Lab Report

Customer: Sample **Date:** _____

Lab Report: _____ **By:** _____

Overview of Dust Bag(s)/Project Information

1) Bag Size & Design: This top loading filter bag was 148" long, had an approximately 8-3/4" wide flat (bag slit lengthwise during removal), a 2-3/4" separate cuff with a 9-3/4" long stainless steel mesh ground wire extension, a 5/8" wide 3-needle lap seam with stainless steel ground wire, and a standard disc bottom. The closest cell plate fit was 6.40" which was a loose fit. The media was an 18 oz/yd^2 unsupported, singed polyester felt.

2) Bag Quantity: 432 Bags (6 comp x 72 bags each)

3) Process/Project ID: TBD

4) Problem (per customer): Poor overall bag performance

5) Service Life of Sample: 4 months

6) Desired Bag Life: TBD

7) Desired Emission Rate: TBD

8) Special Notes: _____

SLY INC
TECHNOLOGY FOR A CLEAN ENVIRONMENT

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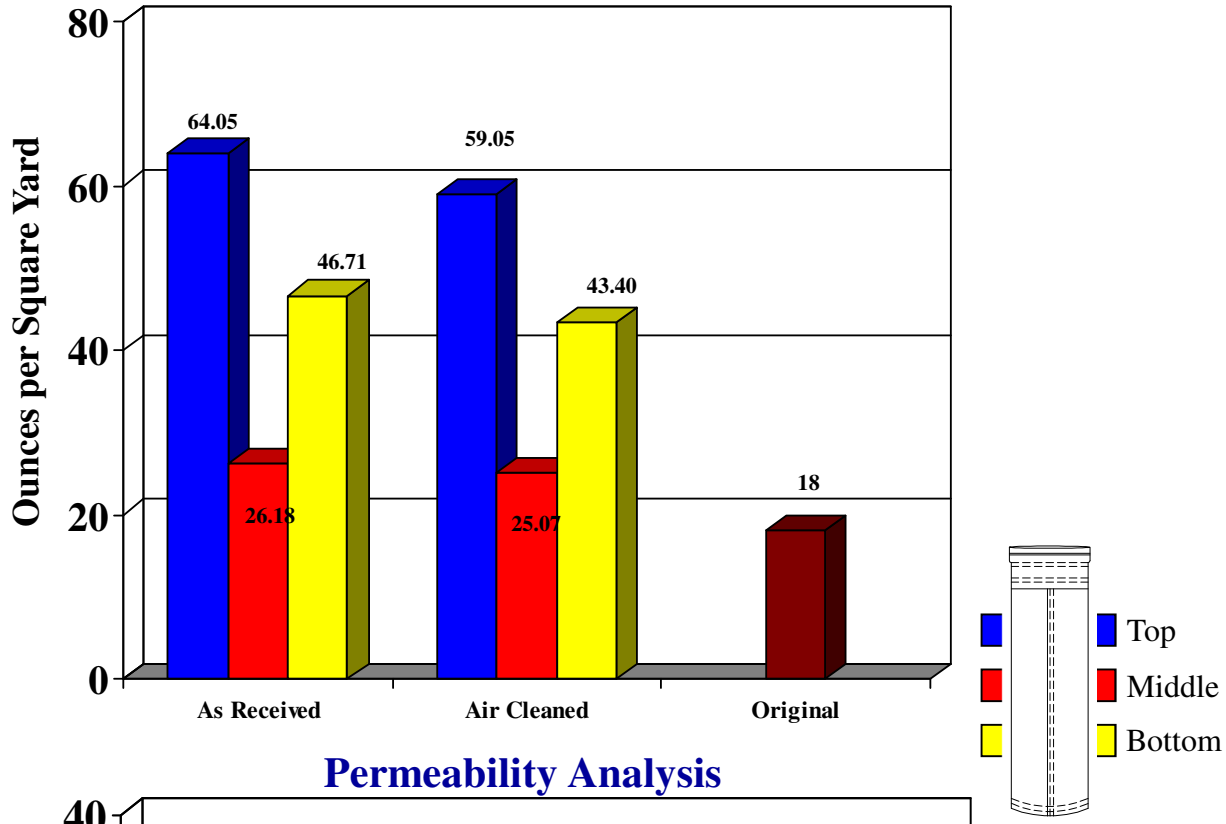
Weight Analysis



Permeability Analysis

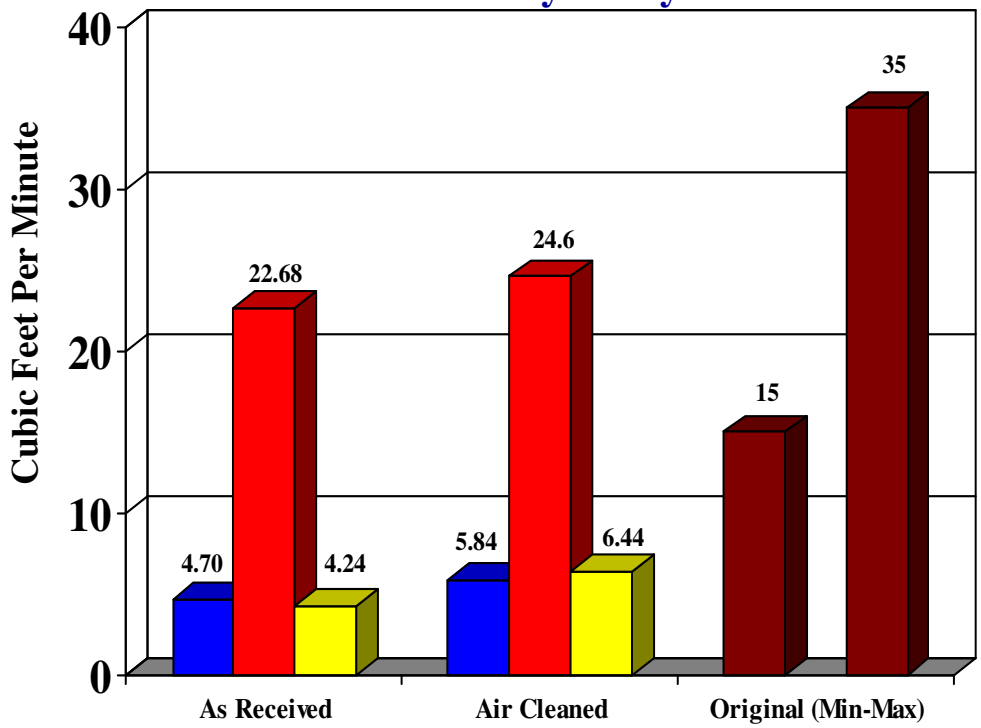
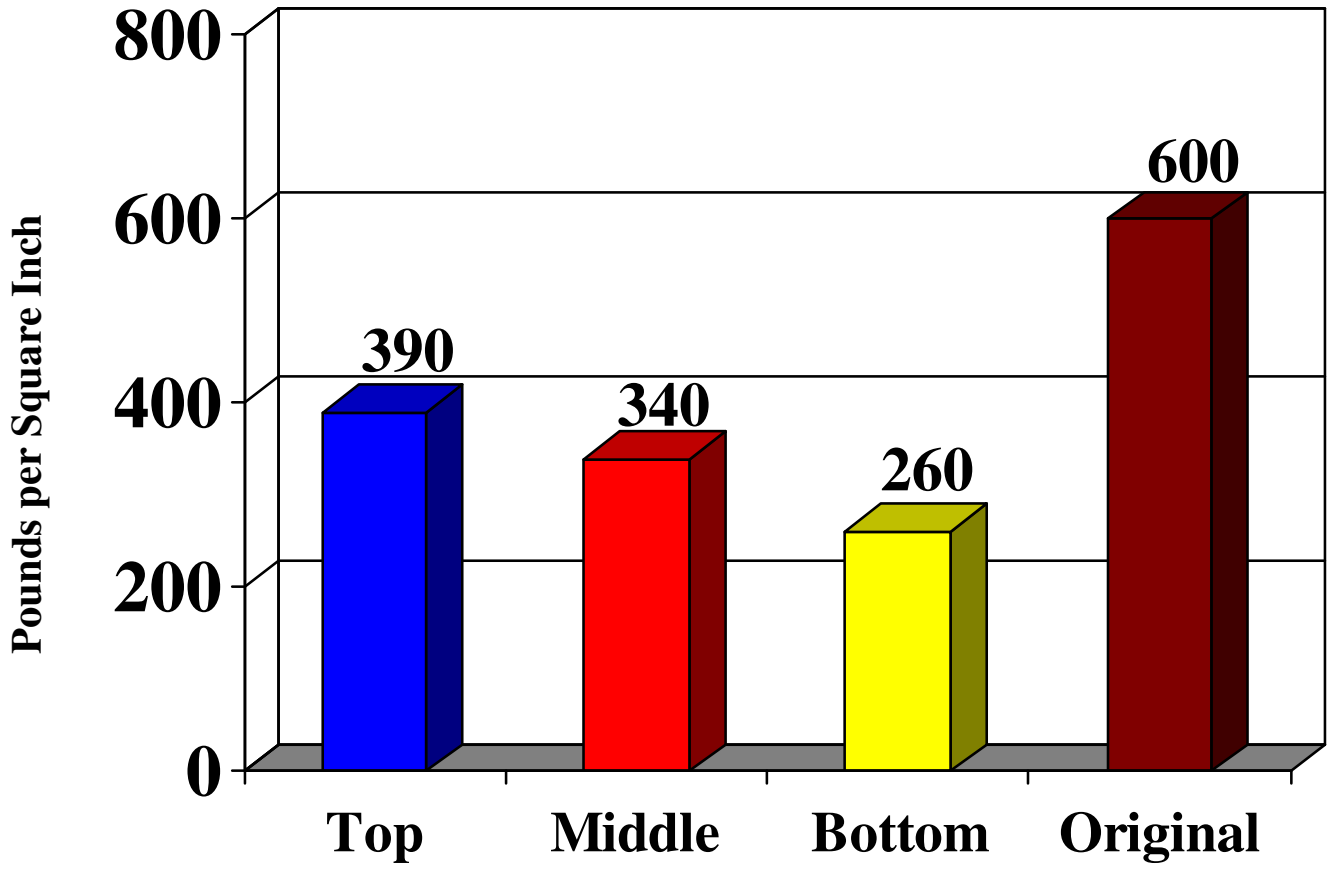


FIGURE # 1

Customer: _____ Date: _____

Lab Report: _____ By: _____

Strength Analysis
(Mullen Burst)



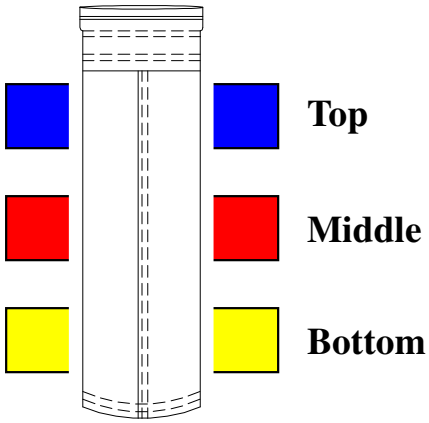


FIGURE # 2

Customer: _____ **Date:** _____

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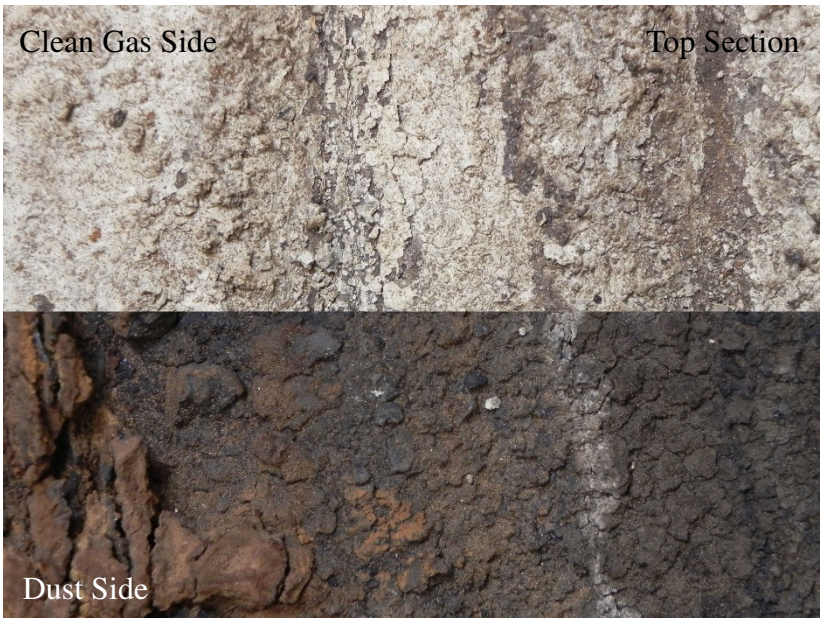
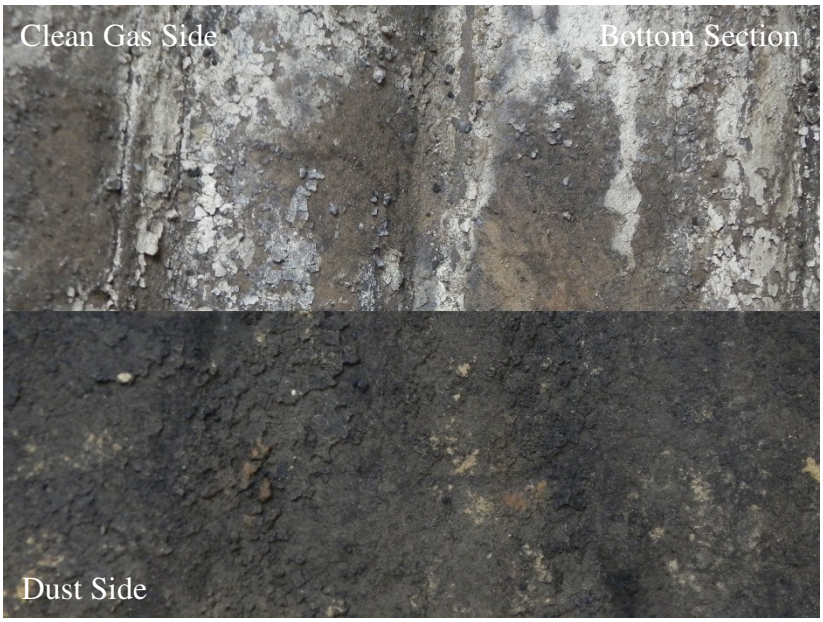


Text: Photograph # 1

Clean Gas Side vs. Dust Side view of the top section. Up to a 1" thick layer of hardened aggressively attached dust was present on the Dust Side (exterior) surface. A 1/8" thick layer of hardened aggressively attached dust was present on the Clean Gas Side (interior) surface. This photograph is also representative of the middle section of the filter bag.



Text: Photograph # 2

Clean Gas Side vs. Dust Side view of the bottom section. Up to an 1/8" thick layer of hardened aggressively attached dust was present on the Dust Side (exterior) surface. A 1/16" thick layer of hardened aggressively attached dust was present on the Clean Gas Side (interior) surface.

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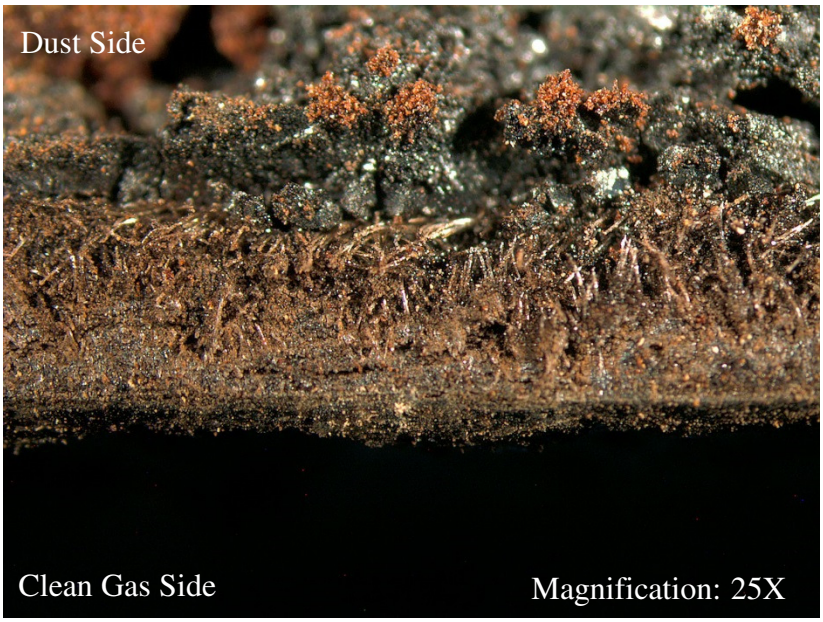
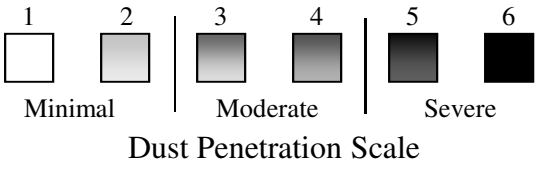
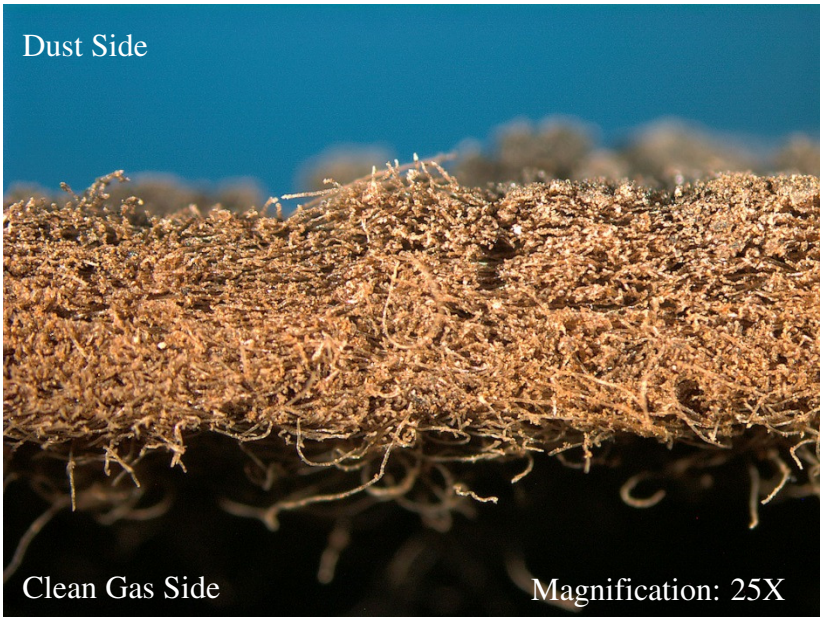


Text: Photograph # 3

Cross section view from the top of the bag.



Dust Penetration Scale

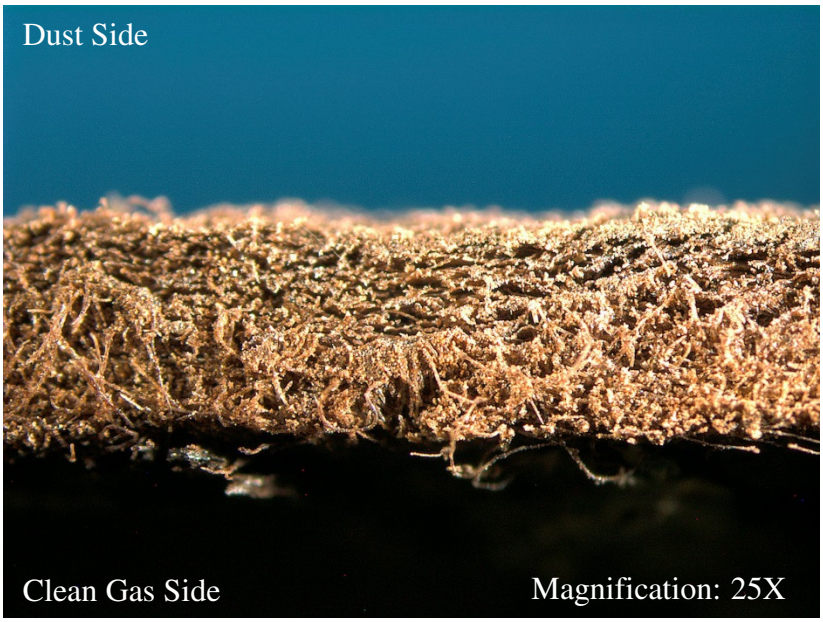


Text: Photograph # 4

Cross section view from the middle of the bag.

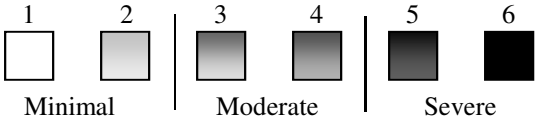
Customer: _____ **Date:** _____

Lab Report: _____ **By:** _____

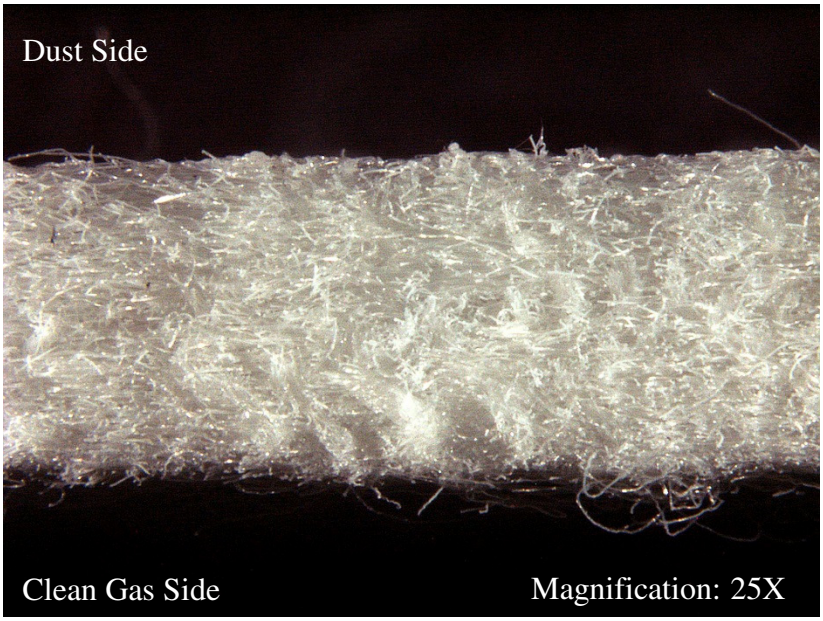


Text: Photograph # 5

Cross section view from the bottom of the bag.



Dust Penetration Scale



Text: Photograph # 6

Cross section view from a clean, unused sample of 18 oz/yd^2 unsupported, singed polyester felt for comparison against the used felt shown in Photographs #3, #4 and #5.

Customer: _____ **Date:** _____

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Text: Photograph # 7

Dust Side view of the filter bag as received to the lab. The filter bag was slit lengthwise during removal. A heavy layer of aggressively attached dust was evident the entire length of the filter bag.

Text: Photograph # 8

Dust Side view of the top portion of the bag illustrating thick, bark-like agglomerations adhered to the external bag surface.

Customer: _____ **Date:** _____

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Text: Photograph # 9
Clean Gas Side view showing a heavy layer of ubiquitous brown, red, and white dust coating the interior bag surface. This photograph is representative of the entire length of the filter bag on the interior side.

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Lab Analysis Summary

Physical Damage: There was no physical damage from the process present on this filter bag. The bag was split during removal.

Chemical Attack: Possible due to a 45% loss in Mullen Burst strength.

Hydrolytic Attack: Possible due to a 45% loss in Mullen Burst strength.

Dust Cake Formation: A thick, bark-like layer of reddish-brown dust coated the entire outside of the bag, with a thinner layer of dust coating the interior side.

Dust Penetration: See Dust Penetration Photographs.

Additional Comments: The permeability and Mullen Burst strength after air pulse cleaning were 12.29 cfm and 330 psi respectively. This represents an 18% loss in permeability (original specification of 15 cfm) and a 45% loss in Mullen Burst strength (original specification of 600 psi).