CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1996

DateRun: 09/18/1996

Experimenters: Jay Jankauskas

ClientType: Biomedical Device Manufacturer

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Part

Contaminants:

Cleaning Methods:

Analytical Methods: OSEE

Purpose: OSEE results on alcohol cleaned parts

Experimental Procedure:

Results: I just finished evaluating the alcohol cleaned parts that you sent to me. The results as shown on the following page vary somewhat from part to part:

11 Fr. Spring- The alcohol did remove a good amount of the contamination, but it still does not look as good as the vapor degreased part. Data points were consistent with a low standard deviation.

J Pins- Looked like the alcohol soak cleaned better than the vapor degreaser. Data scatter was very high (notice the two readings in the low 100's).

Impeller Shaft- The shafts cleaned with alcohol after passivation came out with lower readings than parts that were only passivated (similar trend to the parts just alcohol soaked). As I mentioned before I would like to perform some FTIR readings on these parts. The software we need should be in next week (sorry about the delay).

Short Pins- Too small to obtain readings on the OSEE. I will use the FTIR to evaluate these when we get the necessary software.

OSEE Results For C.R. Bard Inc.										
Part #	1.01E+08				230056-0000			895-0019		
Lot #	13020707				13021720			3019101		
Desc.	1/8 Precision Ball				Impeller Plates			11 Fr. Stylet		
Status	Dirty	Vap Degr	IPA Soak	Dirty	Vap Degr	Alc. s&w	Alc. soak	Dirty	Vap Degr	
	77	95	90	272	343	970	446	198	197	
	63	111	87	327	485	755	416	208	213	
	84	112	104	385	511	904	563	169	210	
	70	113	102	270	397	678	506	215	202	
	98	120	101	214	402	512	590	152	194	
	51	101	85	248	553	734	609	141	202	
	69	117	96	281	468	850	848	137	198	
	79	103	93	267	375	494	516	124	205	
		107	91	263	668	967		153	191	
		106		242	387	969		136	208	
Average	73.88	109.00	94.75	276.90	458.90	783.30	561.75	163.30	202.00	
Std	14.15	8.54	7.17	47.82	99.31	180.65	133.53	32.69	7.12	
Part #		868-0001		868-0002				23006000		
Lot #		4161103						5318102		
Desc.		11 Fr. Spring		9 Fr. Spring				Impeller Shaft		
Status	Dirty	Vap Degr	Alc. Soak	Dirty	Dirty	Vap Degr	Pass	Pas & Alc	Alc. soak	Alc. s&w
	125	138	136	256	158	194	138	158	83	105
	118	155	146	288	151	198	173	157	121	88
	114	157	157	302	87	182	140	167	115	75

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	121	198	156	258	144	184	153	124	114	74
	111	165	142	234	133	203	138	124	108	83
	117	157	149	218	158	203	217	120	121	103
	109	255	139	181	109	190	154	140	118	87
	130	204	133	227	164	182	188	141	118	88
	124	186	147	206	178	196	167	123		
	130	156	152	223	127	181				
Average	119.90	177.10	145.7	239.30	140.90	191.30	163.11	139.33	112.25	87.88
Std	7.40	34.52	8.17	37.03	27.46	8.71	26.50	17.82	12.56	11.37

Summary:

Conclusion: