

UNITED STATES
IOWA CO IA

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111



CERTIFICATE OF ANALYSIS

Date: 4 Dec. 91

Customer: United Technologies
2500 Highway 6E
Iowa City, IA 52240

Product: 5415

Trailer No.: T-480

Attention: Quality Control Manager

Order No.: 000 4332-000

Ship Date: 4 Dec. 91

Customer P.O. No.: 065083

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.13</u>
Contamination, BLK/BRN	ABR-5A	<u>2 / 5</u>
Hard Particles @ 7 mins.	ABR-12	<u>1</u>
Bulk Density, gm/cc	ABR-2B	<u>.497</u>
Brabender Drytime, mins.	ABR-7	<u>4.8</u>
Resin Flow Time, tap/sec.	ABR-8	<u>0 / 11.6</u>
Particle Size, % on	ABR-3	
40 Mesh		<u>0.0</u>
200 Mesh		<u>5.6</u>
Pan		<u>1.8</u>
Residual VCM, ppm	ABGC-26	<u> </u>
Inherent Viscosity	ABR-10	<u>1.03</u> **
METS IR, % of Control	ABR-13	<u>120</u> **

** Values for this property has been determined by our SQC Program
and is not tested on truck shipments.

James M. Shag
Laboratory Supervisor/Lead

(601) 369-8111

VAB.0001198092

PVC BULK TRAILER ANALYSIS

A

Date 12-4-87 Product 5415 Trailer Number T-480
 Customer _____ Silo _____ Time _____
 Technician mf Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.		1.		1.	1.	1.	L =		
	.....		.....					A =		
	2.		2.		2.	2.	2.	B =		
										
MIDDLE	1.		1.		1.	1.	1.	L =		
	.....		.....					A =		
	2.		2.		2.	2.	2.	B =		
										
END	1.		1.		1.	1.	1.	L =		
	.....		.....					A =		
	2.		2.		2.	2.	2.	B =		
										

Screen recheck

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>.13</u>	<u>13.70</u>	<u>16.93</u>	<u>10.66</u>	<u>4.90</u>	<u>2.80</u>	<u>.90</u>	<u>160.629</u>
% on Mesh	<u>0.0</u>	<u>.3</u>	<u>27.4</u>	<u>33.9</u>	<u>21.2</u>	<u>9.8</u>	<u>5.6</u>	<u>1.8</u>	

Screen Analysis	Min.	On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb							
	<u>1.005</u>	<u>58.63</u>	<u>55.25</u>	<u>29.04</u>	<u>11.27</u>	<u>5.04</u>	<u>.3996</u>		
Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198093

PVC BULK TRAILER ANALYSIS

A

Date 12-4-91 Product 5415 Trailer Number T-480
 Customer UTC Silo 690 Time 0545
 Technician L. Outlaw Order No. 000 4332-000

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.13		1.2/5		1.4/1mp	1.497	1.4.8	L = 100.88 A = -.26		
	2.		2.		2.	2.	2.	B = 1.45		9/11.6
MIDDLE	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	B =		
	2.		2.		2.	2.	2.	L =		
								A =		
								B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	0.00	.26	12.53	16.07	11.32	5.57	3.35	.90	158.3
% on Mesh	0.0	.5	25.1	32.1	22.7	11.1	6.7	1.8	↓

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198094

CERTIFICATE OF ANALYSIS

Date: 11-3-91

Product: 5415

Customer: United Technologies
2500 Highway 6E
Iowa City, IA 52240

Code No.: RMS-XK-21

Trailer No.: T-415

Attention: Quality Control Manager

Order No.: 0003067-000

Date of Shipment: 11-3-91

Cust. P. O. No.: 065083

VISTA

Property	Test Method	Specification	Analysis
Moisture, %	ABR-1A	.30 max.	.15
Contamination, blk/brn	ABR-5A	35/100 max.	2/4
Hard Particles @ 7 mins.	ABR-12	25 max.	3
Bulk Density, gm/cc	ABR-2B	.460 min.	.480
Brabender Drytime, mins.	ABR-7	6.0 max.	4.9
Resin Flow Time, tap/sec.	ABR-8	1 / 15 max.	0/12.4
Particle Size, % on	ABR-3		
40 Mesh (0.1 Max.)	200 Mesh *	Pan (5.0 Max.)	
0.0	5.5	1.6	
Residual VCM, ppm	ABGC-26	8.5 ppm max.	.005 Actual < 8.5ppm
** Inherent Viscosity	ABR-10B	1.00 - 1.04	1.01 better corrected 11/5/91

* Specification of 25% max. thru 140 mesh sieve (includes the 200 mesh and the pan). No specification for 200 mesh alone.

** Values for this property have been determined by our SQC Program and are not tested on truck shipment.

Curtis Outlaw
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

4

Date 11-3-91 Product 5415 Trailer Number T-415
 Customer United Tech. Silo 690 Time 1330
 Technician CO + EES Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>.15</u>		1. <u>2/4</u>		1. <u>5/3</u>	1. <u>.480</u>	1. <u>4.9</u>	L = <u>100.61</u>		
	2.		2.		2.	2.	2.	A = <u>.72</u>		
MIDDLE	1.		1.		1.	1.	1.	B = <u>1.12</u>		<u>9/12.0</u>
	2.		2.		2.	2.	2.	L =		
END	1.		1.		1.	1.	1.	A =		
	2.		2.		2.	2.	2.	B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

								Pan	Glassy Part.
Mesh Size	40	60	80	100	120	140	200		
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>.13</u>	<u>12.92</u>	<u>17.49</u>	<u>11.12</u>	<u>4.83</u>	<u>2.75</u>	<u>.78</u>	
% on Mesh	<u>0.00</u>	<u>.3</u>	<u>25.8</u>	<u>35.0</u>	<u>22.1</u>	<u>9.7</u>	<u>5.5</u>	<u>1.6</u>	<u>160.2</u>

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

								Pan	Glassy Part.
Mesh Size	40	60	80	100	120	140	200		
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198096



CERTIFICATE OF ANALYSIS

Date: 9/30/91

Product: 5415

Customer: United Technologies
2500 Highway 6E
Iowa City, IA 52240

Code No.: RMS-XK-21

Trailer No.: 7480

Attention: Quality Control Manager

Order No.: 0002092-000

Date of Shipment: 9/30/91

Cust. P. O. No.: 065083

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Specification</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.30 max.	<u>.10</u>
Contamination, blk/brn	ABR-5A	35/100 max.	<u>3/4</u>
Hard Particles @ 7 mins.	ABR-12	25 max.	<u>1</u>
Bulk Density, gm/cc	ABR-2B	.460 min.	<u>.491</u>
Brabender Drytime, mins.	ABR-7	6.0 max.	<u>5.1</u>
Resin Flow Time, tap/sec.	ABR-8	1 / 15 max.	<u>0/10.0</u>
Particle Size, % on	ABR-3		
40 Mesh (0.1 Max.)	200 Mesh *	Pan (5.0 Max.)	
<u>0.00</u>	<u>5.4</u>	<u>1.8</u>	
Residual VCM, ppm	ABGC-26	8.5 ppm max.	< 8.5ppm
** Inherent Viscosity	ABR-10B	1.00 - 1.04	<u>1.03</u>

* Specification of 25% max. thru 140 mesh sieve (includes the 200 mesh and the pan). No specification for 200 mesh alone.

** Values for this property have been determined by our SQC Program and are not tested on truck shipment.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 9-30-91 Product 5415 Trailer Number T-480
 Customer W.T.C. Site 691 Time 0910
 Technician Co Order No. 0002092-000

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.10	3/4	1.		1.3/1mb	1.491	1.5.1	L = 100.01		
	2.		2.		2.	2.	2.	A = .10		0/10.6
MIDDLE	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glossy Part.
Gross Wt.									
Tare									
Net Wt.	0.00	1.37	18.50	14.17	8.54	4.05	2.70	.91	
% on Mesh	0.0	2.7	37.0	28.3	16.7	8.1	5.4	1.8	172.1

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glossy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

CERTIFICATE OF ANALYSIS

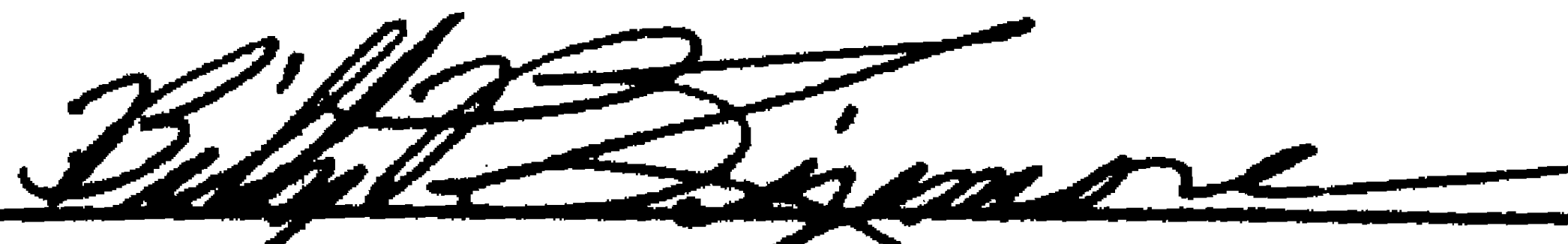
Date: *3 Sept. 91* Product: 5415
Customer: United Technologies Code No.: RMS-XK-21
2500 Highway 6E
Iowa City, IA 52240 Trailer No.: T-809
Attention: Quality Control Manager Order No.: 0001488-000
Date of Shipment: *3 Sept. 91* Cust. P. O. No.: 065083

VISTA

Property	Test Method	Specification	Analysis
Moisture, %	ABR-1A	.30 max.	<u>.09</u>
Contamination, blk/brn	ABR-5A	35/100 max.	<u>3/5</u>
Hard Particles @ 7 mins.	ABR-12	25 max.	<u>1</u>
Bulk Density, gm/cc	ABR-2B	.460 min.	<u>.505</u>
Brabender Drytime, mins.	ABR-7	6.0 max.	<u>5.0</u>
Resin Flow Time, tap/sec.	ABR-8	1 / 15 max.	<u>0/10.4</u>
Particle Size, % on	ABR-3		
40 Mesh (0.1 Max.)	200 Mesh *	Pan (5.0 Max.)	
<u>0.0</u>	<u>2.9</u>	<u>1.6</u>	
Residual VCM, ppm	ABGC-26	8.5 ppm max.	< 8.5ppm
** Inherent Viscosity	ABR-10B	1.00 - 1.04	<u>1.02</u>

* Specification of 25% max. thru 140 mesh sieve (includes the 200 mesh and the pan). No specification for 200 mesh alone.

** Values for this property have been determined by our SQC Program and are not tested on truck shipment.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 9-2-91 Product 5415 Trailer Number T-809
 Customer United Tech Silo 690 Time 0100
 Technician MM Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.09		1.3/5		1.4/1 pc	1.505	1.5.0	L = 100.72 A = 7.10 B = 1.19	Flow 07/10.4	
	2.		2.		2.	2.	2.			
MIDDLE	1.		1.		1.	1.	1.	L = A = B =		
	2.		2.		2.	2.	2.			
END	1.		1.		1.	1.	1.	L = A = B =		
	2.		2.		2.	2.	2.			

Particle Size Distribution:

Screen Analysis 10 Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare <u>T</u>									
Net Wt.	0.00	1.07	20.56	15.85	7.93	3.55	1.45	.80	
% on Mesh	0.0	2.1	41.1	31.7	13.5	7.1	2.9	1.6	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198100

PVC BULK TRAILER ANALYSIS

Date 8-6-91 Product 5415 Trailer Number T-479
 Customer United Tech Silo Silo 690 Time 0100-0340
 Technician M.T Order No. 0001014-000

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.10		1.2		1.3	1.	1.	L = 160.40		Flow
			17		2 MT.	492	49	A = -0.16		0
	2.		2.		2.	2.	2.	B = 1.19		9.9
MIDDLE	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		
END	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									Micro - 182
Tare									
Net Wt.	0.00	1.89	23.28	12.58	6.30	3.02	2.16	0.68	
% on Mesh	0.00	3.8	46.6	25.2	12.7	6.0	4.3	1.4	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198101

CERTIFICATE OF ANALYSIS

Date: 8-6-91

Product: 5415

Customer: United Technologies
2500 Highway 6E
Iowa City, IA 52240

Code No.: RMS-XK-21

Trailer No.: T-479

Attention: Quality Control Manager

Order No.: 000014-000

Date of Shipment: 8-6-91

Cust. P. O. No.: 065083

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Specification</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.30 max.	<u>.10</u>
Contamination, blk/brn	ABR-5A	35/100 max.	<u>2/7</u>
Hard Particles @ 7 mins.	ABR-12	25 max.	<u>2</u>
Bulk Density, gm/cc	ABR-2B	.460 min.	<u>.492</u>
Brabender Drytime, mins.	ABR-7	6.0 max.	<u>4.9</u>
Resin Flow Time, tap/sec.	ABR-8	1 / 15 max.	<u>0/9.9</u>
Particle Size, % on	ABR-3		
40 Mesh (0.1 Max.)	200 Mesh *	Pan (5.0 Max.)	
<u>0.0</u>	<u>4.3</u>	<u>1.4</u>	
Residual VCM, ppm	ABGC-26	8.5 ppm max.	< 8.5ppm
** Inherent Viscosity	ABR-10B	1.00 - 1.04	<u>1.02</u>

* Specification of 25% max. thru 140 mesh sieve (includes the 200 mesh and the pan). No specification for 200 mesh alone.

** Values for this property have been determined by our SQC Program and are not tested on truck shipment.

Melvin Tallie
Laboratory Supervisor/Lead

CERTIFICATE OF ANALYSIS

Date: 6-25-91

Product: 5415

Customer: United Technologies
2500 Highway 6E
Iowa City, IA 52240

Code No.: RMS-XK-21

Trailer No.: T 723

Attention: Quality Control Manager

Order No.: 0000401-000

Date of Shipment: 6-25-91

Cust. P. O. No.: 065083

<u>Property</u>	<u>Test Method</u>	<u>Specification</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.30 max.	<u>.21</u>
Contamination, blk/brn	ABR-5A	35/100 max.	<u>4/3</u>
Hard Particles @ 7 mins.	ABR-12	25 max.	<u>1</u>
Bulk Density, gm/cc	ABR-2B	.460 min.	<u>.500</u>
Brabender Drytime, mins.	ABR-7	6.0 max.	<u>5.2</u>
Resin Flow Time, tap/sec.	ABR-8	1 / 15 max.	<u>0/9.6</u>
Particle Size, % on	ABR-3		
40 Mesh (0.1 Max.)	200 Mesh *	Pan (5.0 Max.)	
<u>0.00</u>	<u>3.1</u>	<u>2.0</u>	
Residual VCM, ppm	ABGC-26	8.5 ppm max.	< 8.5ppm
** Inherent Viscosity	ABR-10B	1.00 - 1.04	<u>1.03</u>

* Specification of 25% max. thru 140 mesh sieve (includes the 200 mesh and the pan). No specification for 200 mesh alone.

** Values for this property have been determined by our SQC Program and are not tested on truck shipment.

Daniel Thompson

Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 6-25-91 Product 5445 Trailer Number T-723 A
 Customer Essex Ute Site 691 Time 15:58-16:30
 Technician D.J. & M.B. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>21</u>		1. <u>4</u> <u>3</u>		1. <u>2</u> <u>1</u>	<u>.500</u>	1. <u>5.2</u>	L = <u>100.89</u> A = <u>-0.12</u> B = <u>1.14</u>		<u>9.6</u>
	2.		2.		2. <u>28</u>	2.	2.			
MIDDLE	1.		1.		1.	1.	1.	L =		NO METAL
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
								B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glossy Part.
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>1.88</u>	<u>19.94</u>	<u>14.23</u>	<u>8.28</u>	<u>3.25</u>	<u>1.54</u>	<u>1.02</u>	
% on Mesh	<u>0.0</u>	<u>3.8</u>	<u>39.9</u>	<u>28.5</u>	<u>16.2</u>	<u>6.5</u>	<u>3.1</u>	<u>2.0</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glossy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh	<u>0</u>	<u>12.73</u>	<u>85.39</u>	<u>46.46</u>	<u>22.19</u>	<u>7.48</u>	<u>2.79</u>	<u>0.74</u>	<u>= 177.78</u>

Remarks _____

VAB.0001198104

CERTIFICATE OF ANALYSIS

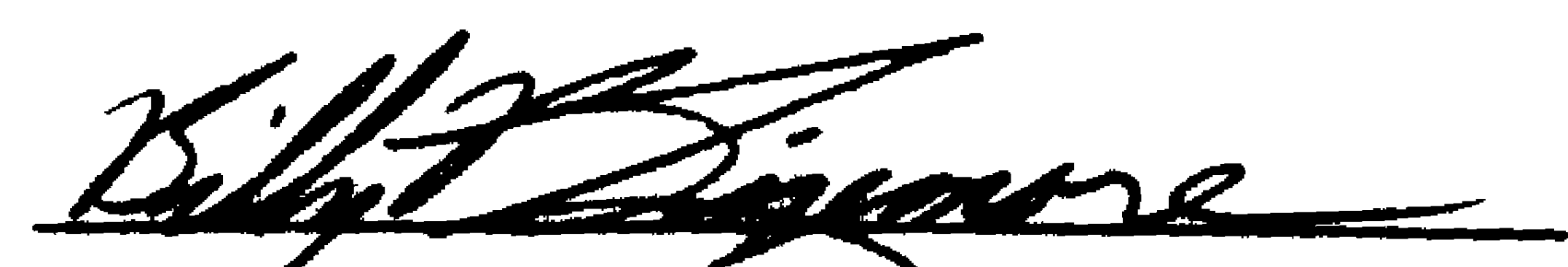
Date: *28 May 91* Product: 5415
Customer: United Technologies Code No.: RMS-XK-21
2500 Highway 6E
Iowa City, IA 52240 Trailer No.: *T-479*
Attention: Quality Control Manager Order No.: *908350-001*
Date of Shipment: *28 May 91* Cust. P. O. No.: *065083*

VISTA

Property	Test Method	Specification	Analysis
Moisture, %	ABR-1A	.30 max.	<u>.11</u>
Contamination, blk/brn	ABR-5A	35/100 max.	<u>3/12</u>
Hard Particles @ 7 mins.	ABR-12	25 max.	<u>2</u>
Bulk Density, gm/cc	ABR-2B	.460 min.	<u>.502</u>
Brabender Drytime, mins.	ABR-7	6.0 max.	<u>4.9</u>
Resin Flow Time, tap/sec.	ABR-8	1 / 15 max.	<u>0/8.3</u>
Particle Size, % on	ABR-3		
40 Mesh (0.1 Max.)	200 Mesh *	Pan (5.0 Max.)	
<u>.0</u>	<u>3.1</u>	<u>1.2</u>	
Residual VCM, ppm	ABGC-26	8.5 ppm max.	< 8.5ppm
** Inherent Viscosity	ABR-10B	1.00 - 1.04	<u>1.02</u>

* Specification of 25% max. thru 140 mesh sieve (includes the 200 mesh and the pan). No specification for 200 mesh alone.

** Values for this property have been determined by our SQC Program and are not tested on truck shipment.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 5-27-91 Product 5415 ^A Trailer Number T-479
 Customer United Tech Silo 691 Time 1035-1550
 Technician M.T. & DL Order No. 908350-001

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>11</u>		1. <u>3</u>		1. <u>17</u>	1. <u>502</u>	1. <u>4.9</u>	L = <u>98.97</u>	<u>0</u>	
	2. <u>12</u>		2. <u>12</u>		2. <u>2</u>			A = <u>-0.06</u>		
MIDDLE	1. <u> </u>		1. <u> </u>		1. <u> </u>	1. <u> </u>	1. <u> </u>	L = <u> </u>	<u> </u>	<u> </u>
	2. <u> </u>		2. <u> </u>		2. <u> </u>	2. <u> </u>	2. <u> </u>	A = <u> </u>		
END	1. <u> </u>		1. <u> </u>		1. <u> </u>	1. <u> </u>	1. <u> </u>	L = <u> </u>	<u> </u>	<u> </u>
	2. <u> </u>		2. <u> </u>		2. <u> </u>	2. <u> </u>	2. <u> </u>	A = <u> </u>		
								B = <u> </u>		

Particle Size Distribution:

Screen Analysis Min. On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare <u>P</u>									
Net Wt.	<u>0.00</u>	<u>0.99</u>	<u>22.50</u>	<u>13.55</u>	<u>7.71</u>	<u>3.00</u>	<u>1.55</u>	<u>0.62</u>	
% on Mesh	<u>0.0</u>	<u>2.0</u>	<u>45.0</u>	<u>27.1</u>	<u>15.6</u>	<u>6.0</u>	<u>3.1</u>	<u>1.2</u>	

Screen Analysis Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks

Vista Polymers
A Division of
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Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

A

CERTIFICATE OF ANALYSIS

VISTA

Date: 4.28.91

Load Date:

Product: 5415

Customer: United Technologies
2500 Highway 6E
Iowa City, Iowa 52240

Code No.: ...

Trailer No.: T-723

Attention: Quality Control Manager

Order No.: 906198-001

Date of Shipment: 4.28-91

Customer P.O. No.: 065083

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>		
Moisture, %	ABR-1A	<u>.11</u>		
Contamination, blk/brn	ABR-5A	<u>3/8</u>		
Hard Particles @ 7 min	ABR-12	<u>2</u>		
Bulk Density, gm/cc	ABR-2B	<u>.511</u>		
Brabender Dry Time, min.	ABR-07	<u>4.8</u>		
Resin Flow Time, tap/sec.	ABR-08	<u>9/8.6</u>		
Particle Size, % on	ABR-03	<u>40 mesh</u>	<u>200 mesh</u>	<u>Pan</u>
		<u>0.00</u>	<u>3.8</u>	<u>1.3</u>
Residual VCM, ppm	ABGC-26	<u>.061</u>		
Inherent Viscosity	ABR-10	<u>1.03</u>		

Artis Jones
Laboratory Supervisor/Lead

VAB.0001198107

PVC BULK TRAILER ANALYSIS

Date 4-27-91 Product 5415 Trailer Number T-723
Customer United Tech. Silo 690 Time 2345
Technician TE-JPS Order No. 906158-001

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.11		1.38		1.52 HA	.511	4.8	L = 100.70 A = 0.01 B = 1.32	1.029	Flow 9/8.6
	2.		2.		2.	2.	2.			
MIDDLE	1.		1.		1.	1.	1.	L =		NO METAL
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	B =		
	2.		2.		2.	2.	2.	L =		
								A =		
								B =		

Particle Size Distribution:

Screen Analysis	Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb							Pan	Glassy Part.
Mesh Size	40	60	80	100	120	140	200		
Gross Wt.								microns = 180.2	
Tare									
Net Wt.	0.00	1.06	23.82	12.97	6.64	2.86	1.89	0.66	
% on Mesh	0.0	2.1	47.6	25.9	13.6	5.7	3.8	1.3	

Screen Analysis	Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb							Pan	Glassy Part.
Mesh Size	40	60	80	100	120	140	200		
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198108

UNITED  STATES

Vista Polymers
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Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

A

LETTER OF CERTIFICATION

VISTA

Date: September 13, 1991

Customer: Customer Service
Suite 223D
Houston, TX

Product: 5305

Railcar No.: UTCX 46591

Attention: Mark Volz

Order No.: 0001720-000

Date of Shipment: Sept. 11, 1991

Location: United Dist.

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.10
Bulk Density, gm/cc	ABR-2A	.547
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		20.0
Pan		2.2
Residual VCM, ppm	ABGC-26	.073
Inherent Viscosity	ABR-10	.72
Contamination Blk./Brn.	ABR-5A	14 / 8
B Color	ABR-9	1.67


Amy E. Bagwell

Laboratory Supervisor/Lead

VAB.0001198110

PVC RAILCAR ANALYSIS

Load Date: 7/27/91 Product: 5305 Car No.: 46511Time Logged In: 1030 Logged In By: AKLShip Date: 9/1/91 Silo(s): 683/684 Customer: United Dist0001720-000 MontgomeryMetall (1)

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.05		.09		.05		.10	
Contamination Syntron Method	4 1/2		5 1/4		2 1/2		1 1/8	
Wet Method								
Bulk Density	.548		.549		.540		.549	
BD w/antistat								
Viscosity	.722		.722		.725		.724	
RVCM	.058		.073		.065		.072	
Blown Film								
Tappi Test Contamination Composite	.06 or less		.07 ----- .15		.20 ----- .60			
	5/9							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.09</u>	<u>3.26</u>	<u>7.10</u>	<u>13.30</u>	<u>15.05</u>	<u>10.00</u>	<u>1.09</u>
% P	<u>0.0</u>	<u>0.2</u>	<u>6.5</u>	<u>14.2</u>	<u>26.8</u>	<u>30.1</u>	<u>20.0</u>	<u>2.2</u>

Static Flow: 0 19.8 % Glassies: <1.0 Avg. Microns: 127.9Color L: 99.09 a 0.66 b 1.47 CPA: 19.3Technician: M.T. & M.R.

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Phone (601) 369-8111

A

LETTER OF CERTIFICATION

VISTA

Date: Sept. 13, 1991

Customer: Customer Service
Suite 223D
Houston, TX

Product: 5265

Railcar No.: UTCX 46483

Attention: Mark Volz

Order No.: 0001719-000

Date of Shipment: Sept. 11, 1991

Location: United Dist. TX

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.14
Bulk Density, gm/cc	ABR-2A	0.544
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		11.2
Pan		2.2
Residual VCM, ppm	ABGC-26	0.077
Inherent Viscosity	ABR-10	0.67
Contamination Blk./Brn.	ABR-5A	8/ 15
B Color	ABR-9	1.75


Amy E. Bagwell

Laboratory Supervisor/Lead

VAB.0001198112

PVC RAILCAR ANALYSIS

A

Load Date: 8-14-91 Product: 5265 Car No.: 46483Time Logged In: 0400 Logged In By: GOShip Date: 9/11/91 Silo(s): 687,688 Customer: United
0001719-000no metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.11		.13		.12		.14	
Contamination	<u>8</u> 15	—	<u>4</u> 7	—	<u>2</u> 14	—	<u>3</u> 17	—
Bulk Density	.545		.543		.546		.541	
BD w/antistat								
Viscosity	.674		.662		.659		.673	
RVCM	.077		.001		.004		.077	

Mirrex Shipments ONLY

Tappi Test Contamination Composite	.06 or less	.07 ----- .15	.20 ----- .60
	<u>5/13</u>		

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>.48</u>	<u>5.89</u>	<u>11.56</u>	<u>14.35</u>	<u>10.87</u>	<u>5.60</u>	<u>1.11</u>
%	<u>0.0</u>	<u>1.0</u>	<u>11.8</u>	<u>23.1</u>	<u>29.0</u>	<u>21.7</u>	<u>11.2</u>	<u>2.2</u>

Static Flow: 0 17.4Avg. Microns: 141.8Color L: 99.0 a .74 b 1.75Technician: MATE

UNITED TECH
MT. AIR INC

Vista Polymers
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Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

CERTIFICATE OF ANALYSIS

VISTA

Date: November 27, 1991

Customer: United Technologies
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager

Product: 5415

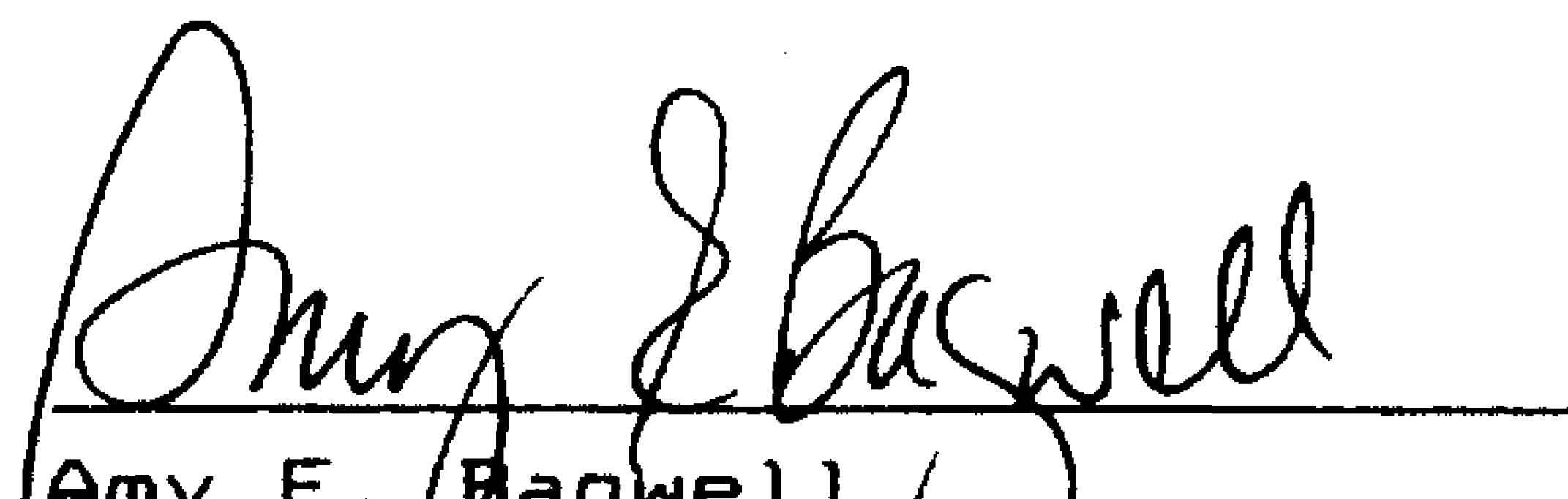
Railcar No.: UTCX 46411

Order No.: 0004033-000

Ship Date: November 25, 1991

Customer P.O. No.: 050-01881

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	.10
Bulk Density, GM/CC	ABR-2B	.503
Brabender Dry Time, Mins.	ABR-7	5.0
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		6.4
Pan		0.2
Vinyl Chloride Monomer	ABGC-26	.001
Inherent Viscosity	ABR-10	1.01
Hard Particle @ 7 Min	ABR-12	1
Contamination, BLK/BRN	ABR-5A	7 / 8
METS IR, % of Control	ABR-13	123


Amy E. Bagwell
Laboratory Supervisor

(601) 369-3624

VAB.0001198115

PVC RAILCAR ANALYSIS

Load Date: 11-16-91 Product: 5415 Car No.: 46411Time Logged In: 1800 Logged In By: 6Ship Date: 11/25/91 Silo(s): 690- Customer: Essex-UTC, Mt. Airy
050-01881 0004033-000NO METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.10		.07		.07		.07	
Contamination	$\frac{5}{8}$	$\frac{10}{10}$	$\frac{5}{8}$	$\frac{7}{12}$	$\frac{6}{6}$	$\frac{5}{9}$	$\frac{7}{8}$	$\frac{8}{11}$
Bulk Density	.500		.500		.506		.508	
BD w/o/antistat								
Hard Particle	$\frac{3}{1 \text{ Pr.}}$	—	—	—	—	—	—	—
Viscosity	1.008							
RVCM	.001							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.12</u>	<u>12.01</u>	<u>17.26</u>	<u>11.48</u>	<u>5.01</u>	<u>3.20</u>	<u>0.12</u>
%	<u>0.0</u>	<u>0.2</u>	<u>24.0</u>	<u>34.5</u>	<u>24.7</u>	<u>10.0</u>	<u>6.4</u>	<u>0.2</u>

Drytime: 5.0 Static Flow: 0, 9.8 Avg. Microns: 159.4Color L: 100.83 a -0.10 b 1.17METS: 9964, 123.2Technician: D.T. HDL

Vista Polymers
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Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

CERTIFICATE OF ANALYSIS

Date: November 8, 1991

Customer: United Technologies
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030

Attention: Quality Control Manager

Ship Date: November 7, 1991

Product: 5415

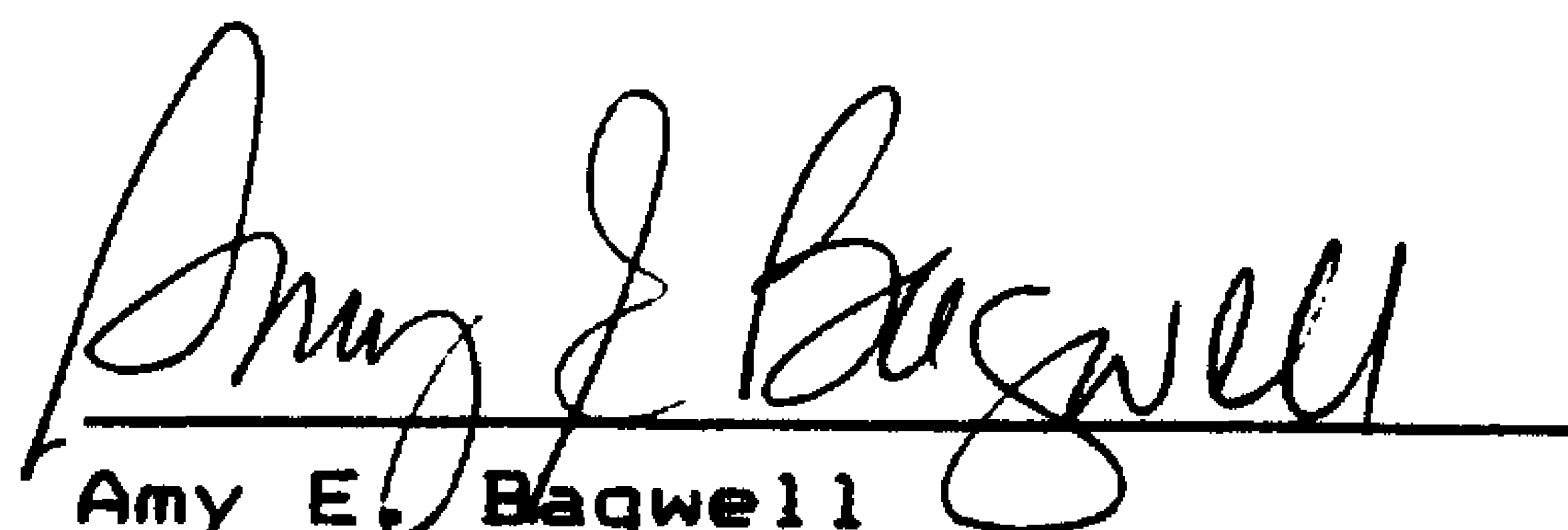
Railcar No.: VIPX 45801

Order No.: 0003310-000

Customer P.O. No.: 050-01790

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	.10
Bulk Density, GM/CC	ABR-2B	.490
Brabender Dry Time, Mins.	ABR-7	4.8
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		5.5
Pan		1.9
Vinyl Chloride Monomer	ABGC-26	.004
Inherent Viscosity	ABR-10	1.01
Hard Particle @ 7 Min	ABR-12	3
Contamination, BLK/BRN	ABR-5A	10/15
METS IR, % of Control	ABR-13	121.5



Amy E. Bagwell
Laboratory Supervisor

(601) 369-3624

VAB.0001198117

PVC RAILCAR ANALYSIS

Load Date: 11-4-91Product: 5415Car No.: 45801Time Logged In: 0200Logged In By: Det.Ship Date: 11/7/91Silo(s): 685Customer: United Tech

CPO 050-01790

0003310-000

no metal

	<u>A</u>		<u>CA</u>		<u>CB</u>		<u>B</u>	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.07		.09		.10		.08	
Contamination	<u>10</u> 15	<u>9</u> 12	<u>8</u> 12	<u>10</u> 16	<u>10</u> 12	<u>9</u> 10	<u>8</u> 9	<u>11</u> 9
Bulk Density	.489		.490		.488		.493	
BD w/o/antistat								
Hard Particle	<u>21</u> 32PS	—	—	—	—	—	—	—
Viscosity	1.010							
RVCM	.004							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>.15</u>	<u>16.86</u>	<u>15.14</u>	<u>8.80</u>	<u>4.60</u>	<u>3.18</u>	<u>1.14</u>
%	<u>0.0</u>	<u>.3</u>	<u>33.7</u>	<u>30.3</u>	<u>17.8</u>	<u>9.2</u>	<u>6.4</u>	<u>2.3</u>

Drytime: 4.8Static Flow: 0 19.3Avg. Microns: 164.1Color L: 100.77 a -1.14 b 1.07NETS: 9620, 171.5Technician: M & T E

PVC RAILCAR ANALYSIS

Load Date: 11-4-91Product: 5415Car No.: 45801

Time Logged In: _____

Logged In By: _____

Ship Date: _____

Silo(s): _____

Customer: _____

ReRAN Screens 11-6-91

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture								
Contamination	—	—	—	—	—	—	—	—
Bulk Density								
BD w/o/antistat								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity								
RVCM								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.28</u>	<u>16.55</u>	<u>15.97</u>	<u>9.41</u>	<u>4.35</u>	<u>2.76</u>	<u>0.96</u>
%	<u>0.0</u>	<u>0.6</u>	<u>33.1</u>	<u>31.9</u>	<u>18.3</u>	<u>8.7</u>	<u>5.5</u>	<u>1.9</u>

Drytime: _____

Static Flow: 1Avg. Microns: 115

Color L: _____

a: _____

b: _____

METS: 1

%

Technician: TE & MG

Vista Polymers
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Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

CERTIFICATE OF ANALYSIS

VISTA

Date: 12/23/91

Customer: United Technologies
511 Hay Street

Product: 5415

P.O. Box 807

Railcar No.: PTLX 41597

Mt. Airy, NC 27030

Attention: Quality Control Manager

Order No.: 0004995-000

Ship Date: 12/20/91

Customer P.O. No.: 050-01972

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.14
Bulk Density, GM/CC	ABR-2B	0.493
Brabender Dry Time, Mins.	ABR-7	4.7
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.3
Pan		1.3
Vinyl Chloride Monomer	ABGC-26	0.001
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7 Min	ABR-12	1
Contamination, BLK/BRN	ABR-5A	5/8
METS IR, % of Control	ABR-13	117


H.D. Lucas
Laboratory Supervisor

(601) 369-3624

VAB.0001198120

Vista Polymers

Highway: 215

Abbeville, MS 38730

PVC RAILCAR ANALYSIS

PTLX

Load Date: 12-18-91 Product: 5415 Car No.: 41597Time Logged In: 0600 Logged In By: CoShip Date: 12/20/91 Silo(s): 690-691 Customer: UNITED TECH
0004995-000 MOUNT AIRY NC

Normal

	A Top		CA Top		CB Top		B Top	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.05		.14		.13		.12	
Contamination	<u>4</u> 7	<u>3</u> 9	<u>5</u> 8	<u>6</u> 10	<u>3</u> 6	<u>5</u> 9	<u>4</u> 5	<u>6</u> 10
Bulk Density	.492		.490		.497		.494	
BD w/antistat								
Hard Particle	<u>5</u> 1 Hr	—	—	—	—	—	—	—
Viscosity	1.018							
RVCM	.001							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.38</u>	<u>22.93</u>	<u>15.07</u>	<u>16.78</u>	<u>2.73</u>	<u>1.63</u>	<u>0.63</u>
%	<u>0.0</u>	<u>0.8</u>	<u>45.4</u>	<u>30.1</u>	<u>13.1</u>	<u>5.5</u>	<u>3.3</u>	<u>1.3</u>

Drytime: 4.7 Static Flow: 0 19.2 Avg. Microns: 177.7Color L: 101.06 a: -0.27 b: 1.12METS: 9300 117.4 %Technician: TE-SJS

VAB.0001198121

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

CERTIFICATE OF ANALYSIS

Date: 12-10-91

Customer: United Technologies
P. O. Box 807
Mt. Airy, NC 27030

Product: 5415

Trailer No.: T-810

Attention: Quality Control Manager

Order No.: 0004670-000

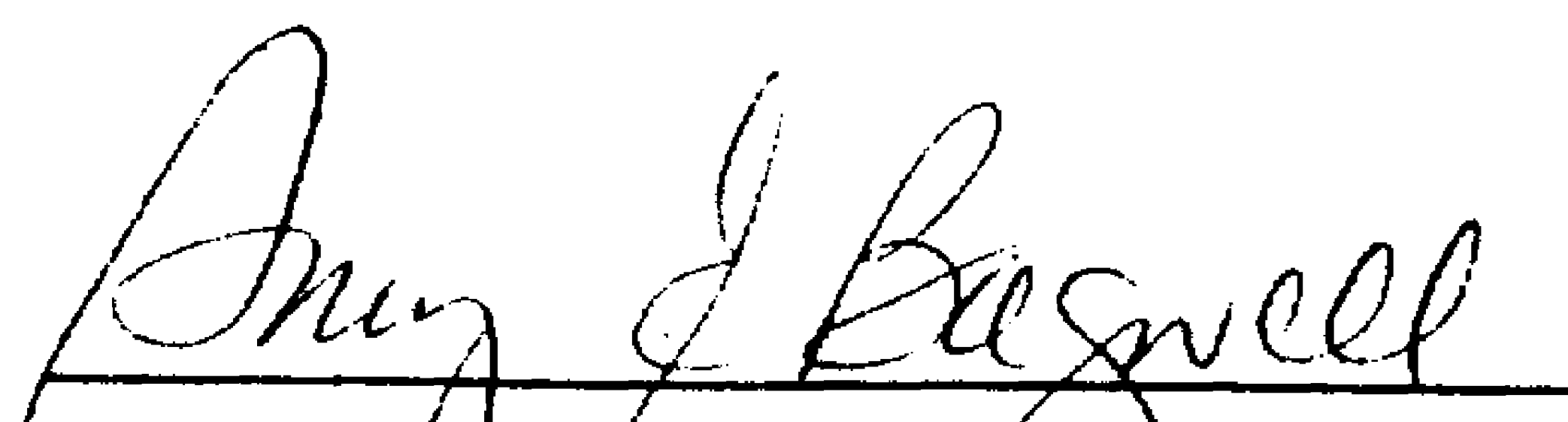
Ship Date: 12-10-91

Customer P.O. No.: 01922

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.03</u>
Contamination, BLK/BRN	ABR-5A	<u>4, 6</u>
Hard Particles @ 7 mins.	ABR-12	<u>1</u>
Bulk Density, gm/cc	ABR-2B	<u>.493</u>
Brabender Drytime, mins.	ABR-7	<u>5.0</u>
Resin Flow Time, tap/sec.	ABR-8	<u>0, 11.1</u>
Particle Size, % on	ABR-3	
40 Mesh		<u>0.0</u>
200 Mesh		<u>3.5</u>
Pan		<u>1.6</u>
Residual VCM, ppm	ABGC-26	<u>.001</u>
Inherent Viscosity	ABR-10	<u>1.03</u> **
METS IR, % of Control	ABR-13	<u>120</u> **

** Values for this property has been determined by our SQC Program
and is not tested on truck shipments.


Laboratory Supervisor/Lead

(601) 369-8111

VAB.0001198122

PVC BULK TRAILER ANALYSIS

Date 12-9-91 Product 5415 Trailer Number F810
 Customer UTC Silo 690 Time 1700-1740
 Technician BT + HPL Order No. 0004670-000

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.03		1.4		1.2	1.493	1.5.0	L = 100.3		
	2.		2.		2.53			A = 0.06		
MIDDLE	1.		1.		1.		1.	L =	0 11.1	No Metal
	2.		2.		2.		2.	A =		
END	1.		1.		1.		1.	L =		
	2.		2.		2.		2.	A =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	0.00	1.37	21.22	14.98	7.04	2.86	1.76	0.78	
% on Mesh	0.0	2.7	42.4	30.0	14.1	5.7	3.5	1.6	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks Micron 178.3

VAB.0001198123

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

A

CERTIFICATE OF ANALYSIS

919-786-6966 Jay

Date: 12-6-91

Customer: United Technologies
P. O. Box 807
Mt. Airy, NC 27030

Product: 5415

VISTA

Trailer No.: MATLACK

Attention: Quality Control Manager

Order No.: 0004574-000

Ship Date: 12-8-91

Customer P.O. No.:

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.08</u>
Contamination, BLK/BRN	ABR-5A	<u>15, 7</u>
Hard Particles @ 7 mins.	ABR-12	<u>1</u>
Bulk Density, gm/cc	ABR-2B	<u>.498</u>
Brabender Drytime, mins.	ABR-7	<u>5.0</u>
Resin Flow Time, tap/sec.	ABR-8	<u>0, 9.8</u>
Particle Size, % on	ABR-3	
40 Mesh		<u>0.0</u>
200 Mesh		<u>5.3</u>
Pan		<u>1.5</u>
Residual VCM, ppm	ABGC-26	<u>.016</u>
Inherent Viscosity	ABR-10	<u>1.03</u> **
METS IR, % of Control	ABR-13	<u>124</u> **

** Values for this property has been determined by our SQC Program
and is not tested on truck shipments.

Amy E. Bagwell
Laboratory Supervisor/Lead

(601) 369-8111

VAB.0001198124

TO: AMY BAGWELL

FAX: 601-369-3642

VISTA

ACCT. NO. _____

→ THIS IS A SHIPMENT
BEING MADE THIS
WEEKEND. PLS. FAX
A COA TO UTC FOR
THIS CMPT.

WIRE MESSAGE

DATE 12/6

THANKS CMC

TERMINAL: CSX BIDS, TOLEDO

ATTENTION: WINNIE

PLEASE NOTE THE FOLLOWING ORDER:

SHIP TO: United Technologies Corp
511 Hany Street
P.O. Box 807
Mount Airy, NC 27030

PRODUCT: 5415 Blue PVC Resin

QUANTITY: 45,000 lbs

DELIVERY DATE: 12/9/91

DELIVERY TIME: 8.A.M.

VISTA ORDER #: 0004574-000

CUSTOMER P. O. #:

SPECIAL INSTRUCTIONS:

Pls. fax confirming shipping info.
Use Matlach

Use

PLCX 46853 CMPT A

IF YOU HAVE ANY QUESTIONS CONCERNING THIS ORDER, PLEASE
CALL ME.

CMC

MARVA H. NELSON
PVC CUSTOMER SERVICE
1-800-231-8212, EXT. 3407
FAX #: 713-588-3429

RCR.038/mlf

\$1750
rate

VAB.0001198125

Vista Polymers:

Highway 2E

Aberdeen, ME 39730

PVC RAILCAR ANALYSIS

Load Date: 10-15-91

Product:

5415

Car No.:

46853

Time Logged In: 0630

Logged In By:

M.A.

Ship Date: 10/29

Silo(s):

690, 691

Customer:

PLCY
0002965-000

No metal

1000

1000

	(A)		(CA)		(CB)		(B)	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.08		.07		.08		.07	
Contamination	$\frac{15}{7}$	$\frac{T8}{12}$	$\frac{3}{3}$	$\frac{T5}{8}$	$\frac{6}{5}$	$\frac{T8}{8}$	$\frac{5}{2}$	$\frac{T2}{12}$
Bulk Density	.498		.500		.496		.490	
BD wo/antistat								
Hard Particle	$\frac{5}{1 \text{ P.P.}}$	—	—	—	—	—	—	—
Viscosity	1.025							
RVCM	.016							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.61</u>	<u>17.84</u>	<u>15.40</u>	<u>8.70</u>	<u>4.05</u>	<u>2.63</u>	<u>0.73</u>
%	<u>0.0</u>	<u>1.2</u>	<u>35.7</u>	<u>30.8</u>	<u>17.4</u>	<u>8.1</u>	<u>5.3</u>	<u>1.5</u>

Drytime: 5.0Static Flow: 0

19.8

Avg. Microns:

169.1

Color L: 100.31 a: -0.12 b: 1.33METS: 9739 1123.6 %

Technician:

D. J. M. B.

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

CERTIFICATE OF ANALYSIS

Date: October 25, 1991

Customer: United Technologies
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030

Attention: Quality Control Manager

Product: 5415

Railcar No.: PLWX 44351

Order No.: 0002802-000

Date of Shipment: October 24, 1991 Customer P.O. No.: 050-01716

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.02
Bulk Density, GM/CC	ABR-2B	0.493
Brabender Dry Time, Mins.	ABR-7	5.0
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.3
Pan		0.6
Vinyl Chloride Monomer	ABGC-26	0.001
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7 Min	ABR-12	6
Contamination, BLK/BRN	ABR-5A	5 / 7
METS IR, % of Control	ABR-13	124


Amy E. Bagwell
Laboratory Supervisor/Lead

VAB.0001198127

PVC RAILCAR ANALYSIS

Load Date: 10-11-91 Product: 5415 Car No.: 44351Time Logged In: 0530 Logged In By: CoShip Date: 10/24 Silo(s): 690-691 Customer: SAINT UTC, MTRay
050-01716 0002902-000Metal 7

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.02		.01		.01		.02	
Contamination	$\frac{5}{7}$	$\frac{6}{8}$	$\frac{3}{8}$	$\frac{4}{7}$	$\frac{4}{8}$	$\frac{5}{7}$	5	$\frac{5}{9}$
Bulk Density	.487		.493		.500		.493	
BD w/antistat								
Hard Particle	$\frac{35}{600}$	—	—	—	—	—	—	—
Viscosity	1.021							
RVCM	.001							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>.73</u>	<u>24.09</u>	<u>13.40</u>	<u>6.90</u>	<u>2.80</u>	<u>1.63</u>	<u>.32</u>
% P	<u>00</u>	<u>1.5</u>	<u>48.2</u>	<u>26.8</u>	<u>14.0</u>	<u>5.4</u>	<u>33</u>	<u>.6</u>

Drytime: 5.0 Static Flow: 0 111.0 Avg. Microns: 180.7Color L: 99.90 a: -0.17 b: 1.22METS: 9620, 124.1 %Technician: M.T. + R.H.

PVC RAILCAR ANALYSIS

Load Date: 10-11-91 Product: 5415 Car No.: 44351Time Logged In: 1200 Logged In By: _____Ship Date: _____ Silo(s): 690, 691 Customer: _____

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture							<i>Resample</i> <u>bottom</u> <u>1st</u> <u>3</u> <u>17</u>	
Contamination	—	—	—	—	—	—		
Bulk Density								
BD wo/antistat								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity								
RVCM								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	—	—	—	—	—	—	—	—
%	—	—	—	—	—	—	—	—

Drytime: _____ Static Flow: _____ / _____ Avg. Microns: _____

Color L: _____ a _____ b _____

METS: _____ / _____ %

Technician: _____

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

LETTER OF CERTIFICATION

Date: October 11, 1991

Customer: United Technologies
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager

Product: 5415

Railcar No.: PLCX 42984

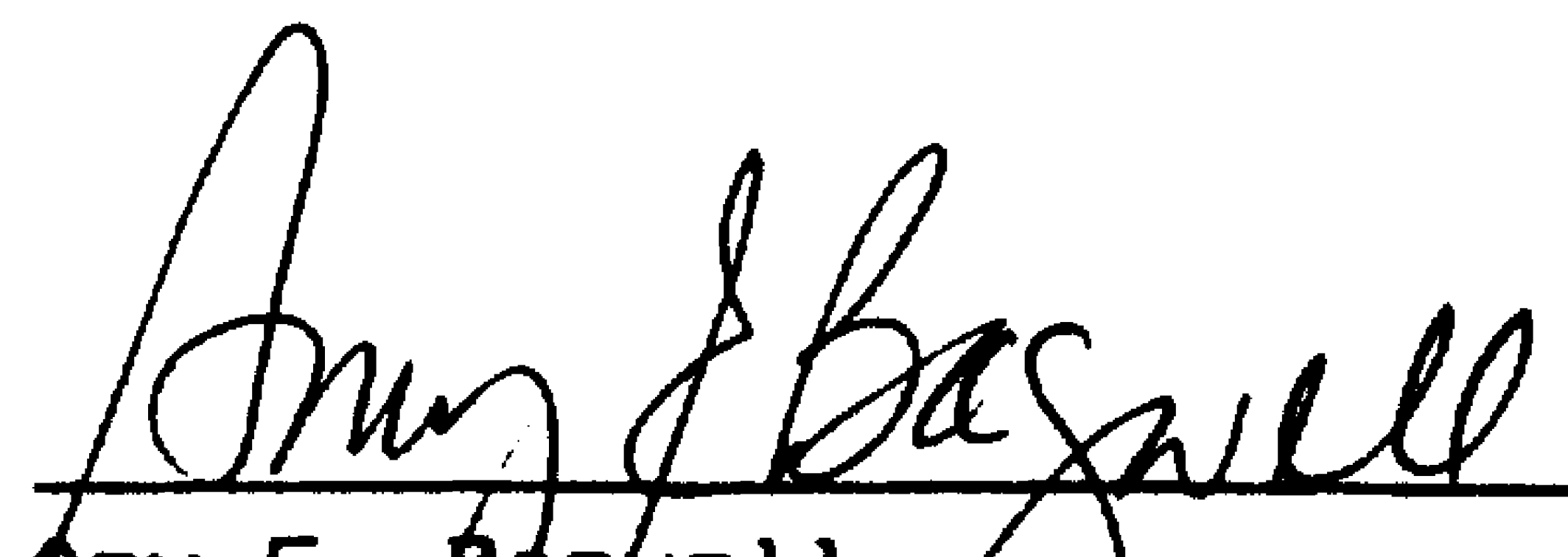
Order No.: 0002419-000

Date of Shipment: October 8, 1991

Customer P.O. No.: 050-01651

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.11
Bulk Density, GM/CC	ABR-2B	0.493
Brabender Dry Time, Mins.	ABR-7	4.9
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		5.8
Pan		1.8
Vinyl Chloride Monomer	ABGC-26	0.028
Inherent Viscosity	ABR-10	1.01
Hard Particle @ 7Min	ABR-12	1
Contamination, blk/brn	ABR-5A	4/ 8
METS IR, % of Control	ABR-13	118


Amy E. Bagwell
Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 10-2-91Product: 5415Car No.: 4298XTime Logged In: 1900Logged In By: MGShip Date: 10/8/91Silo(s): 690 681Customer: United Tech05001651-0002419-000metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.07		.11		.09		.06	
Contamination	$\frac{4}{8}$	$\frac{3}{6}$	$\frac{2}{6}$	$\frac{4}{7}$	$\frac{3}{9}$	$\frac{3}{8}$	$\frac{2}{5}$	$\frac{4}{6}$
Bulk Density	496		.486		498		.490	
BD wo/antistat								
Hard Particle	$\frac{4}{1}$	—	—	—	—	—	—	—
Viscosity	1.009							
RVCM	.028							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>.62</u>	<u>13.76</u>	<u>15.73</u>	<u>10.92</u>	<u>4.92</u>	<u>2.92</u>	<u>.92</u>
% P	<u>0.0</u>	<u>1.2</u>	<u>27.5</u>	<u>31.5</u>	<u>22.4</u>	<u>9.8</u>	<u>5.8</u>	<u>1.8</u>

Drytime: 4.9Static Flow: 0 19.7Avg. Microns: 162.1Color L: 100.75 a -0.14 b 1.11METS: 9147, 118.0%Technician: M.T & R.H

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

LETTER OF CERTIFICATION

Date: September 26, 1991

Customer: United Technologies
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030

Attention: Quality Control Manager

Date of Shipment: 6 Sept. 91

Product: 5415

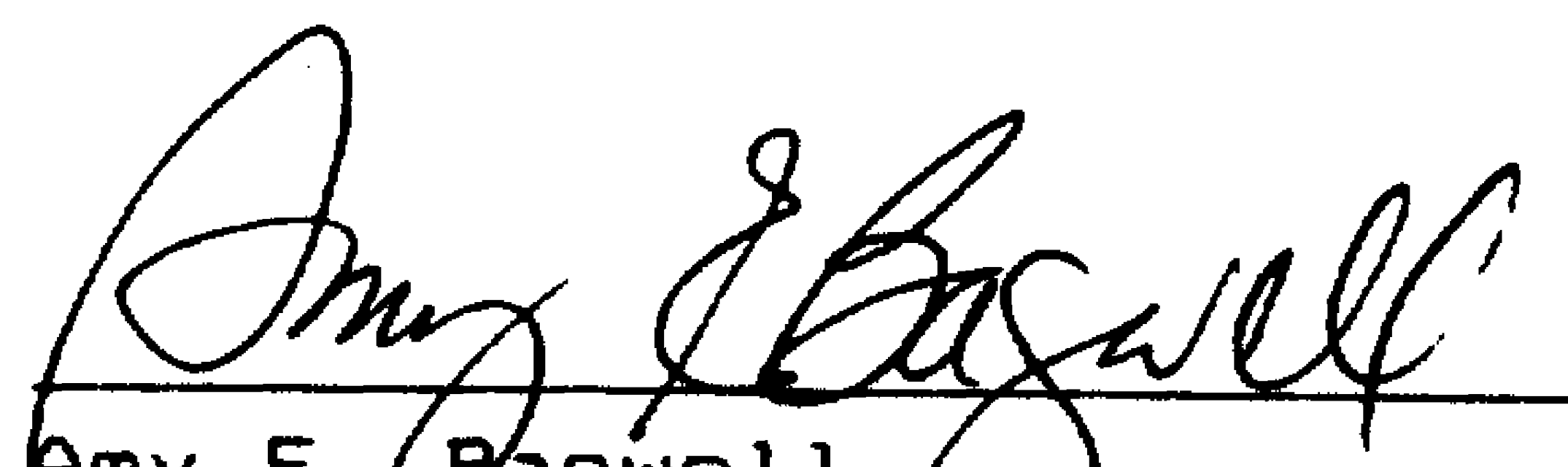
Railcar No.: UTCX 46474

Order No.: 0001944-000

Customer P.O. No.: 050-01599

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.12
Bulk Density, GM/CC	ABR-2B	0.506
Brabender Dry Time, Mins.	ABR-7	5.0
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		6.1
Pan		1.7
Vinyl Chloride Monomer	ABGC-26	0.001
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	.1
Contamination, blk/brn	ABR-5A	3/ 15
METS IR, % of Control	ABR-13	124


Amy E. Bagwell
Laboratory Supervisor/Lead

VAB.0001198132

PVC RAFFER ANALYSIS

Load Date: 10-11

Product: 5415

Car No.: 4074

Time Logged In: 1400

Logged In By:

Ship Date: 9/23/91

Silo(s): 670-691

Customer: Blanc

UTC Mt Any
10001944-000

050-01599

NO METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.05		.07		.12		.05	
Contamination	<u>3</u>	<u>T4</u>	<u>3</u>	<u>T2</u>	<u>1</u>	<u>T3</u>	<u>2</u>	<u>T3</u>
TOPS 100 Grams	<u>15</u>	<u>19</u>	<u>18</u>	<u>16</u>	<u>16</u>	<u>21</u>	<u>28</u>	<u>25</u>
Bulk Density	.512		.503		.506		.503	
BD w/antistat								
Hard Particle	<u>3</u>	—	—	—	—	—	—	—
	<u>18P.</u>							
Viscosity	1.019							
RVCM	.001							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pass
Weight	<u>0.00</u>	<u>3.73</u>	<u>20.63</u>	<u>10.85</u>	<u>5.89</u>	<u>2.80</u>	<u>3.04</u>	<u>0.87</u>
%	<u>0.0</u>	<u>7.5</u>	<u>45.3</u>	<u>21.7</u>	<u>12.1</u>	<u>5.6</u>	<u>6.1</u>	<u>1.7</u>

Drytime: 5.0

Static Flow: 0 110.9

Avg. Microns: 186.6

Color L: 100.53 -0.14 1.08

NETS: 9617, 124.3

Technician: P.O. + 03.

LETTER OF CERTIFICATION

Date: 11 Sept. 91

Product: 5415

VISTA

Customer: United Technologies
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030

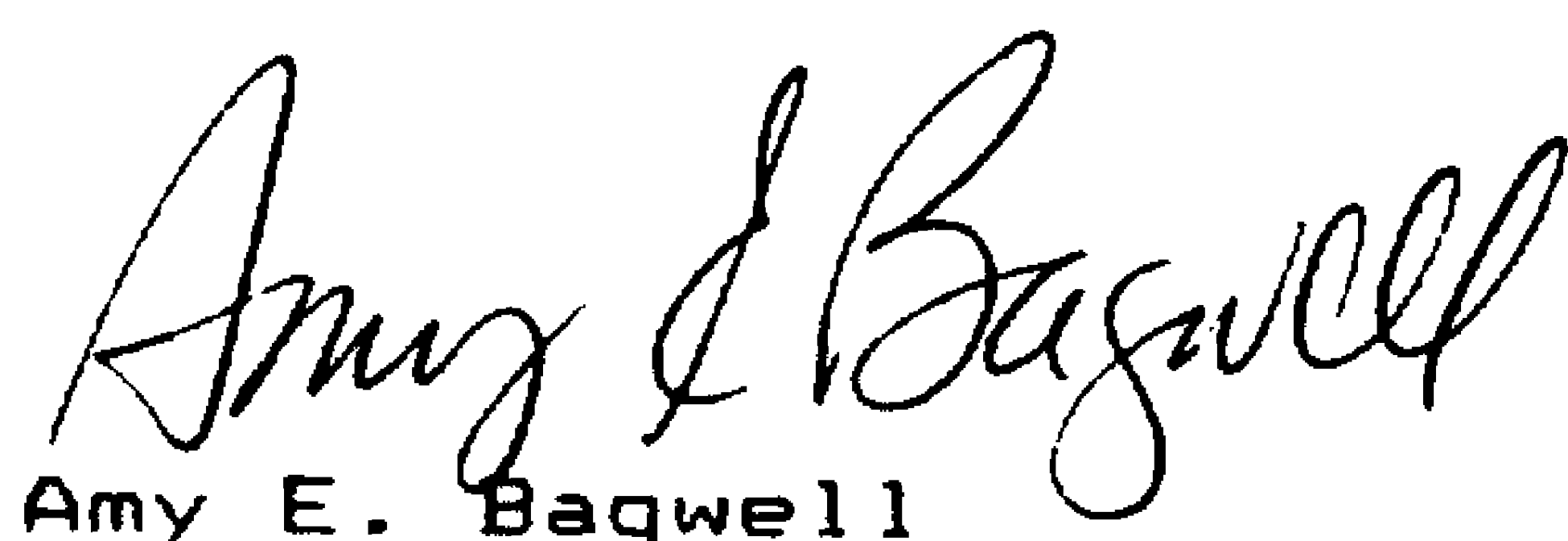
Railcar No.: VIPX 45871

Attention: Quality Control Manager

Order No.: 0001636-000

Date of Shipment: 6 Sept. 91 Customer P.O. No.: 050-01560

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.13
Bulk Density, GM/CC	ABR-2B	0.494
Brabender Dry Time, Mins.	ABR-7	5.1
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		5.4
Pan		1.6
Vinyl Chloride Monomer	ABGC-26	0.001
Inherent Viscosity	ABR-10	1.01
Hard Particle @ 7Min	ABR-12	3
Contamination, blk/brn	ABR-5A	5/ 8
METS IR, % of Control	ABR-13	113


Amy E. Bagwell

Laboratory Supervisor/Lead

Viscous Pt. 1000

Highway: 2E

Grade: 530

Grade: 530

PVC RAILCAR ANALYSIS

Load Date: 9-4-91

Product: 5415

Car No.: 45871

Time Logged In: 2230

Logged In By: RJH

Ship Date: 9/6/91

Silo(s): 690, 691

Customer: UTA Mt Arley

0001636-000

No Metal

	(A)		(CA)		(CB)		(B)	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.13		.09		.08		.06	
Contamination	<u>4</u> 6	<u>4</u> 5	<u>3</u> 5	<u>3</u> 4	<u>4</u> 7	<u>4</u> 6	<u>5</u> 8	<u>4</u> 7
Bulk Density	.495		.486		.498		.497	
BD w/o/antistat								
Hard Particle	<u>12</u> 3 du	—	—	—	—	—	—	—
Viscosity	1.005							
RVCM	.001							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>.81</u>	<u>1687</u>	<u>1552</u>	<u>915</u>	<u>399</u>	<u>269</u>	<u>.82</u>
% P	<u>0.0</u>	<u>1.6</u>	<u>33.7</u>	<u>31.0</u>	<u>18.7</u>	<u>8.0</u>	<u>5.4</u>	<u>1.6</u>

Drytime: 5.1

Static Flow: 0 110.7

Avg. Microns: 168.3

Color L: 100.73 a: -0.12 b: 1.16

HETS: 9.147, 113.18

Technician: MT & RH

PVC BULK TRAILER ANALYSIS

Date 9-6-91 Product 5415 Trailer Number T-415
 Customer United Tech. Corp. Silo 690 + 691 Time 1415
 Technician ES Order No. 0001665-000

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>15</u>		1. <u>11</u>		1. <u>2/11E</u>	1. <u>.504</u>	1. <u>5.1</u>	L = <u>100.56</u>		
	2.		2.		2.	2.	2.	A = <u>0.08</u>		
								B = <u>1.07</u>		
										<u>9/10.6</u>
MIDDLE	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
								B =		
END	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
								B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.35</u>	<u>12.64</u>	<u>16.09</u>	<u>11.03</u>	<u>5.33</u>	<u>3.60</u>	<u>1.04</u>	
% on Mesh	<u>0.00</u>	<u>0.7</u>	<u>25.3</u>	<u>32.2</u>	<u>21.8</u>	<u>10.7</u>	<u>7.2</u>	<u>2.1</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB 0001198136

LETTER OF CERTIFICATION

VISTA

Date: 9-6-91

Product: 5415

Customer: United Technologies
511 Hay Street
P. O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager

Code No.: RMS-XK-21

Trailer No.: T-415

Order No.: 000 1665-000

Date of Shipment: 9-6-91

Customer P.O. No.:

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.15</u>
Bulk Density, gm/cc	8.405	<u>.504</u>
Brabender Dry Time, Mins.	8.450	<u>5.1</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.00</u>
200 Mesh		<u>7.2</u>
Pan		<u>2.1</u>
Residual VCM, ppm	8.955	Not more than 5.0 PPM
Inherent Viscosity	8.600	<u>1.02</u>
Hard Particles @ 7 min	ABR-12	<u>1</u>
Contamination, blk/brn	ABR-5A	<u>1 / 11</u>
METS IR, % of control	ABR-13	<u>125</u> *

*Values for this property have been determined by our Statistical Quality Control Program and do not represent an actual analysis of a sample from this shipment.

Eddie Smith
Laboratory Supervisor/Lead

VAB.0001198137

LETTER OF CERTIFICATION

VISTA

Date: 9-8-91

Product: 5415

Customer: United Technologies
511 Hay Street
P. O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager

Code No.: RMS-XK-21

Trailer No.: T-722

Order No.: 0001665-001

Date of Shipment: 9-8-91

Customer P.O. No.: 050-01560

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.06</u>
Bulk Density, gm/cc	8.405	<u>.502</u>
Brabender Dry Time, Mins.	8.450	<u>50</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>5.6</u>
Pan		<u>1.7</u>
Residual VCM, ppm	8.955	Not more than 5.0 PPM
Inherent Viscosity	8.600	<u>1.02</u>
Hard Particles @ 7 min	ABR-12	<u>2</u>
Contamination, blk/brn	ABR-5A	<u>2, 3</u>
METS IR, % of control	ABR-13	<u>125</u> *

*Values for this property have been determined by our
Statistical Quality Control Program and do not represent
an actual analysis of a sample from this shipment.

Curtis Outlaw
Laboratory Supervisor/Lead

VAB.0001198138

PVC BULK TRAILER ANALYSIS

Date 9-8-91 Product 5415 Trailer Number T-722
 Customer U.T.C. Silo 690 Time 1030
 Technician Co & Es Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.06		1.2/3		12 2.502	1.	1.	L = 100.89		
	2.		2.		2.	2.	2.	A = .07		0.10.1
MIDDLE	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	0.00	1.21	19.15	14.09	8.03	3.95	2.82	.86	
% on Mesh	0.0	2.2	38.3	28.2	16.1	7.9	5.6	1.7	172.1

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198139

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

LETTER OF CERTIFICATION

VISTA

Date: 26 Aug. 91

Product: 5415

Customer: United Technologies
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030

Railcar No.: UTCX-46415

Attention: Quality Control Manager

Order No.: 0001313-000

Date of Shipment: 22 Aug. 91 Customer P.O. No.: 050-01463

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	.08
Bulk Density, GM/CC	ABR-2B	.511
Brabender Dry Time, Mins.	ABR-7	5.1
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		4.6
Pan		1.5
Vinyl Chloride Monomer	ABGC-26	.038
Inherent Viscosity	ABR-10	1.010
Hard Particle @ 7Min	ABR-12	3
Contamination, blk/brn	ABR-5A	12 / 8
METS IR, % of Control	ABR-13	120


Billy P. Sizemore

Laboratory Supervisor/Lead

VAB.0001198140

PVC RAILCAR ANALYSIS

Load Date: 8-26-91 Product: 5415 Car No.: 46415 ^{UTCX}

Time Logged In: 1500 Logged In By: CO ^{UTA, Mt. Airy}

Ship Date: 7/30/91 8/22 Silo(s): 690-691 Customer: ~~WTCX~~ ~~WTCX~~
050-01463 ~~0000000000~~ ~~CSX~~ ~~8105~~ ~~0001313-000~~

Metal (1)

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.13	TOP	.04	TOP	.05	TOP	.09	TOP
Contamination	<u>16</u> 9	<u>25</u> 10	<u>15</u> 11	<u>24</u> 12	<u>10</u> 8	<u>15</u> 12	<u>16</u> 5	<u>12</u> 12
Bulk Density	.516	.	.500		.515		.515	
BD w/antistat								
Hard Particle	<u>10</u> 3 R.P.	—	—	—	—	—	—	—
Viscosity	1.010							
RVCM	.038							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>1.09</u>	<u>17.42</u>	<u>14.74</u>	<u>9.33</u>	<u>4.16</u>	<u>2.31</u>	<u>.76</u>
% P	<u>0.0</u>	<u>2.2</u>	<u>34.8</u>	<u>29.5</u>	<u>19.1</u>	<u>8.3</u>	<u>4.6</u>	<u>1.5</u>

Drytime: 5.1 Static Flow: 0 110.1 Avg. Microns: 170.3

Color L: 100.54 a: -0.01 b: 1.45

HETS: 8986, 120.4

Technician: MT & MB

04707
04706

LETTER OF CERTIFICATION

VISTA

Date: 8/13/91

Product: 5415

Customer: United Technologies
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030

Railcar No.: ACFX-41170

Attention: Quality Control Manager

Order No.: 0001098-000

Date of Shipment: 8/12/91

Customer P.O. No.: 050-01430

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.21
Bulk Density, GM/CC	ABR-2B	0.511
Brabender Dry Time, Mins.	ABR-7	5.1
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.1
Pan		1.3
Vinyl Chloride Monomer	ABGC-26	0.005
Inherent Viscosity	ABR-10	1.03
Hard Particle @ 7Min	ABR-12	2
Contamination, blk/brn	ABR-5A	4/5
METS IR, % of Control	ABR-13	121


H.D. Lucas

Laboratory Supervisor/Lead

VAB.0001198143

PVC RAILCAR ANALYSIS

Load Date: 8-10-91Product: 5415Car No.: 41170 ^{ACFX}Time Logged In: 1800Logged In By: ESShip Date: 8/12/91Silo(s): 690+691Customer: United IceMOUNT AIR 0001098-000CPO#050-01430No metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.13		.21		.13		.13	
Contamination	<u>3</u>	<u>T4</u>	<u>4</u>	<u>T3</u>	<u>4</u>	<u>T2</u>	<u>3</u>	<u>T3</u>
<u>TOPS 100 GRAMS</u>	<u>4</u>	<u>6</u>	<u>4</u>	<u>3</u>	<u>5</u>	<u>4</u>	<u>3</u>	<u>4</u>
Bulk Density	.506		.515		.506		.518	
BD wo/antistat								
Hard Particle	<u>4</u>	—	—	—	—	—	—	—
	<u>2 R.P.</u>							
Viscosity	1.028							
RVCM	.005							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>3.13</u>	<u>25.50</u>	<u>11.62</u>	<u>5.35</u>	<u>2.35</u>	<u>1.54</u>	<u>0.64</u>
%	<u>0.0</u>	<u>6.3</u>	<u>51.0</u>	<u>23.2</u>	<u>10.4</u>	<u>4.7</u>	<u>3.1</u>	<u>1.3</u>

Drytime: 5.1Static Flow: 0.78Avg. Microns: 191.0Color L: 101.01 a -0.08 b 1.05METS: 9457, 120.5 %Technician: D.T. FHL

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730
Phone (601) 369-8111

LETTER OF CERTIFICATION

VISTA

Date: 7/31/91 Product: 5415
Customer: United Technologies Railcar No.: ACFX-41137
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager Order No.: 0000847-000
Date of Shipment: 7/30/91 Customer P.O. No.: 050-01369

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.16
Bulk Density, GM/CC	ABR-2B	0.491
Brabender Dry Time, Mins.	ABR-7	5.0
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		5.9
Pan		1.7
Vinyl Chloride Monomer	ABGC-26	0.017
Inherent Viscosity	ABR-10	1.01
Hard Particle @ 7Min	ABR-12	3
Contamination, blk/brn	ABR-5A	2/33
METS IR, % of Control	ABR-13	125



H.D. Lucas

Laboratory Supervisor/Lead

VAB.0001198145

PVC RAILCAR ANALYSIS

Load Date: 7-27-91 Product: 5415 Car No.: 41137 ACFX

Time Logged In: _____ Logged In By: _____

Ship Date: 7/30/91 Silo(s): _____ Customer: Issy UT
0000 847-000 MOUNT AIRY NC

clean

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture								
Contamination	—	—	<u>8</u> <u>20</u>	—	—	—	—	—
Bulk Density								
BD w/antistat								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity								
RVCM								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	_____	_____	_____	_____	_____	_____	_____	_____
%	_____	_____	_____	_____	_____	_____	_____	_____

Drytime: _____ Static Flow: 1 Avg. Microns: _____

Color L: _____ a: _____ b: _____

HETS: 1 5

Technician: _____

PVC RAILCAR ANALYSIS

Load Date: 7-27-91 Product: 5415 Car No.: 41137

Time Logged In: 0500 Logged In By: TALLIE

Ship Date: _____ Silo(s): 690/671 Customer: _____

No Metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.14		.14		.15		.16	
Contamination	<u>2</u>	<u>T3</u>	<u>5</u>	<u>T4</u>	<u>3</u>	<u>T3</u>	<u>2</u>	<u>T2</u>
<i>Tops 100 grams</i>	9	16		12	25	7	33	12
Bulk Density	.486		.495		.492		.490	
BD w/o/antistat								
Hard Particle	<u>8</u>	—	—	—	—	—	—	—
	3GE							
Viscosity	1.014							
RVCM	.017							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.13</u>	<u>13.57</u>	<u>16.53</u>	<u>11.05</u>	<u>4.93</u>	<u>2.94</u>	<u>0.87</u>
%	<u>0.0</u>	<u>0.3</u>	<u>27.1</u>	<u>33.1</u>	<u>22.0</u>	<u>9.9</u>	<u>5.9</u>	<u>1.7</u>

Drytime: 5.0 Static Flow: 0.11.2 Avg. Microns: 160.4

Color L: 101.00 a: 0.07 b: 1.04

METS: 9291, 124.5

Technician: ES + JS

LETTER OF CERTIFICATION

VISTA

Date: 7/22/91 Product: 5415
Customer: United Technologies Railcar No.: ACFX-41167
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager Order No.: 0000591-000
Date of Shipment: 7/19/91 Customer P.O. No.: 050-01309

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.12
Bulk Density, GM/CC	ABR-2B	0.502
Brabender Dry Time, Mins.	ABR-7	5.0
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.8
Pan		1.4
Vinyl Chloride Monomer	ABGC-26	0.019
Inherent Viscosity	ABR-10	1.04
Hard Particle @ 7Min	ABR-12	3
Contamination, blk/brn	ABR-5A	4/ 12
METS IR, % of Control	ABR-13	111



H.D. Lucas

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 6-25-91 Product: 5415 Car No.: 41167

Time Logged In: 0400 Logged In By: RJH

Ship Date: 7-19-91 Silo(s): 690, 691 Customer: Essex VT
~~0000591~~ 0000591-000 MONT ARI

NO metal

12:00

12:00

	(A) MT		(CA) MT		(CB)		(B)	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.09		.12		.07		.06	
Contamination	$\frac{3}{10}$	—	$\frac{4}{12}$	—	$\frac{3}{8}$	—	$\frac{2}{15}$	—
Bulk Density	.507		.505		.500		.497	
BD w/antistat								
Hard Particle	$\frac{12}{300}$	—	—	—	—	—	—	—
995 Viscosity	.994	1.004	1.008		1.006		1.008	
RVCM	.019							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.6</u>	<u>.23</u>	<u>19.29</u>	<u>15.58</u>	<u>8.49</u>	<u>3.57</u>	<u>1.92</u>	<u>.72</u>
%P	<u>0.0</u>	<u>.5</u>	<u>38.6</u>	<u>31.2</u>	<u>17.4</u>	<u>7.1</u>	<u>3.8</u>	<u>1.4</u>

Drytime: 5.0 Static Flow: 0.19.9 Avg. Microns: 171.1

Color L: 100.10 a: -0.08 b: 1.19

METS: 9000, 111.3

Technician: M, T & R H



LETTER OF CERTIFICATION

VISTA

Date: 6/25/91

Product: 5415

Customer: United Technologies
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030

Railcar No.: PLWX-44726

Attention: Quality Control Manager

Order No.: 0000333-000

Date of Shipment: 6/24/91

Customer P.O. No.:

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.21
Bulk Density, GM/CC	ABR-2B	0.510
Brabender Dry Time, Mins.	ABR-7	5.1
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.4
Pan		1.3
Vinyl Chloride Monomer	ABGC-26	0.02B
Inherent Viscosity	ABR-10	1.01
Hard Particle @ 7Min	ABR-12	1
Contamination, blk/brn	ABR-5A	B/ 2
METS IR, % of Control	ABR-13	110


H.D. Lucas

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 6-16-91 Product: 5415 Car No.: 44726 PLW

Time Logged In: 01:00 Logged In By: D.T.

Ship Date: 6-24-91 Silo(s): 690+691 Customer: ISSUE UT
0000333-000 MOUNT AIRY

No metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.12		.19		.21		.19	
Contamination	<u>8</u>	<u>T6</u>	<u>7</u>	<u>T5</u>	<u>3</u>	<u>—</u>	<u>4</u>	<u>—</u>
<u>TAPS 100 GRAMS</u>	<u>2</u>	<u>4</u>	<u>4</u>	<u>5</u>	<u>2</u>	<u>—</u>	<u>2</u>	<u>—</u>
Bulk Density	.505		.507		.514		.515	
BD w/antistat								
Hard Particle	<u>3</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	<u>1 MB</u>							
Viscosity	1.013							
RVCM	.028							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.70</u>	<u>20.25</u>	<u>1420</u>	<u>7.95</u>	<u>3.30</u>	<u>1.71</u>	<u>0.65</u>
%	<u>0.0</u>	<u>3.4</u>	<u>40.5</u>	<u>28.4</u>	<u>16.4</u>	<u>6.8</u>	<u>3.4</u>	<u>1.3</u>

Drytime: 5.1 Static Flow: 0.19.5 Avg. Microns: 178.0

Color L: 100.56 a: -2.07 b: 1.15

HETS: 8.718 110.1 %

Technician: D.T. + M.B.

No worksheet 23 June 91
LETTER OF CERTIFICATION

VISTA

Date: 6-23-91

Product: 5415

Customer: United Technologies
511 Hay Street
P. O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager

Code No.: RMS-XK-21

Trailer No.: T-723

Order No.: 0000336-000

Date of Shipment: 6-23-91

Customer P.O. No.: 050-01250

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.07</u>
Bulk Density, gm/cc	8.405	<u>.501</u>
Brabender Dry Time, Mins.	8.450	<u>5.0</u>
Particle Size, % on	8.300	
40 Mesh		<u>.00</u>
200 Mesh		<u>4.7</u>
Pan		<u>1.8</u>
Residual VCM, ppm	8.955	Not more than 5.0 PPM
Inherent Viscosity	8.600	<u>1.03</u>
Hard Particles @ 7 min	ABR-12	<u>1</u>
Contamination, blk/brn	ABR-5A	<u>4 / 6</u>
METS IR, % of control	ABR-13	<u>118</u> *

*Values for this property have been determined by our
Statistical Quality Control Program and do not represent
an actual analysis of a sample from this shipment.

Melvin Tallie
Laboratory Supervisor/Lead

VAB.0001198152

PVC BULK TRAILER ANALYSIS

A

Date 6-22-91 Product 5415 Trailer Number T-723
 Customer United Tech Silo 690 Time 2400
 Technician MJ Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>0.07</u>		1. <u>4/6</u>		1. <u>1/25</u>	1. <u>.501</u>	1. <u>5.0</u>	L = <u>100.25</u> A = <u>7.09</u>	<u>Flow</u> <u>78.0</u>	
	2.		2.		2.	2.	2.	B = <u>1.13</u>		
MIDDLE	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
								B =		

Particle Size Distribution:

Screen Analysis 10 Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare <u>T</u>									
Net Wt.	<u>0.00</u>	<u>.17</u>	<u>13.55</u>	<u>17.12</u>	<u>11.25</u>	<u>4.71</u>	<u>2.35</u>	<u>.90</u>	
% on Mesh	<u>0.0</u>	<u>.3</u>	<u>27.1</u>	<u>34.2</u>	<u>22.5</u>	<u>9.4</u>	<u>9.7</u>	<u>1.8</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAD.0001198153

LETTER OF CERTIFICATION

VISTA

Date: 20 June 91 Product: 5415
Customer: United Technologies Railcar No.: PLCX-43865
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager Order No.: 0000228-000
Date of Shipment: 12 June 91 Customer P.O. No.: 050-01215

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	.19
Bulk Density, GM/CC	ABR-2B	.507
Brabender Dry Time, Mins.	ABR-7	4.9
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		2.5
Pan		1.2
Vinyl Chloride Monomer	ABGC-26	.212
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	1
Contamination, blk/brn	ABR-5A	5 / 8
METS IR, % of Control	ABR-13	119


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 5-25-91 Product: 5415Car No.: 43865Time Logged In: 1500Logged In By: TALLIEShip Date: 12 June 91 Silo(s): 690-691 Customer: ESSA/IPC
0000228-000 CM-050-01215 UTC Mount Airyno metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.13		.14		.16		.19	
Contamination	$\frac{5}{8}$	$\frac{6}{7}$	$\frac{5}{8}$	$\frac{7}{5}$	$\frac{6}{5}$	no top	$\frac{4}{6}$	no top
Bulk Density	.503		.503		.514		.502	
BD w/antistat								
Hard Particle	$\frac{4}{1} 55$	—	—	—	—	—	—	—
Viscosity	1.016							
RVCM	.212							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>.64</u>	<u>23.77</u>	<u>14.29</u>	<u>7.20</u>	<u>2.52</u>	<u>1.23</u>	<u>.58</u>
%	<u>0.0</u>	<u>1.3</u>	<u>47.5</u>	<u>28.6</u>	<u>13.9</u>	<u>5.0</u>	<u>2.5</u>	<u>1.2</u>

Drytime: 4.9 Static Flow: 0.17.8 Avg. Microns: 180.1Color L: 100.40 a: 0.03 b: 1.75METS: 9,300 / 118.5 %Technician: M.T. & R.H.

LETTER OF CERTIFICATION

VISTA

Date: 3 June 91

Product: 5415

Customer: United Technologies
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030

Railcar No.: GACX-73398

Attention: Quality Control Manager

Order No.: 891333-020

Date of Shipment: 31 May 91

Customer P.O. No.: 050-01176

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.12
Bulk Density, GM/CC	ABR-2B	0.502
Brabender Dry Time, Mins.	ABR-7	5.0
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.9
Pan		1.3
Vinyl Chloride Monomer	ABGC-26	0.030
Inherent Viscosity	ABR-10	1.03
Hard Particle @ 7Min	ABR-12	2
Contamination, blk/brn	ABR-5A	8/ 29
METS IR, % of Control	ABR-13	111


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 5-20-91Product: 5415Car No.: 73398Time Logged In: 0200Logged In By: F.T.Ship Date: 31 May 91Silo(s): 690+691Customer: Issey891333-020CPO# 050-01176no metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.11		.09		.12		.10	
Contamination	$\frac{7}{16}$	$\frac{4}{15}$	$\frac{8}{29}$	$\frac{6}{22}$	$\frac{7}{16}$	$\frac{4}{12}$	$\frac{4}{15}$	$\frac{5}{12}$
Bulk Density	.499		.503		.498		.510	
BD w/antistat								
Hard Particle	$\frac{8}{2 MG}$	—	—	—	—	—	—	—
Viscosity	1.026							
RVCM	.030							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>.31</u>	<u>20.46</u>	<u>14.91</u>	<u>8.20</u>	<u>3.25</u>	<u>1.93</u>	<u>.67</u>
%	<u>0.0</u>	<u>.6</u>	<u>40.9</u>	<u>29.8</u>	<u>17.0</u>	<u>6.5</u>	<u>3.9</u>	<u>1.3</u>

Drytime: 5.0Static Flow: 0 17.9Avg. Microns: 172.9Color L: 100.41 a .02 b 1.48METS: 9.136, 110.5%Technician: MATE

LETTER OF CERTIFICATION

VISTA

Date: 20 May 91 Product: 5415
Customer: United Technologies Railcar No.: VIPX-45878
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager Order No.: 891333-019
Date of Shipment: 17 May 91 Customer P.O. No.: 050-01126

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.14
Bulk Density, GM/CC	ABR-2B	0.507
Brabender Dry Time, Mins.	ABR-7	5.1
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.6
Pan		1.3
Vinyl Chloride Monomer	ABGC-26	0.054
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	2
Contamination, blk/brn	ABR-5A	4/ 7
METS IR, % of Control	ABR-13	117


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 5-15-91Product: 5415Car No.: 45878Time Logged In: 15:00Logged In By: P.T.Ship Date: 17 May 91Silo(s): 1810+691Customer: Mount Airy891333-019CPD 050-01126No METAL18:00

	<u>A</u>		<u>CA</u>		<u>CB</u>		<u>B</u>	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.05		.06		.12		.14	
Contamination	$\frac{4}{7}$	$\frac{6}{10}$	$\frac{2}{5}$	$\frac{5}{9}$	$\frac{3}{6}$	$\frac{9}{8}$	$\frac{3}{7}$	$\frac{5}{7}$
Bulk Density	503		495		513		516	
BD wo/antistat								
Hard Particle	$\frac{50}{22}$ 2 MI	—	—	—	—	—	—	—
Viscosity	1.015							
RVCM	1054							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>:44</u>	<u>19.56</u>	<u>15.86</u>	<u>8.53</u>	<u>3.15</u>	<u>1.78</u>	<u>:63</u>
%	<u>0.0</u>	<u>.9</u>	<u>39.1</u>	<u>31.7</u>	<u>17.1</u>	<u>6.3</u>	<u>3.6</u>	<u>1.3</u>

Drytime: 5.1Static Flow: 0 19.2Avg. Microns: 172.8Color L: 100.70 a -0.07 b 1.37METS: 9291, 116.9%Technician: M.T. & R.H.

LETTER OF CERTIFICATION

Date: 25 Apr. 91 Product: 5415
Customer: United Technologies Railcar No.: ACFX-41156
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager Order No.: 891333-018
Date of Shipment: 23 Apr. 91 Customer P.O. No.: 050-01056

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.18
Bulk Density, GM/CC	ABR-2B	0.505
Brabender Dry Time, Mins.	ABR-7	4.8
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		4.2
Pan		1.5
Vinyl Chloride Monomer	ABGC-26	0.032
Inherent Viscosity	ABR-10	1.01
Hard Particle @ 7Min	ABR-12	5
Contamination, blk/brn	ABR-5A	19/ 49
METS IR, % of Control	ABR-13	116


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 4-19-91Product: 5415Car No.: ACFX 41156Time Logged In: 0910Logged In By: COShip Date: 23Silo(s): 690-691Customer: United TechSpecial H. for891333-018 CPO-050-01056

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.14		.18		.17		.17	
Contamination	<u>8</u>	<u>75</u>	<u>9</u>	<u>76</u>	<u>19</u>	<u>74</u>	<u>19</u>	<u>74</u>
<u>TOP 91 100 Grams</u>	<u>41</u>	<u>32</u>	<u>12</u>	<u>15</u>	<u>49</u>	<u>36</u>	<u>69</u>	<u>31</u>
Bulk Density	.511		.506		.504		.500	
BD w/antistat								
Hard Particle	<u>37</u> <u>13</u> <u>5</u> R.P.	—	—	—	—	—	—	—
Viscosity	1.014							
RVCM	.032							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.20</u>	<u>16.62</u>	<u>15.41</u>	<u>10.34</u>	<u>4.45</u>	<u>2.10</u>	<u>0.75</u>
%	<u>0.0</u>	<u>0.4</u>	<u>33.2</u>	<u>30.8</u>	<u>21.0</u>	<u>8.9</u>	<u>4.2</u>	<u>1.5</u>

Drytime: 4.8Static Flow: 0 18.6Avg. Microns: 165.9Color L: 100.46 a -0.06 b 1.60METS: 9,300, 116.0%Technician: DT-HPL

LETTER OF CERTIFICATION

VISTA

Date: 3-22-91

Product: 5415

Customer: United Technologies
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030

Railcar No.: ACFX-41148

Attention: Quality Control Manager

Order No.: 891333-017

Date of Shipment: 3-21-91

Customer P.O. No.: 050-00979

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.11
Bulk Density, GM/CC	ABR-2B	0.506
Brabender Dry Time, Mins.	ABR-7	4.9
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.7
Pan		1.3
Vinyl Chloride Monomer	ABGC-26	0.038
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	2
Contamination, blk/brn	ABR-5A	3/ 2
METS IR, % of Control	ABR-13	117


H.D. Lucas

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 3-20-91Product: 5415Car No.: 41148Time Logged In: 2100Logged In By: R3fShip Date: 3-21-91Silo(s): 690, 691Customer: United Tech.891333-017CPO 050-00979No metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.11		.08		.05		.06	
Contamination	$\frac{2}{2}$	$\frac{4}{1}$	$\frac{3}{2}$	$\frac{7}{4}$	$\frac{2}{1}$	$\frac{5}{3}$	$\frac{2}{2}$	$\frac{7}{3}$
Bulk Density	.511		.506		.505		.503	
BD wo/antistat								
Hard Particle	$\frac{7}{2.55}$	—	—	—	—	—	—	—
Viscosity	1.018							
RVCM	.038							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>.58</u>	<u>14.63</u>	<u>14.27</u>	<u>9.18</u>	<u>3.78</u>	<u>1.86</u>	<u>.65</u>
%	<u>0.0</u>	<u>1.2</u>	<u>39.3</u>	<u>28.5</u>	<u>18.4</u>	<u>7.6</u>	<u>3.7</u>	<u>1.3</u>

Drytime: 4.9Static Flow: 0 / 10.4 Avg. Microns: 172.3Color L: 100.48 a .14 b 1.42METS: 9457, 116.9 %Technician: G, ES, MT.

LETTER OF CERTIFICATION

VISTA

Date: 3-14-91

Product: 5415

Customer: United Technologies
511 Hay Street
P. O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager

Code No.: RMS-XK-21

Trailer No.: 7-5668

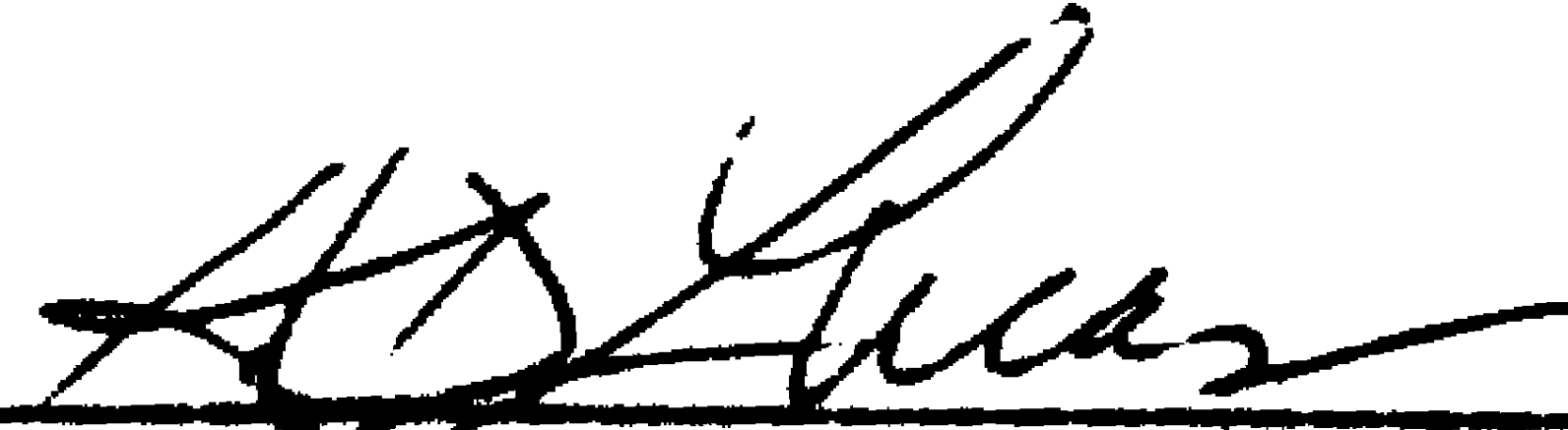
Order No.: 903542-001

Date of Shipment: 3-12-91

Customer P.O. No.: 050-00944
LOT NO.: 04659

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.18</u>
Bulk Density, gm/cc	8.405	<u>.511</u>
Brabender Dry Time, Mins.	8.450	<u>5.1</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.00</u>
200 Mesh		<u>5.3</u>
Pan		<u>1.2</u>
Residual VCM, ppm	8.955	Not more than 5.0 PPM
Inherent Viscosity	8.600	<u>1.01</u>
Hard Particles @ 7 min	ABR-12	<u>2</u>
Contamination, blk/brn	ABR-5A	<u>4.2</u>
METS IR, % of control	ABR-13	<u>116</u> *

*Values for this property have been determined by our
Statistical Quality Control Program and do not represent
an actual analysis of a sample from this shipment.


Laboratory Supervisor/Lead

VAB.0001198164

Bag Blend

Regular or Bags

Page ___ of ___ pages

Vinyl Sample Log

Page 1 of 1
12-5-90

Date 12-1-90
Product Type 5415

VAB.0001198165

Blend Number	Time By	To	Sample No.	Moist.	Particle Size Distribution								HP Screen Set	Bulk G./C.C.	Dry Time	Cont. %	Static Flow	L & N Values			CPA Glassy	Visc.
					40	60	80	100	120	140	200	Pan						L	A	B		
04659	0.3/0.4/0.5	B A 9 5	1 + 10	-	0.0	0.13	10.38	16.47	14.53	5.38	2.64	0.62	14/8 64	.511	5-1	-	108	20	50	80		.038
					0.0	0.3	20.6	32.9	28.9	10.8	5.3	1.2										
			%	.17												2						1.005
			%	.18												2						1.013
			%	.16												3						
			%	.15												2						
			%	.17												4						
			%	.17												3						
			%	.18												2						

LETTER OF CERTIFICATION

VISTA

Date: 3-11-91

Product: 5415

Customer: United Technologies
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030

Railcar No.: UTCX-46570

Attention: Quality Control Manager

Order No.: 891333-016

Date of Shipment: 3-8-91

Customer P.O. No.: 050-00940

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.12
Bulk Density, GM/CC	ABR-2B	0.498
Brabender Dry Time, Mins.	ABR-7	4.8
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		2.2
Pan		1.1
Vinyl Chloride Monomer	ABGC-26	0.040
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	2
Contamination, blk/brn	ABR-5A	4/ 2
METS IR, % of Control	ABR-13	117


H.D. Lucas

Laboratory Supervisor/Lead

Vista Polymers

Highway 25

Aberdeen, MS 39730

PVC RAILCAR ANALYSIS

Load Date: 3-6-91Product: 5415Car No.: 46570 ^{UTCX}Time Logged In: 23:30Logged In By: RJHShip Date: 3-8-91Silo(s): 690, 691Customer: UTC ^{Mountain}891333-016050-00940Medal ok

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.10		.05		.12		.12	
Contamination	$\frac{2}{2}$	$\frac{5}{2}$	$\frac{4}{2}$	$\frac{9}{4}$	$\frac{2}{2}$	$\frac{7}{6}$	$\frac{2}{1}$	$\frac{8}{4}$
Bulk Density	.500		.490		.502		.501	
BD wo/antistat								
Hard Particle	$\frac{12}{26.E.}$	—	—	—	—	—	—	—
Viscosity	1.017							
RVCM	.040							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>.63</u>	<u>25.82</u>	<u>13.21</u>	<u>6.49</u>	<u>2.20</u>	<u>1.08</u>	<u>.56</u>
%	<u>0.0</u>	<u>1.3</u>	<u>51.6</u>	<u>26.4</u>	<u>13.0</u>	<u>4.4</u>	<u>2.2</u>	<u>1.1</u>

Drytime: 4.8Static Flow: 0.19.0Avg. Microns: 183.1Color L: 99.80 a 0.01 b 1.55METS: 9,136 / 117.4 %Technician: M.T., CO, ES

TO: All Vista PVC Resin Customers

FROM: Jim Edwards

DATE: 2/14/91

SUBJECT: PVC Resin Particle Size Analysis

VISTA

Vista's Aberdeen PVC Plant Q C Lab has changed the equipment used for particle size analysis. The change is from wire mesh sieves to Electroformed Precision Sieves. ASTM E 11-70 for wire sieves allows ± 5 to ± 19 μm tolerances for openings 200 to 40 mesh respectively. Precision screens offer tolerances ± 2 μm for all mesh sizes in that range.

This change will not affect our resin's physical properties. There will be a slight change in the reported mesh distributions. The fine and the coarse ends should stay the same or decrease slightly. The middle screens will appear to be more peaked depending on the resin type.

Testing has found the wire mesh sieves to be less accurate than the Precision Sieves, allowing oversized resin to pass through to a smaller sieve. The oversized resin slipped through openings made too large by shifting wire mesh.

An Experimental Design was recently performed on the resin particle size variation at the Aberdeen Plant. The data showed:

85% of the variance was attributed to the Process

14% of the variance was attributed to the Testing

1% of the variance was attributed to the Sampling

The change to Precision Sieves will help reduce the variance attributed to Testing. This will allow better analysis of actual process variation. If you would like to discuss this change further please call.

Sincerely,

Jim Edwards
Chief Plant Chemist
(601-369-3607)

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

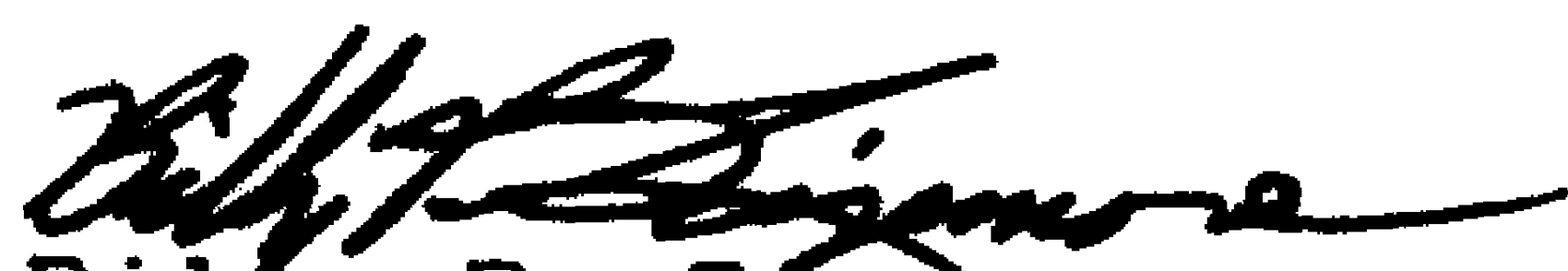
Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

LETTER OF CERTIFICATION

Date: 18 Feb. 91 Product: 5415
Customer: United Technologies Railcar No.: UTCX-48050
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager Order No.: 891333-015
Date of Shipment: 15 Feb. 91 Customer P.O. No.: 050-00880

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.15
Bulk Density, GM/CC	ABR-2B	0.511
Brabender Dry Time, Mins.	ABR-7	5.5
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.2
Pan		0.8
Vinyl Chloride Monomer	ABGC-26	0.018
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	1
Contamination, blk/brn	ABR-5A	4/ 9
METS IR, % of Control	ABR-13	117


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 2-10-91Product: 5415Car No.: 48050Time Logged In: 1200Logged In By: M.T.Ship Date: 15 Feb. 91Silo(s): 690/691Customer: Essex Mount Airy891333-015No Metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.05		.15		.10		.15	
Contamination	<u>2</u>	<u>7 3</u>	<u>3</u>	<u>7 4</u>	<u>2</u>	<u>7 5</u>	<u>4</u>	<u>7 11</u>
TOPS 100 GRAMS	7	4	6	4	7	3	9	14
Bulk Density	.514		.510		.508		.510	
BD w/antistat								
Hard Particle	<u>2</u>	—	—	—	—	—	—	—
	1 P.P.							
Viscosity	1.016							
RVCM	.018							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.18</u>	<u>17.12</u>	<u>16.07</u>	<u>10.63</u>	<u>3.90</u>	<u>1.61</u>	<u>0.38</u>
%	<u>0.0</u>	<u>0.4</u>	<u>34.2</u>	<u>32.1</u>	<u>21.9</u>	<u>7.4</u>	<u>3.2</u>	<u>0.8</u>

