Qubit quantification of digest plate

This protocol assumes that you have read and understand the manufacturer's instructions attached below. Please read the full manufacturer's instructions before using this abbreviated protocol.

This protocol is to quantify a digest plate that has been cleaned. This is not the manufacturers method of quantification and is not recommended without testing against other methods for accuracy.

1. For a full plate of 96 wells, make a working solution of HS buffer and dye by combining 19mL + 502uL of HS buffer with 98uL of HS dye. (96 wells plus 2 standards)
2. Place 190 uL of working solution into an empty well and add 10uL of standard 1.
3. Place 190 uL of working solution into an empty well and add 10uL of standard 2.
4. For the rest of the wells, add 199uL of working solution with a multichannel pipet
5. Add 1uL sample to each well
6. Vortex the plate
7. Allow the plate to incubate 2 minutes.
8. Qubit the standards
9. Qubit the wells by cutting the plate apart, being very careful to keep track of the order that the wells are analyzed.
10. Export data to usb drive by hitting the data button and then the image of the usb drive.
11. Once you have verified that you have safely stored all of the data on the computer, clear the data on the qubit machine
12. Import the qubit results to the database

```
# update parameters for the current analysis ####
# name of results file
### HAVE TO CHANGE THE MICROLITER SYMBOL TO UL INSTEAD OF THE SPECIAL CHARACTER ###
infile <- "/Volumes/USB DISK/2018 6/QUBIT_2018-06-12_11-22-AM.csv"

# date of qubit analysis
today <- Sys.Date()
```

```
## Warning in as.POSIXlt.POSIXct(Sys.time()): unknown timezone 'zone/tz/2018c.
## 1.0/zoneinfo/America/New_York'
```

```
# today <- "2018-05-15"

# name of plate measured
this_plate <- "D4794-D4887"


# type of plate
type <- "digest"
id <- "digest_id"

# type of analysis - HS or BR
anly <- "HS"
```

```
## Warning: package 'knitr' was built under R version 3.4.3
```

```
## Warning in evalq(as.numeric(Assay.Conc.) * 0.2, <environment>): NAs
## introduced by coercion
```

digest_id	extraction_id	quant
D4794	E2901	94.60
D4795	E2902	114.00
D4796	E2903	12.08
D4797	E2904	106.00
D4798	E2905	106.00
D4799	E2906	21.80
D4800	E2839	112.00
D4801	E2840	32.20
D4802	E2907	47.20
D4803	E2908	72.60
D4804	E2909	35.80
D4805	E2910	86.40
D4806	E2911	19.46
D4807	E2912	34.00
D4808	E2845	65.80
D4809	E2846	48.00
D4810	E2913	49.00
D4811	E2914	48.40
D4812	E2915	84.20
D4813	E2916	66.20
D4814	E2917	93.60
D4815	E2851	100.00
D4816	E2857	48.20
D4817	E2863	39.00
D4818	E2919	137.00
D4819	E2920	78.00
D4820	E2842	114.00
D4821	E2922	64.80
D4822	E2923	62.40
D4823	E2859	32.60
D4824	E2860	43.60
D4825	E2861	24.80
D4826	E2925	116.00
D4827	E2926	49.00
D4828	E2927	77.20
D4829	E2849	54.40
D4830	E2929	87.60
D4831	E2930	67.00
D4832	E2876	79.60
D4833	E2877	71.60
D4834	E2854	33.40
D4835	E2932	89.40
D4836	E2933	108.00
D4837	E2934	45.20
D4838	E2862	44.80
D4839	E2936	102.00
D4840	E2881	65.20
D4841	E2882	48.80
D4842	E2937	108.00
D4843	E2883	18.32

digest_id	extraction_id	quant
D4844	E2939	99.80
D4845	E2834	28.00
D4846	E2835	53.60
D4847	E2836	73.20
D4848	E2884	16.44
D4849	E2885	24.60
D4850	E2943	152.00
D4851	E2944	86.00
D4852	E2945	95.40
D4853	E2886	49.00
D4854	E2947	110.00
D4855	E2887	106.00
D4856	E2888	50.40
D4857	E2889	22.60
D4858	E2890	55.40
D4859	E2891	22.80
D4860	E2950	104.00
D4861	E2951	81.20
D4862	E2952	34.00
D4863	E2892	79.20
D4864	E2893	8.74
D4865	E2894	33.20
D4866	E2953	47.80
D4867	E2954	57.20
D4868	E2955	21.00
D4869	E2956	39.00
D4870	E2957	114.00
D4871	E2895	80.40
D4872	E2896	64.80
D4873	E2897	45.40
D4874	E2958	102.00
D4875	E2959	76.20
D4876	E2960	110.00
D4877	E2961	64.80
D4878	E2962	41.20
D4879	E2898	61.20
D4880	E2899	46.20
D4881	E2900	27.20
D4882	E2963	24.60
D4883	E2964	78.00
D4884	E2965	65.60
D4885	E2966	25.60
D4886	E2967	32.60
D4887	E2847	43.80