CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	0
DateRun:	09/30/2026
Experimenters:	Alicia McCarthy, Amelia Wagner, Rachael Rososky
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Carpet
PartType:	Coupon
Contaminants:	Urine
Cleaning Methods:	
Analytical Methods:	Smell
Purpose:	To test the efficacy of EcoStrong Pet Stain & Odor Eliminator A, EcoStrong Pet Stain & Odor Eliminator B, EcoStrong Ecotech, and Nature's Miracle Stain & Odor Remover in removing bobcat urine malodor from carpet.
Experimental Procedure:	Clean carpet was cut into 13 2.5 in x 4 in rectangular strips. The bobcat urine was applied directly to the carpet. The carpets were aged for three days at ambient room temperature (~68 F). A panel of three lab technicians then blindly examined the odors to determine the baseline values of the 13 bottles; which included a control. The values of the control jar were periodically rechecked throughout the experiment for quality control purposes. After the initial malodor baseline values were obtained from a scale of 1-5. The ranking of malodor level is as follows: 1- being close to no smell of malodor to 5- being the worse malodor level. Each bottle was subjected to rounds of cleaning agent treatments and each panelist was used to assess malodor levels after each cycle of treatment. A cycle of treatment consists of 2 sprays of cleaning agent directly onto the carpet with a gentle rub against the carpet itself afterwards. Treatments of contaminated bottles are stopped after the 3rd cycle of treatment. An effective cleaner will have a malodor level of under 2 after the 3rd round of treatment. Then the malodor was allowed to sit overnight to determine if there was any change of malodor levels from an overnight sit.

Results:

Product	Jar	Number of sprays	Panelist 1	Panelist 2	Panelist 3	Jar Average	Average
EcoStrong Pet Stain & Odor Eliminator A	A1	Untreated	5	5	5	5.0	5.0
	A2		5	5	5	5.0	
	A3		5	5	5	5.0	
	A1	2 sprays	2.5	2.5	2	2.3	1.9
	A2		2	1.5	1.5	1.7	
	A3		1.5	2	2	1.8	
	A1	4 sprays	1	1.5	1.5	1.3	2.1
	A2		3	3.5	2	2.8	
	A3		1.5	2	3	2.2	
	A1	Overnight	2.5	3	3	2.8	3.6
	A2		4.5	3	5	4.2	
	A3		4.5	2.5	4.5	3.8	
	A1	6 Sprays	1	2.5	2	1.8	2.1
	A2		1	1	2	1.3	
	A3		3	3	3	3.0	
EcoStrong Pet Stain & Odor Eliminator B	B1	Untreated	5	5	5	5.0	5.0
	B2		5	5	5	5.0	
	B3		5	5	5	5.0	
	B1	2 Sprays	1.5	1.5	1.5	1.5	1.3
	B2		1	1	1.5	1.2	
	B3		1	1.5	1	1.2	
	B1	4 Sprays	2	2	1.5	1.8	1.8
	B2		1	1	2.5	1.5	
	B3		2.5	2.5	1.5	2.2	
	B1	Overnight	4	3.5	4	3.8	3.3
	B2		3.5	3.5	3.5	3.5	
	B3		3	2.5	2.5	2.7	

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	B1	6 Sprays	2	2	2	2.0	1.8
	B2		1	1.5	2	1.5	
	B3		2	2	2	2.0	
EcoStrong Ecotech	C1	Untreated	5	5	5	5.0	5.0
	C2		5	5	5	5.0	
	C3		5	5	5	5.0	
	C1	2 Sprays	2	2.5	1.5	2.0	2.4
	C2		2.5	3	4	3.2	
	C3		2.5	2.5	1.5	2.2	
	C1	4 Sprays	1	2.5	2.5	2.0	2.9
	C2		1.5	2.5	3.5	2.5	
	C3		4	4	4.5	4.2	
	C1	Overnight	5	4.5	4.5	4.7	4.8
	C2		4	5	5	4.7	
	C3		5	5	5	5.0	
	C1	6 Sprays	2.5	4	4.5	3.7	4.0
	C2		4	4.5	4.5	4.3	
	C3		3	4	5	4.0	
Nature's Miracle Stain & Odor Remover	D1	Untreated	5	5	5	5.0	5.0
	D2		5	5	5	5.0	
	D3		5	5	5	5.0	
	D1	2 Sprays	1	1	1	1.0	1.0
	D2		1	1	1	1.0	
	D3		1	1	1	1.0	
	D1	4 Sprays	1	2	1.5	1.5	1.4
	D2		2	2	1	1.7	
	D3		1.5	1	1	1.2	
	D1	Overnight	1.5	2	1.5	1.7	2.0
	D2		2	2.5	2.5	2.3	
	D3		2	2	2	2.0	
	D1	6 Sprays	2	1	1	1.3	1.4
	D2		1.5	1.5	1	1.3	
	D3		1.5	1.5	1.5	1.5	

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Summary:

Substrates:	Carpet				
Contaminants:	Urine				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
EcoStrong, LLC	EcoStrong Pet Stain & Odor Eliminator A	RTU	0.00	☐	Not effective
EcoStrong, LLC	EcoStrong Pet Stain & Odor Eliminator B	RTU	0.00	☑	Effective
EcoStrong, LLC	EcoStrong EcoTech	RTU	0.00	☐	Not effective
Nature's Miracle	Nature's Miracle Stain & Odor Remover	RTU	0.00	☑	

Conclusion:

The most effective of the 4 cleaning chemistries was the Nature's Miracle Stain & Odor Remover, followed by the EcoStrong Pet Stain & Odor Eliminator Formulation B. Malodor ratings increased slightly for all jars overnight. For some of the jars treated with the EcoStrong Ecotech cleaner, the malodor values were higher for the 3rd treatment round than the 2nd treatment round. This could be due to the smell of the cleaner and urine mixing to create a different malodor and/or the spray temporarily rewetting the urine and mobilizing the foul smelling compounds of the urine.