 | 0.0111 | 250 | 0.130 | 3386 | 4.496 | 0.034 | 4.496 |
| 24 dup | JWII | 272,261 | \|14J1M91 | 0.0111 | 250 | 0.130 | 3895 | 5.178 | 0.034 | 5.089 |
| 20 | JuI | 262 | 1451599 | 0.0110 | 250 | 0.129 | 3651 | 4.895 | 0.034 | 4.895 |
| 20 | May | 263 | 14 J 1F91 | 0.0098 | 250 | 0.115 | 3634 | 5.469 | 0.038 | 5.469 |
| 2 p | APR | 264 | 14Jan91 | 0.0087 | 250 | 0.102 | 3580 | 6.068 | 0.043 | 6.068 |
| 29 | Mar | 265 | \| 14 J3M91 | 0.0090 | 250 | 0.105 | 4188 | 6.871 | 0.041 | 6.871 |
| 2x dup | PEB | 275,266 | \|14J3491 | 0.0080 | 250 | 0.094 | 4481 | 8.274 | 0.047 | 8.312 |

PROJECT ID:MONE SEGITRTAL AHALYSIS
ANALYSIS: $\mathrm{ZHg} / \mathrm{BAIR}$ SANPLB 2

ANALYST: LASORSA/CITTERNAY

FILE \&: MOHSEGO2

| BATTELLE <br> ID | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { HONII } \end{gathered}\right.$ | $\begin{gathered} \text { IITBGRATOR } \\ \text { SEQ } \end{gathered}$ | $\begin{gathered} \text { DIGESYIO: } \\ \text { DAKE } \end{gathered}$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { WI } \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & \text { VOL }(\mu 1) \\ & \text { AHALYED } \end{aligned}\right.$ | $\left\|\begin{array}{c} \text { AMaLyem } \\ \text { WI mg } \end{array}\right\|$ | AREA | $\stackrel{\Sigma E \mathrm{E}}{[\mathrm{Eg}] \mu \mathrm{M} / \mathrm{g}}$ | IDL [Bg] $/ \mathrm{gg} / \mathrm{g}$ | $\begin{aligned} & \text { HEAI } \\ & \text { [Hg] } \mathrm{Hg} / \mathrm{g} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | ЈаM | 267 | \| 14 J 1591 | 0.0089 | 250 | 0.104 | 4958 | 8.235 | 0.042 | 8.235 |
| $2 t$ | DEC | 268 | \| 14 J 2 H 91 | 0.0076 | 250 | 0.089 | 4877 | 9.485 | 0.049 | 9.485 |
| 20 | 1 OV | 269 | \|14J1191 | 0.0087 | 250 | 0.102 | 5557 | 9.448 | 0.043 | 9.448 |
| 2v dup | OCI | 276,270 | \|14J3191 | 0.0057 | 250 | 0.067 | 5850 | 15.185 | 0.065 | 15.194 |

## [Hg] vs Month Participant \#3



PROTECT ID:MONE SEGHEMTAL ANALYSIS
ANALYSIS: EHg/EAIR SAIPLR 3

ANALYST: LASORSA/CITTERUAB
FILE : HOHSEGO3

| $\begin{aligned} & \text { BATTELLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOMTH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DATE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { ing } \end{array}\right\|$ | VOL ( 1 L ) AMALYZED | $\left\|\begin{array}{c} \text { ARALYZED } \\ \text { WI } \mathrm{mg} \end{array}\right\|$ | AREA | $\underset{[\mathrm{EG}]}{\mathrm{EHg}}$ | $\left\|\begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Hg}] \mathrm{\mu g} / \mathrm{g}} \end{array}\right\|$ | $\underset{[\mathrm{Eg}] \mathrm{\mu g} / \mathrm{g}}{\mathrm{HEAH}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
|  | AJG |  |  |  |  |  |  |  |  |  |
| 3 a | JULI | 192 | 9J4991 | 0.0020 | 250 | 0.023 | 534 | 3.872 | 0.186 | 3.872 |
| 3b | JUS | 193 | 9JM191 | 0.0023 | 250 | 0.027 | 464 | 2.901 | 0.162 | 2.901 |
| 3 C | Hay | 194 | 9JגY91 | 0.0021 | 250 | 0.025 | 467 | 3.199 | 0.177 | 3.199 |
| 3 d | APR | 196 | gravis | 0.0018 | 250 | 0.021 | 589 | 4.769 | 0.207 | 4.769 |
| 3 e | HAR | 197 | 9J1491 | 0.0019 | 250 | 0.022 | 635 | 4.889 | 0.196 | 4.889 |
| $3 f$ | P6B | 198 | 9 94191 | 0.0018 | 250 | 0.021 | 594 | 4.812 | 0.207 | 4.812 |
| 39 | JMn | 199 | gJaw91 | 0.0016 | 250 | 0.019 | 439 | 3.931 | 0.233 | 3.931 |
| 3h dup | DSC | 220,200 | 9 J 491 | 0.0008 | 250 | 0.009 | 347 | 4.890 | 0.465 | 5.792 |
| $3 i$ | 108 | 201 | 974991 | 0.0006 | 250 | 0.007 | 399 | 9.462 | 0.620 | 9.462 |
| $3 j$ | $0 C^{1}$ | 202 | 954me | 0.0004 | 250 | 0.005 | 301 | 10.444 | 0.930 | 10.444 |
| 3k | SEPT | 212 | 97291 | 0.0006 | 250 | 0.007 | 603 | 12.842 | 0.620 | 12.842 |
| 31 | 106 | 213 | 95191 | 0.0006 | 250 | 0.007 | 494 | 10.150 | 0.620 | 10.150 |
| 34 | JUII | 214 | 971991 | 0.0004 | 250 | 0.005 | 414 | 12.262 | 0.930 | 12.262 |
| 3 n dup | JW | 219,215 | 971991 | 0.0014 | 250 | 0.016 | 668 | 6.192 | 0.266 | 6.382 |
| 30 | HaI | 216 | 972991 | 0.0006 | 250 | 0.007 | 501 | 10.323 | 0.620 | 10.323 |
| 3p | APR 1 | 217 | 9J1991 | 0.0006 | 250 | 0.007 | 599 | 12.743 | 0.620 | 12.743 |

## [Hg] vs Month Participant \#4



PROJECT LD:HONE SEETESTAL AMALYSIS
AKALYSIS: EHG/BAIR SAIPLU 4

ANALYST: CITTERMAN/LASORSA
PILE 1: MOHSECO4

| $\begin{gathered} \text { BATYELLE } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SRG } \\ \text { HOMIH } \end{gathered}\right.$ | $\begin{gathered} \text { IHIBERATOR } \\ \text { SEO: } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { DIGESTIO } \\ \text { DATE } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { DIGRSIIOM } \\ \text { VI } g \end{gathered}\right.$ | $\left\lvert\, \begin{aligned} & \text { VOL }(\mu l) \\ & \text { MWLYESD } \end{aligned}\right.$ | $\left\|\begin{array}{c} \text { AHALYZED } \\ \text { Wr mg } \end{array}\right\|$ | AREA | $\begin{gathered} \Sigma \mathrm{ZHg} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \text { MDL } \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { MRAM } \\ {[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | \\| A0G |  |  |  |  |  |  |  |  |  |
| 42 | / JUL | 360 | \|17J1191 | 0.0078 | 250 | 0.091 | 1027 | 1.819 | 0.048 | 1.819 |
| 4b | J0. | 361 | \|17JM191 | 0.0079 | 250 | 0.092 | 1095 | 1.917 | 0.047 | 1.917 |
| 4 c dup | H18 | 375,362 | \|17Jय91 | 0.0083 | 250 | 0.097 | 998 | 1.660 | 0.045 | 1.715 |
| $4 d$ | APR | 363 | \|17J3191 | 0.0076 | 250 | 0.089 | 906 | 1.643 | 0.049 | 1.643 |
| 4 4 | $\mid M R$ | 364 | \|17J2991 | 0.0040 | 250 | 0.047 | 536 | 1.822 | 0.093 | 1.822 |

## [Hg] vs Month Participant \#5



PROJECT ID:HONE SEGIERTAL AMALYSIS
AMALYSIS: EHg/EAIR SAMPLE 5

ANALYST: CITTERHAN/LASORSA
FILX f: HOMSBCO5

| $\begin{aligned} & \text { BATTELLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \text { MOMTH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTECRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DAIP } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOH } \\ \mathrm{Wr} \mathrm{~g} \end{array}\right\|$ | $\left\|\begin{array}{l} \mathrm{VOL}(\mu \mathrm{~L}) \\ \mathrm{AHALYEDDD} \end{array}\right\|$ | $\left\|\begin{array}{c} \text { ABALYZED } \\ \text { WI } \end{array}\right\|$ | AREA | $\begin{gathered} \sum \mathrm{Hgq} \\ {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}$ | $\underset{\mathrm{HDL}}{\mathrm{HD}] \mu \mathrm{g} / \mathrm{g}}$ | $\begin{gathered} \text { MRAM } \\ {[\mathrm{Hg}] \mathrm{Hg} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mid$ SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 5 | $\triangle$ SG | 281 | \|16J1991 | 0.0188 | 250 | 0.220 | 1885 | 1.471 | 0.020 | 1.471 |
| 5b | JOLY | 282 | \|16J1491 | 0.0214 | 250 | 0.250 | 1964 | 1.347 | 0.017 | 1.347 |
| 5 C | J03 | 292 | \|16JNM91 | 0.0182 | 250 | 0.213 | 1747 | 1.394 | 0.020 | 1.394 |
| 50 | H $1 / 2$ | 293 | \|16J1991 | 0.0144 | 250 | 0.168 | 1334 | 1.335 | 0.026 | 1.335 |
| 5 | APR | 295 | \|16J21991 | 0.0143 | 250 | 0.167 | 1351 | 1.362 | 0.026 | 1.362 |
| 51 | HMR | 296 | 16.1491 | 0.0144 | 250 | 0.168 | 1397 | 1.400 | 0.026 | 1.400 |
| 59 | P6B | 297 | 16J11991 | 0.0123 | 250 | 0.144 | 1373 | 1.610 | 0.030 | 1.610 |
| 51 | Jג | 298 | \|16J1991 | 0.0130 | 250 | 0.152 | 1804 | 2.017 | 0.029 | 2.017 |
| 51 | DSC | 302 | 167191 | 0.0127 | 250 | 0.149 | 1813 | 2.076 | 0.029 | 2.076 |
| 5j | 100 | 303 | \|16J191 | 0.0107 | 250 | 0.125 | 2034 | 2.771 | 0.035 | 2.771 |
| 5 | OCT | 304 | \|168191 | 0.0030 | 250 | 0.094 | 1839 | 3.343 | 0.047 | 3.343 |
| 51 | SEPT | 305 | \|16JM531 | 0.0085 | 250 | 0.099 | 2362 | 4.063 | 0.044 | 4.063 |
| 51 | 106 | 306 | \|1601991 | 0.0078 | 250 | 0.091 | 2311 | 4.330 | 0.048 | 4.330 |
| 5n | JWH | 307 | \|1651991 | 0.0077 | 250 | 0.090 | 2723 | 5.183 | 0.048 | 5.183 |
| 50 | Jus | 308 | 16Jam91 | 0.0065 | 250 | 0.076 | 2465 | 5.549 | 0.057 | 5.549 |
| 5p | \| hay | | 316 | \|6JJ1991 | $\mid 0.0059$ \| | \| 250 | \| 0.069 | 2648 | 6.575 | 0.063 | 6.575 |

## [Hg] vs Month Participant \#6



PROSECT ID: KOFR SEGHENTAL AHALYSIS
AMALYSIS: $\mathbb{Z H} /$ HAIR SAMPLB 6

AMALYST: CITTERUAH/LASORSA
PILR f: MOHSECO6

| $\begin{array}{\|c} \text { BATTBLLLB } \\ \text { ID } \end{array}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOHITE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { ITMERATOR } \\ \text { SER } \end{array}\right\|$ |  | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \mathrm{mp} \end{array}\right\|$ | VOL ( $\mu \mathrm{L}$ ) AMLYZED | $\left\|\begin{array}{l} \text { AHALYZED } \\ \overline{W I R} \mathrm{Eg} \end{array}\right\|$ | ARRA | $\underset{[\mathrm{Bq}] \mathrm{Hg} / \mathrm{g}}{\mathrm{EH}}$ | $\left\lvert\, \begin{gathered} \text { MRAN } \\ {[\mathrm{Hg}] \mu \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|scalp |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |
| 6 a | 1006 | 311 | \|16J1491 | 0.0104 | 250 | 0.122 | 570 | 0.755 | 0.755 |
| 6b | July | 312 | \|16J4.991 | 0.0096 | 250 | 0.112 | 611 | 0.881 | 0.881 |
| 6c dup | J01 | 344,313 | \|16JM991 | 0.0096 | 250 | 0.112 | 631 | 0.867 | 0.879 |
| 60 | M M | 314 | \| 26 J 1 H 91 | 0.0089 | 250 | 0.104 | 535 | 0.823 | 0.823 |
| $6 e$ | APR | 317 | \|16J1991 | 0.0089 | 250 | 0.104 | 603 | 0.937 | 0.937 |
| 65 | HaR | 318 | \| $16 \mathrm{~J} 1 \mathrm{H}_{191}$ | 0.0079 | 250 | 0.092 | 723 | 1.282 | 1.282 |
| 69 | PEB | 330 | \|16J1491 | 0.0073 | 250 | 0.085 | 823 | 1.510 | 1.510 |
| 6 h | Jal | 331 | \|16J1991 | 0.0082 | 250 | 0.096 | 1098 | 1.816 | 1.816 |
| 61 | DSC | 332 | \| 16.15192 | 0.0079 | 250 | 0.092 | 1174 | 2.020 | 2.020 |
| $6 j$ | 100 | 333 | \|16J1991 | 0.0077 | 250 | 0.090 | 1053 | 1.852 | 1.852 |
| 6 | OCT | 334 | \|16J1291 | 0.0071 | 250 | 0.083 | 1057 | 2.016 | 2.016 |
| 61 | SEPT | 335 | \|16J1791 | 0.0064 | 250 | 0.075 | 988 | 2.085 | 2.085 |
| 61 dup | 10 E | 345,338 | \|16J1991 | 0.0064 | 250 | 0.075 | 1140 | 2.419 | 2.377 |
| 64 | Juk | . 339 | \|16Jan91 | 0.0057 | 250 | 0.067 | 856 | 2.016 | 2.016 |
| 60 dup | Ju | 342,340 | \|16J1491 | 0.0053 | 250 | 0.062 | 882 | 2.237 | 2.218 |
| $6 p$ dup | WII | 343,341 | \|1671491 | \| 0.0052 | 250 | 0.061 | 1006 | 2.615 | 2.527 |

## [Hg] vs Month Participant \#7



PROTECT ID:MOHE SEGIEATLLL ARALYSIS
ANALYSIS: EHg/EAIR SANPLR 7

ANALYST: CITTERHAN/LASORSA
PILB $\ddagger$ : HOUSEG07


## [Hg] vs Month Participant \#8



PROTECT ID:MONT SBCHEMTAL AMALYSIS

ANALYSIS: $\Sigma Z \mathrm{Hg} / \mathrm{BALR}$ SAMPLR 8

## [Hg] vs Month Participant \#9



PROJECT ID:HONE SEGTETTAL ALALYSIS

AHALYSIS: ZHg/EAIR SAMPLE 9

| $\begin{aligned} & \text { BATYEILLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MONTII } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { INTEGERATOR } \\ \text { SERA } \end{gathered}\right.$ | $\left.\right\|_{\text {DIIE }}{ }^{\text {DIGBSTIOI }}$ | $\left\|\begin{array}{c} \text { DIGRSTIOM } \\ \text { WI g } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL ( } \mu \mathrm{l}) \\ \text { AWALYEED } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { MaLYEED } \\ \text { WI } \end{array}\right\|$ | AREA | $\begin{gathered} \text { EHg } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\begin{gathered} \mathrm{KDL} \\ {[\mathrm{Eg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCSLP |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |
|  | 10 G |  |  |  |  |  |  |  |  |
| 93 | JULY | 365 | \|17J4.91 | 0.0145 | 250 | 0.170 | 770 | 0.729 | 0.026 |
| 9b dup | JUI | 390,366 | \|17J1/991 | 0.0137 | 250 | 0.160 | 956 | 0.942 | 0.027 |
| 9 | May | 367 | \|17J3991 | 0.0121 | 250 | 0.142 | 979 | 1.117 | 0.031 |
| 98 | APS | 368 | \|17JM991 | 0.0110 | 250 | 0.129 | 1000 | 1.255 | 0.034 |
| ge | HAR | 371 | \|17J1491 | 0.0092 | 250 | 0.108 | 1138 | 1.712 | 0.040 |
| of dup | P8B | 376,372 | \|17J4991 | 0.0074 | 250 | 0.087 | 1093 | 2.043 | 0.050 |
| 99 | Jan | 373 | \|17J1991 | 0.0061 | 250 | 0.071 | 1135 | 2.575 | 0.061 |
| و | DSC | 374 | \|17J3191 | 0.0044 | 250 | 0.051 | 1168 | 3.675 | 0.085 |
| 91 | 100 | 387 | \|17JME91 | 0.0044 | 250 | 0.051 | 1188 | 3.667 | 0.085 |
| $9{ }^{1}$ | OCT | 388 | \|17J4191 | 0.0049 | 250 | 0.057 | 2199 | 6.167 | 0.076 |
| \% | SEPI | 369 | \|17J1991 | 0.0035 | 250 | 0.041 | 1923 | 7.535 | 0.106 |

## [Hg] vs Month Participant \#10



PROTECI ID:HONR SEGTETHAL AMALYSIS

AMALYSIS: EHg/EAIR SANPLR 10

ANALYST: CITTERHAN/LASORSA
FILE $\ddagger$ : HOHSEGIO

| $\begin{gathered} \text { BATTELLE } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOMII } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTESERATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAFE } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \mathrm{FI} \mathrm{~g} \end{gathered}\right.$ | VOL (14) AMALIEED | $\left\|\begin{array}{l} \text { AMALYZEDD } \\ \mathrm{WI} \mathrm{mg} \end{array}\right\|$ | AREA | $\begin{gathered} \Sigma H g \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \mathrm{KDL} \\ {[\mathrm{Eg}] / \mathrm{gg} / \mathrm{g}} \end{gathered}\right.$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCLLP |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
|  | AOG |  |  |  |  |  |  |  |  |  |
| 103 | JoLl | 391 | \|17J1491 | 0.0111 | 250 | 0.130 | 701 | 0.842 | 0.034 | 0.842 |
| 100 dup | JUS | 396,392 | 17J1491 | 0.0110 | 250 | 0.129 | 534 | 0.638 | 0.034 | 0.647 |
| 10 C | mal | 393 |  | 0.0109 | 250 | 0.127 | 413 | 0.490 | 0.034 | 0.490 |
| 10 d | APR | 394 | \|17J1星1 | 0.0109 | 250 | 0.127 | 389 | 0.459 | 0.034 | 0.459 |
| 100 | \| MAR | 395 | \|17Jม191 | 0.00\% | 250 | 0.112 | 326 | 0.430 | 0.039 | 0.430 |

## [Hg] vs Month Participant \#11



PROJECT ID:NOIE SEGIGTAL AHALYSIS
ANALYSIS: ZHig/EAIR SANPLE 11

AHALYST: CITTERHAN/LASORSA
pILB : Monsegil

| $\begin{aligned} & \text { BMTIELLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MONTH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { MTECRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAFE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGBSTION } \\ \text { WI } \mathrm{g} \end{array}\right\|$ | $\left\|\begin{array}{l} \operatorname{VOL}(\mu \mathrm{L}) \\ \mathrm{ABALYZED} \end{array}\right\|$ | $\left\|\begin{array}{c} \text { ANALYZED } \\ \operatorname{TrIg} \end{array}\right\|$ | AREA | $\begin{gathered} \text { EBg } \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \mathrm{MDL} \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ | $\begin{gathered} \text { KRKM } \\ {[\mathrm{Bg}] \text { [gG/ } / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
| 11 a | ${ }^{1} \mathrm{OG}$ | 397 | \|17Jม191 | 0.0083 | 250 | 0.097 | 546 | 0.866 | 0.045 | 0.866 |
| 11 b dup | JULI | 403,398 | \|17J1991 | 0.0072 | 250 | 0.084 | 304 | 0.530 | 0.052 | 0.532 |
| 116 | J015 | 399 | \|17J1091 | 0.0074 | 250 | 0.087 | 313 | 0.533 | 0.050 | 0.533 |
| 11d | Hay | 400 | \| 17 J2191 | 0.0072 | 250 | 0.084 | 322 | 0.565 | 0.052 | 0.565 |
| 110 | APR | 401 | \|17J1M91 | 0.0059 | 250 | 0.069 | 318 | 0.680 | 0.063 | 0.680 |
| 118 | HAR | 402 | \|1751491 | 0.0070 | 250 | 0.082 | 416 | 0.768 | 0.053 | 0.768 |

## [Hg] vs Month Participant \#12



PROJECT ID:HONE SEGLTITAL MALYSIS
AMALYSIS: EHg/EAIR SAKPLE 12

ANALYST: CITTERRHAN/LASORSA
PILB |: HOHSEG12

| BATMELLE <br> ID | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOSHI } \end{gathered}\right.$ | $\begin{array}{\|c} \text { DFIEGRATOR } \\ \text { SEQf } \end{array}$ | DIGESIOR | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { Wr } \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & \text { POL ( } \mu \mathrm{I}) \\ & \text { AMALYZ } \end{aligned}\right.$ | $\left\|\begin{array}{\|c\|} A M A L y E D D \\ \operatorname{Ting} \end{array}\right\|$ | AREA | $\begin{gathered} \sum \mathrm{Hg} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ | $\begin{aligned} & \text { MBAH } \\ & \text { [Hg] } \mathrm{Hg} / \mathrm{g} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
| 12a | AOG | 417 | \| 22 J 1191 | 0.0188 | 250 | 0.220 | 1444 | 1.081 | 0.020 | 1.081 |
| 12b dup | JULI | 423,418 | \|22]1191 | 0.0165 | 250 | 0.193 | 1646 | 1.407 | 0.023 | 1.335 |
| 12c | JUI | 419 | \|22J1491 | 0.0176 | 250 | 0.206 | 2393 | 1.928 | 0.021 | 1.928 |
| 12d | H2Y | 420 | \| 2251.91 | 0.0165 | 250 | 0.193 | 2907 | 2.504 | 0.023 | 2.504 |
| 128 | APR | 421 | \| 2251191 | 0.0180 | 250 | 0.210 | 5472 | 4.340 | 0.021 | 4.340 |
| 127 | MAR | 422 | \|22J4991 | 0.0129 | 250 | 0.151 | 5599 | 6.198 | 0.029 | 6.198 |

## [Hg] vs Month Participant \#13



PROJECT ID:NOFR SEGIBTITAL AMALYSIS
AMALYSIS: $2 H g /$ BAIR SAMPLE 13

ANALYST: CITTERHAN/LASORSA
PILE \&: MOHSEG13


| $\begin{aligned} & \text { BATPZLLE } \\ & \text { ID } \end{aligned}$ | $\left.\right\|_{\text {MOHiTH }} ^{\text {SRG }}$ | $\left\|\begin{array}{c} \text { NTEEPRTOR } \\ \text { SEQ: } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOII } \end{gathered}\right.$ | $\left\|\begin{array}{cc} \text { DIGBSTIOM: } \\ \text { Wr } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL ( } \mu \mathrm{IL}) \\ \text { AMALYED } \end{array}\right\|$ | $\begin{gathered} \text { ) } \\ D \end{gathered}\left\|\begin{array}{c} \text { Analyzzed } \\ \operatorname{lng} \end{array}\right\|$ | AREA | $\begin{gathered} \mathrm{EHg} \\ {[\mathrm{~Bq}] \mathrm{pg} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \mathrm{VDL} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ | $\begin{gathered} \text { MRAM } \\ {[\mathrm{Hg}][\mathrm{Mg} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 13a | 10 G | 425 | \|22J1491 | 0.0090 | 250 | 0.105 | 540 | 0.816 | 0.041 | 0.816 |
| 13b | JOLY | 426 | \|22J1491 | 0.0113 | 250 | 0.132 | 601 | 0.727 | 0.033 | 0.727 |
| 13 C | J01 | 427 | \|22J14991 | 0.0096 | 250 | 0.112 | 392 | 0.543 | 0.039 | 0.543 |
| 13d | HMY | 428 | \|22J10691 | 0.0098 | 250 | 0.115 | 327 | 0.437 | 0.038 | 0.437 |
| 130 | APR | 429 | \|22J1791 | 0.0099 | 250 | 0.116 | 320 | 0.423 | 0.038 | 0.423 |
| 13 f dup | HAR | 437,430 | 22J1M91 | 0.0075 | 250 | 0.088 | 265 | 0.453 | 0.050 | 0.474 |
| 139 | PRB | 431 | \|22J1491 | 0.0076 | 250 | 0.089 | 295 | 0.503 | 0.049 | 0.503 |
| 13h | JMI | 432 | \|22J4191 | 0.0076 | 250 | 0.089 | 280 | 0.475 | 0.049 | 0.475 |
| 131 | DSC | 433 | 22J1491 | 0.0073 | 250 | 0.085 | 298 | 0.530 | 0.051 | 0.530 |
| 13j | 000 | 434 | 22J1791 | 0.0060 | 250 | 0.070 | 290 | 0.626 | 0.062 | 0.626 |
| \| 13k dup | OCI | 438,435 | \|22J1791 | 0.0050 | 250 | 0.058 | 366 | 0.969 | 0.074 | 0.947 |
| 131 | SEPI | 436 | \|22J1491 | 0.0038 | 250 | 0.044 | 330 | 1.139 | 0.098 | 1.139 |

## [Hg] vs Month Participant \#14



PROTECT ID:HONR SEGIEITAL AMALYSIS
AHALYSIS: KHg/HAIR SAMPLR 14

AMALYST: CITTERHAN/LASORSA
PILB I: MOHSEGI4

| $\begin{array}{\|c} \text { BATYELLLB } \\ \text { ID } \end{array}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \operatorname{moninH} \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTECRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\begin{gathered} \text { DIGESIIOM } \\ \text { DAIT } \end{gathered}$ | $\left\|\begin{array}{c} \text { DIGRSIIO } \\ \mathrm{Fr} \\ g \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & V O L(\mu I) \\ & \text { ABALYZED } \end{aligned}\right.$ | $\left\|\begin{array}{c} \text { BMALYZED } \\ \text { Wr Eg } \end{array}\right\|$ | arBa | $\stackrel{\mathrm{BHg}}{[\mathrm{Bg}] \mathrm{\mu g} / \mathrm{g}}$ | $\operatorname{HNDL}_{[\mathrm{Hg}]} / \mathrm{mg} / \mathrm{g} \mid$ | $\underset{[\mathrm{Hg}]}{\mathrm{HRN} / \mathrm{Mg} / \mathrm{g}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCAIP |  |  |  |  |  |  |  |  |  |
|  | SIPT |  |  |  |  |  |  |  |  |  |
| 14a dup | 10 G | 487,485 | 22Jı191 | 0.0105 | 250 | 0.123 | 594 | 0.773 | 0.035 | 0.762 |
| 14b | JULI | 486 | 22Jan91 | 0.0090 | 250 | 0.105 | 581 | 0.880 | 0.041 | 0.880 |
| 14 C | JUII | 488 | 22J1191 | 0.0077 | 250 | 0.090 | 547 | 0.964 | 0.048 | 0.964 |
| 14d | ${ }_{14} 1$ | 489 | 22J14991 | 0.0076 | 250 | 0.089 | 560 | 1.002 | 0.049 | 1.002 |
| 148 | APR | 490 | 2271191 | 0.0086 | 250 | 0.101 | 672 | 1.077 | 0.043 | 1.077 |
| 145 dup | Mar | 494,491 | 22.11991 | 0.0069 | 250 | 0.081 | 734 | 1.474 | 0.054 | 1.243 |
| 149 | P6B | 493 | 22J1491 | 0.0081 | 250 | 0.095 | 694 | 1.183 | 0.046 | 1.183 |
| 14h | JM | 787 | 22711991 | 0.0066 | 250 | 0.077 | 818 | 1.264 | 0.056 | 1.264 |
| 14 i dup | DSC | 501,495 | 2251991 | 0.0068 | 250 | 0.080 | 915 | 1.888 | 0.055 | 1.867 |
| 14) | 108 | $4 \%$ | 22711921 | 0.0062 | 250 | 0.073 | 967 | 2.194 | 0.060 | 2.194 |
| 14k | OCT | 497 | 2271991 | 0.0050 | 250 | 0.058 | 932 | 2.618 | 0.074 | 2.618 |
| 141 | SSTR | 488 | 227199 | 0.0046 | 250 | 0.054 | 1032 | 3.165 | 0.081 | 3.165 |
| 1411 | S0G | 499 | 2271191 | 0.0043 | 250 | 0.050 | 1078 | 3.544 | 0.087 | 3.544 |
| 1418 | Jun | 500 | 2201191 | 0.0048 | 250 | 0.056 | 1339 | 3.975 | \| 0.078 | 3.975 |

## [Hg] vs Month Participant \#15



PROJECT ID:HONE SEGHRTTAL ARALYSIS
AMALYSIS: ZHg/BAIR SAKPLE 15

AMALYST: CITTERHAH/LASORSA
FILR \&: MOHSEG15

| $\begin{gathered} \text { BATTYELLE } \\ \text { ID } \end{gathered}$ | $\left.\right\|_{\text {HOHIRI }} ^{\text {SEG }}$ | $\left\|\begin{array}{c} \text { IVTECRATOR } \\ \text { SER } \end{array}\right\|$ | $\left.\right\|_{\text {DIIR }} ^{\text {DIGBSTIOM }}$ | $\left\|\begin{array}{c} \text { DIGESTION } \\ \text { ming } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL (p1) } \\ \mid A L A L Y B D D \end{array}\right\|$ | $\left\|\begin{array}{l} \operatorname{AMALYZEDD} \\ \operatorname{WI} \mathrm{g} \end{array}\right\|$ | ARBA | $\stackrel{8 \mathrm{Eg}}{[\mathrm{Eg}]_{\mathrm{kg}} / \mathrm{g}}$ | $\left\|\begin{array}{c} \mathrm{YDL} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { HRAM } \\ {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | AOG |  |  |  |  |  |  |  |  |  |
| 15a | JULY | 577 | 25J11991 | 0.0078 | 250 | 0.091 | 638 | 1.151 | 0.048 | 1.151 |
| 15b | J01 | 578 | 2571191 | 0.0077 | 250 | 0.090 | 753 | 1.382 | 0.048 | 1.382 |
| $15 c$ | M M I | 579 | 25JJI991 | 0.0066 | 250 | 0.077 | 533 | 1.129 | 0.056 | 1.129 |
| 15d | APR | 580 | 25 J1F91 | 0.0069 | 250 | 0.081 | 644 | 1.313 | 0.054 | 1.313 |
| 15e | mar | 581 | 25J11991 | 0.0056 | 250 | 0.065 | 677 | 1.704 | 0.066 | 1.704 |
| 151 | PIS | 582 | 2571291 | 0.0061 | 250 | 0.071 | 966 | 2.251 | 0.061 | 2.251 |
| 15 g | Jג | 583 | 25511991 | 0.0059 | 250 | 0.069 | 1020 | 2.460 | 0.063 | 2.460 |
| 150 dup | DEC | 608,586 | 25.51891 | 0.0059 | 250 | 0.104 | 1703 | 2.637 | 0.042 | 2.692 |
| 151 | 100 | 597 | 2571591 | 0.0059 | 250 | 0.069 | 1290 | 2.997 | 0.063 | 2.997 |
| 15j | OCT | 598 | 2571191 | 0.0073 | 250 | 0.085 | 1893 | 3.579 | 0.051 | 3.579 |
| 15k | SEPT | 599 | 2571991 | 0.0069 | 250 | 0.081 | 1983 | 3.969 | 0.054 | 3.969 |
| 151 | 106 | 600 | 2551991 | 0.0066 | 250 | 0.077 | 2017 | 4.222 | 0.056 | 4.222 |
| 151 | JWEI | 601 | 2572191 | 0.0065 | 250 | 0.076 | 2040 | 4.336 | 0.057 | 4.336 |
| 15n | Jum | 602 | 2571991 | 0.0057 | 250 | 0.067 | 1953 | 4.731 | 0.065 | 4.731 |
| 150 | H18 | 603 | 25511991 | 0.0050 | 250 | 0.058 | 1866 | 5.150 | 0.074 | 5.150 |
| 15p dup | APR | 609,604 | 25511191 | 0.0043 | 250 | 0.050 | 1655 | 5.301 | 0.087 | 5.288 |
| 159 | HAR | 605 | 25.511991 | 0.0041 | 250 | 0.048 | 1580 | 5.303 | 0.091 | 5.303 |
| 15 r | FEB | 606 | 25JMM91 | \| 0.0039 | 250 | \| 0.046 | 1548 | 5.460 | 0.095 | 5.460 |

PROWECT ID:HONR SEGIBITAL ANALYSIS
AMALYSIS: $\Sigma \mathrm{Hg} / \mathrm{HAIR}$ SARPLB 15

AHALYST: CIITERTIAN/LASORSA
PILR f: HOHSEG15

| $\begin{gathered} \text { BAITELLX } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \text { Hoint } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIFBERATOR } \\ \text { SROA } \end{array}\right\|$ | DIGESTIO: | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { ITI } g \end{gathered}\right.$ | $\left\|\begin{array}{l} \text { VOL }(\mu \mathrm{l}) \\ \mathrm{A} A L Y G E D \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AMALYEDD } \\ \text { NI } \end{array}\right\|$ | AREA | $\underset{[\mathrm{Lig}]}{\mathrm{Ng} / \mathrm{gg} / \mathrm{g}}$ | $\left.\left\|\begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Bg}]} \end{array}\right\| \mathrm{\mu g} / \mathrm{g} \right\rvert\,$ | HEAM <br> [ Bg ] $\mathrm{Hg} / \mathrm{g}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 156 | J月1 | 607 | 25 J 191 | 0.0034 | 250 | 0.040 | 1587 | 6.424 | 0.109 | 6.424 |

## [Hg] vs Month Participant \#16



PROURCT ID: HONE SECHETTAL ANALYSIS
AHALYSIS: EBg/EMIR SAMPLE 16

AMALYST: CTTTERHAN/LASORSA
PILE \&: WOMSEG16

| $\begin{gathered} \text { BAYPRLLE } \\ \text { DD } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { HOMIH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { IMTEGRATOR } \\ \text { SERf } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DICESTIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGBSITON } \\ \text { WI } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu \mathrm{L}) \\ \text { AHALYEDD } \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AHALYEBD } \\ \text { WI } \mathrm{mg} \end{array}\right\|$ |  | $\stackrel{2 \mathrm{Bg}}{[\mathrm{Hg}] \mathrm{kg} / \mathrm{g}}$ | $\left\|\begin{array}{c} \operatorname{HDL} \\ {[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { MENA } \\ {[\mathrm{Hg}]} \end{gathered} \mathrm{mg} / \mathrm{g}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 16a | 10 G | 612 | \| 25 J 12191 | 0.0063 | 250 | 0.074 | 453 | 0.945 | 0.059 | 0.945 |
| 16b | JULY | 613 | \| 25.51191 | 0.0069 | 250 | 0.081 | 646 | 1.255 | 0.054 | 1.255 |
| 16 C | 501 | 614 | \|25J12991 | 0.0075 | 250 | 0.088 | 1213 | 2.213 | 0.050 | 2.213 |
| 16 d | May | 615 | \|25JJic91 | 0.0048 | 250 | 0.056 | 1153 | 3.283 | 0.078 | 3.283 |
| 16 e | APR | 616 | \|25J1M91 | 0.1223 | 250 | 1.430 | 1169 | 0.131 | 0.003 | 0.131 |
|  | \| Mar | \|SAMPLE \$16e | C H2S 1 M | GIIIIG EREOA |  |  |  |  |  |  |

## [Hg] vs Month Participant \#17



PROJECT ID:HONR SBGIETHAL MNALYSIS

ANALYSIS: EHg/BAIR SAHPLB 17

AMALYST: CITTERUAN/LASORSA
FILE \{: MOHSEG17

| $\begin{gathered} \text { BATTELLS } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { Moini } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SEQff } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAFE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { ming } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ \text { AMLYZED } \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AHALYZZD } \\ \text { WI } \end{array}\right\|$ | AREA | $\underset{[\mathrm{Bg}]}{\mathrm{EBg} / \mathrm{gg} / \mathrm{g}}$ | $\left\|\begin{array}{c} \mathrm{VDL} \\ \text { [Hg}] \end{array}\right\|$ | $\begin{gathered} \text { HRAM } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | IDG |  |  |  |  |  |  |  |  |  |
| 17a | JULY | 520 | 23J1191 | 0.0082 | 250 | 0.096 | 675 | 1.126 | 0.045 | 1.126 |
| 17b dup | J011 | 539,521 | 2351.91 | 0.0060 | 250 | 0.070 | 325 | 0.698 | 0.062 | 0.737 |
| 17 c | hay | 522 | 2351991 | 0.0062 | 250 | 0.073 | 320 | 0.664 | 0.060 | 0.664 |
| 17d | APR | 524 | 23J1491 | 0.0063 | 250 | 0.074 | 268 | 0.535 | 0.059 | 0.535 |
| 17 e | Mar | 525 | 23J1991 | 0.0067 | 250 | 0.078 | 281 | 0.531 | 0.056 | 0.531 |
| 177 | Pr8 | 526 | 2371191 | 0.0075 | 250 | 0.088 | 332 | 0.572 | 0.050 | 0.572 |
| 179 | JaII | 528 | 2372991 | 0.0061 | 250 | 0.071 | 353 | 0.753 | 0.061 | 0.753 |
| 17h | DEC | 529 | 23J1491 | 0.0059 | 250 | 0.069 | 338 | 0.742 | 0.063 | 0.742 |
| 171 | 100 | 530 | 23J1991 | 0.0033 | 250 | 0.039 | 236 | 0.881 | 0.113 | 0.881 |
| 17 j | OCT | 532 | 2351991 | 0.0031 | 250 | 0.036 | 270 | 1.096 | 0.120 | 1.096 |
| 17\% | SEPI | 533 | 23J1991 | 0.0044 | 250 | 0.051 | 421 | 1.266 | 0.085 | 1.266 |
| \| 171 dup | $\triangle 06$ | \| 545,534 | 23711991 | 0.0033 | 250 | 0.039 | 353 | 1.392 | 0.113 | 1.433 |

## [Hg] vs Month Participant \#18



PROJECT ID:MOHE SEGFEMTAL ANALYSIS
AMALYSIS: EHg/EAIR SAMPLE 18

AMALYST: CITTRRMAN/LASORSA
PILE \#: MOUSEG18

| $\begin{gathered} \text { BATIELLE } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { Hoint } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { IITREGRAOR } \\ \text { SEQ\& } \end{gathered}\right.$ | $\begin{array}{\|c} \text { DIGESIIOII } \\ \text { DATE } \end{array}$ | $\left\|\begin{array}{c} \text { DIGRSIOM } \\ \mathrm{Wr} \end{array}\right\|$ | $\left\|\begin{array}{l} \operatorname{VOL}(\mu 1) \\ \mid \mathrm{AROLYEDD} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AMLYZED } \\ \text { WI } \end{array}\right\|$ | AREA | $\underset{[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}}{\mathrm{Kig}}$ | $\left\|\begin{array}{c} \text { NDL } \\ {[\mathrm{Eg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { HRAN } \\ {[\mathrm{Bg}]_{\mathrm{Hg}} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|scalp |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | 10.6 |  |  |  |  |  |  |  |  |  |
| 18a | Juy | 617 | 25,51991 | 0.0086 | 250 | 0.101 | 183 | 0.252 | 0.043 | 0.252 |
| 18b dup | SOII | 652,645 | 2551191 | 0.0083 | 250 | 0.097 | 206 | 0.298 | 0.045 | 0.288 |
| 18 C | hay | 646 | 2551291 | 0.0087 | 250 | 0.102 | 280 | 0.400 | 0.043 | 0.400 |
| 180 | APR | 617 | 25 J 1191 | 0.0083 | 250 | 0.097 | 369 | 0.565 | 0.045 | 0.565 |
| 18 e | MAR | 648 | 25 J 21991 | 0.0083 | 250 | 0.097 | 417 | 0.644 | 0.045 | 0.644 |
| $18 f$ | F88 | 649 | 25 J 4191 | 0.0074 | 250 | 0.087 | 340 | 0.581 | 0.050 | 0.581 |
| 189 | JM | 650 | 2571191 | 0.0072 | 250 | 0.084 | 299 | 0.519 | 0.052 | 0.519 |
| 18h dup | DEC | 666,663 | 2572191 | 0.0036 | 250 | 0.042 | 202 | 0.676 | 0.103 | 0.609 |
| $18 i$ | W0V | 664 | 257N191 | 0.0050 | 250 | 0.058 | 226 | 0.552 | 0.074 | 0.552 |
| 18j | OCI | 665 | 25 JLW 91 | 0.0036 | 250 | 0.042 | 198 | 0.661 | 0.103 | 10.66138 |

## [Hg] vs Month Participant \#19



PROJECT ID: HOHR SECHETTAL MNALYSIS
AHALYSIS: EHg/EAIR SANPLE 19

AMALYST: CITTERRHAS/LASORSA

## PTLB : : HOUSEG19

| $\begin{gathered} \text { BTYBLLE } \\ \text { ID } \end{gathered}$ | $\begin{gathered} \text { SEG } \\ \text { MOHIIR } \end{gathered}$ | $\left.\begin{gathered} \text { DITEGGRAOR } \\ \text { SED } \end{gathered} \right\rvert\,$ | DIGESTIOM <br> DAIE | $\left\lvert\, \begin{gathered} \text { DIGRSTIOH } \\ \mathrm{FI} \mathrm{~g} \end{gathered}\right.$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ A M L Y S E D \end{array}\right\|$ | $\left\|\begin{array}{c} \text { ABALYEED } \\ \text { Wr } \\ \text { Eg } \end{array}\right\|$ | AREA |  | $\left\|\begin{array}{c} \text { HDL } \\ {[\mathrm{Bg}]} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { HBAM } \\ {[\mathrm{Eg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 19a | ISE | 671 | 2854.91 | 0.0053 | 250 | 0.062 | 193 | 0.429 | 0.070 | 0.429 |
| 19b | JULY | 672 | 2851191 | 0.0052 | 250 | 0.061 | 172 | 0.382 | 0.072 | 0.382 |
| 19C dup | JUI | 674,673 | 28J土n91 | 0.0045 | 250 | 0.053 | 167 | 0.427 | 0.083 | 0.434 |
| 19d | HAP | 675 | 2854191 | 0.0053 | 250 | 0.062 | 210 | 0.472 | 0.070 | 0.472 |
| 19 | APR | 676 | 2874591 | 0.0052 | 250 | 0.061 | 172 | 0.382 | 0.072 | 0.382 |
| $19 f$ | har | 677 | 28J1491 | 0.0050 | 250 | 0.058 | 171 | 0.395 | 0.074 | 0.395 |
| 19 g | PKB | 678 | 2874191 | 0.0052 | 250 | 0.061 | 174 | 0.388 | 0.072 | 0.388 |
| 19h | JגI | 679 | 28J1591 | 0.0056 | 250 | 0.065 | 219 | 0.469 | 0.066 | 0.469 |
| 191 | DRC | 680 | 2851191 | 0.0049 | 250 | 0.057 | 191 | 0.458 | 0.076 | 0.458 |
| 19j | 100 | 681 | 2851191 | 0.0044 | 250 | 0.051 | 224 | 0.612 | 0.085 | 0.612 |
| 19k | OCT | 682 | 287291 | 0.0045 | 250 | 0.053 | 259 | 0.703 | 0.083 | 0.703 |
| 191 dup | SEPT | 697,683 | 2872991 | 0.0040 | 250 | 0.047 | 271 | 0.779 | 0.093 | 0.799 |
| 19 | ${ }^{1} 06$ | 698 | 28J1991 | 0.0040 | 250 | 0.047 | 296 | 0.864 | 0.093 | 0.864 |
| 19n | JULI | 700 | 2851591 | 0.0035 | 250 | 0.041 | 295 | 0.983 | 0.106 | 0.983 |
| 190 | JUI | 701 | 2871591 | 0.0029 | 250 | 0.034 | 319 | 1.298 | 0.128 | 1.298 |
| 19p | HAY | 702 | 2851491 | 0.0026 | 250 | 0.030 | 317 | 1.438 | 0.143 | 1.438 |
| 19 g | APR | 703 | 28JaF91 | 0.0027 | 250 | 0.032 | 335 | 1.475 | 0.138 | 1.475 |
| \| 19r dup | HAR | 705,704 | 28JAF91 | 0.0029 | 250 | 0.034 | 410 | 1.722 | \| 0.128 | 1.680 |

## [Hg] vs Month Participant \#20



PROJECT ID:HOHE SEGIEITAL AHALYSIS
AMALISIS: EHg/HAIR SANPLE 20

AMALYST: CITTERHAN/LASORSA
FILR f: HOMSEG2O

| $\begin{gathered} \text { BATTELLLE } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOMrin } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DITBGRATOR } \\ \text { SEOf } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAFB } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { WI g } \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & \text { VOL }(\mu \mathrm{L}) \\ & \text { AMALYEDD } \end{aligned}\right.$ | $\left\|\begin{array}{c} \text { AMLYZED } \\ \text { WI } \end{array}\right\|$ | ARSA | $\begin{gathered} \mathrm{ZHg} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { HERAM } \\ {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mid$ SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | 1006 |  |  |  |  |  |  |  |  |  |
| 203 | JUL | 706 | 28J1491 | 0.0116 | 250 | 0.136 | 565 | 0.611 | 0.032 | 0.611 |
| 20b dup | JOH | 709,707 | 28510191 | 0.0104 | 250 | 0.122 | 416 | 0.488 | 0.036 | 0.487 |
| 200 | hay | 708 | 28JM 91 | 0.0144 | 250 | 0.168 | 613 | 0.537 | 0.026 | 0.537 |

## [Hg] vs Month Participant \#21



PROJECT ID:HONE SEGIRTTAL AHALYSIS
AMALYSIS: EBg/BAIR SANPLE 21

AHALYST: CITTERNAN/LASORSA
FILE f: MOHSEG21

| $\begin{gathered} \text { BATYELLSB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \text { MinKI } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { MTEGRATOR } \\ \text { SERf } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIO: } \\ \mathrm{WIg} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu) \\ A M N Y Z E D \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AMALYZZD } \\ \text { WI Mg } \end{array}\right\|$ | AREA | $\begin{gathered} \Sigma \mathrm{Zg} \\ {[\mathrm{Eg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \text { VDL } \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\underset{[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}}{\text { RISN }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
| 21a | $\triangle 0 G$ | 711 | 28J1991 | 0.0066 | 250 | 0.077 | 591 | 1.127 | 0.056 | 1.127 |
| 21b | JUY | 712 | 2851191 | 0.0053 | 250 | 0.062 | 472 | 1.100 | 0.070 | 1.100 |
| 21c | J0I | 713 | 28JJF91 | 0.0053 | 250 | 0.062 | 501 | 1.174 | 0.070 | 1.174 |
| 21d | yay | 714 | 28J11991 | 0.0040 | 250 | 0.047 | 304 | 0.891 | 0.093 | 0.891 |
| 21 e | APR | 715 | 28JaK91 | 0.0049 | 250 | 0.057 | 375 | 0.923 | 0.076 | 0.923 |
| 218 | HR | 716 | 28J31191 | 0.0042 | 250 | 0.049 | 389 | 1.121 | 0.089 | 1.121 |
| \| 219 dup | PEB | 729,728 | \| 28Jam91 | 0.0036 | 250 | 0.042 | 435 | 1.515 | 0.103 | 1.566 |

## [Hg] vs Month Participant \#22



PROJECT ID:HONR SEGTBIITAL MALLYSIS
AMALYSIS: $\mathrm{ZHg} / \mathrm{EAIR}$ SAIPIR 22

MMALYST: CITTERHAN/LASORSA
PILE : : HOHSEG22

| $\begin{gathered} \text { BMTELLLE } \\ \text { D } \end{gathered}$ | $\left.\right\|_{\text {MOM }} ^{\text {SEG }}$ | $\left\|\begin{array}{c} \text { IITBGRATOR } \\ \text { SEOf } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAEE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESIIOM } \\ \text { ITI } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { POL }(\mu) \\ \text { A1LLYEED } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AHLYZESD } \\ \text { WI Eg } \end{array}\right\|$ | LREA | $\underset{[\mathrm{Bq}]_{\mathrm{Kg}}^{\mathrm{Eg} / \mathrm{g}}}{ }$ | $\left\|\begin{array}{c} \text { HDL } \\ {[\mathrm{Ig}]} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { MENA } \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCATP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | AOG |  |  |  |  |  |  |  |  |  |
| \| 22a dup | JOLY | 734,730 | 2814191 | 0.0057 | 250 | 0.067 | 1449 | 2.659 | 0.065 | 2.788 |
| 22 b | J015 | 731 | 2854191 | 0.0052 | 250 | 0.061 | 777 | 1.943 | 0.072 | 1.943 |
| 22 c | hay | 732 | 28J4991 | 0.0046 | 250 | 0.054 | 548 | 1.520 | 0.081 | 1.520 |

## [Hg] vs Month Participant \#23



PROJECT ID:HONR SECMEITTLL AHALYSIS
AHALYSIS: EHg/HAIR SARPLE 23

AMALYST: CITTERHAM/LASORSA
PILE \#: MOUSEG23

| $\begin{aligned} & \text { BATIBLLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { Moint } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { IMTEERATOR } \\ \text { SERf } \end{gathered}\right.$ |  | $\left\lvert\, \begin{gathered} \text { DIGBSIIOM } \\ \mathrm{Mr} \end{gathered}\right.$ | $\left\|\begin{array}{l} \text { VOL ( } \mu \mathrm{L}) \\ \text { ABLCYEED } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AMALYZED } \\ \text { MI } x g \end{array}\right\|$ | AREA | $\stackrel{\mathrm{kgg}}{[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}}$ | $\left\|\begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Bg}] / \mathrm{gg} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { MBL } \\ {[\mathrm{Hg}] \operatorname{lng} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | 1006 |  |  |  |  |  |  |  |  |  |
| 23a | JUII | 739 | \|3151191 | 0.0035 | 250 | 0.041 | 114 | 0.272 | 0.106 | 0.272 |
| 23b | J01 | 740 | \|3151991 | 0.0050 | 250 | 0.058 | 154 | 0.299 | 0.074 | 0.299 |
| 23 c | HMY | 742 | \|3151991 | 0.0036 | 250 | 0.042 | 137 | 0.351 | 0.103 | 0.351 |
| 23d | APR | 789 | 3171991 | 0.0039 | 250 | 0.046 | 197 | 0.467 | 0.095 | 0.467 |
| 23 e | Mar | 790 | \|3151991 | 0.0038 | 250 | 0.044 | 191 | 0.462 | 0.098 | 0.462 |
| 238 | PEB | 791 | \|3154991 | 0.0044 | 250 | 0.051 | 203 | 0.429 | 0.085 | 0.429 |
| 239 dup | ת/II | 806,792 | \|31J1991 | 0.0044 | 250 | 0.051 | 232 | 0.501 | 0.085 | 0.490 |
| 23h | DSC | 793 | \|3151491 | 0.0037 | 250 | 0.043 | 237 | 0.610 | 0.101 | 0.610 |
| $23 i$ | 100 | 794 | \|3151991 | 0.0037 | 250 | 0.043 | 226 | 0.578 | 0.101 | 0.578 |
| 23 j | OCI | 795 | \|3154191 | 0.0036 | 250 | 0.042 | 276 | 0.745 | 0.103 | 0.745 |
| 23k | SEPT | 799 | \|3151991 | 0.0039 | 250 | 0.046 | 301 | 0.758 | 0.095 | 0.758 |
| 231 | IDG | 800 | \|31.01991 | 0.0024 | 250 | 0.028 | 248 | 0.991 | 0.155 | 0.991 |
| 238 | JULI | 801 | \|3151991 | 0.0034 | 250 | 0.040 | 311 | 0.902 | 0.109 | 0.902 |
| 23n | JVII | 802 | \|31/2191 | 0.0030 | 250 | 0.035 | 325 | 1.073 | 0.124 | 1.073 |
| 230 | Hay | 804 | \|3151591 | 0.0035 | 250 | 0.041 | 358 | 1.022 | 0.106 | 1.022 |
| 23p | APR | 805 | \|3151.91 | 0.0029 | 250 | 0.034 | 324 | 1.106 | 0.128 | 1.106 |

## [Hg] vs Month Participant \#24



PROJECT ID:MOHR SECGETITAL AMALYSIS
AMALYSIS: EHg/HAIR SANPLE 24

AHALYST: CITTERHAA/LASORSA
PILE f: HOHSEG24

| $\begin{aligned} & \text { BAITEILLR } \\ & \text { ID } \end{aligned}$ | $\left\|\begin{array}{c} \operatorname{SEG} \\ \operatorname{moning} \end{array}\right\|$ | $\left\|\begin{array}{c} \text { IFTBGRATOR } \\ \text { SEQAI } \end{array}\right\|$ | $\left.\right\|_{\text {DIFIE }} ^{\text {DIGESTIOM }}$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { in } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ \text { AMALYED } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AMLCYZED } \\ \mathrm{Wr} \mathrm{mg} \end{array}\right\|$ | ARRA | $\stackrel{8 \mathrm{Bg}}{[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}}$ | $\left\|\begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ | $\begin{aligned} & \text { MRNA } \\ & {[\mathrm{Hg}] \mathrm{Hg} / \mathrm{g}} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCLIP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 24a | $\triangle 0 \mathrm{G}$ | 819 | 315AF91 | 0.0048 | 250 | 0.056 | 656 | 1.478 | 0.078 | 1.478 |
| 24 b | JULI | 820 | 3172991 | 0.0059 | 250 | 0.069 | 621 | 1.135 | 0.063 | 1.135 |
| 24. | JUI | 821 | 3151491 | 0.0056 | 250 | 0.065 | 604 | 1.161 | 0.066 | 1.161 |
| 24 d | may | 822 | 3172199 | 0.0063 | 250 | 0.074 | 633 | 1.085 | 0.059 | 1.085 |
| 24e | APR | 823 | 31J1991 | 0.0049 | 250 | 0.057 | 476 | 1.029 | 0.076 | 1.029 |
| $24 f$ | HAR | 824 | 3151591 | 0.0056 | 250 | 0.065 | 538 | 1.027 | 0.066 | 1.027 |
| 249 | PSB | 825 | 3174191 | 0.0051 | 250 | 0.060 | 504 | 1.051 | 0.073 | 1.051 |
| 24h | JMI | 826 | 3171191 | 0.0053 | 250 | 0.062 | 637 | 1.298 | 0.070 | 1.298 |
| 241 dup | DEC | 837,827 | 31421991 | 0.0048 | 250 | 0.056 | 646 | 1.455 | 0.078 | 1.487 |
| $24 j$ | 100 | 828 | 3172191 | 0.0051 | 250 | 0.060 | 824 | 1.767 | 0.073 | 1.767 |
| 24k | OCI | 829 | 31J2M91 | 0.0044 | 250 | 0.051 | 806 | 2.002 | 0.085 | 2.002 |
| 241 | SEPT | 830 | 3172191 | 0.0042 | 250 | 0.049 | 773 | 2.007 | 0.089 | 2.007 |
| 241 | IVG | 831 | 317291 | 0.0045 | 250 | 0.053 | 949 | 2.320 | 0.083 | 2.320 |
| 2418 | JULI | 832 | 3172191 | 0.0040 | 250 | 0.047 | 993 | 2.735 | 0.093 | 2.735 |
| 240 | JIII | 833 | 3171191 | 0.0040 | 250 | 0.047 | 970 | 2.670 | 0.093 | 2.670 |
| 24p | H14 | 834 | 3151991 | 0.0040 | 250 | 0.047 | 1022 | 2.818 | 0.093 | 2.818 |
| 24 q | APR | 835 | 3151991 | 0.0033 | 250 | 0.039 | 1161 | 3.896 | 0.113 | 3.896 |
| 245 | Mar | 836 | 31Jam91 | 0.0030 | \| 250 | 0.035 | \| 1030 | 3.788 | 0.124 | 3.788 |

## [Hg] vs Month Participant \#25



PROUECT ID:MOHR SBCEBTITAL AWALYSIS
MMLYSIS: EHg/HILR SAMPLE 25

AIALYST: CTTTERPHAN/LASORSA
PILR f: MOHSEG25

| $\begin{gathered} \text { BATTELLES } \\ \text { DD } \end{gathered}$ | $\left.\right\|_{\text {MOM }} ^{\text {SEI }}$ | $\left\|\begin{array}{c} \text { IITBERATORR } \\ \text { SERf } \end{array}\right\|$ | DIGESIIOII DAFE | $\left\|\begin{array}{c}\text { DIGRSIIOM } \\ \text { nig }\end{array}\right\|$ | $\left\|\begin{array}{l} \operatorname{VOL}(\beta 1) \\ \text { AMSLYED } \end{array}\right\|$ |  | ARSA | $\underset{[\mathrm{Eg}] \mathrm{Hg} / \mathrm{g}}{ }$ | $\left\|\begin{array}{c} \mathrm{HDLL} \\ {[\mathrm{Eg}] \mathrm{Mg} / \mathrm{g}} \end{array}\right\|$ | $\begin{array}{\|c\|c\|c\|c\|} \text { HRAR } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mid$ SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
|  | ${ }^{1} 06$ |  |  |  |  |  |  |  |  |  |
| 25a | JULI | 853 | \|815909 | 0.0049 | 250 | 0.057 | 773 | 1.901 | 0.076 | 1.901 |
| 256 | JUII | 854 | \|854091 | 0.0042 | 250 | 0.049 | 552 | 1.560 | 0.089 | 1.560 |
| \| 25 c dup | Hay | 869,855 | \|825891 | 0.0035 | 250 | 0.041 | 371 | 1.227 | 0.106 | 1.250 |
| 250 | 19P | 856 | \|875991 | 0.0038 | 250 | 0.044 | 352 | 1.068 | 0.098 | 1.068 |
| 25 e | Mar | 857 | \|818991 | 0.0040 | 250 | 0.047 | 363 | 1.049 | 0.093 | 1.049 |
| 255 | PB8 | 858 | \|875091 | 0.0035 | 250 | 0.041 | 385 | 1.277 | 0.106 | 1.277 |
| 259 | JıI | 859 | \|818891 | 0.0022 | 250 | 0.026 | 303 | 1.566 | 0.169 | 1.566 |
| 250 | DIC | 860 | 1825301 | 0.0029 | 250 | 0.034 | 330 | 1.304 | 0.128 | 1.304 |
| $25 i$ | 100 | 861 | \|82F091. | 0.0023 | 250 | 0.027 | 327 | 1.628 | 0.162 | 1.628 |
| $25 j$ | OCT | 862 | 1815691 | 0.0019 | 250 | 0.022 | 287 | 1.708 | 0.196 | 1.708 |
| 25k | SEPT | 863 | \|812091 | 0.0017 | 250 | 0.020 | 231 | 1.865 | 0.219 | 1.865 |
| 251 dup | ING | 870,864 | \|875991 | 0.0016 | 250 | 0.019 | 252 | 1.755 | 0.233 | 1.775 |
| 250 | JUL | 865 | \|854891 | 0.0019 | 250 | 0.022 | 259 | 1.524 | 0.196 | 1.524 |
| 25n | Jus | 866 | \|814891 | 0.0013 | 250 | 0.015 | 232 | 1.969 | 0.286 | 1.969 |
| 250 | Hily | 867 | 87F991 | 0.0013 | 250 | 0.015 | 226 | 1.911 | 0.286 | 1.911 |
| 25p | $\triangle P 8$ | 868 | \|8FEB91 | 0.0010 | 250 | 0.012 | 220 | 2.409 | \| 0.372 | 2.409 |

## [Hg] vs Month Participant \#26



PROJECT ID:MOHE SEGTENTAL MMALYSIS
AHALYSIS: ZHg/HAIR SAIPLR 26

ARALYST: CITTERPAA/LASORSA
PILR \{: MOHSEG26

| $\begin{gathered} \text { BATTELLIE } \\ \text { DD } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOHirit } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { IITHERATOR } \\ \text { SER } \end{array}\right\|$ | $\begin{gathered} \text { DIGESHIOM } \\ \text { DAIE } \end{gathered}$ | $\left\|\begin{array}{c} \text { digesicion } \\ \text { in g } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { POL }(\mu 1) \\ \text { ALNLYESD } \end{array}\right\|$ | $\left\|\frac{\text { AIALYEED }}{\text { IT }}\right\|$ | AREA | $\text { [ } \mathrm{Eq}] \mathrm{mg} / \mathrm{g}$ | $[\mathrm{Hid}] \mathrm{Hg} / \mathrm{g}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCLLP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 26a dup | A0G | 915,887 | $85 \times 891$ | 0.0059 | 250 | 0.069 | 593 | 1.042 | 0.063 | 0.989 |
| 26 b | JULY | 889 | $8 \mathrm{LCP91}$ | 0.0058 | 250 | 0.068 | 461 | 0.805 | 0.064 | 0.805 |
| 26 C | JOF | 890 | 878691 | 0.0056 | 250 | 0.065 | 406 | 0.727 | 0.066 | 0.727 |
| 260 | HMY | 891 | 875991 | 0.0060 | 250 | 0.070 | 469 | 0.793 | 0.062 | 0.793 |
| 264 | APR | 892 | 876591 | 0.0066 | 250 | 0.077 | 543 | 0.843 | 0.056 | 0.843 |
| $26 \pm$ | mar | 893 | 87699 | 0.0065 | 250 | 0.076 | 603 | 0.957 | 0.057 | 0.957 |
| 26 g | PBB | 894 | 854891 | 0.0082 | 250 | 0.096 | 818 | 1.044 | 0.045 | 1.044 |
| 26h | JגI | 895 | 876391 | 0.0056 | 250 | 0.065 | 658 | 1.218 | 0.066 | 1.218 |
| \| 261 dup | DBC | 916,896 | 856891 | 0.0064 | 250 | 0.075 | 790 | 1.293 | 0.058 | 1.253 |
| 26j | 107 | 897 | 858891 | 0.0061 | 250 | 0.071 | 656 | 1.114 | 0.061 | 1.114 |
| 263 | OCI | 898 | 851891 | 0.0062 | 250 | 0.073 | 689 | 1.154 | 0.060 | 1.154 |
| 261 | SEPT | 899 | 87691 | 0.0069 | 250 | 0.081 | 723 | 1.091 | 0.054 | 1.091 |
| 261 | S0G | 917 | 815891 | 0.0058 | 250 | 0.068 | 586 | 1.047 | 0.064 | 1.047 |
| 26n | JULI | 918 | 858991 | 0.0056 | 250 | 0.065 | 626 | 1.161 | 0.066 | 1.161 |
| 260 | Ju1 | 919 | 815391 | 0.0047 | 250 | 0.055 | 474 | 1.034 | 0.079 | 1.034 |
| $26 p$ | Hay | 920 | 878391 | 0.0048 | 250 | 0.056 | 513 | 1.100 | 0.078 | 1.100 |
| 269 | APR | 921 | 873891 | 0.0043 | 250 | 0.050 | 438 | 1.040 | 0.087 | 1.040 |
| 26 r | HAR | 922 | 878891 | 0.0041 | 250 | 0.048 | 462 | 1.154 | 0.091 | 1.154 |
| 26s | 1 PEB | 923 | 875891 | \| 0.0046 | | \| 2501 | 10.054 | 469 | 1.045 | 0.081 | \| 1.045 |


| PROJECT ID: | :MOVR SEE | germatal amat | UYSIS |  | AMALYST: | CITTERHAN/ | /Lasorsa |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AMALYSIS: | EEq/EAIR | IR SAPPLE 26 |  |  | PILP \$: | HOHSEG26 |  |  |  |  |
| $\begin{aligned} & \text { BAITELLES } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOMITH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTEGRATOR } \\ \text { SER } \end{array}\right\|$ | $\left.\right\|_{\text {DIITB }} ^{\text {DIGESTIOM }}$ | $\left\lvert\, \begin{gathered} \text { DIGBSTIOM } \\ \text { in } \\ g \end{gathered}\right.$ | $\left\|\begin{array}{\|l\|l\|} \left\lvert\, \begin{array}{l} \text { VOL } \end{array}(\beta 1)\right. \\ \text { ALALYEED } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AMALYERD } \\ \mathrm{WI} \mathrm{gg} \end{array}\right\|$ | ARBA | $\stackrel{2 \mathrm{Hg}}{[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}}$ | $\left\|\begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Bg}] \mathrm{\mu g} / \mathrm{g}} \end{array}\right\|$ | $\underset{[\mathrm{HR}]_{\mathrm{Hg}}^{\mathrm{Mg} / \mathrm{g}}}{ }$ |
| $26 t$ | J 1 | 924 | 878891 | 0.0041 | 250 | 0.048 | 458 | 1.143 | 0.091 | 1.143 |
| 264 | DRC | 925 | $8 \mathrm{PKB91}$ | 0.0036 | 250 | 0.042 | 450 | 1.278 | 0.103 | 1.278 |
| 26v | H00 | 926 | $87 \mathrm{KB91}$ | 0.0041 | 250 | 0.048 | 492 | 1.233 | 0.091 | 1.233 |

## [Hg] vs Month Participant \#27



PROURCT ID:MONB SEGTENTAL ANALYSIS

AHALYSIS: $2 \mathrm{Hg} /$ HAIR SAMPLE 27

ANALYST: CITTERUAH/LASORSA
FILE \&: NOHSEG27

| $\left\|\begin{array}{c} \text { BATTBLLB } \\ \text { DD } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { HOMITH } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { INTEGRATOR } \\ \text { SEQ } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOH: } \\ \text { DATE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGBSTIOM } \\ \text { in } \end{array}\right\|$ | VOL ( $\mu \mathrm{L}$ ) AMALYEKI | $\left\|\begin{array}{c} \text { AHALYZED } \\ \text { WI } \mathrm{Eg} \end{array}\right\|$ | AREA | $\begin{gathered} \text { zHg } \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \operatorname{HDL} \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\begin{gathered} \text { HBAR } \\ {[\mathrm{Bq}]_{\mu \mathrm{g} / \mathrm{g}}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 27a dup | 10.6 | 952,932 | 12PGB91 | 0.0058 | 250 | 0.068 | 292 | 0.494 | 0.064 | 0.511 |
| 276 | JULY | 933 | 12F8691 | 0.0057 | 250 | 0.067 | 300 | 0.514 | 0.065 | 0.514 |
| 27c | JuI | 934 | 12P5691 | 0.0058 | 250 | 0.068 | 278 | 0.464 | 0.064 | 0.464 |
| 27d | HLT | 937 | 12FEB91 | 0.0061 | 250 | 0.071 | 272 | 0.430 | 0.061 | 0.430 |
| 27e | APR | 938 | 12FR691 | 0.0050 | 250 | 0.058 | 220 | 0.413 | 0.074 | 0.413 |
| 27 f dup | Har | 954,953 | 12PF691 | 0.0061 | 250 | 0.071 | 257 | 0.408 | 0.061 | 0.420 |
| 279 | PIB | 955 | 12P6391 | 0.0049 | 250 | 0.057 | 232 | 0.454 | 0.076 | 0.454 |
| 27 m | JגI | 956 | 12 F 6891 | 0.0048 | 250 | 0.056 | 241 | 0.483 | 0.078 | 0.483 |
| 27 i | DSC | 957 | 12FE391 | 0.0043 | 250 | 0.050 | 226 | 0.502 | 0.087 | 0.502 |
| 27j | 100 | 958 | 12 F 5691 | 0.0046 | 250 | 0.054 | 259 | 0.546 | 0.081 | 0.546 |
| 27k |  | 959 | 12F[391 | 0.0041 | 250 | 0.048 | 243 | 0.571 | 0.091 | 0.571 |
| 271 | SSPR | 960 | 1214991 | 0.0046 | 250 | 0.054 | 301 | 0.644 | 0.081 | 0.644 |
| 27 | \| 406 | 961 | 1218391 | 0.0029 | 250 | 0.034 | 302 | 1.026 | 0.128 | 1.026 |

## [Hg] vs Month Participant \#28



PROJECT ID: NOHE SEGIBTRAL ANALYSIS
ANALYSIS: $\mathrm{ZHg} /$ HAIR SAMPLE 28

ANALYST: CITTERYAH/LASORSA
FILE $\ddagger$ : MOHSEG28

| $\begin{array}{\|c} \text { BATYELLEB } \\ \text { ID } \end{array}$ | $\left\lvert\, \begin{gathered} \text { SRG } \\ \text { MONFI } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { WI g } \end{array}\right\|$ | VOL ( $\mu \mathrm{I}$ ) AMALYZED | $\left\|\begin{array}{l} \text { AMALYZED } \\ \text { Win } \\ \hline 1 \end{array}\right\|$ | ARRA | $\underset{[\mathrm{Hg}]}{\mathrm{ZHg} / \mathrm{g} / \mathrm{g}}$ | $\left\|\begin{array}{c} \text { MDL } \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\begin{gathered} \text { KERM } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | 106 |  |  |  |  |  |  |  |  |  |
| 28a | July | 1246 | 14PEB91 | 0.0088 | 250 | 0.103 | 699 | 0.681 | 0.042 | 0.681 |
| 28b | Jus | 1247 | 1478891 | 0.0071 | 250 | 0.083 | 682 | 0.822 | 0.052 | 0.822 |
| 28 C | Hay | 1249 | 1478891 | 0.0070 | 250 | 0.082 | 830 | 1.033 | 0.053 | 1.033 |
| 28d dup | APS | $\mid 1265,1250$ \| | 14 Pr 891 | 0.0065 | 250 | 0.076 | 1004 | 1.365 | 0.057 | 1.386 |

## [Hg] vs Month Participant \#29



PROJECT ID: HONR SEGEBTIAL AMALYSIS
AHALYSIS: $2 \mathrm{Hg} / \mathrm{EALR}$ SARPLE 29

AMALYST: CITTERMAN/LASORSA
PILB \&: YOHSEG29


| $\begin{gathered} \text { BATTEILE } \\ \text { DD } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOMII } \end{gathered}\right.$ | $\mid$ ITHEGRATOR <br> SEQf | DIGESTIOH <br> DATE | DIGBSTIOM <br> In <br> 1 | VOL ( $\mu \mathrm{L}$ ) AMLLYZED | $\left\|\begin{array}{c} \text { AHALYZED } \\ \mathrm{mIg} \end{array}\right\|$ | ARRA | $\underset{[\mathrm{Eg}]}{\mathrm{zg} / \mathrm{g} / \mathrm{g}}$ | $\begin{gathered} \text { HDL } \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { HERA } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SIPP |  |  |  |  |  |  |  |  |  |
|  | $\triangle \mathrm{AO}$ |  |  |  |  |  |  |  |  |  |
| 29a | JULI | 962 | 12 F [691 | 0.0065 | 250 | 0.076 | 508 | 0.797 | 0.057 | 0.797 |
| 29b | J0: | 963 | 12 FW 891 | 0.0067 | 250 | 0.078 | 468 | 0.709 | 0.056 | 0.709 |
| 29C dup | HAY | 966,964 | 1278891 | 0.0062 | 250 | 0.073 | 513 | 0.844 | 0.060 | 0.824 |
| 298 | APR | 965 | 1245391 | 0.0062 | 250 | 0.073 | 453 | 0.741 | 0.060 | 0.741 |
| 298 | HaR | 967 | 1276391 | 0.0063 | 250 | 0.074 | 466 | 0.751 | 0.059 | 0.751 |
| 29 f | IEB | 968 | 12P6891 | 0.0060 | 250 | 0.070 | 475 | 0.805 | 0.062 | 0.805 |
| 299 dup | JIM | 979,969 | $12 \mathrm{~F} \times 991$ | 0.0056 | 250 | 0.065 | 472 | 0.856 | 0.066 | 0.885 |
| 29n | DSC | 970 | 12P4891 | 0.0051 | 250 | 0.060 | 479 | 0.955 | 0.073 | 0.955 |
| 291 | 100 | 971 | 1276991 | 0.0052 | 250 | 0.061 | 508 | 0.996 | 0.072 | 0.996 |
| 29j | OCP | 974 | 124:091 | 0.0049 | 250 | 0.057 | 575 | 1.204 | 0.076 | 1.204 |
| 29k | SEPP | 975 | 1215891 | 0.0036 | 250 | 0.042 | 590 | 1.683 | 0.103 | 1.683 |
| 291 | 106 | 976 | 1218091 | 0.0028 | 250 | 0.033 | 549 | 2.008 | 0.133 | 2.008 |
| 298 dup | \| JUII | 978,977 | 1214891 | 0.0025 | 250 | 0.029 | 647 | 2.669 | 0.149 | 2.596 |

HOTE: SANPLE 29i WAS TRAMSFERSD TO AHOTEBR VLAL AFTER TER ADDITIOM OR BRCl

## [Hg] vs Month Participant \#30



PROJECT ID:HOHE SECHETTAL AHALYSIS
AMALYSIS: EHg/EAIR SALPLE 30

AMALYST: CTTTERHAH/LASORSA
PILE 7: MOUSEG3O


|  | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { HOMTH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left.\right\|_{\text {DITESII }} ^{\text {DIGMI }}$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { in } \\ \mathrm{g} \end{array}\right\|$ | VOL ( $\mu \mathrm{ll}$ ) MaLYZED | $\left\|\begin{array}{c} \text { AHALYZED } \\ \text { WI } \mathrm{gg} \end{array}\right\|$ | AREA | $\underset{[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}}{\mathrm{EHg}}$ | $\left\lvert\, \begin{aligned} & \mathrm{HDL} \\ & {[\mathrm{Hg}] \mathrm{\mu g} / \mathrm{g}} \end{aligned}\right.$ | $\left\lvert\, \begin{gathered} \text { HRAM } \\ {[\mathrm{Hg}] \mathrm{gg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | AOG |  |  |  |  |  |  |  |  |  |
| 30a dup | JULY | \|1264,1251 | 1478691 | 0.0076 | 250 | 0.089 | 711 | 0.804 | 0.049 | 0.789 |
| 30b | J0w | 1252 | 1478891 | 0.0081 | 250 | 0.095 | 747 | 0.796 | 0.046 | 0.796 |
| 30 C | H HY | 1253 | 14PE891 | 0.0071 | 250 | 0.083 | 673 | 0.810 | 0.052 | 0.810 |
| $30 d$ | APR | 1254 | 14 P6B91 | 0.0062 | 250 | 0.073 | 641 | 0.879 | 0.060 | 0.879 |
| 300 | HaR | 1255 | 1478391 | 0.0064 | 250 | 0.075 | 976 | 1.345 | 0.058 | 1.345 |
| $30 f$ | PBB | 1256 | 14 PR 891 | 0.0055 | 250 | 0.064 | 1249 | 2.034 | 0.068 | 2.034 |
| 309 | J21 | 1257 | 1478991 | 0.0043 | 250 | 0.050 | 937 | 1.917 | 0.087 | 1.917 |
| 30h dup | DSC | \|1298,1258 | 14PE391 | 0.0040 | 250 | 0.047 | 1262 | 2.879 | 0.093 | 2.822 |
| 30i | 100 | 1259 | 14P3891 | 0.0036 | 250 | 0.042 | 1359 | 3.396 | 0.103 | 3.396 |

## [Hg] vs Month Participant \#31



PROJECT ID：MOHE SEGIRNTAL AMALYSIS
AMALYSIS：$\Sigma$ Eg／EAIR SAMPLE 31

ANALYST：CITTERUAN／LASORSA
PILE \＃：MOHSEG31

| $\begin{gathered} \text { BATTBLLB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MONII } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { ITTEGRITOR } \\ \text { SEQ } \end{array}\right\|$ | $\begin{array}{\|c} \text { DIGESTION } \\ \text { DAIE } \end{array}$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \mathrm{WI} \mathrm{~g} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu \mathrm{L}) \\ \text { AMALYZDD } \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & \text { AMALYZED } \\ & \hdashline ⿴ 囗 十 \end{aligned}\right.$ | AREA | $\begin{gathered} \text { KHg } \\ {[\mathrm{Eg}] \mathrm{Hg} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Hg}] \mathrm{\mu g} / \mathrm{g}} \end{array}\right\|$ | $\left\{\begin{array}{c} \text { MERM } \\ {[\mathrm{Eq}][\mathrm{mg} / \mathrm{g}} \end{array}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ｜SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | ${ }^{1} 0 \mathrm{G}$ |  |  |  |  |  |  |  |  |  |
| 31a | JULY | 1266 | 14PR891 | 0.0064 | 250 | 0.075 | 1053 | 1.459 | 0.058 | 1.459 |
| 31b | JUII | 1267 | 14PEB91 | 0.0053 | 250 | 0.062 | 921 | 1.527 | 0.070 | 1.527 |
| 31c | Hay | 1268 | 14PEB91 | 0.0053 | 250 | 0.062 | 945 | 1.569 | 0.070 | 1.569 |
| 31d | APR | 1269 | 14P8891 | 0.0046 | 250 | 0.054 | 727 | 1.361 | 0.081 | 1.361 |
| 31 e | MAR | 1270 | 14 PB 891 | 0.0050 | 250 | 0.058 | 731 | 1.259 | 0.074 | 1.259 |
| 317 | FKB | 1271 | 1478891 | 0.0042 | 250 | 0.049 | 777 | 1.603 | 0.089 | 1.603 |
| 319 dup | Jan | ｜1273，1272 | 1478891 | 0.0045 | 250 | 0.053 | 731 | 1.399 | 0.083 | 1.422 |
| 314 | DEC | 1274 | 14 Pr 891 | 0.0040 | 250 | 0.047 | 678 | 1.449 | 0.093 | 1.449 |
| 31 i | 1007 | 1275 | 14\％391 | 0.0043 | 250 | 0.050 | 749 | 1.504 | 0.087 | 1.504 |
| 31j | OCT | 1276 | 1474391 | 0.0040 | 250 | 0.047 | 755 | 1.631 | 0.093 | 1.631 |
| 31k | SEPT | 1277 | 147691 | 0.0032 | 250 | 0.037 | 667 | 1.779 | 0.116 | 1.779 |
| 311 | 106 | 1278 | 1415991 | 0.0030 | 250 | 0.035 | 751 | 2.162 | 0.124 | 2.162 |
| ｜ 318 dep | JUE | ［1299，1279 | 1414891 | 0.0029 | 250 | 0.034 | 1024 | 3.205 | 0.128 | 3.038 |
| 31n | Jun | 1290 | 1474891 | 0.0029 | 250 | 0.034 | 966 | 3.019 | 0.128 | 3.019 |
| 310 | ｜May | 1291 | 1478391 | 0.0024 | 250 | 0.028 | 1156 | 4.386 | 0.155 | 4.386 |

## [Hg] vs Month Participant \#32



PROTECT ID:MONB SECIEMTAL AMALYSIS
AMALYSIS: IHg/HAIR SAHPLE 32

ANALYST: CITYERNAH/LASORSA
PLLE \#: MOHSEG32

| $\begin{gathered} \text { BATTRLLLS } \\ \text { DD } \end{gathered}$ | $\left.\right\|_{\text {MOMITH }} ^{\text {SEG }}$ | $\left\|\begin{array}{c} \text { IMTEGRATOR } \\ \text { SER } \end{array}\right\|$ | $\left.\right\|_{\text {DIITB }} ^{\text {DIGESIIOM }}$ | $\left\|\begin{array}{c} \text { DIGESTIOZ } \\ \text { wr } \end{array}\right\|$ |  | $\left\|\begin{array}{l} \text { AHALYZZDD } \\ W I \mathrm{Ig} \end{array}\right\|$ | AREA | $\underset{[\mathrm{Eg}] \mathrm{\mu g} / \mathrm{g}}{\mathrm{Zgg}}$ | $\left\lvert\, \begin{gathered} \mathrm{YDL} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { YRAN } \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
| 32a | ADG | 1300 | 20 Fr891 | 0.0079 | 250 | 0.092 | 1366 | 1.585 | 0.047 | 1.585 |
| 32b dup | JULI | \|1314,1301 | 2016891 | 0.0085 | 250 | 0.099 | 1613 | 1.745 | 0.044 | 1.790 |
| 32C | Jun | 1302 | \|20P1691 | 0.0093 | 250 | 0.109 | 1683 | 1.665 | 0.040 | 1.665 |
| 32d | HiY | 1303 | \|20prse9 | 0.0090 | 250 | 0.105 | 1006 | 1.018 | 0.041 | 1.018 |
| 32e | APS | 1304 | \|20pre91 | 0.0081 | 250 | 0.095 | 723 | 0.805 | 0.046 | 0.805 |
| 327 | ImR | 1305 | \|2017391 | 0.0063 | 250 | 0.074 | 572 | 0.812 | 0.059 | 0.812 |
| 329 | FXB | 1306 | \|2015691 | 0.0074 | 250 | 0.087 | 660 | 0.802 | 0.050 | 0.802 |
| 32h dup | 511 | \|1315,1307 | \|201F391 | 0.0065 | 250 | 0.076 | 627 | 0.866 | 0.057 | 0.874 |
| 32i | DSC | 1308 | \|2018691 | 0.0053 | 250 | 0.062 | 608 | 1.028 | 0.070 | 1.028 |
| 32j | 108 | 1309 | \|2014891 | 0.0046 | 250 | 0.054 | 573 | 1.114 | 0.081 | 1.114 |
| 32k | OCT | 1310 | \|2017891 | 0.0045 | 250 | 0.053 | 598 | 1.190 | 0.083 | 1.190 |
| 321 | SEPT | \| 1311 | \|20188991 | \| 0.0032 | 250 | $\mid 0.037$ | 471 | 1.304 | 0.116 | 1.304 |

## [Hg] vs Month

 Participant \#33

PROJECT ID:MOHR SEGIETIAL ANALYSIS
AHALYSIS: EHg/yAIR SAMPLE 33

ANALYST: CIITIERHAN/LASORSA
FILE f: HOHSEG33



## [Hg] vs Month Participant \#34



Month


PROJECT ID:HONE SEGIEHTAL AIMLYSIS
AMALYSIS: KHg/HAIR SAMPLR 34

AMALYST: CITTERUAH/LASORSA
PILE f: HOUSEG34

| $\begin{gathered} \text { BATTELLE } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \text { MOMA } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { IHIEGRATOR } \\ \text { SEQt } \end{array}\right\|$ | $\left\lvert\, \begin{array}{\|c} \text { DIGRSIIOM } \\ \text { DAIE } \end{array}\right.$ | $\left\|\begin{array}{c} \text { DIGBSTIOM } \\ \mathrm{FI} \mathrm{~g} \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & \text { VOL ( } \mu 1) \\ & \left\|\begin{array}{ll} 1 / 2 L Y E D D \end{array}\right\| \end{aligned}\right.$ | $\left\|\begin{array}{l\|l\|} \text { AMALYZED } \\ \text { Wi } \end{array}\right\|$ | AREL | $\begin{gathered} \Sigma \mathrm{Eg} \mathrm{~g} \\ {[\mathrm{Eg}] \mathrm{pg} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \operatorname{MDL} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $34 t$ | DEC | 1353 | $20 \mathrm{PRB91}$ | 0.0040 | 250 | 0.047 | 1042 | 2.403 | 0.093 | 2.403 |
| 340 | 100 | 1356 | $20 \mathrm{PrB91}$ | 0.0036 | 250 | 0.042 | 1089 | 2.793 | 0.103 | 2.793 |
| 347 | OCT | 1357 | 2078891 | 0.0036 | 250 | 0.042 | 997 | 2.552 | 0.103 | 2.552 |
| 3417 | SEPT | 1358 | $20 \mathrm{Pr89} 1$ | 0.0036 | 250 | 0.042 | 959 | 2.452 | 0.103 | 2.452 |
| 34 x | 20G | 1359 | 2018391 | 0.0040 | 250 | 0.047 | 1125 | 2.598 | 0.093 | 2.598 |
| 34y | JUL | 1360 | 2076991 | 0.0037 | 250 | 0.043 | 1007 | 2.508 | 0.101 | 2.508 |
| 342 | Jun | 1361 | 2018391 | 0.0038 | 250 | 0.044 | 1175 | 2.859 | 0.098 | 2.859 |

## [Hg] vs Month Participant \#35



PROJECT ID:HOTR SBGETTAL MNALYSIS
AMALYSIS: EBg/HAIR SAMPLE 35

AMALYST: CITTRRHAN/LASORSA
PILE f: MOHSEG35

| $\begin{gathered} \text { BATYELLSR } \\ \text { DD } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOMIH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { ITHEGRATOR } \\ \text { SEQA } \end{array}\right\|$ | $\begin{gathered} \text { DIGESITOM } \\ \text { DAIE } \end{gathered}$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \mathrm{me} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ \text { ABALYESD } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { allalyzED } \\ \text { WI Eg } \end{array}\right\|$ | AREA | [Eq] | $\left\|\begin{array}{c} \operatorname{HDL} \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \mathrm{HBRM} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SIEPT |  |  |  |  |  |  |  |  |  |
| 35a dup | $\triangle \mathrm{A} G$ | \|1413,1399 | \|41:1891 | 0.0074 | 250 | 0.087 | 472 | 0.572 | 0.050 | 0.559 |
| 35b | JULY | 1400 | \|410R891 | 0.0067 | 250 | 0.078 | 495 | 0.664 | 0.056 | 0.664 |
| 35c | JUS | 1401 | \|414R21 | 0.0066 | 250 | 0.077 | 463 | 0.628 | 0.056 | 0.628 |
| 350 | hay | 1402 | \|414R291 | 0.0063 | 250 | 0.074 | 499 | 0.712 | 0.059 | 0.712 |
| 35 | APR | 1403 | \|414R21 | 0.0071 | 250 | 0.083 | 579 | 0.738 | 0.052 | 0.738 |
| 355 | NAR | 1404 | \|414821 | 0.0064 | 250 | 0.075 | 667 | 0.948 | 0.058 | 0.948 |
| 359 | PEB | 1405 | \|414891 | 0.0052 | 250 | 0.061 | 681 | 1.193 | 0.072 | 1.193 |
| 35h | JMI | 1406 | \|414R291 | 0.0058 | 250 | 0.068 | 829 | 1.310 | 0.064 | 1.310 |
| 35i | DEC | 1407 | \| $414 \mathrm{NR91}$ | 0.0042 | 250 | 0.049 | 784 | 1.708 | 0.089 | 1.708 |
| \| 35j dup | 1807 | \|1414,1408 | \|410891 | 0.0039 | 250 | 0.046 | 822 | 1.932 | 0.095 | 1.845 |
| 35k | OCT | 1411 | \| 4Hap91 | 0.0038 | 250 | 0.044 | 1061 | 2.576 | 0.098 | 2.576 |
| 351 | SEPI | 1412 | \| 4apal | 0.0033 | 250 | 0.039 | 1126 | 3.153 | 10.113 | 3.153 |

## [Hg] vs Month Participant \#36



PROJECT ID:KOHR SECHETTLL ANALYSIS
ARALYSIS: ZHg/HALR SAMPLR 36

AHALYST: CITTERMAN/LASORSA
PILE I: HOHSEG36

| $\begin{gathered} \text { BATTELLDB } \\ \text { DD } \end{gathered}$ | $\left.\right\|_{\text {HOMR }} ^{\text {SRG }}$ | $\left\|\begin{array}{c} \text { IITIECRATOR } \\ \text { SERA } \end{array}\right\|$ | $\left.\right\|_{\text {DIGESIIOI }} ^{\text {DAFE }}$ | $\left\|\begin{array}{c} \text { DIGBSIIOM } \\ \text { WI } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ \text { AMLYZED } \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AHALYZED } \\ \text { TII } \end{array}\right\|$ | AREA | $\underset{[\mathrm{Hg}] \mathrm{Kg} / \mathrm{g} / \mathrm{g}}{\mathrm{EH}}$ | $\left\|\begin{array}{c} \text { HDL } \\ {[\mathrm{Hg}]} \end{array}\right\|$ | $\begin{gathered} \text { KRAR } \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|scale |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
| $36 a$ | 206 | 1415 | 410891 | 0.0061 | 250 | 0.071 | 224 | 0.310 | 0.061 | 0.310 |
| 36b | JULY | 1416 | 414R91 | 0.0056 | 250 | 0.065 | 196 | 0.290 | 0.066 | 0.290 |
| 36c dup | JU1 | \|1421,1417 | 414891 | 0.0048 | 250 | 0.056 | 199 | 0.344 | 0.078 | 0.350 |
| 36 d | Hay | 1418 | 4uapel | 0.0041 | 250 | 0.048 | 209 | 0.426 | 0.091 | 0.426 |
| 360 | APS | 1419 | 410891 | 0.0036 | 250 | 0.042 | 203 | 0.469 | 0.103 | 0.469 |
| 366 | \| MAR | 1420 | 420291 | 0.0020 | 250 | 0.023 | 192 | 0.793 | 0.186 | 0.793 |

## [Hg] vs Month Participant \#37



PROJECI LD:MOTR SBGIEITTAL AMALYSIS
AMLLYSIS: EHg/EAIR SANPLE 37

AMALYST: CTTTERUAN/LASORSA

## PILE $\ddagger$ : BOHSEG37

| $\begin{gathered} \text { BATYELLB } \\ \text { DD } \end{gathered}$ | $\left.\right\|_{\text {MOB }} ^{\text {SBI }}$ | $\left\|\begin{array}{c} \text { IITBGRATOR } \\ \text { SEOA } \end{array}\right\|$ | $\left.\right\|_{\text {DIGRSITOM }}$ | $\left\|\begin{array}{c} \text { DIGBSTIOM } \\ \mathrm{m} \\ \mathrm{~m} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ A B A C Y E D D \end{array}\right\|$ |  | AREA | $\begin{gathered} \mathrm{EBg} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \text { YDL } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { HRAM } \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCLIP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | SOG |  |  |  |  |  |  |  |  |  |
| 37a | JULI | 1426 | 540891 | 0.0094 | 250 | 0.110 | 418 | 0.396 | 0.040 | 0.396 |
| 37 b | JUI | 1427 | 54, RR91 | 0.0110 | 250 | 0.129 | 480 | 0.391 | 0.034 | 0.391 |
| 37c dup | M M | \|1471,1428 | 5HAR91 | 0.0097 | 250 | 0.113 | 425 | 0.377 | 0.038 | 0.388 |
| 37d | APR | 1441 | 541891 | 0.0100 | 250 | 0.117 | 458 | 0.397 | 0.037 | 0.397 |
| 37e | Mar | 1442 | 501491 | 0.0085 | 250 | 0.099 | 429 | 0.435 | 0.044 | 0.435 |
| 37 f | FKB | 1443 | 572P91 | 0.0089 | 250 | 0.104 | 594 | 0.590 | 0.042 | 0.590 |
| 379 | JAII | 1444 | 504R91 | 0.0091 | 250 | 0.106 | 647 | 0.632 | 0.041 | 0.632 |
| 37h | DSC | 1445 | 5014P91 | 0.0076 | 250 | 0.089 | 555 | 0.642 | 0.049 | 0.642 |
| 37i | 100 | 1446 | 514291 | 0.0052 | 250 | 0.061 | 457 | 0.761 | 0.072 | 0.761 |
| \| 37j dup | OCT | \|1472,1447 | 5:0.091 | 0.0062 | 250 | 0.073 | 577 | 0.821 | 0.060 | 0.764 |
| 37k | SEPP | 1448 | 51aR91 | \| 0.0045 | 250 | 0.053 | 558 | 1.091 | 0.083 | \| 1.091 |

## [Hg] vs Month

Participant \#38


PROTBCI ID:HONR SBGEMTAL AHALYSIS
AHALYSIS: $8: g / E A I R ~ S A M P L R ~ 38$

AHALYST: CITTERMAN/LASORSA
PILB : : HONSEG38

| BATIGLLE <br> ID | $\begin{gathered} \text { SEG } \\ \text { Hoint } \end{gathered}$ | \| IITBGRATOR | $\left\lvert\, \begin{gathered} \text { DIGESIIOA } \\ \text { DAIE } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { WL } g \end{gathered}\right.$ | $\left\|\begin{array}{l} \text { VOL }(\mu \mathrm{l}) \\ \text { ANLIED } \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AHALYEED } \\ \text { WI Eg } \end{array}\right\|$ | ARRA | $\underset{[\mathrm{Eg}] \mathrm{mg} / \mathrm{g}}{\mathrm{E}}$ | MDL <br> [Bg] $\mathrm{Hg} / \mathrm{g}$ | NRKH <br> [ Bg$] / \mu \mathrm{g} / \mathrm{g}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SCALP |  |  |  |  |  |  |  |  |  |
|  | SRPI |  |  |  |  |  |  |  |  |  |
| 388 dup | LOG | \|1485,1449 | 5112991 | 0.0090 | 250 | 0.105 | 919 | 0.890 | 0.041 | 0.916 |
| 38b | JULI | 1450 | 511291 | 0.0081 | 250 | 0.095 | 610 | 0.667 | 0.046 | 0.667 |
| 38C | Ju: | 1451 | 514291 | 0.0073 | 250 | 0.085 | 657 | 0.800 | 0.051 | 0.800 |
| 38d | NAI | 1452 | 501281 | 0.0053 | 250 | 0.062 | 555 | 0.921 | 0.070 | 0.921 |
| 38 e | APR | 1453 | 511291 | 0.0042 | 250 | 0.049 | 507 | 1.055 | 0.089 | 1.055 |
| 388 | HR | 1454 | 54nP91 | 0.0035 | 250 | 0.041 | 628 | 1.591 | 0.106 | 1.591 |

## [Hg] vs Month

 Participant \#39

PROTECT ID:HONE SRGHETAL AKALYSIS
AMALYSIS: ZHg/BAIR SAIPLE 39

AHALYST: CITTERNAN/LASORSA
PILR : MOMSEG39

| $\begin{gathered} \text { BATHELLLB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { Honint } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { IFIEGRATOR } \\ \text { SER\& } \end{array}\right\|$ | $\begin{gathered} \text { DIGESTIOM } \\ \text { DATR } \end{gathered}$ | $\left\|\begin{array}{c} \text { DIGESTIOH: } \\ \mathrm{g} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL ( } \mu \mathrm{I}) \\ \text { AMNLYED } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AMALYLZED } \\ \text { WI Eg } \end{array}\right\|$ | ARES | $\underset{[\mathrm{Eg}] \mathrm{Mg} / \mathrm{g}}{\mathrm{EH}}$ | $\left\|\begin{array}{c} \mathrm{VDL} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\stackrel{\text { RBAN }}{[\mathrm{Eg}] \mathrm{mg} / \mathrm{g}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | A0G |  |  |  |  |  |  |  |  |  |
| 39a | July | 1492 | 6Har91 | 0.0057 | . 250 | 0.067 | 544 | 0.802 | 0.065 | 0.802 |
| 39b | JWI | 1493 | G4aR91 | 0.0055 | 250 | 0.064 | 491 | 0.744 | 0.068 | 0.744 |
| 398 dup | HMY | \|1515,1494 | 6uar91 | 0.0047 | 250 | 0.055 | 401 | 0.697 | 0.079 | 0.684 |
| 398 | APR | 1495 | guapl | 0.0051 | 250 | 0.060 | 408 | 0.655 | 0.073 | 0.655 |
| 39 | HAR | $14 \%$ | 61ap91 | 0.0054 | 250 | 0.063 | 414 | 0.628 | 0.069 | 0.628 |
| 39 f | FEB | 1497 | 612891 | 0.0043 | 250 | 0.050 | 338 | 0.629 | 0.087 | 0.629 |
| 399 | J31 | 1498 | 6ap91 | 0.0037 | 250 | 0.043 | 341 | 0.738 | 0.101 | 0.738 |
| 39h | DEC | 1499 | 6aral | 0.0037 | 250 | 0.043 | 336 | 0.726 | 0.101 | 0.726 |
| 391 | 300 | 1500 | G1ap91 | 0.0035 | 250 | 0.041 | 307 | 0.692 | 0.106 | 0.692 |
| 39j | OCT | 1501 | 6un891 | 0.0036 | 250 | 0.042 | 292 | 0.635 | 0.103 | 0.635 |
| 39k | SEPT | 1502 | 641891 | 0.0032 | 250 | 0.037 | 269 | 0.650 | 0.116 | 0.650 |
| 391 | 406 | 1505 | 6ap91 | 0.0035 | 250 | 0.041 | 285 | 0.635 | 0.106 | 0.635 |
| 394 | SULV | 1506 | 64891 | 0.0022 | 250 | 0.026 | 264 | 0.924 | 0.169 | 0.924 |
| 39n dup | JuI | \|1516,1507 | Gup91 | 0.0027 | 250 | 0.032 | 232 | 0.646 | 0.138 | 0.632 |
| 390 | hay | 1508 | 6uar91 | 0.0024 | 250 | 0.028 | 284 | 0.923 | 0.155 | 0.923 |
| 39p | APR | 1509 | 6HAR91 | 0.0025 | 250 | 0.029 | 253 | 0.774 | 0.149 | 0.774 |

## [Hg] vs Month

 Participant \#40

PROJECT ID:HOHR SEGIEMAL AMALYSIS
AHALYSIS: $\Sigma \mathrm{Hg} / \mathrm{HAIR}$ SAMPLE 40

AMALYST: CITTERUAT/LASORSA
PILS f: HOISEG40

| $\begin{gathered} \text { BMTIELLLB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { HONRI } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SEQf } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGSSIIOM } \\ \text { DATB } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { digrsitom } \\ \text { min } \end{array}\right\|$ | YOL ( $\mu 1$ ) ALELYESD | $\left\|\begin{array}{c} \text { AWLYEZED } \\ \text { WI } \end{array}\right\|$ | ARKA | $\underset{[\mathrm{Bg}]}{\mathrm{EHg} / \mathrm{gg}}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Bg}] \mathrm{gg} / \mathrm{g}} \end{gathered}\right.$ | $\underset{\text { HiRAN }}{[\mathrm{Bq}] \mu \mathrm{g} / \mathrm{g}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 40a | 20 E | 1510 | 614891 | 0.0091 | 250 | 0.106 | 943 | 0.899 | 0.041 | 0.899 |
| 40 b | JULI | 1511 | 64AP91 | 0.0088 | 250 | 0.103 | 1005 | 0.994 | 0.042 | 0.994 |
| 40c dup | Jum | \|1517,1512 | 6uAR91 | 0.0089 | 250 | 0.104 | 819 | 0.793 | 0.042 | 0.792 |
| 400 | \| May | 1513 | 6HAR91 | 0.0053 | 250 | 0.062 | 465 | 0.727 | 0.070 | 0.727 |

## [Hg] vs Month Participant \#41



PROJECT ID: HONR SBGTENTAL ANALYSIS
AHALYSIS: EHg/HAIR SAMPLS 41

AMALYST: CITTRRRMI/LLASORSA
PILR : : HOMSEGA1

| $\begin{gathered} \text { BATTELLB } \\ \text { ID } \end{gathered}$ | $\left.\right\|_{\text {MOMTH }}$ | $\left\|\begin{array}{c} \text { IVTEGRAIOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIO } \\ \text { DAIE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \mathrm{WI} \mathrm{~g} \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & \text { VOL }(\mu \mathrm{l}) \\ & \text { ALALYEDD } \end{aligned}\right.$ | $\left\|\begin{array}{c} \text { ALALYEED } \\ \text { WI Eg } \end{array}\right\|$ | AREA | $\stackrel{28 \mathrm{Bg}}{[\mathrm{gq}] \mathrm{mg} / \mathrm{g}}$ | $\left\|\begin{array}{l} \mathrm{MDL} \\ {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{array}\right\|$ | $\begin{array}{\|c} \text { RIBAK } \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCNLP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | 106 |  |  |  |  |  |  |  |  |  |
| 41a | JUI | 1531 | 6unpe1 | 0.0067 | 250 | 0.078 | 785 | 0.992 | 0.056 | 0.992 |
| 41b | JU1 | 1532 | 6up91 | 0.0060 | 250 | 0.070 | 920 | 1.309 | 0.062 | 1.309 |
| 41c | H HI | 1535 | 64ar91 | 0.0071 | 250 | 0.083 | 832 | 0.995 | 0.052 | 0.995 |
| 41d | APR | 1536 | 64ar91 | 0.0081 | 250 | 0.095 | 1053 | 1.116 | 0.046 | 1.116 |
| 41e dup | Har | \|1558,1537 | 610891 | 0.0067 | 250 | 0.078 | 1128 | 1.449 | 0.056 | 1.443 |
| 417 | PrB | 1538 | 6ap91 | 0.0066 | 250 | 0.077 | 1179 | 1.540 | 0.056 | 1.540 |
| 419 | JaII | 1539 | 6ap91 | 0.0071 | 250 | 0.083 | 1529 | 1.871 | 0.052 | 1.871 |
| 413 | DEC | 1540 | 61ap91 | 0.0057 | 250 | 0.067 | 1486 | 2.263 | 0.065 | 2.263 |
| 41 i | 130 | 1541 | $6{ }^{1} 1881$ | 0.0056 | 250 | 0.065 | 1471 | 2.280 | 0.066 | 2.280 |
| 41) | OCT | 1542 | 64ap91 | 0.0055 | 250 | 0.064 | 1538 | 2.430 | 0.068 | 2.430 |
| 412 | SEPT | 1545 | 64ap91 | 0.0059 | 250 | 0.069 | 1708 | 2.522 | 0.063 | 2.522 |
| 411 | $\triangle A O G$ | 1546 | 641491 | 0.0049 | 250 | 0.057 | 1673 | 2.973 | 0.076 | 2.973 |
| 418 | JULI | 1547 | GUP91 | 0.0048 | 250 | 0.056 | 1653 | 2.998 | 0.078 | 2.998 |
| 410 | J01 | 1548 | gand | 0.0045 | 250 | 0.053 | 1369 | 2.635 | 0.083 | 2.635 |
| 410 | HAY | 1549 | 6Hap91 | 0.0044 | 250 | 0.051 | 1368 | 2.693 | 0.085 | 2.693 |
| 41p dup | APR | \|1559,1550 | | 64R91 | 0.0040 | 250 | 0.047 | 761 | 1.609 | 0.093 | 1.616 |
| 419 | \| MAR | 1552 | 61ar91 | 0.0037 | 250 | 0.043 | 1063 | 2.467 | 0.101 | 2.467 |
| 415 | 1 PEB | \| 15531 | \| 6Har91 | 10.0044 | \| 250 | | 10.051 | 1014 | 1.975 | 0.085 | 1.975 |

PROJECT ID:HONE SEGIEMAL AHALYSIS

AMALYSIS: EHg/HALR SANPLS 41

ANALYST: CITTERHAH/LASORSA
FILR f: MOHSEG4

| $\begin{gathered} \text { BAFTBLLS } \\ \text { ID } \end{gathered}$ | $\begin{gathered} \text { SRG } \\ \text { Howriil } \end{gathered}$ | $\begin{array}{\|c} \text { IITEGRATOR } \\ \text { SEO } \end{array}$ | $\begin{gathered} \text { DIGESTIOM } \\ \text { DATE } \end{gathered}$ | $\left\|\begin{array}{c} \text { DIGRSIIOM } \\ \text { IT } g \end{array}\right\|$ | $\left\|\begin{array}{l} \mathrm{VOL}(\beta 1) \\ \text { ABALYZBD } \end{array}\right\|$ |  | ARBA | $\begin{gathered} \sum H g \\ {[H q] \mu g / g} \end{gathered}$ |  | $\left\lvert\, \begin{gathered} \text { MRAN } \\ {[\mathrm{Hg}]_{\mu \mathrm{H}} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41s | J4. | 1554 | 671R21 | 0.0038 | 250 | 0.044 | 851 | 1.904 | 0.098 | 1.904 |
| 41 t | DSC | 1555 | 64ar91 | 0.0043 | 250 | 0.050 | 887 | 1.758 | 0.087 | 1.758 |
| 414 | 1807 | 1556 | 6412891 | 0.0039 | 250 | 0.046 | 740 | 1.602 | 0.095 | 1.602 |
| 41v | $0 C_{1}$ | 1557 | 6unP91 | 0.0031 | 250 | 0.036 | 652 | 1.762 | 0.120 | 1.762 |

## [Hg] vs Month Participant \#42



PROJECT ID:HONR SBCHIBITAL AHALYSIS

ANALYSIS: EHg/HAIR SAKPLE 42

ANALYST: CITTERHAN/LASORSA
PILE \&: MOHSEG42

| $\begin{gathered} \text { BATTELLB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MONTH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { ITIEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\begin{array}{\|c} \text { DIGESTIOM } \\ \text { DAIEB } \end{array}$ | $\left\|\begin{array}{c} \text { DIGESTION } \\ \text { WI } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu \mathrm{L}) \\ \text { ABALYEDD } \end{array}\right\|$ |  | ARRA | $\text { [ } \mathrm{Hg}][\mathrm{mg} / \mathrm{g}$ | $[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}$ | $\left\lvert\, \begin{gathered} \text { HEAM } \\ {[\mathrm{Eg}] \mathrm{gg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCNIP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 42a | AOG | 1577 | 11 H 1201 | 0.0070 | 250 | 0.082 | 318 | 0.365 | 0.053 | 0.365 |
| 42b | JULY | 1578 | 11HAP91 | 0.0078 | 250 | 0.091 | 419 | 0.445 | 0.048 | 0.445 |
| 42C dup | Jon | 1596,1579 | 11 aras | 0.0069 | 250 | 0.081 | 374 | 0.444 | 0.054 | 0.420 |
| 42d | may | 1580 | 1114891 | 0.0067 | 250 | 0.078 | 379 | 0.464 | 0.056 | 0.464 |
| 42e | APR | 1581 | 111AR91 | 0.0079 | 250 | 0.092 | 512 | 0.547 | 0.047 | 0.547 |
| 427 | nas | 1582 | 1114P91 | 0.0051 | 250 | 0.060 | 381 | 0.613 | 0.073 | 0.613 |
| 429 | PEB | 1583 | $11 \mathrm{HaP91}$ | 0.0072 | 250 | 0.084 | 436 | 0.504 | 0.052 | 0.504 |
| 42h | J\II | 1584 | 1110291 | 0.0066 | 250 | 0.077 | 411 | 0.515 | 0.056 | 0.515 |
| $42 i$ | DSC | 1585 | $14 \mathrm{nPO1}$ | 0.0063 | 250 | 0.074 | 479 | 0.638 | 0.059 | 0.638 |
| 42j | 100 | 1586 | 11:19891 | 0.0055 | 250 | 0.064 | 525 | 0.807 | 0.068 | 0.807 |
| 42K | OCT | 1587 | U14P01 | 0.0058 | 250 | 0.068 | 522 | 0.760 | 0.064 | 0.760 |
| 421 | SEPT | 1590 | 11918 | 0.0052 | 250 | 0.061 | 418 | 0.666 | 0.072 | 0.666 |
| 421 dup | 206 | \|1597,1591 | $110 \% 01$ | 0.0054 | 250 | 0.063 | 400 | 0.611 | 0.069 | 0.607 |
| 42n | JWH | 1592 | 1171091 | 0.0049 | 250 | 0.057 | 397 | 0.668 | 0.076 | 0.668 |
| 420 | Jul | 1593 | $13 \mathrm{MPO1}$ | 0.0047 | 250 | 0.055 | 339 | 0.584 | 0.079 | 0.584 |
| 429 | H1 | 1594 | $11 \mathrm{nP} \mathrm{P}^{1}$ | 0.0050 | 250 | 0.058 | 382 | 0.627 | 0.074 | 0.627 |
| 429 | \| APR | | \| 1606 | \| 11Hap91 | 0.0052 | 250 | \| 0.061 | 381 | 0.601 | 0.072 | 0.601 |

## [Hg] vs Month Participant \#43



PROJECT ID:MOHR SEGFRMTAL ANALYSIS
AMALYSIS: EHg/BAIR SAIPLE 43

AMALYST: CITTERHAY/LASORSA
PILE \#: MOHSEG43

| $\begin{array}{\|c} \text { BATTELLB } \\ \text { ID } \end{array}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOIII } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { INTEGRATOR } \\ \text { SEQf } \end{gathered}\right.$ | $\left.\right\|_{\text {DITE }} ^{\text {DIGSTIOH }}$ | $\left\|\begin{array}{c} \text { DIGESIIOX } \\ \text { WI } \end{array}\right\|$ | $\left\|\begin{array}{l} \operatorname{VOL}(\mu 1) \\ \operatorname{ABLLYED} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { ABALYZED } \\ \text { WT } \mathrm{mg} \end{array}\right\|$ | AREA | $\stackrel{2 \mathrm{Eg}}{[\mathrm{Hg}] \mathrm{Hg} / \mathrm{g}}$ | $\left\|\begin{array}{c} \text { nid } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { KRKA } \\ {[\mathrm{Hg}] \mu \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 43a | AOG | 1598 | \|LIMAR91 | 0.0078 | 250 | 0.091 | 745 | 0.826 | 0.048 | 0.826 |
| 43b | JULY | 1599 | \| 11 unar91 | 0.0070 | 250 | 0.082 | 666 | 0.817 | 0.053 | 0.817 |
| 43c dup | JJII | \|1682,1600 | \|114R291 | 0.0055 | 250 | 0.064 | 453 | 0.942 | 0.068 | 0.937 |
| 43 d | Hay | 1601 | \|11\%apl | 0.0053 | 250 | 0.062 | 576 | 0.925 | 0.070 | 0.925 |
| 43 | APR | 1602 | \|u114891 | 0.0057 | 250 | 0.067 | 572 | 0.854 | 0.065 | 0.854 |
| $43 f$ | Has | 1603 | \|1110p91 | 0.0057 | 250 | 0.067 | 559 | 0.833 | 0.065 | 0.833 |
| 439 | ISB | 1607 | \|1100891 | 0.0052 | 250 | 0.061 | 574 | 0.939 | 0.072 | 0.939 |
| 43h | JAI | 1608 | \|11Map91 | 0.0044 | 250 | 0.051 | 557 | 1.075 | 0.085 | 1.075 |
| 431 | DSC | 1609 | \| $114 \mathrm{napg1}$ | 0.0040 | 250 | 0.047 | 540 | 1.144 | 0.093 | 1.144 |
| 43) | $10 \%$ | 1610 | \|1191091 | 0.0042 | 250 | 0.049 | 591 | 1.200 | 0.089 | 1.200 |
| 43k dap | $0 \times 1$ | \|1683,1611 | \|limper | 0.0031 | 250 | 0.036 | 379 | 1.377 | 0.120 | 1.288 |
| 431 | SEPP | 1612 | \|119891 | 0.0036 | 250 | 0.042 | 586 | 1.387 | 0.103 | 1.387 |
| 438 | 206 | 1613 | \|11\%P91 | 0.0038 | 250 | 0.033 | 526 | 1.588 | 0.133 | 1.588 |
| 43n dup | Jun | \|1673,1614 | \|11\%10891 | 0.0032 | 250 | 0.037 | 471 | 1.689 | 0.116 | 1.645 |
| 430 dap | JuI | \|1674,1615 | \|1191991 | 0.0027 | 250 | 0.032 | 554 | 2.383 | 0.138 | 1.931 |
| 43p | MaI | 1679 | \|11H0p91 | 0.0021 | 250 | 0.025 | 430 | 2.333 | 0.177 | 2.333 |
| 439 | APR | 1681 | \|1141901 | 0.0017 | 250 | 0.020 | 354 | 2.329 | 0.219 | 2.329 |
| 435 | \| Mar | | 1680 | \|11HAR91 | \| 0.0017 | | 250 | 0.020 | 381 | 2.525 | 0.219 | 2.525 |

## [Hg] vs Month

Participant \#44


PROJECT ID:HOHR SEGIBTIAL AMALYSIS
AMALYSIS: EHg/BAIR SAMPLE 44

AMALYST: CITTERHAN/LASORSA
PILE $\ddagger:$ HOMSEG44

| $\begin{array}{\|c} \text { BATTRLLR } \\ \text { ID } \end{array}$ | $\left.\right\|_{\text {MOHITH }} ^{\text {SEG }}$ | $\left\|\begin{array}{c} \text { IVTEGRATIOR } \\ \text { SERI } \end{array}\right\|$ | $\left.\right\|_{\text {DIGESIIOII }} ^{\text {DIIB }}$ | $\left\|\begin{array}{c} \text { DIGRSTIOM } \\ \mathrm{mI} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ \text { ABALYZED } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { ABALYZED } \\ W I \operatorname{mg} \end{array}\right\|$ | ARRA | $\begin{gathered} \mathrm{EHg} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\begin{gathered} \mathrm{HDL} \\ {[\mathrm{Bg}] / \mathrm{mg} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \mathrm{HBLI} \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mid$ SCALP |  |  |  |  |  |  |  |  |  |
|  | \| SEPP |  |  |  |  |  |  |  |  |  |
|  | AOG |  |  |  |  |  |  |  |  |  |
| 44 a | JULI | 1688 | \|1210191 | 0.0056 | 250 | 0.065 | 313 | 0.621 | 0.066 | 0.621 |
| 44b | J015 | 1689 | \|1210891 | 0.0050 | 250 | 0.058 | 270 | 0.589 | 0.074 | 0.589 |
| 44c | HAY | 1690 | \|1214891 | 0.0049 | 250 | 0.057 | 264 | 0.586 | 0.076 | 0.586 |
| 44d dup | APR | \|1701,1691 | \|12argo | 0.0051 | 250 | 0.060 | 221 | 0.458 | 0.073 | 0.479 |
| 44 | Hap | 1692 | \|1214P91 | 0.0046 | 250 | 0.054 | 204 | 0.463 | 0.081 | 0.463 |
| 44 | PR8 | 1693 | \|124P91 | 0.0044 | 250 | 0.051 | 205 | 0.486 | 0.085 | 0.486 |
| 44 g | JKI | 1694 | \|120.as91 | 0.0042 | 250 | 0.049 | 185 | 0.451 | 0.089 | 0.451 |
| 44 | DSC | 1695 | \|1210391 | 0.0051 | 250 | 0.060 | 273 | 0.585 | 0.073 | 0.585 |
| 44 | 108 | 169 | \|1214091 | 0.0039 | 250 | 0.046 | 217 | 0.587 | 0.095 | 0.587 |
| 44j | OCT | 1697 | \|1200891 | 0.0044 | 250 | 0.051 | 277 | 0.689 | 0.085 | 0.689 |
| 44k | SEP | 1698 | \|1210891 | 0.0044 | 250 | 0.051 | 327 | 0.829 | 0.085 | 0.829 |
| 441 | 206 | 1699 | \|201401 | 0.0051 | 250 | 0.060 | 375 | 0.832 | 0.073 | 0.832 |
| 441 | JWI | 1700 | \|1201991 | 0.0044 | 250 | 0.051 | 310 | 0.782 | 0.085 | 0.782 |
| 441 | JIS | 1715 | \|1210191 | 0.0037 | 500 | 0.087 | 612 | 0.980 | 0.050 | 0.980 |
| 140 dup | 四 | \|1723,1716 | 1270291 | 0.0036 | 500 | 0.084 | 471 | 0.713 | 0.052 | 0.790 |
| 44p | APR | 1717 | 1240891 | 0.0028 | 500 | 0.065 | 490 | 0.959 | 0.066 | 0.959 |

## [Hg] vs Month Participant \#45



PROJECT ID: MOHE SEGHENTAL AMALYSIS
AHALYSIS: ZHg/EAIR SANPLE 45

AMALYST: CITTERMAN/LASORSA
PILE $\ddagger$ : MOHSEG45

| $\begin{gathered} \text { BATTELLE } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SRG } \\ \text { MOHITH } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { INTEGRATOR } \\ \text { SEQ } \end{gathered}\right.$ | $\begin{array}{\|c} \text { DIGRSTIO: } \\ \text { DAFE } \end{array}$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \mathrm{mI} \end{array}\right\|$ | VOL ( 11 ) AHALYZED | AMALYZED <br> in mg | AREA | $\begin{gathered} \mathrm{ZHg} \\ {[\mathrm{~Bq}] \mathrm{\mu g} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \mathrm{MDL} \\ {[\mathrm{Eg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { HBAR } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPI |  |  |  |  |  |  |  |  |  |
|  | ${ }^{\text {a }}$ DG |  |  |  |  |  |  |  |  |  |
| 45a | JULI | 1744 | 13HRR91 | 0.0186 | 500 | 0.435 | 2566 | 0.836 | 0.010 | 0.836 |
| 45b | JOI | 1745 | 13HAR91 | 0.0164 | 500 | 0.384 | 1949 | 0.715 | 0.011 | 0.715 |

## [Hg] vs Month Participant \#46



PROJECT ID: HOWR SEGGERTAL AWALYSIS
AMALYSIS: EHg/HAIR SAMPLB46

AMALYST: CITTRRHAN/LASORSA
FILE \#: MOHSEG46

| $\begin{gathered} \text { BATTRLLEB } \\ \text { ID } \end{gathered}$ | $\left.\right\|_{\text {HOHITH }} ^{\text {SEG }}$ | $\left\|\begin{array}{c} \text { INTEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left.\right\|_{\text {DAER }} ^{\text {DIGRSTIOM }}$ | $\left\|\begin{array}{c} \text { DIGRSTIOM } \\ \text { WI } g \end{array}\right\|$ | VOL ( $\mu \mathrm{l}$ ) AHALYZED | $\left\|\begin{array}{c} \text { AMALYZED } \\ \text { Wr eg } \end{array}\right\|$ | AREA | $\begin{gathered} \text { Z } \mathrm{Hg} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left.\left\|\begin{array}{c} \operatorname{HDL} \\ {[\mathrm{Hg}]} \end{array}\right\| \mathrm{gg} / \mathrm{g} \right\rvert\,$ | $\begin{gathered} \text { HBAK } \\ {[\mathrm{Bg}] \mu \mathrm{gg} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | AOG |  |  |  |  |  |  |  |  |  |
| 46a | JULY | 1746 | 13HAR91 | 0.0102 | 500 | 0.239 | 809 | 0.457 | 0.018 | 0.457 |
| 46b | J01 | 1747 | 13MAR91 | 0.0095 | 500 | 0.222 | 866 | 0.528 | 0.020 | 0.528 |
| 46 C | HMY | 1748 | 13HAR91 | 0.0089 | 500 | 0.208 | 902 | 0.588 | 0.021 | 0.588 |
| 46d | $\triangle P R$ | 1749 | 13HAR91 | 0.0077 | 500 | 0.180 | 916 | 0.691 | 0.024 | 0.691 |
| 46e dup | has | \|1885,1883 | 13142891 | 0.0084 | 500 | 0.196 | 486 | 0.572 | 0.022 | 0.558 |
| 465 | FIB | 1884 | 13H12891 | 0.0073 | 500 | 0.171 | 388 | 0.517 | 0.025 | 0.517 |
| 469 | JMI | 1886 | 13HAP91 | 0.0074 | 500 | 0.173 | 545 | 0.734 | 0.025 | 0.734 |
| 46 n | DSC | 1888 | 13Map91 | 0.0074 | 500 | 0.173 | 601 | 0.814 | 0.025 | 0.814 |

## [Hg] vs Month Participant \#47



PROJECT ID: MONR SBCHETTAL ANALYSIS
AMALYSIS: EHg/EAIR SAIPLEE47

AMALYST: CITTERHAN/LASORSA
FILB : : HOHSEG47

| $\begin{aligned} & \text { BATTELLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { HOHITB } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { ITTRERATOR } \\ \text { SEQf } \end{array}\right\|$ | $\left.\right\|_{\text {DIGESTIOM }} ^{\text {DITE }}$ | $\left\|\begin{array}{c} \text { DIGESTION } \\ \mathrm{mI} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ A B A L Y Z D D \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AMALYZED } \\ \mathrm{Wr} \mathrm{~g} \end{array}\right\|$ | ARRA | $\begin{gathered} \mathrm{KHg} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { HEAN } \\ {[\mathrm{Eg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|scale |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | IDG |  |  |  |  |  |  |  |  |  |
| 47a | JULY | 1889 | 13HAR91 | 0.0076 | 500 | 0.178 | 746 | 0.994 | 0.024 | 0.994 |
| 47b dup | J0: | \|1901,1890 | 13HAR91 | 0.0070 | 500 | 0.164 | 529 | 0.751 | 0.027 | 0.800 |
| 47c | hay | 1891 | 13HAP91 | 0.0072 | 500 | 0.168 | 678 | 0.949 | 0.026 | 0.949 |
| 47d | APR | 1892 | 13HAR91 | 0.0058 | 500 | 0.136 | 615 | 1.064 | 0.032 | 1.064 |
| 47e | HAR | 1895 | 1314R291 | 0.0066 | 500 | 0.154 | 593 | 0.899 | 0.028 | 0.899 |
| 47 f | PSB | 1896 | $13 H 12 \mathrm{P} 91$ | 0.0059 | 500 | 0.138 | 726 | 1.244 | 0.032 | 1.244 |
| 479 | JגI | 1897 | $13 \mathrm{Hap91}$ | 0.0047 | 500 | 0.110 | 712 | 1.530 | 0.040 | 1.530 |
| 472 | DEC | 1898 | 13H12R91 | 0.0036 | 500 | 0.084 | 583 | 1.620 | 0.052 | 1.620 |
| 47 i | 100 | 1899 | 13412 P 91 | 0.0025 | 500 | 0.058 | 419 | 1.639 | 0.074 | 1.639 |
| 47j | $10 C T$ | 1900 | 1340.991 | 0.0021 | 500 | 0.049 | 390 | 1.806 | 10.089 | 1.806 |

## [Hg] vs Month

 Participant \#48

PROWECT ID:MOME SBGIRNTHLL MMALYSIS
ANALYSIS: $\mathrm{EHg} / \mathrm{HAIR}$ SANPLB 48

AHALYST: CIITERHAN/LASORSA
FILE f: HOHSEG48


| $\begin{aligned} & \text { BATTELLR } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \text { HONTH } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { IMTEGRATOR } \\ \text { SEQA } \end{gathered}\right.$ | $\begin{gathered} \text { DIGBSIIOM } \\ \text { DAITE } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { WI } g \end{gathered}\right.$ | $\left\lvert\, \begin{aligned} & \text { VOL }(\mu 1) \\ & A M A L I Z E D \end{aligned}\right.$ | $\left\|\begin{array}{c} \text { AHALYGED } \\ \text { WI } \mathrm{Eg} \end{array}\right\|$ | AREA | $\begin{gathered} \Sigma H g \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \text { MDL } \\ \text { [Hg] }] / g \end{array}\right\|$ | $\begin{array}{\|c} \text { HEAN } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCNLP |  |  |  |  |  |  |  |  |  |
|  | SBPT |  |  |  |  |  |  |  |  |  |
| 48a | A0G | 1922 | 21HaR91 | 0.0164 | 250 | 0.192 | 3263 | 4.532 | 0.023 | 4.532 |
| 48b dup | JULI | \|1940,1916 | 2114R21 | 0.0147 | 250 | 0.172 | 2718 | 4.207 | 0.025 | 4.045 |
| 48c | JU. | 1917 | 21141891 | 0.0141 | 500 | 0.330 | 3089 | 2.482 | 0.013 | 2.482 |
| 48d | HLI | 1918 | 21141891 | 0.0134 | 500 | 0.313 | 1907 | 1.602 | 0.014 | 1.602 |
| 48e | APR | 1919 | 2114R91 | 0.0073 | 500 | 0.171 | 960 | 1.457 | 0.025 | 1.457 |
| 485 | HAR | 1920 | 2114291 | 0.0040 | 500 | 0.094 | 573 | 1.552 | 0.047 | 1.552 |

## [Hg] vs Month

Participant \#49


PROJECT ID:HOHE SEGIRTITAL ANALYSIS
ANALYSIS: $\mathrm{ZHg} / \mathrm{HAIR}$ SAMPLB 49

ANALYST: CITTERHAH/LASORSA
PILE \&: MOHSEG49


## [Hg] vs Month Participant \#50



PROJBCT ID:NOHE SEGIENTAL ANALYSIS
ANALYSIS: EHg/BAIR SAMPLE 50

ANALYST: CITTERKAK/LASORSA

PILE f: HONSEG50

| $\begin{aligned} & \text { BATTELLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOHTHI } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTEGRATOR } \\ \text { SER } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTION } \\ \text { mi } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu \mathrm{L}) \\ \text { ARALYZDD } \end{array}\right\|$ |  | AREA | $\begin{gathered} \text { EHg } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\stackrel{\mathrm{MDL}}{[\mathrm{Hg}] \mathrm{g} / \mathrm{g} / \mathrm{g}}$ | $\underset{[\mathrm{Eg}]}{\mathrm{HR} / \mathrm{Mg} / \mathrm{g}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mid$ Scalp |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | AOG |  |  |  |  |  |  |  |  |  |
| 50a | JULY | 1927 | 21HAR91 | 0.0141 | 500 | 0.330 | 2146 | 1.717 | 0.013 | 1.717 |
| 50b dup | JUI | \|1941,1928 | 21414991 | 0.0122 | 500 | 0.285 | 1860 | 1.716 | 0.015 | 1.819 |
| 50 C | HAY | 1929 | 21HAR91 | 0.0124 | 500 | 0.290 | 1672 | 1.515 | 0.015 | 1.515 |
| 508 | APR | 1931 | 21HARO1 | 0.0120 | 500 | 0.281 | 1645 | 1.539 | 0.016 | 1.539 |
| 50e | HaR | 1932 | 214AR91 | 0.0128 | 500 | 0.299 | 1599 | 1.402 | 0.015 | 1.402 |
| $50 f$ | FBB | 1933 | 2110R91 | 0.0101 | 500 | 0.236 | 1327 | 1.469 | 0.018 | 1.469 |
| 50 g | JAI | 1934 | 21:14891 | 0.0111 | 500 | 0.260 | 1614 | 1.632 | 0.017 | 1.632 |
| 50h | DSC | 1935 | 2110891 | 0.0118 | 500 | 0.246 | 1590 | 1.698 | 0.018 | 1.698 |
| 501 | 100 | 1936 | 21112891 | 0.0097 | 500 | 0.227 | 1643 | 1.902 | 0.019 | 1.902 |
| 50j dup | OCI | \|1956,1937 | 2114821 | 0.0095 | 500 | 0.222 | 1372 | 1.549 | 0.020 | 1.628 |
| 50\% | SEPT | 1938 | 21:0191 | 0.0093 | 500 | 0.218 | 1319 | 1.585 | 0.020 | 1.585 |
| 501 | AOG | 1939 | 21141291 | 0.0075 | 500 | \| 0.175 | 1086 | 1.610 | 0.025 | \| 1.610 |

## [Hg] vs Month Participant \#51



PROJECT ID: HOHR SEGRERTAL AMALYSIS
AMALYSIS: ZHg/HAIR SAMPLRS 51

ARALYST: CITTERHAM/LASORSA
PILR f: MOHSEC51

| $\begin{aligned} & \text { BATTELLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOMNI } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INIEGRATOR } \\ \text { SBO! } \end{array}\right\|$ | $\left\{\begin{array}{c} \text { DIGESTIOM } \\ \text { DAIE } \end{array}\right.$ | $\left\|\begin{array}{c} \text { DIGBSIIOM } \\ \mathrm{VI} \mathrm{~g} \end{array}\right\|$ | VOL ( 1 1) AHALYEED | $\left\|\begin{array}{c} \text { AMALYZED } \\ \text { WI } \end{array}\right\|$ | AREA | $\begin{gathered} \mathrm{ZHg} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ | $\underset{[\mathrm{Eg}] \mu \mathrm{g} / \mathrm{g}}{\mathrm{RERM}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|Scalp |  |  |  |  |  |  |  |  |  |
|  | SKPP |  |  |  |  |  |  |  |  |  |
| 51a | 10 G | 1974 | 2214P91 | 0.0080 | 500 | 0.187 | 959 | 1.251 | 0.023 | 1.251 |
| 51b | JULI | 1975 | 2210RP91 | 0.0075 | 500 | 0.175 | 1010 | 1.409 | 0.025 | 1.409 |
| 51c | 5015 | 1976 | 221:AR91 | 0.0072 | 500 | 0.168 | 1070 | 1.559 | 0.026 | 1.559 |
| 51d | hay | 1977 | 224aR91 | 0.0065 | 500 | 0.152 | 1021 | 1.644 | 0.029 | 1.644 |
| \| 51e dup | APS | \|2001,1978 | 2241491 | 0.0067 | 500 | 0.157 | 1076 | 1.670 | 0.028 | 1.579 |
| 514 | Mas | 1979 | 2214P91 | 0.0059 | 500 | 0.138 | 803 | 1.408 | 0.032 | 1.408 |
| 519 | P68 | 1982 | 22101991 | 0.0046 | 500 | 0.108 | 675 | 1.501 | 0.040 | 1.501 |
| 51h | Jas | 1983 | 2241091 | 0.0047 | 500 | 0.110 | 648 | 1.406 | 0.040 | 1.406 |
| 51 | DEC | 1984 | 220:1991 | 0.0035 | 500 | 0.082 | 505 | 1.442 | 0.053 | 1.442 |
| 51) | 108 | 1985 | 2240801 | 0.0038 | 500 | 0.089 | 508 | 1.337 | 0.049 | 1.337 |
| 512 | OCI | 1998 | 220001 | 0.0038 | 500 | 0.059 | 479 | 1.276 | 0.049 | 1.276 |
| \| 511 du9 | SEPT | \|2002,1999 | 2200101 | 0.0033 | 500 | 0.077 | 383 | 1.160 | 0.056 | 1.197 |
| 511 | ANS | 2000 | 220:1091 | 0.0030 | 500 | 0.070 | 371 | 1.234 | 0.062 | 1.234 |

## [Hg] vs Month <br> Participant \#52



PROJECT ID: HONE SEGIENTAL ANALYSIS

ANALYSIS: EHg/EAIR SAPPLE 52

ANALYST: CITTERRAN/LASORSA
PILE \#: MOHSEG52

| $\begin{array}{\|c} \text { BATPRLLE } \\ \text { ID } \end{array}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { HONTH } \end{gathered}\right.$ | INTEGRATOR SER | DIGESTION DATE | $\left\|\begin{array}{c} \text { DIGBSTION } \\ \text { WI g } \end{array}\right\|$ | VOL ( $\mu \mathrm{I}$ ) AHALYZED | $\left\|\begin{array}{l} \text { AMALYZED } \\ \text { WT } \end{array}\right\|$ | AREA | $\begin{gathered} \mathbb{E g} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \mathrm{HDL} \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { KEAN } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | AJG |  |  |  |  |  |  |  |  |  |
| 52a | JoLy | 2004 | 2240R91 | 0.0085 | 500 | 0.199 | 1313 | 1.613 | 0.022 | 1.613 |
| 52b | J0: | 2005 | 2240R91 | 0.0083 | 500 | 0.194 | 996 | 1.246 | 0.022 | 1.246 |
| 52c dup | HAY | \|2018,2006 | 22101891 | 0.0085 | 500 | 0.199 | 675 | 0.815 | 0.022 | 0.781 |
| 52d | APR | 2007 | 224ap91 | 0.0081 | 500 | 0.189 | 455 | 0.567 | 0.023 | 0.567 |
| 52e | MAR | 2008 | 22414291 | 0.0079 | 500 | 0.185 | 400 | 0.508 | 0.024 | 0.508 |
| $52 f$ | FEB | 2009 | 22414891 | 0.0080 | 500 | 0.187 | 493 | 0.625 | 0.023 | 0.625 |
| 52 g | JM1 | 2011 | 22101991 | 0.0084 | 500 | 0.196 | 446 | 0.536 | 0.022 | 0.536 |
| 52h | DEC | 2012 | 22101291 | 0.0090 | 500 | 0.210 | 519 | 0.586 | 0.021 | 0.586 |
| 521 | H0V | 2013 | 22141991 | 0.0081 | 500 | 0.189 | 490 | 0.613 | 0.023 | 0.613 |
| 52j | CTI | 2014 | 22401891 | 0.0072 | 500 | 0.168 | 482 | 0.678 | 0.026 | 0.678 |
| 52k dup | SEPT | \|2019,2015 | 2201891 | 0.0068 | 500 | 0.159 | 584 | 0.877 | 0.027 | 0.793 |
| 521 | 100 | 2016 | 22:01991 | 0.0056 | 500 | 0.131 | 573 | 1.044 | 0.033 | 1.044 |
| 52 | JUIX | 2017 | 221AP91 | 0.0036 | 500 | 0.084 | 519 | 1.465 | 0.052 | 1.465 |

## [Hg] vs Month Participant \#53



PROJECT ID: HOHR SBCHEHTAL AHALYSIS

AMALYSIS: EHg/HAIR SARPLE 53

ANALYST: CITTERHAN/LASORSA
PILR \&: HONSEG53

| $\begin{gathered} \text { BATTELLS } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \text { HOMrH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { ITIEGRATOR } \\ \text { SED } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGRSITOM } \\ \text { DANE } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { DIGESTION } \\ \text { Wr } \\ \hline \end{gathered}\right.$ | $\left\lvert\, \begin{aligned} & \text { POL }(\mu I) \\ & A M A L Y E D \end{aligned}\right.$ | $\left\|\begin{array}{c} \text { AHALYZED } \\ \text { WI } \mathrm{gg} \end{array}\right\|$ | AREA | $\begin{gathered} \Sigma \mathrm{Bg} \\ {[\mathrm{Eg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\begin{aligned} & \text { VDL } \\ & {[\mathrm{Bg}]{ }^{2} \mu \mathrm{~g} / \mathrm{g}} \end{aligned}$ | $\begin{gathered} \text { HRAN } \\ {[\mathrm{Hg}] \mathrm{Hg} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | $10 G$ |  |  |  |  |  |  |  |  |  |
| 53 a | JULY | 2024 | 25NaR91 | 0.0159 | 250 | 0.186 | 229 | 0.274 | 0.023 | 0.274 |
| 53b | J02 | 2025 | 25712121 | 0.0159 | 250 | 0.186 | 259 | 0.314 | 0.023 | 0.314 |
| 53c dup | HAI | \|2052,2026 | $25 \times 1.891$ | 0.0154 | 500 | 0.360 | 497 | 0.289 | 0.012 | 0.281 |
| 53d | 1P2 | 2027 | 2514891 | 0.0129 | 250 | 0.151 | 157 | 0.219 | 0.029 | 0.219 |
| 53e | HAR | 2029 | 2514.1091 | 0.0145 | 500 | 0.339 | 316 | 0.214 | 0.013 | 0.214 |
| 534 | PFB8 | 2044 | 254ap91 | 0.0169 | 500 | 0.395 | 435 | 0.228 | 0.011 | 0.228 |
| 539 | J11 | 2031 | 2510.191 | 0.0141 | 500 | 0.330 | 340 | 0.238 | 0.013 | 0.238 |
| 53h | DEC | 2045 | 2501991 | 0.0158 | 500 | 0.370 | 377 | 0.209 | 0.012 | 0.209 |
| $53 i$ | 100 | 2051 | 2510 Pal | 0.0149 | 500 | 0.348 | 395 | 0.233 | 0.012 | 0.233 |
| 53j | $\boldsymbol{C O}$ | 2047 | 2012 Pal | 0.0159 | 500 | 0.372 | 487 | 0.274 | 0.012 | 0.274 |
| 53k dup | Stap | 2053,2048 | 2rupol | 0.0114 | 500 | 0.267 | 381 | 0.293 | 0.016 | 0.302 |
| 531 | 106 | 2049 | 2301901 | 0.0110 | 500 | 0.257 | 434 | 0.350 | 0.017 | 0.350 |
| 53] | \| JULI | 2050 | 250nP91 | 0.0066 | 500 | 0.154 | 293 | 0.380 | 0.028 | 0.380 |

