

# COMPARISON STUDY SUMMARY: EMTECHNOLOGIES R2S vs. Mattson/Garvin STA

## EMTECHNOLOGIES R2S vs. Mattson/Garvin STA

Final Results Date Sampled: 4/20/98 Sampling Area: Unclassified Corridor

Run#	CFU/Sampling Method		CFU Difference	%Difference
	STA	R2S		
1	11	8		
2	6	11		
3	10	10		
4	54	57		
5	10	14		
6	29	26		
7	9	18		
<b>Total</b>	<b>129</b>	<b>144</b>	<b>-15</b>	<b>10.42</b>

- Notes:
- Sample period of 60-minutes per run; equivalent to 60 cubic feet or 1.71 cubic meters of air sampled.
  - R2S tested to have 10.42% more recovery with 15 additional CFU recovered during these runs.
  - Throats of STA and R2S were at same height for runs 2-7
  - R2S was on left side, STA on right side of cart for Runs 1-4 and switched for Runs 5-7

Final Results Date Sampled: 4/28/98 Sampling Area: Unclassified Corridor

Time Sampled	Location on Cart	Run #	CFU/Sampling Method		CFU Difference	%Difference
			STA	R2S		
1010-1045	Left	1	35	42		
1050-1125	Right	2	25	34		
1125-1200	Left	3	29	29		
1200-1235	Right	4	14	13		
1235-1310	Left	5	9	12		
1315-1350	Right	6	33	40		
1358-1433	Left	7	23	21		
1440-1515	Right	8	18	27		
1515-1550	Left	9	27	23		
<b>Total</b>		<b>CFU</b>	<b>213</b>	<b>241</b>	<b>-28</b>	<b>11.62</b>

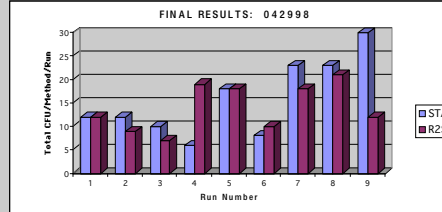
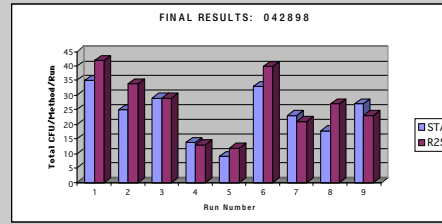
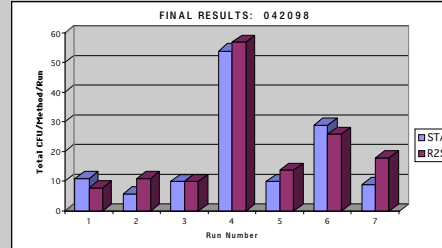
- Notes:
- Sampling period of 35 minutes per run; equivalent to 35 cubic feet or 1 cubic meter of air sampled
  - R2S tested to have 11.62% more recovery with 28 additional CFU recovered during these runs.

Final Results Date Sampled: 4/29/98 Sampling Area: Unclassified Corridor

Time Sampled	Location on Cart	Run #	CFU/Sampling Method		CFU Difference	%Difference
			STA	R2S		
0940-1015	Left	1	12	12		
1020-1055	Right	2	12	9		
1100-1135	Left	3	10	7		
1145-1220	Right	4	6	19		
1248-1323	Left	5	18	18		
1325-1400	Right	6	8	10		
1400-1435	Left	7	23	18		
1445-1520	Right	8	23	21		
1520-1555	Left	9	30	12		
<b>Total</b>		<b>CFU</b>	<b>142</b>	<b>126</b>	<b>16</b>	<b>-12.70</b>

- Notes:
- Sampling period of 35 minutes per run; equivalent to 35 cubic feet or 1 cubic meter of air sampled
  - STA tested to have 12.70% more recovery with 16 additional CFU recovered during these runs.

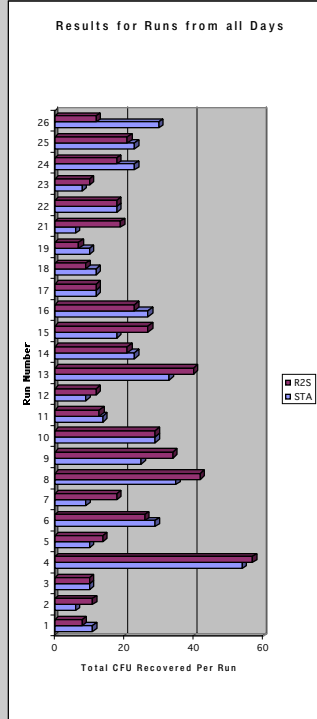
## EMTECHNOLOGIES R2S vs. Mattson/Garvin STA



## EMTECHNOLOGIES R2S vs. Mattson/Garvin STA

Final Results of all Runs from all Days

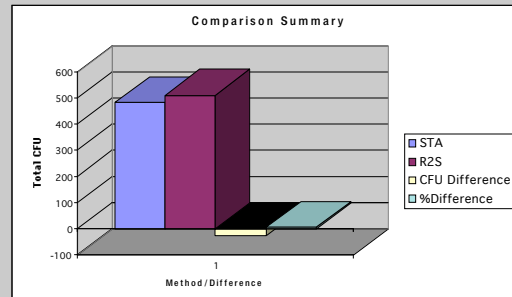
Run #	CFU/Sampling Method	
	STA	R2S
01	11	8
02	6	11
03	10	10
04	54	57
05	10	14
06	29	26
07	9	18
08	35	42
09	25	34
10	29	29
11	14	13
12	9	12
13	33	40
14	23	21
15	18	27
16	27	23
17	12	12
18	12	9
19	10	7
20	6	19
21	18	18
22	9	10
23	23	18
24	23	18
25	23	21
26	30	12



## EMTECHNOLOGIES R2S vs. Mattson/Garvin STA

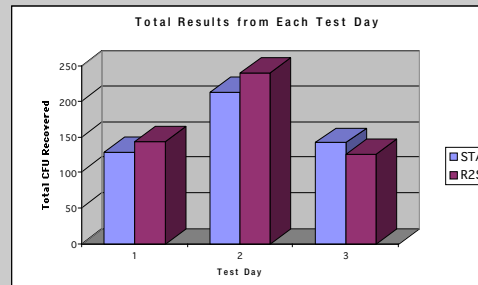
Results Summary for all Days & Runs

CFU/Sampling Method		CFU Difference	%Difference
STA	R2S		
<b>484</b>	<b>511</b>	<b>-27</b>	<b>5.28</b>

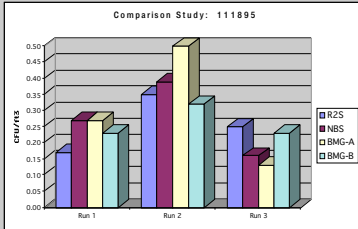
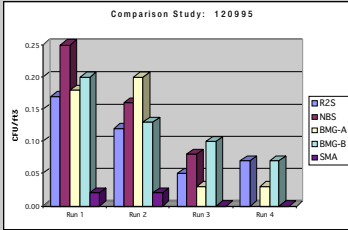
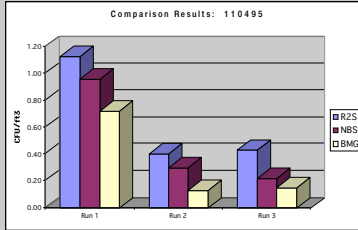
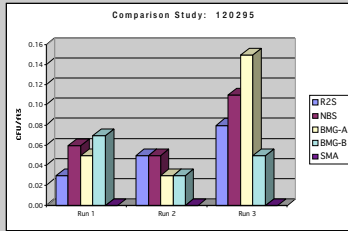
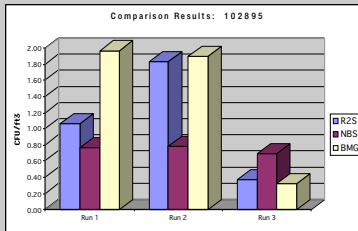


- Notes:
- R2S tested to have 5.28% greater recovery with 27 more CFU recovered over the three days of testing.
  - A total volume of 1050 Cubic feet or 30 Cubic meters of air was sampled over the 3 day test.

Test Date	STA	R2S
Day 1	42098	129
Day 2	42898	213
Day 3	42998	142



# COMPARISON STUDY SUMMARY: EMT R2S, BMG STA, NBS STA, VELTECH SMA



**Abbreviation Key for Samplers Tested**

R2S / EMT Remote-Slit-Sampler  
 NBS / New Brunswick STA  
 BMG (A & B) / Barramundi Corp. Mattson/ Garvin Air Sampler (STA)  
 SMA / Veltech Sterilizable Microbial Atrium

Method	Total Counts	Total Ft <sup>2</sup>	Total CFU/Ft <sup>3</sup>
R2S	98	90	1.09
BMG	126	90	1.4
NBS	86	113	0.76

Method	Total Counts	Total Ft <sup>2</sup>	Total CFU/Ft <sup>3</sup>
R2S	118	180	0.66
BMG	60	180	0.33
NBS	157	318	0.49

Method	Total Counts	Total Ft <sup>2</sup>	Total CFU/Ft <sup>3</sup>
R2S	46	180	0.26
NBS	87	318	0.27
BMG-A	54	180	0.30
BMG-B	47	180	0.26
BMG-Total	101	360	0.28

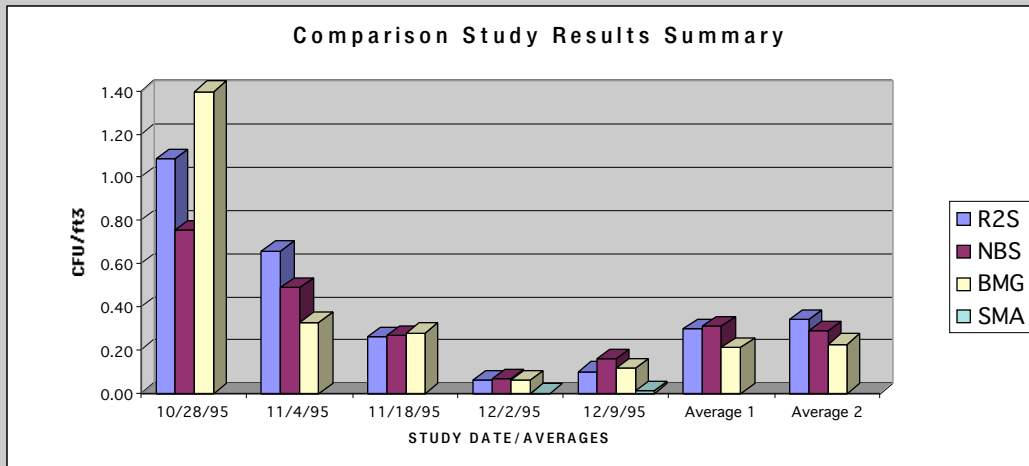
Method	Total Counts	Total Ft <sup>2</sup>	Total CFU/Ft <sup>3</sup>
R2S	10	180	0.06
NBS	23	318	0.07
BMG-A	14	180	0.08
BMG-B	9	180	0.05
SMA	0	180	0.00
ASP	0	NA	NA
BMG-Total	23	360	0.06

Method	Total Counts	Total Ft <sup>2</sup>	Total CFU/Ft <sup>3</sup>
R2S	24	240	0.10
NBS	52	318	0.16
BMG-A	27	240	0.11
BMG-B	30	240	0.13
SMA	2	240	0.01
ASP	6	NA	NA
BMG-Total	57	480	0.12

Method	Total Counts	Total Ft <sup>2</sup>	Total CFU/Ft <sup>3</sup>
R2S	188	600	0.30
BMG	218	1020	0.21
NBS	296	954	0.31

Method	Total Counts	Total Ft <sup>2</sup>	Total CFU/Ft <sup>3</sup>
R2S	296	870	0.34
BMG	367	1631	0.23
NBS	405	1385	0.29

Method	10/28/95	11/4/95	11/18/95	12/2/95	12/9/95	Average 1	Average 2
R2S	1.09	0.66	0.26	0.06	0.10	0.30	0.34
NBS	0.76	0.49	0.27	0.07	0.16	0.31	0.29
BMG	1.40	0.33	0.28	0.06	0.12	0.21	0.23
SMA				0.00	0.01		



**NOTES:**

- R2S** Daily Results from individual unit.
- BMG** Daily results from individual unit or combined results from two (2) units.
- NBS** Daily results from individual unit.
- SMA** Daily results from individual unit/testing of SMA only performed on two dates.
- Average 1** Average results of all days of testing with High/Low Day Results Discounted
- Average 2** Average results of all days of testing