CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	1999
DateRun:	02/10/1999
Experimenters:	Jason Marshall
ClientType:	Navy Depot
ProjectNumber:	Project #1
Substrates:	Alloys, Steel
PartType:	Coupon
Contaminants:	None
Cleaning Methods:	
Analytical Methods:	
Purpose:	Request for information
Experimental Procedure:	SUBSTRATE MATERIAL: Cadmium and High Strength Steels QUESTION ASKED: Do you have a list of aqueous cleaners that pass (or for that matter, fail) the hydrogen embrittlement test of cadmium plated and high strength steels?
Results:	RESPONSE/ANSWER: After searching the Laboratory's database of cleaners and technical data sheets, the following table is a listing of some cleaners that meet standards related to your request. If you would like more information on any of these products, contact the lab at (978)934-3133.

Table 1. Listing of Aqueous Cleaners and Standards Met

Company Name	Product Trade Name	Classification	Standards
Buckeye International	Aero Master	Alkaline Aqueous	AMS 1530
			AMS 1533 A
			AMS 1526 B
			AMS 1550 A
			Douglas CSD #1
			Boeing D6-17487
Buckeye International	Shopmaster	Alkaline Aqueous	ASTM F-483
			ASTM F-485
			ASTM F-502
			ASTM F-519
			ASTM F-1110-9
By Pas Industrial Strength	#2800 TM	Alkaline Aqueous	Douglas CSD #1
			AMS 1526 B
			Boeing D6-17487
Carroll Company	Blue Gold	Alkaline Aqueous	ASTM F-482
			ASTM F-495
			ARP 1755 A
Chrisal USA	Super CMF 240	Alkaline Aqueous	Douglas
			Boeing

CLEANING LABORATORY EVALUATION SUMMARY

Fine Organic Corporation	FO 606	Alkaline Aqueous	Douglas CSD #1
			MIL-R-83936 B
			NSN 8010-01-374-4336
Gemtek Products	SC 1000	Non-ionic Surfactant System	MIL-87936-A
			MIL-C-44361-613
			Douglas CSD #1
Gemtek Products	SC-Aircraft		MIL-87936-A
			MIL-PRF-85560 C
			MIL-87937 C
			Boeing D6-17487
			Douglas CSD #1
			AMS 1526 B
Innovative Organics Inc	Amberclean L 12	Alkaline Aqueous	Boing BAC-5763
International Products Corporation	MICRO 90	Alkaline Aqueous	ASTM D121/122
LPS Laboratories Inc	LPS Precision Clean	Alkaline Aqueous	Douglas CSD #1
			AMS 1526 A
Mirachem Corporation	Mirachem 500	Alkaline Aqueous	Douglas CSD #1
			Boeing D6-17487
			ASTM F-945
			ASTM F-483
			ARP 1755-B
			AMS 1526 B
Oakite Products	InproClean 3800	Alkaline Aqueous	Lawrence Hydrogen Embrittlement Test
			Douglas Stressed Ring Test
			ASTM F-945
Quaker Chemical Corporation	Formula 697-UT	Alkaline Aqueous	ASTM F-945
			P & W Compatibility Test

CLEANING LABORATORY EVALUATION SUMMARY

			P & W Stock Loss Test
			ARP 1755 B
Star Cleaning Miracle Inc	Star 75	Alkaline Aqueous	Douglas CSD #1
			AMS 1526 B
			Boeing D6-17487
Turco Products Inc	Turco 5948 DPM	Alkaline Aqueous	Douglas CSD #1
WR Grace	Daraclean 238	Alkaline Aqueous	Douglas CSD #1
			ASTM F-502
			ASTM F-485
			ASTM F-519
			ASTM F-1110
			ASTM F-483
			ASTM F-1111
			ASTM F-945
			ASTM F-484
			AMS 1526 B
			ARP 1755 B
WR Grace	Daraclean 282	Alkaline Aqueous	Douglas CSD #1
			Boeing BAC 5763
			ATM F-1110
			ARP 1512
			ARP 1511
			ARP 1795 A
			ASTM F-502
			ASTM F-519 1C
			ASTM F-484
			ASTM F-945
			ASTM F-485
			P&W ALLOY Compatibility
			AMS 1526 A
			AMS 1537
			MIL-C-8-7936 A
			ARP 1755 A

Summary:

Conclusion: