**Manpower & Cost Estimates**

**K1 Water Disinfection Generator**

**Project Manager: Rodney herrington**

**David Kirby**

**Diego Chavez**

**University of New Mexico**

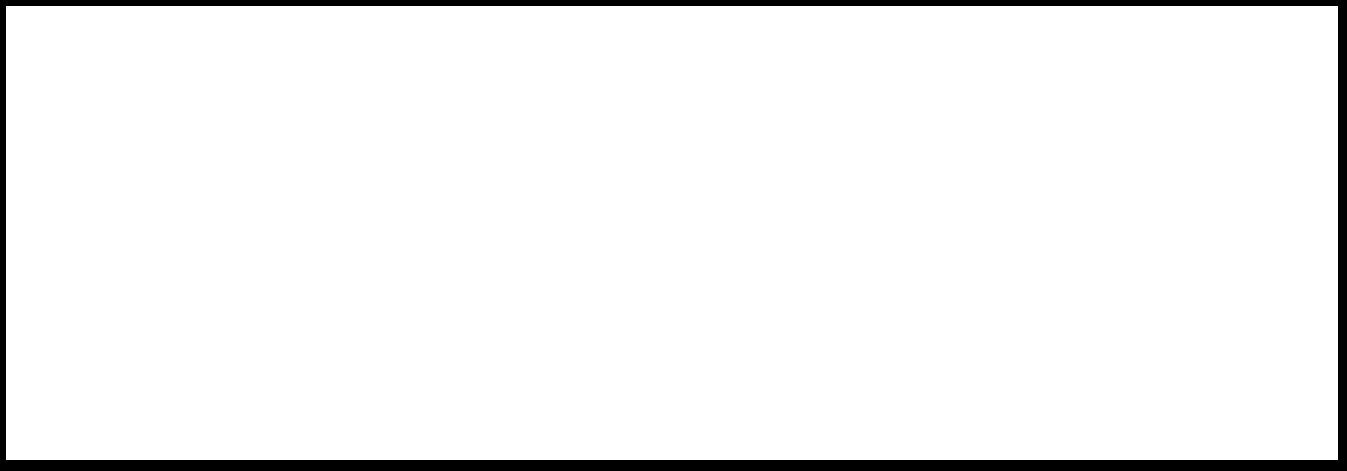
**School of Engineering**

**Aqua Research**

**5601 Midway Park Pl Ne**

**Albuquerque, Nm 87109**

**10/10/19**



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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | Electrical Computer  Engineer Engineer | | **TOTAL** | | | | |  |  |
|  |  |  |  | Unburdened Hourly Rate | | | | $34 | $40 |  | |  |  |  |  |  |
|  | **Task** | | | | | |  | **Hours Required** | |  |  |  |  |  |  |  |
|  | Project Definition | | | | | |  | 80 | 80 | 10 | $11,840.00 | | | |  |  |
|  | Functional Specification | | | | | | | 25 | 25 |  | $3,700.00 | | | |  |  |
|  | Implementation | | | | | |  | 20 | 20 |  | $2,960.00 | | | |  |  |
|  | Test Plan | | | | | |  | 60 | 60 |  | $8,880.00 | | | |  |  |
|  | Prototype Assembly | | | | | |  | 25 | 25 |  | $3,700.00 | | | |  |  |
|  |  | | | | | |  |  |  |  |  | | |  |  |  |
|  |  |  |  |  |  | Total Unburdened Cost | |  |  |  | $41,440.00 | | | |  |  |
|  |  |  |  | **Total Burdened (50%) Cost** | | | |  |  |  | **$82,880.00** | | | |  |  |
|  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | MATERIALS COSTS | |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Task |  | Materials |  |  | Cost | |  | | |  |
|  |  |  |  | Reference | | | (BOOK) Exploring BeagleBone: Tools and Techniques for Building with Embedded Linux. 2nd edition. | | |  | $25.19 |  |  |  |  |  |
|  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | **Total** |  |  |  | **$25.19** |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | **EQUIPMENT COSTS** | |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Task |  | Equipment | Type |  | Cost | | |  | |  |
|  |  |  | Prototype | | | | Beaglebone Controller | | Purchase |  | $269.95 | |  |  |  |  |
|  |  |  |  |  |  |  |  | |  |  | $15.80 | |  |  |  |  |
|  |  |  |  |  |  |  | 2xUSBs |  | Purchase |  |  |  |  |  |
|  |  |  |  |  |  |  | HDMI | | Purchase |  | $5.24 | |  |  |  |  |
|  |  |  |  |  |  |  | Ethernet port | | Purchase |  | $3.21 | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | |  |  |  | |  |  |  |  |
|  |  |  |  |  |  | **TOTAL** |  |  |  |  | **$294.20** | |  |  |  |  |
|  |  |  |  |  |  |  |  | | | |  |  |  |  |  |  |
|  |  |  |  |  |  |  | K1 Water Disinfection Generator Manpower & Cost Summary | | | |  |  |  |  |  |  |
|  |  |  |  |  |  | Cost Category | |  | Estimated Cost | |  |  |  |  |  |  |
|  |  |  |  |  |  | Burdened Labor | |  | $82,880 | |  |  |  |  |  |  |
|  |  |  |  |  |  | Materials |  |  | $25.19 | |  |  |  |  |  |  |
|  |  |  |  |  |  | Equipment | |  | $294.20 | |  |  |  |  |  |  |
|  |  |  |  |  |  | Total Estimated Project Cost | | | **$83,199.39** | |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

