

FIELD EQUIPMENT VERIFICATION (PRE/POST A WEEKLY SAMPLING):



| Session No: | Verifiers (pre-sampling): | | Pre Date: | Pre Time: | Verifiers (post-sampling): | | Post Date: | Post Time: |
|---------------------|---------------------------|--|-----------|-----------|----------------------------|--|------------|------------|
| WM127, LN4, LFR3 | M. Sharpe, L. Yannell | | 9/11/23 | 10:00 AM | L. Yannell, M. Sharpe | | 9/14/2023 | 12:00 |
| | " | | " | " | M. Sharpe, Y. St. Louis | | 9/12/2023 | 10:15 |

| QA/QC Check | Inst # | Probe # | Last Cal Date | PRE: Verification Value | POST: Verification Value | Acceptable Range | Comments/ Notes | QA? |
|------------------|--------|---------|-----------------|-------------------------|--|---|--|---|
| Temperature | NIST | n/a | NIST Exp. Date | Std Val | NIST NIST NIST NIST | ± 0.6 °C of NIST | Compare to NIST Std value in tap water | |
| | 2 | 7 | 6/28/24 | 28.3 | 27.6 | 31.4 | 29.2 | |
| | 2 | 8 | 6/28/24 | | 27.6 | | 29.2 | |
| Salinity | | | 3 months | Std Val | Tap water Salin Std 8/7/23 date 33.7 ppt | Tap water Salin Std 9/11/23 date 34.0 ppt | ± 1 ppt | Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle |
| | 3 | 7 | 8/07/23 | 0.18 | 33.4 | 0.18 | 34.0 | |
| | 4 | 8 | 8/07/23 | 0.18 | 34.2 | 0.18 | 33.3 | |
| Dissolved Oxygen | 84 | | 1 year | Std Val | 100% | 100% | ± 5 % | |
| | 3 | 3 | 7/17/23 | 98.2 | 99.6 | | verified 3x (98.4%, 97.7%) | |
| | 4 | 4 | 7/17/23 | 101.3 | 102.1 | | verified 2x (102.3%) | |
| pH | | | 3 weeks | Std Val | pH 7.00 pH 10.00 | pH 7.00 pH 10.00 | ± 0.1 pH of pH std value | Compare to Manufacturer pH Std value on bottle |
| | 3 | 5 | 8/07/23 7/11/23 | 7.00 | 10.01 | 7.00 | 10.01 | pH 7 + 10 solutions Exp 5/2024 |
| | 4 | 6 | 8/07/23 9/11/23 | 7.00 | 10.01 | 7.00 | 10.01 | |
| Turbidity | | | 3 months | Std Val | BLANK <0.1 LOW 1-10 NTU | BLANK <0.1 LOW 1-10 NTU | ± 0.18 NTU Low 1-10 | Compare to Gel LOW 1-10 Std Calibration value |
| | 5 | n/a | 7/20/23 | 0.05 | 6.41 | 0.06 | 6.59 | spare 0.06 Low: 6.54 |
| | 2 | n/a | 7/20/23 | 0.05 | 6.38 | 0.04 | 6.31 | spare 0.06 spare 0.06 Low: 6.31 |

QA: * Are pre- and post within one week?
* Delay times are ok?
* Other equipment issues?

NMS - lab

| | | | | | | |
|---------|----------------------------|--------------------------------------|---|----------------------|----------|----------------|
| Team | Lahaina Town Fire Response | Samplers (Last Name, 1st Initial) | Yannell, L Kinnell, J Calender, T | Meters and Probes ID | | |
| Session | 3 | | | HQ2200: SM 4 | | 2100Q: SM 2 |
| Date | 09/14/2023 | | | pH: SM 6 | DO: SM 4 | Salinity: SM 8 |

| Location Name Sample ID | Fresh water Flowing (Y/N) | Time (of collection) | Temp (°C) variable | Salinity (ppt) 30-35 normal | Dissolved Oxygen | | pH 8-8.3 normal | Turbidity (NTU) | | | People (within 100 ft) | | |
|-----------------------------|---------------------------------|----------------------------|--------------------------|--------------------------------------|-----------------------------|-------------------------|-----------------------|--------------------|------|------|------------------------|-------|------|
| | | | | | (mg/L) 5.2-7.0 normal | (%) 85-105 normal | | | | | water | beach | camp |
| Mala Tavern LMT230914 | Y | 7:33 | 26.2 | 34.6 | 6.73 | 100.3 | 7.97 | 1.29 | 1.22 | 1.54 | 0 | 0 | 0 |
| Mala Ramp LMR230914 | Y | 7:57 | 26.9 | 34.3 | 6.35 | 99.5 | 8.08 | 3.07 | 3.35 | 3.90 | 0 | 0 | 0 |
| Papalaua St LPS230914 | N | 8:19 | 27.0 | 34.6 | 6.62 | 100.2 | 8.09 | 3.61 | 3.58 | 4.07 | 0 | 0 | 0 |
| Lahaina Harbor LLH230914 | N | 8:45 | 27.9 | 35.1 | 6.17 | 95.2 | 8.10 | 0.52 | 0.66 | 0.76 | 0 | 5 | 0 |
| 505 Front St PFF230914 | N | 9:10 | 27.6 | 35.0 | 6.90 | 105.8 | 8.08 | 0.96 | 1.05 | 1.19 | 0 | 0 | 0 |
| Lindsey Hale PLH230914 | N | 9:35 | 28.1 | 34.7 | 6.69 | 103.6 | 8.05 | 2.33 | 2.24 | 2.11 | 0 | 0 | 0 |
| Lahaina Town PLT230914 | N | 9:50 | 28.5 | 34.5 | 6.47 | 100.4 | 8.05 | 3.76 | 4.22 | 4.06 | 0 | 0 | 0 |

Space blank pre: 0.07

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).
Use the back of the form if needed.

Sprinkles of rain along WM yesterday
Low tide @ 7:52 am
LMR - stream flowing; Boom replaced
Sunny, hot, light breeze just starting
LMT - trickle of water inflow from storm drain
LLH - US Coast Guard surveying for debris removal;
only slight oil sheen on harbor water
surface
PLT - monk seal! Less visible turbidity; not

Sites with potential for freshwater flow: 505 Front St, Mala Ramp outside

TURBIDITY VERIFICATION & PROBE TEMPERATURES

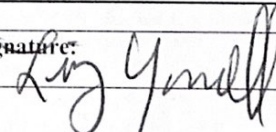
| | Blank (must be < 0.10) | Low (+/- 0.18) | Med (+/- 1.80) | High (+/- 18) |
|------------------------|---------------------------|-------------------|-------------------|------------------|
| Turbidity Standard | 0.05 | 6.31 | 56.8 | 601 |
| Field - Pre-Sample | 0.06 | 6.37 | 56.1 | 602 |
| Lab - Post Sample | 0.04 | 6.37 | 56.4 | 601 |
| Probes (+/- 0.2 °C) | D.O | Salinity | pH | Notes |
| Verify Probe Temps | 25.9 | 26.2 | 26.1 | |
| CHAIN OF CUSTODY | # of Samples | Relinquish to | Contact | |
| Nutrients | 7 | NMS | L. Yannell | |
| Signature (Team Lead): | Liz Yannell | | Print: | Liz Yannell |

Hui O Ka Wai Ola - Sample Collection Datasheet

| | | | |
|---------|----------------------------|-----------------------------------|---|
| Team | Lahaina Town Fire Response | Samplers (Last Name, 1st Initial) | Yannell, L. Kimmell, J. Callender, T. |
| Session | 3 | | |
| Date | 09/14/2023 | | |

| Sample ID | Location Name | Sample taken? | Duplicate sample? | Time | Volume | Protocol Notes | Comments |
|---------------|----------------|-------------------------------------|--------------------------|------|--------|---|----------|
| Nutrients | | | | | | | |
| LMT230914-N-1 | Mala Tavern | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 7:33 | 125 ml | Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters | |
| LMR230914-N-1 | Mala Ramp | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 7:57 | 125 ml | Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters | |
| LPS230914-N-1 | Papalaua St. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 8:19 | 125 ml | Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters | |
| LLH230914-N-1 | Lahaina Harbor | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 8:45 | 125 ml | Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters | |
| PFF230914-N-1 | 505 Front St | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 9:10 | 125 ml | Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters | |
| PLH230914-N-1 | Lindsey Hale | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 9:35 | 125 ml | Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters | |
| PLT230914-N-1 | Lahaina Town | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 9:50 | 125 ml | Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters | |

| | | | | | | | |
|-----------|--|--------------------------|--------------------------|--|--------|--|--|
| Sediments | | | | | | | |
| | | <input type="checkbox"/> | <input type="checkbox"/> | | 500 ml | | |
| | | <input type="checkbox"/> | <input type="checkbox"/> | | 500 ml | | |
| | | <input type="checkbox"/> | <input type="checkbox"/> | | 500 ml | | |

Signature:  Print: Liz Yannell