## [Hg] vs Month Participant \#54



PRORECT ID: MOME SEGFBTTAL AMALYSIS
AMALYSIS: EHg/EAIR SAMPLE 54

AMALYST: CITTERHAN/LASORSA
PILR \#: HOMSEG54

| $\begin{aligned} & \text { BATTELLLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \text { MOMTH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTIGRATOR } \\ \text { SEQA } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DATE } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { DIGRSTIOM } \\ \text { Win } \end{gathered}\right.$ | $\left\lvert\, \begin{aligned} & \text { VOL }(\mu 1) \\ & \text { ALALYZED } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \left\|\begin{array}{l} \text { ARALYEBD } \\ \\ W R E g \end{array}\right\| \end{aligned}\right.$ | ARRA | $\stackrel{\text { RHg }}{[\mathrm{Hg}] \mathrm{\mu g} / \mathrm{g}}$ | HDL [ Hg ] $\mathrm{mg} / \mathrm{g}$ | $\begin{gathered} \mathrm{MRNA} \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
|  | AOG |  |  |  |  |  |  |  |  |  |
| 54a | JULY | 2054 | \|25H14R91 | 0.0084 | 500 | 0.196 | 563 | 0.604 | 0.022 | 0.604 |
| 54b dup | JUII | \|2092,2055 | \|2514R91 | 0.0088 | 500 | 0.206 | 527 | 0.522 | 0.021 | 0.508 |
| 54 C | mar | 2056 | \| $25414 \mathrm{R91}$ | 0.0087 | 500 | 0.203 | 422 | 0.429 | 0.021 | 0.429 |
| 54d | APR | 2057 | \|251412991 | 0.0083 | 500 | 0.194 | 442 | 0.473 | 0.022 | 0.473 |
| 54e | MAR | 2058 | 25121891 | 0.0073 | 500 | 0.171 | 420 | 0.509 | 0.025 | 0.509 |
| 545 | Prs | 2059 | 2510.1891 | 0.0077 | 500 | 0.180 | 452 | 0.522 | 0.024 | 0.522 |
| 54g | JNI | 2062 | 251ar91 | 0.0070 | 500 | 0.164 | 551 | 0.708 | 0.027 | 0.708 |
| 54h | DSC | 2063 | \|2514R91 | 0.0075 | 500 | 0.175 | 587 | 0.707 | 0.025 | 0.707 |
| 54 i | 100 | 2064 | 257nR91 | 0.0073 | 500 | 0.171 | 562 | 0.693 | 0.025 | 0.693 |
| 54j | OCI | 2065 | \|2510891 | 0.0071 | 500 | 0.166 | 501 | 0.631 | 0.026 | 0.631 |
| 54k dup | SEPT | \|2093,2066 | \|2510391 | 0.0060 | 500 | 0.140 | 475 | 0.684 | 0.031 | 0.682 |
| 541 | 106 | 2067 | 2510391 | 0.0065 | 500 | 0.152 | 524 | 0.723 | 0.029 | 0.723 |
| 541. | JULI | 2068 | 2501291 | 0.0057 | 500 | 0.133 | 507 | 0.796 | 0.033 | $0.7 \%$ |
| 54 | JuI | 2069 | \|2514891 | 0.0054 | 500 | 0.126 | 526 | 0.874 | 0.034 | 0.874 |
| 540 | Hay | 2070 | 25101291 | 0.0028 | 500 | 0.065 | 385 | 1.207 | 0.066 | 1.207 |
| 54p | APR | 2071 | 25101891 | 0.0035 | 500 | 0.082 | 469 | 1.194 | 0.053 | 1.194 |
| 549 | HAR | 2072 | 2541P91 | 0.0032 | 500 | 0.067 | 337 | 1.026 | 0.065 | 1.026 |
| 54r | \| PEB | 2073 | 25NaR91 | 0.0031 | 500 | 0.073 | 373 | 1.054 | 0.060 | 1.054 |

PROUECT ID: NOTE SEGHETTAL MMALYSIS
AMALYSIS: ZHg/BALR SAMPLR 54

AMALYST: CITTTRRHAI/LASORSA
PILE \&: MOHSRG54

| $\begin{gathered} \text { BAITELLLE } \\ \text { DD } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOMIH } \end{gathered}\right.$ | IIITEGRATOR <br> SEQt | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAPE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DICESTIOM } \\ g \end{array}\right\|$ | $\left\|\begin{array}{l} \text { pol ( } \beta 1) \\ \text { AMNYRED } \end{array}\right\|$ | $\left\|\begin{array}{c} \text { ABLYZZBD } \\ \text { RT } \end{array}\right\|$ | AREA | $\underset{[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}}{\mathrm{El}}$ | $\left\|\begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Bg}] \mathrm{gg} / \mathrm{g}} \end{array}\right\|$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 54s | J/I | 2074 | \|25414R91 | 0.0030 | 500 | 0.070 | 397 | 1.165 | 0.062 | 1.165 |
| 54t dup | DEC | \|2096,2075 | \|25414R91 | 0.0035 | 500 | 0.082 | 443 | 1.085 | 0.053 | 1.054 |
| 54u | 100 | 2076 | \|2514R21 | 0.0037 | 500 | 0.087 | 409 | 0.975 | 0.050 | 0.975 |
| 547 | OCT | 2077 | \|25414R91 | 0.0033 | 500 | 0.077 | 363 | 0.961 | 0.056 | 0.961 |
| 541 | SEPT | 2090 | \|25142891 | 0.0027 | 500 | 0.063 | 396 | 1.242 | 0.069 | 1.242 |
| 54 x | AOG | 2091 | \|2514891 | 0.0024 | 500 | 0.056 | 343 | 1.188 | 0.078 | 1.188 |

## [Hg] vs Month <br> Participant \#55



PROJECT ID:MOHR SEGIETTTLL AMALYSIS
AMALYSIS: ZHg/HILR SAMPLE 55

ANALYST: CITTERUAN/LASORSA
PILR $\ddagger$ : HOHSBG55 $\qquad$

| $\begin{aligned} & \text { BATHELLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SRG } \\ \text { MOMIH } \end{gathered}\right.$ | IITPEGRATOR SERf | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DATE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { ing } \end{array}\right\|$ | VOL (18) AHLLYEED | $\left\|\begin{array}{c} \text { AMALYZED } \\ \text { RI } \end{array}\right\|$ | AREA | $\begin{gathered} \text { EHg } \\ {\left[\text { Hg }_{2}\right] \mathrm{mg} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \operatorname{MDL} \\ {[\mathrm{Bg}]_{\mu \mathrm{g}} / \mathrm{g}} \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { MRAI } \\ {[\mathrm{Bg}][\mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SCALP |  |  |  |  |  |  |  |  | 1 |
|  | OCT |  |  |  |  |  |  |  |  |  |
| 55a | SEPT | 2100 | 2614P91 | 0.0062 | 500 | 0.145 | 1605 | 2.387 | 0.030 | 2.387 |
| 55b dup | 10 C | \|2118,2101 | | 2641891 | 0.0060 | 500 | 0.140 | 1475 | 2.261 | 0.031 | 2.272 |
| 55 c | JULI | 2102 | 2610R91 | 0.0059 | 500 | 0.138 | 1395 | 2.171 | 0.032 | 2.171 |
| 55d | JUI | 2103 | 2641291 | 0.0055 | 500 | 0.129 | 1075 | 1.778 | 0.034 | 1.778 |
| 55e | Hal | 2204 | 26:4P91 | 0.0043 | 500 | 0.101 | 773 | 1.608 | 0.043 | 1.608 |
| 555 | APR | 2105 | 2614P91 | 0.0044 | 500 | 0.103 | 589 | 1.176 | 0.042 | 1.176 |
| 55g dup | Har | \|2110,2106 | 261:AR91 | 0.0046 | 500 | 0.108 | 638 | 1.225 | 0.040 | 1.254 |
| 55b | 1 PrB | 2107 | \| 2614R91 | 0.0048 | 500 | \| 0.112 | 749 | 1.393 | 0.039 | 1.393 |

## [Hg] vs Month Participant \#56



PROTECT ID:HOKR SEGYENTAL ANALYSIS
AMALYSIS: $2 H g /$ HALR SAMPLE 56

AHALYST: CITHERHAN/LASORSA
PILE \&: HOHSBG56

| $\begin{gathered} \text { BATTELLLR } \\ \text { ID } \end{gathered}$ | $\left.\right\|_{\text {HOMKI }} ^{\text {SRE }}$ | $\left\|\begin{array}{c} \text { INTEGRATOR } \\ \text { SER\# } \end{array}\right\|$ | $\begin{array}{\|c} \text { DIGESTIO: } \\ \text { DAIE } \end{array}$ | $\left\|\begin{array}{c} \text { DIGBSTIOM } \\ \text { mI } \end{array}\right\|$ | POL ( 1 IL ) AHALYZED | $\left\|\begin{array}{c} \text { ABLYZZDD } \\ \text { WI } \end{array}\right\|$ | AREA | $\stackrel{\Sigma \mathrm{Hg}}{[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}}$ | $\left\|\begin{array}{c} \mathrm{KDL} \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 56a | ADG | 2111 | 264AR91 | 0.0062 | 500 | 0.145 | 955 | 1.394 | 0.030 | 1.394 |
| 56b dup | JULI | \|2117,2112 | 264UR91 | 0.0058 | 500 | 0.136 | 1203 | 1.895 | 0.032 | 1.820 |
| 56 C | J0I | 2115 | 26HAR91 | 0.0040 | 500 | 0.094 | 1077 | 2.449 | 0.047 | 2.449 |
| 56d | I Hay | 2116 | 26:4R91 | 0.0046 | 500 | \| 0.108 | 1319 | 2.628 | 10.040 | 2.628 |

## [Hg] vs Month Participant \#57



## Month

PROTECT ID:MOHR SEGFBNTAL AHALYSIS
AHLLYSIS: EHg/EAIR SAMPLE 57

AMALYST: CITTERHAN/LASORSA
PILR f: MOHSEG57

| $\begin{gathered} \text { BATIELLSB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { Hoint } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | :DIGESTIOM | $\left\|\begin{array}{c} \text { DIGRSIIOM } \\ \text { WI } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ \text { AWALYEDD } \end{array}\right\|$ | $\left\|\begin{array}{c} A B A L Y Z E D \\ M I E g \end{array}\right\|$ | ARRA | $\underset{[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}}{\mathrm{~g}}$ | $\left\lvert\, \begin{gathered} \operatorname{HDL} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { K[RAM } \\ {[\mathrm{Eg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|scarp |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
| 57a | SEPT | 2163 | $27 \mathrm{Map91}$ | 0.0079 | 500 | 0.185 | 1298 | 1.503 | 0.024 | 1.503 |
| 57b dup | 1006 | \|2190,2166 | $27 \mathrm{marg1}$ | 0.0056 | 500 | 0.131 | 902 | 1.388 | 0.033 | 1.462 |
| 57c | JULY | 2167 | 271aR91 | 0.0059 | 500 | 0.138 | 936 | 1.439 | 0.032 | 1.439 |
| 57d | J01 | 2168 | 2710R91 | 0.0041 | 500 | 0.096 | 825 | 1.817 | 0.045 | 1.817 |
| 57e | HAY | 2169 | 2710R91 | 0.0049 | 500 | 0.115 | 710 | 1.301 | 0.038 | 1.301 |
| 574 | APR | 2170 | 2701R91 | 0.0037 | 500 | 0.087 | 562 | 1.349 | 0.050 | 1.349 |
| 57g | Mar | 2172 | 2710R91 | 0.0032 | 500 | 0.075 | 437 | 1.195 | 0.058 | 1.195 |
| 57n | F8B | 2173 | 2714891 | 0.0025 | 500 | 0.058 | 368 | 1.271 | 0.074 | 1.271 |
| 571 | J31 | 2194 | 2710P91 | 0.0025 | 500 | 0.058 | 400 | 1.391 | 0.074 | 1.391 |
| 57j dup | DEC | \|2191,2175 | 2710891 | 0.0023 | 500 | 0.054 | 505 | 1.845 | 0.081 | 1.876 |
| 57k | 100 | 2188 | 27:0891 | 0.0024 | 500 | 0.056 | 458 | 1.594 | 0.078 | 1.594 |
| 571 | \| OCI | 2189 | 271aR91 | 0.0016 | 500 | 0.037 | 446 | 2.324 | 0.116 | 2.324 |

## [Hg] vs Month Participant \#58



PROJECT ID:HOHE SEGTRTTAL AMALYSIS
AMALYSIS: ZHg/EAIR SAMPLB 58

AMALYST: CITTERUAH/LASORSA
PILR \&: HOHSEG58

| $\begin{gathered} \text { BMTBLLS } \\ \text { ID } \end{gathered}$ | $\left.\right\|_{\text {MOHITI }}$ | $\left\|\begin{array}{c} \text { INTECRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\begin{gathered} \text { DIGESTIOH } \\ \text { DAIE } \end{gathered}$ | $\left\|\begin{array}{c} \text { DIGBSIIOM } \\ \text { WI } \end{array}\right\|$ | OOL ( $\mathrm{\mu l}$ ) AMLLYZED | $\left\|\begin{array}{l} \text { AMALYZED } \\ \text { In } \mathrm{Ig} \end{array}\right\|$ | AREA | $\begin{aligned} & \text { Kigg } \\ & {[\mathrm{Eg}] \mathrm{mg} / \mathrm{g}} \end{aligned}$ | $\left\|\begin{array}{c} \text { MDL } \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ | $\begin{gathered} \text { HBAN } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
| 58a | 10 G | 2208 | 29MRR91 | 0.0093 | 500 | 0.218 | 467 | 0.403 | 0.020 | 0.403 |
| 58b dup | JULY | \|2218,2209 | 294ar91 | 0.0101 | 500 | 0.236 | 402 | 0.314 | 0.018 | 0.325 |
| 58 C | JUI | 2210 | 2914R21 | 0.0097 | 500 | 0.227 | 392 | 0.318 | 0.019 | 0.318 |
| 58d | May | 2211 | 2910RP91 | 0.0101 | 500 | 0.236 | 426 | 0.335 | 0.018 | 0.335 |
| 58e | APR | 2212 | 2910.1891 | 0.0092 | 500 | 0.215 | 371 | 0.315 | 0.020 | 0.315 |
| 588 | HAR | 2213 | 2914R1291 | 0.0094 | 500 | 0.220 | 392 | 0.328 | 0.020 | 0.328 |
| 589 | FEB | 2214 | 2910R291 | 0.0101 | 500 | 0.236 | 440 | 0.347 | 0.018 | 0.347 |
| 58h dup | J\II | \|2219,2215 | 2914RP91 | 0.0089 | 500 | 0.208 | 514 | 0.468 | 0.021 | 0.474 |
| 581 | DSC | 2216 | 2914RP91 | 0.0061 | 500 | 0.143 | 471 | 0.621 | 0.030 | 0.621 |
| $58 j$ | \| 300 | 2217 | 29114891 | 0.0050 | \| 500 | 0.117 | 441 | 0.704 | 0.037 | 0.704 |

## [Hg] vs Month Participant \#59



PRONECT ID:RONE SBGTENTAL AMALYSIS
Emg/HAIR SAIPLE 59

AHALYST: CITTERNAN/LASORSA
PILE f: HOHSEG59

| $\begin{aligned} & \text { BATTELLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \text { Howith } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { ITIEGRATOR } \\ \text { SEQt } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { DIGESTIO } \\ \text { DAIE } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { WI g } \end{gathered}\right.$ | $\left\|\begin{array}{l} \text { VOL ( } \mu \mathrm{l}) \\ \text { MALYEED } \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AMLIZEED } \\ \text { WI Eg } \end{array}\right\|$ | AREA | $\begin{gathered} \mathrm{ZHg} \\ {[\mathrm{Bg}] \mathrm{Hg} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \mathrm{MDL} \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { MRAN } \\ {[\mathrm{Eg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SCALP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
| 59a | ADG | 2220 | 29112R91 | 0.0107 | 500 | 0.250 | 2481 | 2.025 | 0.017 | 2.025 |
| 59b | JULX | 2221 | 2911R91 | 0.0106 | 500 | 0.248 | 2505 | 2.064 | 0.018 | 2.064 |
| 59c dup | Jum | \|2248,2224 | 2914R91 | 0.0063 | 500 | 0.147 | 1389 | 1.928 | 0.030 | 2.059 |
| 59d | \| NAY | 2225 | \|291RR291 | 0.0026 | 500 | 0.061 | 666 | 2.123 | 0.072 | 2.123 |

## [Hg] vs Month Participant \#60



PROJECT ID: HONE SBGTETIAL MHALYSIS
AMALYSIS: EHg/EAIR SANPLE 60

AMALYST: CITYERYAN/LASORSA
FILE f: HOMSEG60

| $\begin{aligned} & \text { BATTELLBB } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \operatorname{mon}_{12} \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { IITEGRATOR } \\ \text { SEQA } \end{array}\right\|$ | $\left.\right\|_{\text {DIIER }} ^{\text {DIESIIM }}$ | $\left\|\begin{array}{c} \text { DIGESTIO: } \\ \mathrm{Tr} \\ \mathrm{~g} \end{array}\right\|$ | $\left\|\begin{array}{l} \mathrm{POL}(\mu \mathrm{~L}) \\ \text { AMNYYED } \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AMALYYEZD } \\ \text { WI } \mathrm{Eg} \end{array}\right\|$ | AREA | $\begin{gathered} 2 \mathrm{Rg} \\ {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \operatorname{HDL} \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { HRAM } \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mid$ Scalp |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
| 60a | SEPT | 2192 | 2710R91 | 0.0110 | 500 | 0.257 | 1344 | 1.064 | 0.017 | 1.064 |
| 60b dup | IVG | \|2198,2193 | 2710R291 | 0.0111 | 500 | 0.260 | 1185 | 0.927 | 0.017 | 0.912 |
| $60 c$ | JUY | 2194 | 2710R91 | 0.0110 | 500 | 0.257 | 912 | 0.715 | 0.017 | 0.715 |
| 60 d | J05 | 2195 | 2714R91 | 0.0110 | 500 | 0.257 | 725 | 0.564 | 0.017 | 0.564 |
| 60 e | Hay | 2196 | 271ap91 | 0.0115 | 500 | 0.269 | 858 | 0.642 | 0.016 | 0.642 |
| 605 | APR | 2197 | 2710891 | 0.0080 | 500 | $\mid 0.187$ | 557 | 0.588 | \| 0.023 | 0.588 |

## [Hg] vs Month Participant \#61



PROJECT ID: MOHE SEGIEMTAL AMALYSIS
AHALYSIS: EHg/EAIR SAMPLE 61

ANALYST: CITTERHAR/LASORSA
PILR f: HOHSEG61

| $\begin{gathered} \text { BAITEILLB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \mathrm{HOHiNH} \end{gathered}\right.$ | $\begin{array}{\|c} \text { IIITEGRATOR } \\ \text { SERA } \end{array}$ | $\begin{gathered} \text { DIGESTIOA } \\ \text { DATE } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { DIGESTION } \\ \text { IT } 9 \end{gathered}\right.$ | $\left\|\begin{array}{l} \text { VOL }(\mu \mathrm{l}) \\ \text { AWLYZ } \end{array}\right\|$ | $\left\|\begin{array}{\|c\|} \text { AMALYERD } \\ \text { Wi mg } \end{array}\right\|$ | ARRA | $\underset{[\mathrm{Bg} \mathrm{Ig}] \mu \mathrm{g} / \mathrm{g}}{\mathrm{Z}}$ | $\left\|\begin{array}{c} \text { NDL } \\ \text { (Hg }]^{\prime} / \mathrm{g} / \mathrm{g} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \mathrm{MK} \mathrm{LH} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SCALP |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| SBPT |  |  |  |  |  |  |  |  |  |  |
| 61. | 10G | 2249 | 2914.191 | 0.0060 | 500 | 0.140 | 1729 | 2.533 | 0.031 | 2.533 |
| 61b dup | JULY | \|2254,2250 | 2911R21 | 0.0060 | 500 | 0.140 | 1066 | 1.541 | 0.031 | 1.630 |
| 61c | JUS | 2251 | 2911R21 | 0.0054 | 500 | 0.126 | 545 | 0.847 | 0.034 | 0.847 |
| 61d | \| HAY | 2252 | 29\%1R291 | 0.0040 | 500 | 0.094 | 431 | 0.887 | 0.047 | 0.887 |
| 61e | 1 APR | 2253 | 2911.1891 | 0.0031 | 500 | 0.073 | 358 | 0.934 | 0.060 | 0.934 |

## [Hg] vs Month

 Participant \#62

PROJBCT ID:MONTE SEGIMTTAL AHALYSIS
AMALYSIS: $\operatorname{ZHg} /$ HAIR SAKPLB 62

AMALYST: CITTERHAN/LASORSA
PILE f: MOMSEG62


| $\begin{aligned} & \text { BATTELLEX } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { HONTH } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { IWIBGRATOR } \\ \text { SEQ } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAFE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \mathrm{mI} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu l) \\ A W L Y Z E D \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AMALYZED } \\ \text { WI } \mathrm{Eg} \end{array}\right\|$ | LREA | $\begin{gathered} \Sigma \mathrm{Zg} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \text { HDL } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { MERAN } \\ {[\mathrm{Eg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SCALP |  |  |  |  |  |  |  |  | 1 |
|  | OCI |  |  |  |  |  |  |  |  |  |
| 62a | SEPT | 2619 | 91P191 | 0.0070 | 500 | 0.164 | 1060 | 0.903 | 0.027 | 0.903 |
| 62b dup | 106 | \|2626,2620 | 91PR91 | 0.0066 | 500 | 0.154 | 1265 | 1.150 | 0.028 | 1.215 |
| 62c | JUL | 2622 | 91PR91 | 0.0074 | 500 | 0.173 | 1460 | 1.189 | 0.025 | 1.189 |
| 62d | 501 | 2623 | 91PR91 | 0.0056 | 500 | 0.131 | 981 | 1.042 | 0.033 | 1.042 |
| 62e | May | 2624 | 9 P 291 | 0.0068 | 500 | 0.159 | 1141 | 1.004 | 0.027 | 1.004 |
| 627 | APR | 2625 | 91P891 | 0.0050 | 500 | 0.117 | 713 | 0.836 | 10.037 | 0.836 |

## [ Hg ] vs Month Participant \#62/BLOOM INTERCALIBRATION



PROJECT ID: MONI SEGRMTAL AMALYSIS AMALYSIS: $\mathrm{EHg} / \mathrm{HAIR}$ SAMPLB 62/BLOON

AMALYST: CITTERMAM/LASORSA
PILE f: BLOOM62

| BATTELLER ID | $\begin{gathered} \text { SBG } \\ \text { Honith } \end{gathered}$ | $\begin{array}{\|c} \text { InTEGRATOR } \\ \text { SEQA } \end{array}$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { Wi. } g \end{gathered}\right.$ | VOL ( $\mu \mathrm{l}$ ) ALALYEED |  | AREA | $\begin{gathered} \mathrm{EHg} \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Scalp |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |
| 62a | SEPT |  |  | 0.0073 |  |  |  | 0.66 |
| 62b | 106 |  |  | 0.0068 |  |  |  | 1.015 |
| 62c | JULI |  |  | 0.0071 |  |  |  | 0.890 |
| 62d | JU1 |  |  | 0.0050 |  |  |  | 1.240 |
| 62e | H2I |  |  | 0.0057 |  |  |  | 1.070 |
| 625 | APR |  |  | 0.0032 |  |  |  | 0.960 |

## [Hg] vs Month Participant \#63



PROJECT ID: MOHR SECGEITTAL MNALYSIS
AMALYSIS: $\mathrm{ZHg} / \mathrm{ERIR}$ SAMPLE 63

AMALYST: CITTERYAY/LASORSA
PILE \$: MOHSEG63


## [Hg] vs Month Participant \#64



PROJECT ID:MONE SEGIENTAL AMALYSIS

AHALYSIS: $\Sigma$ EGg/EAIR SANPLE 64

AMALYST: CITTERNIAH/LASORSA
PILR : : HOHSEG64


| $\begin{gathered} \text { BATTELLB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MONTIH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { MITEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\begin{gathered} \text { DIGRSITOM } \\ \text { DAIE } \end{gathered}$ | $\left\|\begin{array}{c} \text { DIGRSTIO } \\ \mathrm{Fi} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu \mathrm{L}) \\ \text { ALRLYESD } \end{array}\right\|$ |  | AREA | $\begin{gathered} \sum \mathrm{IHg} \\ {[\mathrm{gq}} \end{gathered} \mathrm{mg} / \mathrm{g}$ | FidL $[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}$ | $\begin{gathered} \text { KRRM } \\ {[\mathrm{EG}] \mathrm{Mg} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mid$ SCNLP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 64a | ${ }^{\text {a }}$ O | 2343 | 2APR91 | 0.0076 | 500 | 0.178 | 963 | 1.089 | 0.024 | 1.089 |
| 64b dup | JULY | \|2378,2344 | 2APR91 | 0.0071 | 500 | 0.166 | 733 | 0.873 | 0.026 | 0.905 |
| 64c | JUII | 2345 | $2 \mathrm{PRR91}$ | 0.0056 | 500 | 0.131 | 644 | 0.975 | 0.033 | 0.975 |
| 64d | HAY | 2346 | 22PR91 | 0.0063 | 500 | 0.147 | 604 | 0.810 | 0.030 | 0.810 |
| 64 e | APR | 2347 | 21PR91 | 0.0065 | 500 | 0.152 | 550 | 0.712 | 0.029 | 0.712 |
| 645 | HAR | 2348 | 24P891 | 0.0061 | 500 | 0.143 | 628 | 0.872 | 0.030 | 0.872 |
| 649 | PEB | 2349 | 2APR91 | 0.0058 | 500 | 0.136 | 590 | 0.859 | 0.032 | 0.859 |
| 64h | JIH | 2350 | 21PP91 | 0.0055 | 500 | 0.129 | 508 | 0.774 | 0.034 | 0.774 |
| 641 | DEC | 2351 | 2APP91 | 0.0051 | 500 | 0.119 | 550 | 0.908 | 0.036 | 0.908 |
| 64j | 1007 | 2352 | 2APR91 | 0.0048 | 500 | 0.112 | 489 | 0.852 | 0.039 | 0.852 |
| 64k dup | CT | \|2379,2353 | 21P391 | 0.0044 | 500 | 0.103 | 508 | 0.960 | 0.042 | 1.007 |
| 641 | SEPT | 2355 | 21.8291 | 0.0045 | 500 | 0.105 | 583 | 1.093 | 0.041 | 1.093 |
| 641 | 106 | 2356 | 21PP91 | 0.0040 | 500 | 0.094 | 541 | 1.137 | 0.047 | 1.137 |
| 64n | JULI | 2357 | 2APP91 | 0.0046 | 500 | 0.108 | 515 | 0.939 | 0.040 | 0.939 |
| 640 | 501 | 2370 | 21PR91 | 0.0038 | 500 | 0.089 | 466 | 1.014 | 0.049 | 1.014 |
| 64p | HAY | 2371 | 21P891 | 0.0036 | 500 | 0.084 | 399 | 0.907. | 0.052 | 0.907 |
| 649 | APR | 2372 | 2APR91 | 0.0040 | 500 | 0.094 | 457 | 0.944 | 0.047 | 0.944 |
| 64 r | \| Mar | 2373 | 24PR91 | 0.0029 | 500 | 0.068 | 397 | \| 1.120 | 0.064 | 1.120 |

PROJECT ID: HONB SEGIKTITAL AHALYSIS AMALYSIS: $\operatorname{ZHg} /$ EAIR SAMPLR 64

AMALYST: CITTERHAY/LASORSA
PILE f: MOHSEG64

| $\begin{aligned} & \text { BATIBLLB } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SBG } \\ \text { MOMIT } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTEGRATIOR } \\ \text { SER } f \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM: } \\ \text { DART } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { In } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ \text { ABLLYZED } \end{array}\right\|$ | $\left\|\begin{array}{c} \text { AMALYZED } \\ \text { mI } \mathrm{Eg} \end{array}\right\|$ | ARBA | $\stackrel{\Sigma \mathrm{Rg}}{[\mathrm{Hg}] \mathrm{Hg} / \mathrm{g}}$ | $\left\|\begin{array}{c} \operatorname{lidL} \\ {[\mathrm{Hg}] \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { KRAM } \\ {[\mathrm{Eq}] \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64s | PKB | 2375 | 24 PR 91 | 0.0030 | 500 | 0.070 | 408 | 1.115 | 0.062 | 1.115 |
| 64t dup | Jal | \|2380,2376 | $2 \mathrm{PPR91}$ | 0.0032 | 500 | 0.075 | 465 | 1.202 | 0.058 | 1.17281 |
| 64u | DEC | 2377 | $2 \mathrm{PrP91}$ | 0.0028 | 500 | 0.065 | 420 | 1.232 | 0.066 | \|1.23231 |

## [Hg] vs Month

Participant \#65


PROJECT ID: KOHR SEGEETMAL AMALYSIS
ANALYSIS: IHg/EAIR SA1PLE 65

ANALYST: CITTERIAH/LASORSA
PILE f: MOMSEG65


| $\begin{gathered} \text { BampliLe } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MONRH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { ITTEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DAIB } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { in g } \end{array}\right\|$ | VOL ( HI ) MNLYZED | $\left\|\begin{array}{c} \text { AMALYZED } \\ W \mathrm{RI} \end{array}\right\|$ | AREA | $\stackrel{\mathrm{EHg}}{[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}}$ | $\left\|\begin{array}{c} \mathrm{MDL} \\ {[\mathrm{Hg}] \mu \mathrm{mg} / \mathrm{g}} \end{array}\right\|$ | $\begin{gathered} \text { HERA } \\ {[\mathrm{Bg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 65a | AOG | 2392 | 201891 | 0.0070 | 500 | 0.164 | 1052 | 1.285 | 0.027 | 1.285 |
| 65b dup | JULY | \|2390,2382 | 2APR91 | 0.0071 | 500 | 0.166 | 902 | 1.081 | 0.026 | 1.097 |
| 65c | 301 | 2383 | 2AP891 | 0.0074 | 500 | 0.173 | 832 | 0.954 | 0.025 | 0.954 |
| 65d | $\mathrm{H} \times 1$ | 2384 | 2 P P291 | 0.0080 | 500 | 0.187 | 916 | 0.975 | 0.023 | 0.975 |
| 65 | APR | 2385 | 2APP91 | 0.0068 | 500 | 0.159 | 815 | 1.017 | 0.027 | 1.017 |
| 655 dup | HRR | \|2391,2388 | 24 P991 | 0.0064 | 500 | 0.150 | 964 | 1.284 | 0.029 | 1.280 |
| 659 | FSB | 2389 | 24.1991 | 0.0056 | 500 | \| 0.131 | 1153 | 1.764 | 0.033 | 1.764 |

## [Hg] vs Month Participant \#66



PROJECT ID:HONTB SEGTBFITAL ANALYSIS
ANALYSIS: ZHg/BAIR SAMPLE 66

ANALYST: CITTERHAN/LASORSA
FILE \&: HOHSEG66

| $\begin{gathered} \text { BATPILLB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MONIIR } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { ITEGRATOR } \\ \text { SEQ! } \end{array}\right\|$ | DIGESTIOM DAFE | $\left\|\begin{array}{c} \text { DIGESIIOW } \\ \text { min } \end{array}\right\|$ | VOL ( $\mu \mathrm{L}$ ) AMALYZED | $\left\|\begin{array}{l} \text { AMALYZED } \\ \mathrm{mI} \mathrm{Eg} \end{array}\right\|$ | LRES | $\underset{[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}}{\mathrm{Z}}$ | $\left\|\begin{array}{c} \operatorname{MDL} \\ {[\mathrm{Hg}] \mathrm{\mu g} / \mathrm{g}} \end{array}\right\|$ | $\begin{gathered} \text { NBAR } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 66 a | 10 G | 2393 | 24P1991 | 0.0136 | 500 | 0.318 | 3217 | 2.057 | 0.014 | 2.057 |
| 66b dup | JULY | \|2401,2394 | 24P891 | 0.014 | 500 | 0.330 | 3283 | 2.025 | 0.013 | 2.051 |
| 66 C | J0I | 2395 | 2APR91 | 0.0135 | 500 | 0.316 | 3255 | 2.097 | 0.014 | 2.097 |
| 660 | May | 2396 | 218291 | 0.0129 | 500 | 0.302 | 3030 | 2.042 | 0.014 | 2.042 |
| 66 e | $\triangle \mathrm{PR}$ | 2397 | 2APR91 | 0.0115 | 500 | 0.269 | 2805 | 2.119 | 0.016 | 2.119 |
| 665 | HaR | 2398 | 2appe1 | 0.0110 | 500 | 0.257 | 3297 | 2.607 | 0.017 | 2.607 |
| 66 g | P38 | 2399 | $22 \mathrm{PP} \mathrm{P}_{1}$ | 0.0088 | 500 | 0.206 | 2399 | 2.364 | 0.021 | 2.364 |
| 66h | JII | 2400 | 218901 | 0.0041 | 500 | 0.096 | 1482 | 3.113 | 0.045 | 3.113 |

## [Hg] vs Month Participant \#67




## [Hg] vs Month Participant \#68



PROJECT ID:HONT SEGERNTAL AMALYSIS
AKALYSIS: $\operatorname{ZHg} /$ HAIR SAMPLE 68

AMALYST: CITTERUAN/LASORSA
PILE \#: NOHSEG68


| $\begin{gathered} \text { BATYELLES } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOHITH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTRGRATOR } \\ \text { SER } \end{array}\right\|$ | $\begin{array}{\|c} \text { DIGESIIOH } \\ \text { DAIE } \end{array}$ | $\left\|\begin{array}{c} \text { DIGRSTION } \\ \text { WI } \end{array}\right\|$ | $\left\|\begin{array}{l} \operatorname{VOL}(\mu 1) \\ 2 H A L Y Z E D \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AMALYZED } \\ \mathrm{VI} \mathrm{I} \\ \hline \mathrm{Eg} \end{array}\right\|$ | AREA | $\begin{gathered} \mathrm{ERg} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \text { HDL } \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\begin{gathered} \mathrm{HRAM} \\ {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCLIP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
| 68a | SEPT | 2416 | 42PR91 | 0.0049 | 500 | 0.115 | 820 | 1.402 | 0.038 | 1.402 |
| 68b dup | 1006 | \|2428,2417 | 42P191 | 0.0057 | 500 | 0.133 | 657 | 0.957 | 0.033 | 0.972 |
| 68 C | July | 2418 | $4 \mathrm{APR91}$ | 0.0044 | 500 | 0.103 | 494 | 0.917 | 0.042 | 0.917 |
| 688 | J015 | 2419 | 418 P 91 | 0.0045 | 500 | 0.105 | 376 | 0.669 | 0.041 | 0.669 |
| 685 | Hal | 2420 | 418891 | 0.0040 | 500 | 0.094 | 311 | 0.612 | 0.047 | 0.612 |
| 689 | APR | 2421 | 418201 | 0.0040 | 500 | 0.094 | 294 | 0.575 | 0.047 | 0.575 |
| 68g dup | HAR | 12429,2422 | 4 P 2 P 1 | 0.0044 | 500 | 0.103 | 328 | 0.590 | 0.042 | 0.565 |
| 68h | FES | 2423 | 418991 | 0.0045 | 500 | 0.105 | 346 | 0.611 | 0.041 | 0.611 |
| 681 | Jall | 2424 | 41P991 | 0.0033 | 500 | 0.077 | 346 | 0.833 | 0.056 | 0.833 |
| $68 j$ | DSC | 2425 | 44P891 | 0.0039 | 500 | 0.091 | 402 | 0.830 | 0.048 | 0.830 |
| 68k | 107 | 2426 | $4 \mathrm{PP9} 91$ | 0.0031 | 500 | 0.073 | 379 | 0.980 | 0.060 | 0.980 |
| 681 | OCI | 2427 | $4 \mathrm{Pr91}$ | \| 0.0032 | 500 | 0.075 | 385 | 0.965 | 0.058 | 0.965 |

## [Hg] vs Month Participant \#69



PROJECT ID:HOHR SECHEMTAL AKALYSIS
AMALYSIS: EHg/EAIR SAMPLE 69

ANALYST: CITTERKAH/LASORSA
PILE $\ddagger$ : MOHSEG69

| $\begin{aligned} & \text { BATTELLLE } \\ & \text { ID } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { SRG } \\ \text { HOHITH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTECRATOR } \\ \text { SEQ } \ddagger \end{array}\right\|$ | $\begin{array}{\|c} \text { DIGESTIOM } \\ \text { DAITR } \end{array}$ | $\left\|\begin{array}{c} \text { DIGESTION } \\ \mathrm{g} \end{array}\right\|$ | $\left\|\begin{array}{l} \mathrm{VOL}(\mu \mathrm{~L}) \\ \mathrm{ABACYZED} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AMALYZED } \\ \text { WI mg } \end{array}\right\|$ | AREA | $\underset{[\mathrm{BH}][\mu \mathrm{g} / \mathrm{g}}{\mathrm{EHg}}$ | $\left\|\begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Hg}] \mathrm{\mu g} / \mathrm{g}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { KERAR } \\ {[\mathrm{Eg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|Scalp |  |  |  |  |  |  |  |  |  |
|  | OCI |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 69a | AOG | 2432 | 41PR91 | 0.0064 | 500 | 0.150 | 444 | 0.563 | 0.029 | 0.563 |
| 69b dup | JULY | 2440,2433 | 42PR91 | 0.0062 | 500 | 0.145 | 491 | 0.647 | 0.030 | 0.661 |
| 69c | JOL | 2434 | 4APR91 | 0.0057 | 500 | 0.133 | 473 | 0.676 | 0.033 | 0.676 |
| 69d | HMY | 2435 | $4 \mathrm{APRO1}$ | 0.0055 | 500 | 0.129 | 531 | 0.792 | 0.034 | 0.792 |
| 69e | APR | 2436 | 41P891 | 0.0050 | 500 | 0.117 | 533 | 0.875 | 0.037 | 0.875 |
| 69 f | MAR | 2437 | 419291 | 0.0049 | 500 | 0.115 | 662 | 1.122 | 0.038 | 1.122 |
| 69 g dup | PEB | \|2447,2438 | 4APR91 | 0.0047 | 500 | 0.110 | 612 | 1.077 | 0.040 | 1.059 |
| 69h | \| JגI | 2439 | $4 \mathrm{4PR91}$ | 0.0044 | 500 | 0.103 | 649 | 1.224 | \| 0.042 | 1.224 |

## [Hg] vs Month Participant \#70



PROJECT ID: MONR SEGYETTAL ANALYSIS
AMALYSIS: $\mathrm{EHg} / \mathrm{HALR}$ SAMPLE 70

ANALYST: CITTERHAN/LASORSA
PILE : HONSEG70

| $\begin{aligned} & \text { BATTELLE } \\ & \text { ID } \end{aligned}$ | $\left.\right\|_{\text {HONTHE }} ^{\text {SEG }}$ | $\left\|\begin{array}{c} \text { ITTEERATOR } \\ \text { SERA } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGRSIIOM } \\ \text { DAIB } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM\| } \\ \mathrm{g} \end{gathered}\right.$ | VOL ( 1 ll ) AMALYZED | $\left\|\begin{array}{c} \text { ABALYZED } \\ \mathrm{FI} E g \end{array}\right\|$ | ARBA | $\stackrel{\text { BHg }}{[B g] \mu g / g}$ | $\left.\left\|\begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Bg}]} \end{array}\right\| \mu \mathrm{g} / \mathrm{g} \right\rvert\,$ | $\left\lvert\, \begin{gathered} \text { HRAN } \\ {[\mathrm{Bg}] \mathrm{mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
| 70a dup | SEPT | \|2446,2441 | 4.P891 | 0.0098 | 500 | 0.229 | 902 | 0.774 | 0.019 | 0.770 |
| 70b | 10 G | 2442 | 418891 | 0.0079 | 500 | 0.185 | 476 | 0.491 | 0.024 | 0.491 |
| 70 C | JULI | 2443 | 48 P 991 | 0.0085 | 500 | 0.199 | 467 | 0.447 | 0.022 | 0.447 |
| 70d | JUII | 2444 | 42PR91 | 0.0090 | 500 | 0.210 | 385 | 0.343 | 0.021 | 0.343 |
| 70e | HiY | 2445 | 4NPR91 | 0.0074 | 500 | 0.173 | 218 | 0.221 | 0.025 | 0.221 |

## [Hg] vs Month Participant \#71



PROJECT ID: HOHE SEGIRTITAL ANALYSIS
AHALYSIS: ZHg/HAIR SAMPLE 71

ANALYST: CITTERYAN/LASORSA
PILE f: HOHSEG71

| $\begin{gathered} \text { BATTRLLB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOMR } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { MrIEGRATOR } \\ \text { SEQ } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOM } \\ \text { DATE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { III } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ \text { AHLLYZED } \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & \text { AMALYZED } \\ & \hline \text { WI ng } \end{aligned}\right.$ | AREA | $\begin{gathered} 8 \mathrm{Eg} \\ {[\mathrm{Eg}] \mathrm{pg} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \text { HDL } \\ {[\mathrm{Hg}] \mathrm{\mu g} / \mathrm{g}} \end{array}\right\|$ | $\begin{gathered} \text { HRNIN } \\ {[\mathrm{Bq}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | OCI |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 71a | ADG | 2627 | 9APR91 | 0.0113 | 500 | 0.264 | 921 | 0.484 | 0.016 | 0.484 |
| 71b | JULI | 2628 | 94P891 | 0.0111 | 500 | 0.260 | 684 | 0.360 | 0.017 | 0.360 |
| 71c | JUII | 2629 | 9APR91 | 0.0096 | 500 | 0.225 | 562 | 0.338 | 0.019 | 0.338 |
| 71d dup | MaI | \|2637,2630 | 9APR91 | 0.0110 | 500 | 0.257 | 593 | 0.312 | 0.017 | 0.332 |
| 71e | APR | 2631 | 94PR91 | 0.0100 | 500 | 0.234 | 732 | 0.430 | 0.019 | 0.430 |
| 717 | MAR | 2632 | 914P91 | 0.0093 | 500 | 0.218 | 916 | 0.584 | 0.020 | 0.584 |
| 719 | FF3 | 2634 | 91P891 | 0.0067 | 500 | 0.157 | 767 | 0.673 | 0.028 | 0.673 |
| 716 | JJI | 2635 | 91PR91 | 0.0055 | 500 | 0.129 | 1031 | 1.117 | 0.034 | 1.117 |
| 71. | DEC | 2636 | 92 PLO 1 | 0.0038 | 500 | 0.089 | 934 | 1.459 | 0.049 | 1.459 |

## [Hg] vs Month Participant \#72



PROJECT ID: MOHR SEGIETTAL ANALYSIS
AHALYSIS: KBg/EAIR SAMPLE 72

ANALYST: CITTERMAN/LASORSA
PILE \$: MOHSEG72


## [Hg] vs Month Participant \#73



PROJECT ID:NONR SRCHETTAL MMALYSIS
AMALYSIS: ERg/HAIR SAMPLE 73

ANLLYST: CITTERHAN/LASORSA
PILE : : HOHSEG73
-

| $\begin{array}{\|c} \text { BAITELLS } \\ \text { ID } \end{array}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOITH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DTECRATOR } \\ \text { SERA } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DAIE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { in } \end{array}\right\|$ | VOL ( $\mu \mathrm{I}$ ) AUALYZED | $\left\|\begin{array}{c} \text { AMALYZED } \\ \text { Wr mg } \end{array}\right\|$ | AREA | $\begin{gathered} 28 \mathrm{gig} \\ {[\mathrm{Hg}][\mathrm{g} / \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { KIDL } \\ {[\mathrm{Eg}]} \end{gathered} \mathrm{mg} / \mathrm{g}\right.$ | $\left\lvert\, \begin{gathered} \text { HRAB } \\ {[\mathrm{Bg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | OT |  |  |  |  |  |  |  |  |  |
| 73a | SEPT | 2271 | $14 \mathrm{PR91}$ | 0.0080 | 500 | 0.187 | 417 | 0.420 | 0.023 | 0.420 |
| 73b dup | 10 G | \|2286,2284 | 12PP91 | 0.0098 | 500 | 0.229 | 746 | 0.628 | 0.019 | 0.621 |
| 73c | JULI | 2285 | $14 \mathrm{PR91}$ | 0.0071 | 500 | 0.166 | 686 | 0.794 | 0.026 | 0.794 |

## [Hg] vs Month

Participant \#74


PROJBCT ID:HONE SEGIEYTAL AMALYSIS
NMLYSIS: EHg/EAIR SAMPLE 74

AMALYST: CITTERYAN/LASORSA
PILE $\mathbf{f : ~ M O H S E G 7 4}$

| $\begin{gathered} \text { BATTELLLB } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOHTH } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { INTEERATOR } \\ \text { SEQ } \end{gathered}\right.$ | $\left.\right\|_{\text {DIITR }} ^{\text {DIGSTIOM }}$ | $\left\|\begin{array}{c} \text { DIGBSTIOH } \\ \mathrm{HI} \end{array}\right\|$ | VOL ( $\mu \mathrm{I}$ ) analyzed | AMALYZED WI mg | ARRA | $\underset{[\mathrm{BHg}]}{\mathrm{EHg} / \mathrm{g}}$ | $\left.\left\|\begin{array}{c} \operatorname{MDL} \\ {[\mathrm{Hg}]} \end{array}\right\| \mathrm{Mg} / \mathrm{g} \right\rvert\,$ | $\left\lvert\, \begin{gathered} \text { HRRM } \\ {[\mathrm{Eg}] \mathrm{Mg} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SCALP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
| 74 a | SEPT | 2287 | \|12PR91 | 0.0053 | 500 | 0.124 | 814 | 1.273 | 0.035 | 1.273 |
| 74b dup | ADG | \|2291,2288 | \|LAPR91 | 0.0051 | 500 | 0.119 | 633 | 1.016 | 0.036 | 1.028 |
| 74. | JOLY | 2289 | \| $2 \mathrm{PrP91}$ | 0.0036 | 500 | 0.084 | 520 | 1.167 | 0.052 | 1.167 |
| 74d | JOII | 2290 | \|L1P891 | 0.0034 | 500 | 0.080 | 568 | 1.358 | 0.055 | 1.358 |

## [Hg] vs Month Participant \#75



PROJECI ID:HONR SEGIERTAL AMALYSIS
ANALYSIS: $\mathbb{Z g} /$ HAIR SANPLE 75

AHALYST: CITTERNAN/LASORSA
PILE $\ddagger$ : MONSEG75


## [Hg] vs Month Participant \#76



PROJECT ID:HOMB SEGTEMTAL MMLYSIS
AMALYSIS: $\Sigma \mathrm{Hg} / \mathrm{HAIR}$ SAYPLE 76

AHALYST: CITTERNAN/LASORSA
PILE : HOHSBG76


| BATTELLE <br> ID | $\begin{gathered} \text { SEG } \\ \text { HOHIH } \end{gathered}$ | $\begin{array}{\|l} \text { IITEERATOR } \\ \text { SEQ! } \end{array}$ | $\begin{gathered} \text { DIGBSIIOM } \\ \text { DAIE } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { DIGESTIOR } \\ \text { WI } \end{gathered}\right.$ | VOL ( $\mu \mathrm{l}$ ) AMALYEED | $\left\|\begin{array}{c} \text { AMLYKZDD } \\ \text { WI } \end{array}\right\|$ | ARRA | $\underset{[\mathrm{Bg}] \mathrm{Hg} / \mathrm{g}}{\mathrm{E}}$ | $\left\|\begin{array}{c} \text { VDL } \\ \text { (Eg] } 1 / \mathrm{gg} / \mathrm{g} \end{array}\right\|$ | $\begin{gathered} \text { KIEAK } \\ {[\mathrm{Bg}]_{\mathrm{Hg} / \mathrm{g}}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SCALP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
| $76 a$ | SEPT | 2661 | 174P291 | 0.0071 | 500 | 0.166 | 1109 | 0.895 | 0.026 | 0.895 |
| 76 b | 10G | 2662 | 171PF991 | 0.0062 | 500 | 0.145 | 715 | 0.647 | 0.030 | 0.647 |
| 76c dup | JUL | 2667,2663 | 171PP991 | 0.0065 | 500 | 0.152 | 587 | 0.499 | 0.029 | 0.530 |
| 76d | JUS | 2664 | 171PP91 | 0.0071 | 500 | 0.166 | 813 | 0.647 | 0.026 | 0.647 |
| $76 e$ | 121 | 2665 | 171PP91 | 0.0058 | 500 | 0.136 | 746 | 0.723 | 0.032 | 0.723 |
| 765 | APR | 2666 | 171PR91 | 0.0063 | 500 | 0.147 | 918 | 0.828 | 0.030 | 0.828 |

# [Hg] vs Month 

 Participant \#77

PROJECT ID:HONB SEGIERTML ARALYSIS
AMALYSIS: $\mathrm{ZHg} / \mathrm{HILR}$ SAMPLE 77

ANALYST: CITTERNAN/LASORSA
PILR $\ddagger$ : HOHSEG77

| $\left\|\begin{array}{c} \text { BATTBLLEB } \\ \text { ID } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { SEG } \\ \text { MOMIITH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { INTECRRTOR } \\ \text { SER } \end{array}\right\|$ | $\left.\right\|_{\text {DIFB }} ^{\text {DIGESIIOI }}$ | $\left\|\begin{array}{c} \text { DIGESTIOM } \\ \text { wir } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL ( } \mu \mathrm{L}) \\ \text { A:LLYZBD } \end{array}\right\|$ | $\left\|\begin{array}{c} \operatorname{ainLYZZDD} \\ \operatorname{mag} g \end{array}\right\|$ | ARBA | $\begin{gathered} \sum \mathrm{Bg} \\ {[\mathrm{Hg}] \mathrm{Hg} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \mathrm{HDL} \\ {[\mathrm{Hg}] \mathrm{Mg} / \mathrm{g}} \end{array}\right\|$ | $\begin{aligned} & \text { MRAM } \\ & {[\mathrm{Bg}] \mathrm{Hg} / \mathrm{g}} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
|  | SEPP |  |  |  |  |  |  |  |  |  |
| 77a | ADG | 2709 | 181PR91 | 0.0086 | 500 | 0.201 | 470 | 0.254 | 0.022 | 0.254 |
| 77b dup | JULY | \|2723,2710 | 184P991 | 0.0081 | 500 | 0.189 | 420 | 0.238 | 0.023 | 0.255 |
| 77c | JUII | 2711 | 181PR91 | 0.0076 | 500 | 0.178 | 449 | 0.273 | 0.024 | 0.273 |
| 77d | H\|XY | 2712 | 181P1991 | 0.0070 | 500 | 0.164 | 394 | 0.256 | 0.027 | 0.256 |
| 77e | APR | 2713 | 1828891 | 0.0069 | 500 | 0.161 | 474 | 0.320 | 0.027 | 0.320 |
| 77 f | mar | 2714 | 181PP91 | 0.0066 | 500 | 0.154 | 549 | 0.394 | 0.028 | 0.394 |
| 779 | FEB | 2715 | 181P191 | 0.0071 | 500 | 0.166 | 650 | 0.441 | 0.026 | 0.441 |
| 77 | JM | 2716 | 181P891 | 0.0060 | 500 | 0.140 | 653 | 0.525 | 0.031 | 0.525 |
| 771 | DSC | 2724 | 182P891 | 0.0057 | 500 | 0.133 | 736 | 0.629 | 0.033 | 0.629 |
| 77 | 100 | 2718 | 181P191 | 0.0059 | 500 | 0.138 | 829 | 0.690 | 0.032 | 0.680 |
| 77 | OT | 2721 | 14 Pren | 0.0052 | 500 | 0.122 | 1142 | 1.099 | 0.036 | 1.099 |
| 771 | SEPT | 2722 | 185P31 | $\mid 0.0035$ \| | 1500 | 0.082 | 12451 | 1.787 | 0.053 | 1.787 |

## [Hg] vs Month

Participant \#78


PROJECT ID:KOHE SEGYRYTAL ANALYSIS
AMALYSIS: EHg/EAIR SANPLE 78

ANALYST: CITTERHAM/LASORSA
PILR $\ddagger$ : MOHSEG78

| $\begin{aligned} & \text { BAPPELLB } \\ & \text { ID } \end{aligned}$ | $\left.\right\|_{\text {MOHIH }} ^{\text {SRG }}$ | $\left\|\begin{array}{c} \text { INTECRATOR } \\ \text { SEQf } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { DIGESIIOM } \\ \text { DATE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGESTIOW } \\ \text { WR } \end{array}\right\|$ | $\left\|\begin{array}{l} \text { VOL }(\mu 1) \\ \left\|\begin{array}{ll} \text { INLYZSD } \end{array}\right\| \end{array}\right\|$ | $\left\|\begin{array}{l} \text { AHALYERD } \\ \mathrm{WI} \mathrm{Ig} \end{array}\right\|$ | AREA | $\underset{[B g] \mu \mathrm{g} / \mathrm{g}}{\mathrm{EHg}}$ | $\left\|\begin{array}{c} \mathrm{NDLL} \\ {[\mathrm{Hg}] \mathrm{g} / \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\begin{gathered} \text { KREAR } \\ {[\mathrm{Eg}] \mathrm{mg} / \mathrm{g}} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCAIP |  |  |  |  |  |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
|  | SEPT |  |  |  |  |  |  |  |  |  |
| 78a | ADG | 2668 | 174PR91 | 0.0078 | 500 | 0.182 | 2054 | 1.537 | 0.024 | 1.537 |
| 78b | JULY | 2671 | 174 PR91 | 0.0081 | 500 | 0.189 | 1825 | 1.312 | 0.023 | 1.312 |
| 78 C | JUI | 2672 | 171PR91 | 0.0072 | 500 | 0.168 | 1150 | 0.917 | 0.026 | 0.917 |
| 78d dup | Hay | \|2703,2673 | 171 PR91 | 0.0078 | 500 | 0.182 | 1304 | 0.845 | 0.024 | 0.871 |
| 78 e | APR | 2674 | 177 PR 91 | 0.0075 | 500 | 0.175 | 1310 | 1.007 | 0.025 | 1.007 |
| 78 f | Has | 2675 | 1714P891 | 0.0065 | 500 | 0.152 | 1141 | 1.007 | 0.029 | 1.007 |
| 789 | FIB | 2676 | 1714PR91 | 0.0071 | 500 | 0.166 | 1218 | 0.987 | 0.026 | 0.987 |
| 78b | JMI | 2677 | 171 PR91 | 0.0075 | 500 | 0.175 | 1115 | 0.852 | 0.025 | 0.852 |
| 781 | DSC | 2678 | 171P801 | 0.0064 | 500 | 0.150 | 980 | 0.873 | 0.029 | 0.873 |
| 78) | 1007 | 2680 | 1719891 | 0.0056 | 500 | 0.131 | 1006 | 1.026 | 0.033 | 1.026 |
| 78k dip | OCT | \|2704,2681 | 1748991 | 0.0058 | 500 | 0.136 | 1177 | 1.022 | 0.032 | 1.056 |
| 781 | SEPT | 2682 | 1718P91 | 0.0062 | 500 | 0.145 | 1390 | 1.296 | 0.030 | 1.296 |
| 78! | 106 | 2683 | 171P191 | 0.0057 | 500 | 0.133 | 1356 | 1.374 | 0.033 | 1.374 |
| 781 | JWY | 2684 | 174 P 191 | 0.0044 | 500 | 0.103 | 1150 | 1.501 | 0.042 | 1.501 |
| 780 | J01 | 2685 | 171P891 | 0.0043 | 500 | 0.101 | 1021 | 1.357 | 0.043 | 1.357 |
| 78p | May | 2686 | 171 P991 | 0.0040 | 500 | 0.094 | 815 | 1.151 | 0.047 | 1.151 |
| 789 | APR | 2687 | 174PR91 | 0.0031 | 500 | 0.073 | 504 | 0.887 | 0.060 | 0.887 |
| 78\% | MAR | 2688 | 17aPR91 | 0.0026 | 500 | 0.061 | 450 | 0.934 | 0.072 | 0.934 |

PROJECT ID:HOUR SEGTETIAL AMALYSIS
AMALYSIS: $\Sigma H g / H A I R ~ S A M P L E T 8$

AMALYST: CITTERHAN/LASORSA
PILE f: HOHSBG78


## [Hg] vs Month Participant \#79



PROJECT ID:MOIR SEGIETTAL AMALYSIS

ANLEYSIS: $\mathrm{ZHg} / \mathrm{HAIR}$ SAMPLB 79

AHALYST: CITMERMAY/LASORSA

FILR f: HONSEG79

| BATIELLLR <br> ID | $\begin{gathered} \text { SEG } \\ \text { Honirl } \end{gathered}$ | $\begin{array}{\|c\|} \text { ITHEGRATOR } \\ \text { SEQ } \end{array}$ | $\left\lvert\, \begin{gathered} \text { DICESTIOM } \\ \text { DAFE } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { DIGSSIOM } \\ \text { In } \end{array}\right\|$ | $\begin{array}{\|l} \text { POL }(\mu \mathrm{l}) \\ \text { AMLYZED } \end{array}$ |  | ARRA | $\begin{gathered} \Sigma \mathrm{B} g \\ {[\mathrm{Eg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\begin{gathered} \mathrm{HDL} \\ {[\mathrm{Bg}] \mu \mathrm{m} / \mathrm{g}} \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { RBAM } \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SCALP |  |  |  |  | ; |  |  |  |  |
|  | OCT |  |  |  |  |  |  |  |  |  |
| 79a | SEPP | 2725 | 181 PP 91 | 0.0079 | 500 | 0.185 | 2469 | 1.604 | 0.024 | 1.604 |
| 1 79b dup | 106 | \|2727,2726 | 18AFP91 | 0.0067 | 500 | 0.157 | 1770 | 1.344 | 0.028 | 1.381 |

## [Hg] vs Month Participant \#80



PROJECT ID:MONE SEGERTILL MALYSIS
ARALYSIS: $8 \mathrm{Hg} / \mathrm{HAIR}$ SARPLE 80
annuss: crirzwu/LSosese
IILS \&: HOHSEG80

| $\begin{gathered} \text { BAITEBLLE } \\ \text { ID } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { SRG } \\ \text { MOMIH } \end{gathered}\right.$ | $\left\|\begin{array}{c} \text { IITEGERATOR } \\ \text { SEQf } \end{array}\right\|$ | DIGRSITOM DAIE | $\left\lvert\, \begin{gathered}\text { DIGESTIOH } \\ \text { Fi }\end{gathered}\right.$ | $\left\|\begin{array}{l} \mathrm{VOL}(\mu \mathrm{~L}) \\ \mid \mathrm{ABLYZED} \end{array}\right\|$ | $\left\|\begin{array}{l} \text { ANALYZED } \\ \text { WI } \end{array}\right\|$ | ARPA | $\begin{gathered} \Sigma \mathrm{Eg} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{gathered}$ | $\left\|\begin{array}{c} \mathrm{KDLL} \\ {[\mathrm{Hg}] \mu \mathrm{g} / \mathrm{g}} \end{array}\right\|$ | $\begin{aligned} & \text { MRAR } \\ & {[\mathrm{Bg}] \mathrm{Hg} / \mathrm{g}} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \|SCALP |  |  |  |  |  |  |  |  |  |
|  | \| OCT |  |  |  |  |  |  |  |  |  |
| 80a | SEPP | 2728 | 184P891 | 0.0051 | 500 | 0.119 | 1212 | 1.192 | 0.036 | 1.192 |
| 80b | 106 | 2729 | 181PP91 | 0.0047 | 500 | 0.110 | 1039 | 1.101 | 0.040 | 1.101 |
| 80c dup | JULI | 2757,2730 | 184PR91 | 0.0045 | 500 | 0.105 | 860 | 0.939 | 0.041 | 0.944 |
| 800 | JUI | 2731 | $184 \mathrm{PR91}$ | 0.0042 | 500 | 0.098 | 992 | 1.173 | 0.044 | 1.173 |
| 800 | HMY | 2732 | 181P891 | 0.0045 | 500 | 0.105 | 831 | 0.907 | 0.041 | 0.907 |
| $80 f$ | APR | 2745 | 1818 P 91 | 0.0037 | 500 | 0.087 | 722 | 0.948 | 0.050 | 0.948 |
| 80 g | Mar | 2746 | 182 PR 91 | 0.0044 | 500 | 0.103 | 612 | 0.667 | 0.042 | 0.667 |
| 80h | PEB | 2747 | 182P991 | 0.0045 | 500 | 0.105 | 494 | 0.516 | 0.041 | 0.516 |
| 801 | Јล1 | 2748 | 182PP91 | 0.0044 | 500 | 0.103 | 591 | 0.643 | 0.042 | 0.643 |
| 80j dup | DES | \|2758,2749 | 182PR91 | 0.0042 | 500 | 0.098 | 628 | 0.719 | 0.044 | 0.678 |
| 80k | nov | 2750 | 18APR91 | 0.0045 | 500 | 0.105 | 757 | 0.820 | 0.041 | 0.820 |
| 801 | OCT | 2751 | 18APR91 | 0.0043 | 500 | 0.101 | 693 | 0.781 | 0.043 | 0.781 |
| 802 | SEPP | 2752 | 182PPe1 | 0.0040 | 500 | 0.094 | 681 | 0.824 | 0.047 | 0.824 |
| 80 n | ADG | 2753 | 181PR91 | 0.0035 | 500 | 0.082 | 686 | 0.949 | 0.053 | 0.949 |
| 800 | JULI | 2754 | 18APR91 | 0.0035 | 500 | 0.082 | 647 | 0.891 | 0.053 | 0.891 |
| 180 p dup | Jus | \|2759,2755 | 182PR91 | 0.0031 | 500 | 0.073 | 647 | 1.006 | 0.060 | 0.995 |
| 809 | \| May | 2756 | 181PR91 | 0.0021 | \| 500 | \| 0.049 | 526 | 1.186 | 10.089 | 1.186 |

## APPENDIX D

## ANALYTICAL METHODS

# TOTAL MERCURY IN SOLIDS BY COLD VAPOR ATOMIC FLUORESCENCE 

### 1.0 SCOPE AND APPLICATION

1.1 This is a peer-reviewed, published procedure for the determination of total mercury in a wide range of biological and geological matrices. All samples must be subjected to an appropriate dissolution or leaching step prior to analysis.

### 2.0 SUMMARY OF METHOD

2.1 The method is a cold vapor atomic fluorescence technique, based upon the emission of 254 nm radiation by excited $\mathrm{Hg}^{\circ}$ atoms in an inert gas stream. Mercuric ions in the oxidized sample are reduced to $\mathrm{Hg}^{\circ}$ with $\mathrm{SnCl}_{2}$, and then purged onto gold-coated sand traps as a means of preconcentration and interference removal. Mercury vapor is thermally desorbed to a second "analytical" gold trap, and from that into the fluorescence cell. Fluorescence (peak area) is proportional to the quantity of mercury collected, which is quantified using a standard curve as a function of the quantity of sample purged.

Typical detection limit for the method is $0.001 \mu \mathrm{~g} / \mathrm{g}$ as Hg or 1 ppb .

### 3.0 SAMPLE COLLECTION, PRESERVATION, AND HANDLING

3.1 Samples should be collected into acid-cleaned tefion or glass bottles with teflon lids. Under no circumstances should polyethylene, polypropylene, or vinyl containers be used.
3.2 Unless samples have been freeze-dried, they are to be frozen at <$10^{\circ} \mathrm{C}$ until use. A maximum holding time of 1 year at $<-10^{\circ} \mathrm{C}$ is recommended.
3.3 All dissection, homogenization, and other handling of the samples should be done by clean-room gloved personnel in a clean station.

### 4.0 DEFINITIONS

4.1 Atomic Fluorescence - detection based on fluorescent emission from excited atoms of a particular element at a characteristic wavelength. The amount of fluorescence, quantified by integration of peak area, is proportional to the concentration of the atom of interest.
4.2 Acid-cleaned - cleaned in nitric acid of the highest concentration and temperature which can be withstood by the item being cleaned. Glass and teflon containers are boiled in concentrated nitric acid for 48 hours.

### 5.0 POTENTIAL INTERFERENCES

5.1 Due to the strong oxidation step, followed by dual gold amalgamation, there are no observed interferences with the method. The potential exists for destruction of the gold traps (and consequently low values) if free halogens are purged onto them or if they are overheated ( $>500^{\circ} \mathrm{C}$ ). When these instructions are followed, neither of these problems is likely to occur.
5.2 Water vapor may collect on the gold traps, and be released on to the fluorescence cell where it condenses, giving a false peak due to scattering of the excitation radiation. This can be avoided by predrying the gold trap and by discarding traps which tend to absorb large quantities of water vapor.
5.3 As always with atomic fluorescence, the fluorescence intensity is strongly dependent upon the inertness of the carrier gas. The dual amalgamation technique eliminates quenching due to trace gases, but it still remains the analyst's responsibility to ensure high purity inert carrier gas and a leak free analytical system.

### 6.0 RESPONSIBLE STAFF

6.1 Researcher/Technician - sample prep, digestion, analysis, and calculations.

### 7.0 APPARATUS AND REAGENTS

7.1 Apparatus
7.1.1 Cold Vapor Atomic Fluorescence Spectrophotometer (CVAF): The components of this detector include a four-watt low pressure mercury vapor lamp, a far UV quartz flow-through fluorescence cell, ( $12 \mathrm{~mm} \times 12 \mathrm{~mm} \times 45 \mathrm{~mm}$ ), with a 10 mm path length, and a UV-visible photomultiplier, sensitive to $<230 \mathrm{~nm}$ isolated from outside light with a 254 nm interference filter. The carrier gas flow is controlled using a flowmeter with needle valve capable of keeping a constant flow of $25 \mathrm{ml} / \mathrm{min}$.
7.1.2 Flowmeter/needle valve: Flowmeter capable of controlling and measuring gas flow to the purge vessel at 200-500 $\mathrm{ml} / \mathrm{min}$.
7.1.3 Teflon fittings: Connections between components and columns are made using 6.4 mm O.D. tefion FEP tubing, and teflon friction-fit or threaded tubing connectors. Connections between components requiring mobility are made with 3.2 mm O.D. teflon tubing due to its greater flexibility.
7.1.4 Acid fume pretrap: A $10 \mathrm{~cm} \times 0.9 \mathrm{~cm}$ diameter teflon tube containing 2-3 g of reagent grade, non-indicating 8-14 mesh soda lime, packed between silanized glass wool plugs. This trap is purged of Hg by placing it on the output of a clean cold vapor generator, filled with $1 \% \mathrm{HCl}$, and purging overnight with $\mathrm{N}_{2}$ at $100 \mathrm{ml} / \mathrm{min}$.
7.1.5 Cold vapor generator: A 250 ml or 125 ml florence flask with standard taper 24/40 neck, fitted with a purging stopper having a coarse glass frit which extends to within 0.2 cm of the flask bottom.
7.1.6 Gold-coated sand column: Made from 10 cm lengths of 6.5 mm O.D. X 4 mm I.D. quartz tubing, with a coarse quartz frit or crimp 2.0 cm from one end. The tube is filled with 3.4 cm of gold-coated ashed ( $800^{\circ} \mathrm{C}$ for 6 hours) quartz sand ( $60 / 80$ mesh). The end is then plugged with quartz wool. Gold is applied to the sand as a coating several atoms thick using an ion exchange gilding apparatus. The columns are heated to 450-500 C with a coil consisting of 24 ga nichrome wire at a potential of 10 VAC.
7.1.7 Refluxing digestion vials: Acid-cleaned, precalibrated, 23 ml glass scintillation vials with acid-cleaned 1 inch diameter glass spheres placed over the mouth. When the vials are placed on a hot plate at $300-350^{\circ} \mathrm{C}$, the contents will reflux, with the spheres acting as pressure relief valves.
7.1.8 Pipetters: All plastic pneumatic fixed and variable volume pipetters in the range of $10 \mu 1$ to 5 ml . (calibrated)
7.1.9. Recorder: Multi-range chart-recorder/integrator with 0.1- 5.0 mV input and variable speed.

### 7.2 Reagents

7.2.1 Water: Deep well tap water which has been determined to be
very low (<0.02 ng/l) in mercury. The water is continuously
monitored for mercury.
7.2.2 Nitric/sulfuric acid: With constant stirring, carefully add 300 ml of preanalyzed low mercury ( $<10 \mathrm{ng} / 1 \mathrm{Hg}$ ) concentrated sulfuric acid to 700 ml of preanalyzed low mercury ( $<10 \mathrm{ng} / 1$ Hg ) concentrated nitric acid in a teflon bottle. Use caution... this mixture is exothermic and emits caustic fumes.

| 7.2.3 | 10\% Stannous chloride $\left(\mathrm{SnCl}_{2}\right)$ : A solution containing 200 |
| :--- | :--- |
| grams of $\mathrm{SnCl}_{2} 2 \mathrm{H}_{2} \mathrm{O}$ and 100 ml of concentrated HCl , brought |  |
| to a final volume of 1 liter with mercury free water. This |  |
| solution is purged overnight with mercury-free nitrogen" at |  |
| $500 \mathrm{ml} / \mathrm{min}$ to remove all traces of mercury. Store tightly |  |
| capped and in the dark. |  |

7.2.4 5\% Bromine monochloride ( BrCl ): 27 g of KBr are added to a 2 liter bottle of concentrated $\mathrm{HCl}(<5 \mathrm{ng} / 1 \mathrm{Hg})$. A clean magnetic stir bar (teflon coated) is placed in the bottle and the solution is stirred for one hour, in a fume hood. Next, 38 g of pre-analyzed, low Hg KBrO3 are slowly added to the acid as sitrring continues. CAUTION: This process should always be darried out in a fume hood. The fumes from this reagent are very corrosive and a strong irritant. When all of the KBrO3 has been added, the solution should have gone yellow to red to orange. Loosely cap the bottle, and allow to stir another hour before tightening the lid.

### 7.2.5 Stock Mercury Standard: A commercially available 1000 mg $\mathrm{Hg} / 1$ atomic absorption standard is used.

7.2.6 Secondary Standard Solution: 0.100 ml is diluted with $\mathrm{Hg}-$
free water containing 5 ml BrCl , to a final volume of 100 ml
in a teflon bottle. This solution contains $1000 \mathrm{ng} / \mathrm{liter}$ and
should be restandardized or replaced annually.
7.2.7 Working standard solution: Dilute 1.00 ml of the $2^{\circ}$ mercury standard to 100 ml with Hg free water containing $1 \%$ (by volume) bromine monochloride, using a 100 ml class $A$ volumetric flask. This solution has a $[\mathrm{Hg}] 10.0 \mathrm{ng} / \mathrm{ml}$ and should be replaced monthly.
7.2.8 Nitrogen: Grade 4.5 nitrogen which has been further purified by the removal of Hg using an in-line gold coated sand trap.
7.2.9 Helium or argon: Grade 5.0 inert gas which has been further purified by the removal of Hg using an in-line gold coated sand trap.

### 8.0 PROCEDURE

### 8.1 Sample preparation

8.1.1 A 10 gram (or more) aliquot is dissected and homogenized with acid-washed stainless steel tools. Approximately 1.0 g of the homogenized sample is weighed directly into the scintillation vial, recording the weight to the nearest mg on a mercury digestion data sheet (Exhibit 2). 5.0 ml of the $\mathrm{HNO}_{3} / \mathrm{H}_{2} \mathrm{SO}_{4}$ solution is pipetted into the vial and swirled to mix. A sphere is placed over the mouth of the vial. Samples are then placed on a hot plate, and brought up to a refluxing boil in temperature increments. This is to avoid excessive foaming, which is especially common with tissue samples. The samples are refluxed (hot plate temperature about $300^{\circ} \mathrm{C}$ ) for 2-3 hours, or until all organic matter has dissolved, the solution looks almost colorless or light yellow, and the brown gas above the liquid has almost disappeared. Sediment samples, especially sandy ones, may take less time for the organic matter to dissolve. The samples are allowed to cool on the hot plate. 0.500 ml 58 BrCl is pipetted into the sample. The samples are loosely capped and allowed to react with the BrCl overnight. Next, dilute the samples to the mark with low Hg deep well water. Undigested rock material or animal fat does not effect the accuracy of this digestion, because these fractions are both very low in initial Hg content, and are effectively leached by the boiling acid.

### 8.2 Analysis

8.2.1 About 20 ml of low Hg water is added to each bubbler, followed by 1 ml of conc. HCl and 0.500 ml of $\mathrm{SnCl}_{2}$ solution. The bubbler is sparged with $N_{2}$ at $350 \mathrm{ml} / \mathrm{min}$ for 10 minutes, and then a gold-coated sand column is connected to the soda lime pretrap and purged for another 10 minutes. This value is the bubbler blank. To analyze samples, 0.5 ml of $\mathrm{SnCl}_{2}$ and an aliquot of the digestate (usually $0.25-1.0 \mathrm{ml}$ ) are pipetted into each bubbler. THe bubbler caps are replaced, the vessel is gently swirled, gold-coated sand columns are placed onto the soda lime pretrap outlet, and the sample is sparged for 10 minutes. New samples may be sequentially added to the bubblers with additional $\mathrm{SnCl}_{2}$, up to a maximum of 5 consecutive samples. After 5 samples, the bubbler blanks should be measured, and then the standards. The water
in the bubblers is then replaced with clean low Hg water, and the above sequence is repeated.
8.2.2 To analyze the mercury contained on the gold trap, the gold trap is placed inside a coil of nichrome wire and then inserted in-line with the mercury analyzer incoming Hg -free He and the second (analytical) gold-coated sand trap. The He flow rate should be about $30 \mathrm{ml} / \mathrm{min}$. The system is purged for 2 minutes to dry off any condensed water vapor. 10 VAC is applied to the nichrome coil on the working gold-coated trap for 4 minutes, thermally desorbing the Hg as $\mathrm{Hg}^{\circ}$ which is then resorbed by the analytical gold-coated sand column. The voltage to the working gold-coated sand trap is turned off, and a cooling stream of compressed air is directed towards the trap. 10 VAC is applied to the analytical gold-coated sand trap, and the integrator is activated. The analytical trap is heated for 3.0 minutes, or 1 minute beyond the point where the mercury peak returns to baseline.
8.2.3 Following the integration of the mercury peak, the voltage to the analytical trap is turned off. A stream of cooling. compressed air is directed towards the analytical trap. The sample gold-coated sand trap is removed from the gas stream, and the tefion end plugs are replaced until it is needed to collect another sample. The next sample gold-coated sand trap is placed inside the nichrome wire coil, placed in-line with the mercury analyzer incoming Hg -free He and the procedure is repeated. Under no circumstances should a sample gold-coated sand trap be heated while the analytical column is still warm, or analyte may be lost by passing through the analytical column.
8.2.4 Peaks generated using this technique should be very sharp and almost symmetrical. The peak comes off at approximately 1 minute, and has a half-height width of about 5 seconds. Broad or asymmetrical peaks are indicative of an analytical problem possibly including: low gas flow, water vapor on the column, or an analytical column damaged by chemical fumes or overheating. If the analytical column has been damaged, replace the column and the tubing downstream, due to the possibility of gold migration on the downstream surfaces.
8.2.5 Cold vapor atomic fluorescence for mercury is linear over at least five orders of magnitude (Bloom and Fitzgerald, 1988). This method is virtually interference free, so the method of standard additions is not routinely applied. To run standards, an aliquot of working standard solution in the range of 1 ng Hg is pipetted into a purged bubbler containing 0.5 ml of $\mathrm{SnCl}_{2}$ solution, and analyze as one would a sample;
8.2.6 Gold-coated sand traps should be kept track of by unique identifiers, so that any trap producing poor results can be quickly recognized and discarded. Occasionally due to inadyertent contact with halogen fumes, bubbler solution, organic fumes, or overheating, a sampling gold-coated sand trap may become damaged; giving low and irreproducible results. Suspect gold-coated sand traps should be checked with at least two consecutive standard runs before continued use.
8.2.7 The major cause of analytical problems with this method is from using the soda lime pretraps too long. These traps should be purged overnight as described and then used for only one day's analytical work. Longer use risks irreproducibility, as the traps may begin retarding the flow of $\mathrm{Hg}^{\circ}$. Also, as the traps become very wet there is a risk of NaOH -saturated water drops coming off onto the goldcoated sand traps.

### 8.3 Standardization Calibration

8.3.1 Calibrate the analysis with a minimum of a 3-point calibration curve plus a system blank. The calibration concentrations should be $<1 \mathrm{ng} \mathrm{Hg}$.

### 9.0 QUALITY CONTROL

9.1 All quality control data should be maintained and available for easy reference or inspection.
9.2 Quality assurance data must be composed of a minimum of 2 blanks and
3 standards per day.
9.3 Samples containing high analyte concentrations may be run either following dilution, or on a separate run at a lower instrumental sensitivity.

### 9.4 Duplicate or triplicate analyses (depending upon client preference) should be run once every 10 samples or once per batch, whichever comes first.

### 9.5 NRCC or NBS certified standard materials for mercury in tissues and sediments should be analyzed at a frequency of once per 10 samples or once per batch, whichever comes first.

9.6 Procedural spike recoveries should be run once per 10 samples or once per batch, whichever comes first; in the absence of a suitable certified standard tissue, or at the request of the client.

### 9.7 Method Performance

### 9.7.1 The data shown below was obtained from the records of this laboratory, and indicate the performance of this technique compared to an entirely independent methodology.

SUMMARY OF TOTAL MERCURY ANALYSIS OF NRCC (NATIONAL RESEARCH COUNCIL OF CANADA)<br>AND NBS STANDARD MARINE ANIMAL TISSUE

| NBS TUNA | DORM-1 | DOLT-1 |
| :---: | :---: | :---: |
| ALBACORE TUNA | DOGFISH MUSCLE | DOGFISH LIVER |

Measured

| $x$ | 0.93 | 0.806 | 0.240 |
| :---: | :---: | :---: | :---: |
| $S D$ | 0.09 | 0.021 | 0.020 |
| $N$ | 10 | 6 | 4 |

Certified or Expected
X
0.95
0.798
0.225
SD
0.10
0.074
0.037

### 10.0 CALCULATIONS

10.1 Calculations may be made using either a best fit linear regression analysis of the standards and blanks or by using the average response factor method.

### 10.1.1 Average Response Factor Method:

$\begin{aligned} \text { Ave Response Factor }(R F) & =\frac{\Sigma((s t d \text { peak area }-b l k \text { area }) /[\mathrm{Hg}] \mathrm{ng})}{\# \text { std }} \\ {[\mathrm{Hg}] \mathrm{ng} / \mathrm{g} } & =\frac{(\text { sam peak area - blk area) * } v}{R F * v * \operatorname{sam} w t(g)}\end{aligned}$
(Where std peak area is the standard peak area, blk area is the average blank area, $[\mathrm{Hg}]$ is the Hg concentration in ng , sam peak area is the sample peak area, $V$ is the digestate volume in $\mathrm{ml}, v$ is the sample aliquot analyzed, sam wt is the sample weight digested in grams, and RF is the average response factor in area/ng.)
10.1.2 Linear Regression Method:

Using least squares best fit method, calculate the slope of the- line for the standards, forcing the line through zero.
$[\mathrm{Hg}] \mathrm{ng} / \mathrm{g}=\frac{\text { sam area * } V}{\text { slope * } v * \text { sam wt (g) }}$
(Where slope is the slope of the standard regression line in area/ng, for a explanation of the other variables refer to the average response method above.)
10.2 Method Detection Limit (MDL):

The MDL is calculated by recording the results of a standard analyzed seven times, whose concentration is within 10 times of the actual method detection limit.

$$
\text { MDL }[\mathrm{Hg}] \mathrm{ng}=S D * t_{(0.1(1)(n-1))}
$$

(Where $S D$ is the standard deviation of the $[\mathrm{Hg}] \mathrm{ng}$ of the standards analyzed multiplied by the student $t$ value for 99\% one tailed confidence interval with $n-1$ degrees of freedom.)

$$
\text { Detection Limit }[\mathrm{Hg}] \mathrm{ng} / \mathrm{g}=\mathrm{MDL} / \mathrm{sam} \text { wt }(\mathrm{g})
$$

(Where MDL is the method detection limit $[\mathrm{Hg}] \mathrm{ng}$ and sam wt is the weight of the sample analyzed in grams.)

### 11.0 REFERENCES

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| SEQ | SAMPLE ID | VIAL WT <br> grams | VIAL+SAMPLE <br> grams | SAMPLE WT <br> grams | TISSUE <br> $\mathrm{mg} / \mathrm{ml}$ |
| ---: | :---: | :---: | :---: | :---: | :---: |
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