CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	1996
DateRun:	09/04/1996
Experimenters:	Jay Jankauskas
ClientType:	Biomedical Device Manufacturer
ProjectNumber:	Project #1
Substrates:	Stainless Steel
PartType:	Part
Contaminants:	
Cleaning Methods:	
Analytical Methods:	OSEE
Purpose:	More analysis on supplied partr
Experimental Procedure:	

Results:

Reason: OSEE results on alcohol cleaned parts.
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:

1/8 Precision Ball- Didn't appear to be quite as clean as the vapor degreased parts, but was pretty close.
Impeller Plates- The alcohol soak cleaned better than the vapor degreaser, the soak and wipe appeared to be excellent. I still noticed some white residue similar to the vapor degreased impeller plates, but this time it was not nearly as noticeable.
Impeller Shafts- Appears that the alcohol does not clean the impeller shafts nearly as good as the vapor degreaser (the alcohol cleaned parts got readings lower than the dirty parts). I also noticed what appeared to be dark and light colored residues when I examined the parts at 100x magnification. I think we might want to do a solvent extraction examined with FTIR to double check these results. If you have any questions, don't hesitate to contact me.

OSEE Results For C.R. Bard Inc.												
Part #		101446000			230056-0000			895-0019			102002	
Lot #		13020707			13021720			3019101			23086	
Desc.	1/8 Precision Ball				Impeller Plates			11 Fr. Stylet			J Pins	
Status	Dirty	Vap Degr	IPA Soak	Dirty	Vap Degr	Alc. s&w	Alc. soak	Dirty	Vap Degr	Dirty	Vap Degr	Alc. soak
	77	95	90	272	343	970	446	198	197	43	147	231
	63	111	87	327	485	755	416	208	213	76	159	158
	84	112	104	385	511	904	563	169	210	61	124	106
	70	113	102	270	397	678	506	215	202	76	132	269
	98	120	101	214	402	512	590	152	194	108	136	262
	51	101	85	248	553	734	609	141	202	122	149	119
	69	117	96	281	468	850	848	137	198	99	74	
	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	83.57	131.57	190.8
Std	14.15	8.54	7.17	47.82	99.31	180.65	133.53	32.69	7.12	27.63	27.95	72.42
Part #		868-0001		868-0002			23006000					23006
Lot #		4161103					5318102					53181
Desc.	11 Fr. Spring			9 Fr. Spring			Impeller Shaft					Impell
Status	Dirty	Vap Degr	Alc.Soak	Dirty	Dirty	Vap Degr	Pass	Pas & Alc	Alc. soak	Alc. s&w	dirty	Vap De
	125	138	136	256	158	194	138	158	83	105	2	196
	118	155	146	288	151	198	173	157	121	88	22	211
	114	157	157	302	87	182	140	167	115	75	20	177
	121	198	156	258	144	184	153	124	114	74	18	241

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	111	165	142	234	133	203	138	124	108	83	15	265
	117	157	149	218	158	203	217	120	121	103	7	198
	109	255	139	181	109	190	154	140	118	87	40	154
	130	204	133	227	164	182	188	141	118	88	5	143
	124	186	147	206	178	196	167	123				147
	130	156	152	223	127	181						
Average	119.90	177.10	145.70	239.30	140.90	191.30	163.11	139.33	112.25	87.88	16.13	192.4
Std	7.40	34.52	8.17	37.03	27.46	8.71	26.50	17.82	12.56	11.37	12.14	42.18

Summary:

Conclusion: