CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2000

DateRun: 02/28/2000

Experimenters: Jason Marshall

ClientType: City Government

ProjectNumber: Project #1

Substrates:

PartType: Coupon

Contaminants:

Cleaning Methods:

Analytical Methods:

Purpose: Information request

Experimental Procedure:

Results: I have sent you MSDSs and Technical data sheets on the products you requested as well as the reports for the corresponding SCL#s. (I couldn't find the information on Mirachem RTU, but I will continue to look.) The SCL# is the trial classification system used by the laboratory to identify specific trials performed at the Lab. A different SCL# represents a separate test and not a different product.

Terpenes are homocyclic hydrocarbons with a characteristic odor with low-volatility. They usually contain limonene (citrus based) or pinene (pine origins). The following is a list of pro's and con's for semi aqueous cleaners (of which terpenes are included).

Pro's	Con's
Excellent cleaning of difficult soils	Generally high initial costs
Little or no residue following rinsing	Not as widely demonstrated as aqueous or solvents
Neutral solutions will not etch metals	Some may be incompatible with plastics, aluminum or magnesium
Low surface tensions compared to water, allows for penetration into blind holes	Flammability; low flash point in some cleaners
Low vapor pressure when emulsified with water	Odors
Some are biodegradable with low toxicity	Discharge may have high BOD
Capable of high soil loading while still maintaining cleaning ability	High soil loading may make recycling of some cleaners difficult
No ozone depleting potential	Some contain significant concentrations of volatile organic compounds
Organic effluent may have fuel value	Higher number of waste streams to manage when compared to of aqueous solvent systems

Summary:

Conclusion: