CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2001

DateRun: 12/02/2001

Experimenters: Carole LeBlanc, Jason Marshall

ClientType: Manufacturing

ProjectNumber: Project #1

Substrates: Alloys, Copper, Gold, Nickel, Other

PartType: Coupon

Contaminants: Cutting/Tapping Fluids, Lubricating/Lapping Oils, Oil

Cleaning Methods:

Analytical Methods:

Purpose: Run database search for alternatives

Experimental Procedure: An electronic search of SSL's databases of cleaning trials on projects similar to clients situation.

Results:

CompanyName	ProductName	ClassificationDescription	SubstrateDescription	Trials
Abatement Technology	Bio Might 100	Alkaline Aqueous	Copper	4
Alconox, Inc.	Detergent 8	Alkaline Aqueous	Copper	8
Alconox, Inc.	Detergent 8	Alkaline Aqueous	Nickel	8
Ardrox	6333	Caustic	Nickel	4
Brulin Corporation	Formula 815 GD	Alkaline Aqueous	Copper	2
By*Pas & Star Cleaning Products	Star Cleaning Miracle # 50	Alkaline Aqueous	Nickel	2
Calgon Corporation	AK 6215	Alkaline Aqueous	Copper	12
Carroll Company	Blue Gold Industrial Cleaner	Alkaline Aqueous	Nickel	4
Chemical Technologies	Green Thunder	Alkaline Aqueous	Copper	6
Chemical Technologies	Green Thunder	Alkaline Aqueous	Nickel	6
Cleansafe Solutions	Solution 2000	Alkaline Aqueous	Copper	8
Cleansafe Solutions	Solution 2000	Alkaline Aqueous	Nickel	8
CRC Industries	Complex Blue	Semi-Aqueous	Copper	4
CRC Industries	Complex Blue	Semi-Aqueous	Nickel	4
Ecolink	Positron	Organic	Copper	2
Ecolink	Positron	Organic	Nickel	2
Ensolve Biosystems, Inc.	Grease Feast Plus	Enzymatic/Microbial	Copper	6
Ensolve Biosystems, Inc.	Grease Feast Plus	Enzymatic/Microbial	Nickel	6
Ensolve Biosystems, Inc.	Grease Feast Plus	Neutral Aqueous	Copper	6
Ensolve Biosystems, Inc.	Grease Feast Plus	Neutral Aqueous	Nickel	6
Environmental Services	TASC	Alkaline Aqueous	Copper	2

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Envirosolutions, Inc.	Bio T 200 A	Terpene	Copper	4
Envirosolutions, Inc.	Bio T 200 A	Terpene	Nickel	4
Envirosolutions, Inc.	Bio T 300 B	Semi-Aqueous	Copper	2
Envirosolutions, Inc.	Bio T 300 B	Semi-Aqueous	Nickel	2
Envirosolutions, Inc.	Bio T 300 B	Terpene	Copper	2
Envirosolutions, Inc.	Bio T 300 B	Terpene	Nickel	2
Envirosolutions, Inc.	Bio T Parts Washer NR	Terpene	Copper	6
Envirosolutions, Inc.	Bio T Parts Washer NR	Terpene	Nickel	6
Envirosolutions, Inc.	Green Stuff (6325)	Alkaline Aqueous	Copper	6
Envirosolutions, Inc.	Green Stuff (6325)	Alkaline Aqueous	Nickel	6
Finger Lakes Chemicals	Resineater	Terpene	Copper	6
Finger Lakes Chemicals	Resineater	Terpene	Nickel	6
Gemtek Products	SC Supersolve	Organic	Copper	2
General Chemical Corporation	Aluminex 5834	Alkaline Aqueous	Copper	2
General Chemical Corporation	Aluminex 5834	Alkaline Aqueous	Nickel	2
General Chemical Corporation	Aquaclean 4874	Caustic	Copper	2
Heatbath Corporation	Power Wash Cleaner BCR	Alkaline Aqueous	Copper	12
Heatbath Corporation	Uni Kleen 10	Powder Detergent	Copper	4
Hubbard Hall Inc	Aquasonic 201	Alkaline Aqueous	Copper	2
Hubbard Hall Inc	Aquasonic 201	Alkaline Aqueous	Nickel	2
Hubbard Hall Inc	Ram Charger	Alkaline Aqueous	Copper	2
Hubbard Hall Inc	Ram Charger	Alkaline Aqueous	Nickel	2
Hurri Safe	Hot Immersion Degreaser	Alkaline Aqueous	Copper	2
Hurri Safe	Hot Immersion Degreaser	Alkaline Aqueous	Nickel	2
Inland Technologies Inc	Citrasafe	Terpene	Copper	4
Innovative Organics Inc	Amber Clean SC 11	Neutral Aqueous	Copper	2
Innovative Organics Inc	Amber Clean SC 11	Neutral Aqueous	Nickel	2
Innovative Organics Inc	Amberclean L 12	Alkaline Aqueous	Copper	10
Innovative Organics Inc	Amberclean L 12	Alkaline Aqueous	Nickel	10
International Products Corp	LF 2100	Alkaline Aqueous	Copper	1

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International Products Corp	LF 2100	Alkaline Aqueous	Nickel	1
International Products Corp	Micro 90	Alkaline Aqueous	Copper	2
International Products Corp	Micro 90	Alkaline Aqueous	Nickel	2
ITW Fluid Products Group	Accu-Clean	Alkaline Aqueous	Copper	10
ITW Fluid Products Group	Accu-Clean	Alkaline Aqueous	Nickel	12
JDI, Inc.	Mirachem 500 RTU	Alkaline Aqueous	Copper	8
Kleer Flo Company	Grease Off 2	Alkaline Aqueous	Copper	2
Kleer Flo Company	Grease Off 2	Alkaline Aqueous	Nickel	2
Kyzen Corporation	Ionox FCR	Semi-Aqueous	Copper	4
Kyzen Corporation	Ionox FCR	Semi-Aqueous	Gold	2
Kyzen Corporation	Ionox FCR	Semi-Aqueous	Nickel	4
MacDermid	ND LF Supreme	Alkaline Aqueous	Nickel	4
Magnaflux	Zyglo Emulsifier ZR 10B	Neutral Aqueous	Nickel	4
Man Gill Chemical	Gillite 0650 CI	Alkaline Aqueous	Copper	2
Man Gill Chemical	Gillite 0650 CI	Alkaline Aqueous	Nickel	2
Man Gill Chemical	Gillite 1156	Powder Detergent	Copper	2
Mirachem Corporation	Mirachem 500	Alkaline Aqueous	Copper	12
Mirachem Corporation	Mirachem 500	Alkaline Aqueous	Nickel	12
New Pig Corporation	New Pig Degreaser	Semi-Aqueous	Copper	4
New Pig Corporation	New Pig Degreaser	Semi-Aqueous	Nickel	4
New Pig Corporation	New Pig Degreaser	Terpene	Copper	4
New Pig Corporation	New Pig Degreaser	Terpene	Nickel	4
North Atlantic Bio Industries	NAB 9000	Neutral Aqueous	Copper	2
North Atlantic Bio Industries	NAB 9000	Neutral Aqueous	Nickel	2
Oakite Products	Citradet	Semi-Aqueous	Copper	2
Oakite Products	Inproclean 2000	Alkaline Aqueous	Copper	2
Oakite Products	Inproclean 2500	Powder Detergent	Copper	6
Oakite Products	Inproclean 3800	Alkaline Aqueous	Copper	6
Oakite Products	Inproclean 4000 T	Organic	Copper	2
Oakite Products	Inproclean 4000 T	Terpene	Copper	2
Oakite Products	Oakite Low Heat Cleaner 1	Powder Detergent	Copper	4
Oakite Products	Okemclean	Caustic	Copper	2
	Natural Blue	Alkaline Aqueous	Copper	2

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Permatex Industrial Corporation				
Permatex Industrial Corporation	Natural Blue	Alkaline Aqueous	Nickel	2
Quaker Chemical	Formula 625 XL	Alkaline Aqueous	Copper	2
Quaker Chemical	Formula 625 XL	Alkaline Aqueous	Nickel	2
Safe Science	Safe Science Concrete/ Graffiti	Alkaline Aqueous	Copper	12
Safe Science	Safe Science Concrete/ Graffiti	Alkaline Aqueous	Nickel	12
Savogran	Dirtex Prepaint Cleaner	Alkaline Aqueous	Copper	8
Sky Products Co., Inc.	Cleaner #10	Alkaline Aqueous	Copper	4
Smart Sonic	440-R SMT Detergent	Alkaline Aqueous	Copper	2
Smart Sonic	440-R SMT Detergent	Alkaline Aqueous	Nickel	2
Solvent Kleene, Inc.	D-Greeze 1000	Petroleum Distillate	Copper	4
Texo Corporation	Texolite 1734 XL	Alkaline Aqueous	Copper	6
Texo Corporation	Texolite 1734 XL	Alkaline Aqueous	Nickel	6
Today & Beyond	Beyond-2001	Alkaline Aqueous	Copper	6
Today & Beyond	Beyond-2001	Alkaline Aqueous	Nickel	6
Today & Beyond	Beyond-2002	Alkaline Aqueous	Copper	6
Today & Beyond	Beyond-2002	Alkaline Aqueous	Nickel	6
Today & Beyond	Beyond-2003	Alkaline Aqueous	Copper	6
Today & Beyond	Beyond-2003	Alkaline Aqueous	Nickel	6
Today & Beyond	Beyond-2004	Alkaline Aqueous	Copper	6
Today & Beyond	Beyond-2004	Alkaline Aqueous	Nickel	6
Today & Beyond	Beyond-2005	Alkaline Aqueous	Copper	6
Today & Beyond	Beyond-2005	Alkaline Aqueous	Nickel	6
Tower Products, Inc	Tower 270 Cleaner Concentrate	Alkaline Aqueous	Nickel	2
Turco Products Inc	Turco 5948 DPM	Alkaline Aqueous	Copper	6
U.S. Polychem Corp.	Polyspray Jet 790 C	Caustic	Copper	2
U.S. Polychem Corp.	Polyspray Jet 790 C	Caustic	Nickel	2
U.S. Polychem Corp.	Polyspray Jet 790 P	Alkaline Aqueous	Nickel	6
Valtech Corporation	Valtron SP 2275	Neutral Aqueous	Nickel	8
W.R. Grace & Co.	Daraclean 200	Alkaline Aqueous	Copper	2

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W.R. Grace & Co.	Daraclean 200	Alkaline Aqueous	Nickel	2
W.R. Grace & Co.	Daraclean 212	Neutral Aqueous	Copper	4
W.R. Grace & Co.	Daraclean 212	Neutral Aqueous	Nickel	4
W.R. Grace & Co.	Daraclean 282	Alkaline Aqueous	Copper	6
W.R. Grace & Co.	Daraclean 282	Alkaline Aqueous	Nickel	6
Warren Chemical Co	Sea Wash 8	Neutral Aqueous	Copper	8
Warren Chemical Co	Sea Wash 8	Neutral Aqueous	Nickel	8
Watson Technical Associates	Watson Formula 7300	Alkaline Aqueous	Copper	4
Watson Technical Associates	Watson Formula 9000	Alkaline Aqueous	Copper	4
Westford Chemical Corporation	Biosolve	Neutral Aqueous	Copper	12
Westford Chemical Corporation	Biosolve	Neutral Aqueous	Nickel	12

Summary:

Conclusion: Cleaning projects vary from case-to-case. To identify a specific cleaning agent, testing with any of the above listed products should be performed. If you would like the SSL to perform this testing, please contact the lab at (978)934-3133 to arrange delivery of parts and samples of specific contaminants.