Drytime: 5.5Static Flow: 0 19.8Avg. Microns: 168.5Color L: 100.80 a 0.13 b 1.48METS: 9.136 117.4 %Technician: Peto + HPL

LETTER OF CERTIFICATION

VISTA

Date: 30 Jan. 91 Product: 5415
Customer: United Technologies Railcar No.: UTCX-46483
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager Order No.: 891333-014
Date of Shipment: 29 Jan. 91 Customer P.O. No.: 050-00816

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	.21
Bulk Density, GM/CC	ABR-2B	.508
Brabender Dry Time, Mins.	ABR-7	5.0
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		4.0
Pan		1.2
Vinyl Chloride Monomer	ABGC-26	.011
Inherent Viscosity	ABR-10	1.01
Hard Particle @ 7Min	ABR-12	2 ₁
Contamination, blk/brn	ABR-5A	3/8
METS IR, % of Control	ABR-13	118


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 1-28-91Product: 5415Car No.: 46483 ^{UTCX}Time Logged In: 0300Logged In By: TE ^{UTC}Ship Date: 29 Jan 91Silo(s): 690-691Customer: 891333-014 ^{CPD} 1050-00816NO METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.07		.21		.06		.11	
Contamination	<u>3</u>	<u>T 6</u>	<u>3</u>	<u>T 6</u>	<u>2</u>	<u>T 4</u>	<u>5</u>	<u>T 3</u>
<u>TOPS 100 GRAMS</u>	<u>3</u>	<u>15</u>	<u>8</u>	<u>4</u>	<u>6</u>	<u>3</u>	<u>4</u>	<u>18</u>
Bulk Density	.496		.518		.504		.512	
BD wo/antistat								
Hard Particle	<u>6</u>	—	—	—	—	—	—	—
	<u>2 HX</u>							
Viscosity	<u>1.014</u>							
RVCN	.011							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.27</u>	<u>16.74</u>	<u>15.02</u>	<u>10.42</u>	<u>4.87</u>	<u>2.00</u>	<u>0.62</u>
%	<u>0.0</u>	<u>0.5</u>	<u>33.5</u>	<u>30.0</u>	<u>21.1</u>	<u>9.7</u>	<u>4.0</u>	<u>1.2</u>

Drytime: 5.0Static Flow: 0 18.6Avg. Microns: 166.4Color L: 100.51 a 0.02 b 1.31METS: 9,000 / 118.2 %Technician: P.T. & HPL



LETTER OF CERTIFICATION

VISTA

Date: 21 JAN. 91

Product: 5415

Customer: United Technologies
511 Hay Street
P. O. Box 807
Mt. Airy, NC 27030

Code No.: RMS-XK-21

Trailer No.: T-2810

Attention: Quality Control Manager

Order No.: 891572-003

Date of Shipment: 21 JAN. 91

Customer P.O. No.: 050-00774

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.03</u>
Bulk Density, gm/cc	8.405	<u>.499</u>
Brabender Dry Time, Mins.	8.450	<u>5.4</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>2.6</u>
Pan		<u>1.4</u>
Residual VCM, ppm	8.955	Not more than 5.0 PPM
Inherent Viscosity	8.600	<u>1.02</u>
Hard Particles @ 7 min	ABR-12	<u>1</u>
Contamination, blk/brn	ABR-5A	<u>1 1 2</u>
METS IR, % of control	ABR-13	<u>117</u> *

*Values for this property have been determined by our Statistical Quality Control Program and do not represent an actual analysis of a sample from this shipment.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

050-00174

Date 1-21-91 Product 5415 Trailer Number T-2810
 Customer UTC Silo 690491 Time 08:15-09:00
 Technician P.L. + HPL Order No. 891512-003

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.03		1.1		1.2/1 R.P.	1.499	1.5.4	L = 100.57 A = -0.07		0/9.9
	2.		2.		2.	2.	2.	B = 142		
MIDDLE	1.		1.		1.	1.	1.	L =		NO METAL
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	B =		
	2.		2.		2.	2.	2.	L =		
								A =		
								B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	0.00	0.35	00.10	14.68	8.23	2.70	1.32	0.70	
% on Mesh	0.0	0.7	44.2	27.4	16.3	5.4	2.6	1.4	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks 24 micron 175.01

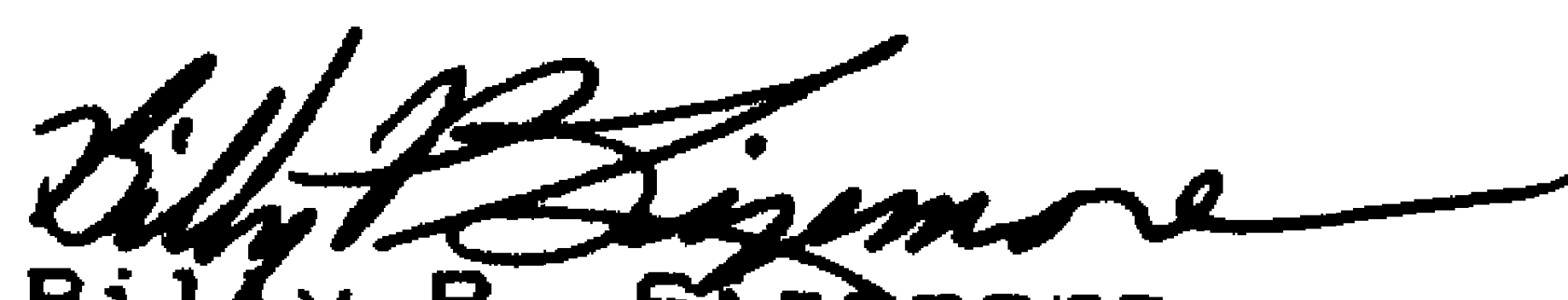


LETTER OF CERTIFICATION

VISTA

Date: 18 Jan. 91 Product: 5415
Customer: United Technologies Railcar No.: GACX-73386
511 Hay Street
P.O. Box 807
Mt. Airy, NC 27030
Attention: Quality Control Manager Order No.: B91333-013
Date of Shipment: 15 Jan. 91 Customer P.O. No.: 050-00727

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.10
Bulk Density, GM/CC	ABR-2B	0.506
Brabender Dry Time, Mins.	ABR-7	5.0
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.1
Pan		1.1
Vinyl Chloride Monomer	ABGC-26	0.026
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	◆ 3
Contamination, blk/brn	ABR-5A	5/ 12
METS IR, % of Control	ABR-13	120


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

3

Load Date: 1-13-91 Product: 5415 Car No.: 73386 *GALX*Time Logged In: 06:00 Logged In By: P.T.Ship Date: 15 Jan 91 Silo(s): 690+691 Customer: United Tech
891333-013 050-00727*no metal**Mt. Airy*

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	<u>.04</u>	<u>140</u>	<u>.06</u>	<u>140</u>	<u>.06</u>	<u>140</u>	<u>.10</u>	<u>140</u>
Contamination	<u>1</u> <u>2</u>	<u>2</u> <u>9</u>	<u>2</u> <u>5</u>	<u>4</u> <u>7</u>	<u>1</u> <u>3</u>	<u>2</u> <u>3</u>	<u>5</u> <u>12</u>	<u>4</u> <u>9</u>
Bulk Density	<u>.502</u>		<u>.509</u>		<u>.506</u>		<u>.506</u>	
BD wo/antistat								
Hard Particle	<u>2</u> <u>3 FWA</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Viscosity	<u>1.021</u>							
RVCM	<u>.026</u>							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.02</u>	<u>0.51</u>	<u>18.94</u>	<u>14.61</u>	<u>10.09</u>	<u>3.28</u>	<u>1.54</u>	<u>0.57</u>
%	<u>0.0</u>	<u>1.0</u>	<u>37.9</u>	<u>29.2</u>	<u>21.1</u>	<u>6.6</u>	<u>3.1</u>	<u>1.1</u>

Drytime: 5.0 Static Flow: 0 110.8 Avg. Microns: 171.7Color L: 100.11 a -0.06 b 1.35METS: 8,986 / 120.4 %Technician: TE - JPS

UNITED TECH
PLAINVIEW MI

Oxford PENDAFLEX®

HANGING FOLDERS

U.S. PAT. 2,785,874
CANADA 604,104
MEXICO 100,104

2

Vista Polymers
A Division of
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Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

CERTIFICATE OF ANALYSIS

Date: November 20, 1991

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Product: 5415

Railcar No.: VIPX 45815

Attention: Quality Control Manager

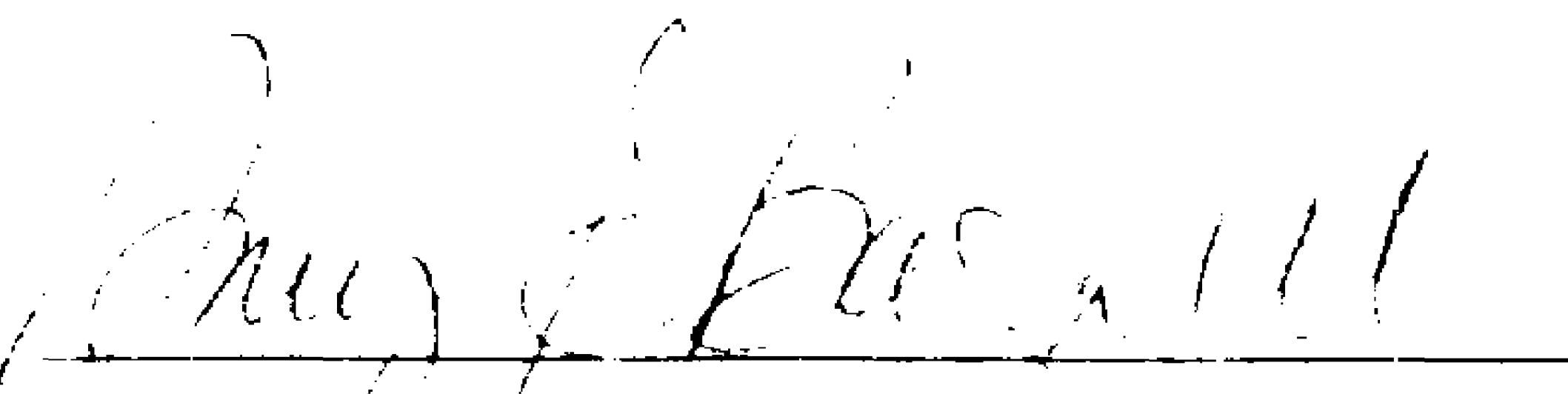
Order No.: 0003664-000

Ship Date: November 19, 1991

Customer P.O. No.: 10256

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	.04
Bulk Density, GM/CC	ABR-2B	.493
Brabender Dry Time, Mins.	ABR-7	5.0
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		6.3
Pan		1.7
Vinyl Chloride Monomer	ABGC-26	.001
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	2
Contamination, blk/brn	ABR-5A	12 / 4
METS IR, % of Control	ABR-13	121


Amy E. Bagwell
Laboratory Supervisor/Lead

VAB.0001198178

PVC RAILCA ANALYSIS

A

Load Date: 11-13-91 Product: 5415Car No.: 45815Time Logged In: 0500Logged In By: MTShip Date: 11-14-91Silo(s): 670-671Customer: ESSX LTC10256-00324-00No metalNo Tins seen

	A <u>1800</u>		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	<u>.04</u>		<u>.02</u>		<u>.02</u>		<u>.02</u>	
Contamination	<u>4</u> <u>5</u>	<u>—</u>	<u>5</u> <u>3</u>	<u>—</u>	<u>12</u> <u>4</u>	<u>—</u>	<u>7</u> <u>5</u>	<u>—</u>
Bulk Density	<u>491</u>		<u>492</u>		<u>494</u>		<u>497</u>	
BD w/antistat								
Hard Particle	<u>12</u> <u>30</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Viscosity	<u>1.019</u>							
RVCN	<u>.001</u>							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>.08</u>	<u>13.55</u>	<u>16.81</u>	<u>10.59</u>	<u>4.78</u>	<u>3.14</u>	<u>.86</u>
% P	<u>0.0</u>	<u>.2</u>	<u>27.1</u>	<u>33.6</u>	<u>21.5</u>	<u>9.6</u>	<u>63</u>	<u>1.7</u>

Drytime: 5.0Static Flow: 0 111.2Avg. Microns: 160.2Color L: 10602 a -0.16 b 1.12METS: 9789, 121.1Technician: MT + ML

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LETTER OF CERTIFICATION

VISTA

Date: December 19, 1991

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Product: 5415

Railcar No.: PLCX 43431

Attention: Quality Control Manager

Order No.: 0004951-000

Date of Shipment: December 18, 1991

Customer P.O. No.: 10307

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.24
Bulk Density, GM/CC	ABR-2B	0.484
Brabender Dry Time, Mins.	ABR-7	4.9
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		6.4
Pan		1.8
Vinyl Chloride Monomer	ABGC-26	0.009
Inherent Viscosity	ABR-10	1.03
Hard Particle @ 7Min	ABR-12	3
Contamination, blk/brn	ABR-5A	4/7
METS IR, % of Control	ABR-13	117


H.D. Lucas
Laboratory Supervisor/Lead

VAB.0001198180

Vista Polymer

Highway 205

Abbeville, MS 38730

PVC RAILCAR ANALYSIS

PLCX

Load Date: 12-6-91

Product:

5415

Car No.: 43431Time Logged In: 2400Logged In By: MDShip Date: 12/18/91Silo(s): 670, 671Customer: United Tech0004951-000PLAINWELL MI

Metal (1)

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.01		.24		.24		.24	
Contamination	$\frac{4}{3}$	$\frac{6}{8}$	$\frac{3}{5}$	$\frac{4}{5}$	$\frac{3}{5}$	$\frac{2}{8}$	$\frac{4}{7}$	$\frac{4}{10}$
Bulk Density	.482		.486		.486		.480	
BD w/antistat								
Hard Particle	$\frac{18}{3 \text{ sec}}$	—	—	—	—	—	—	—
Viscosity	1.033							
RVCM	.009							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>.18</u>	<u>13.25</u>	<u>16.06</u>	<u>11.02</u>	<u>5.15</u>	<u>3.18</u>	<u>.88</u>
% P	<u>0.0</u>	<u>.4</u>	<u>26.5</u>	<u>32.1</u>	<u>22.5</u>	<u>10.3</u>	<u>6.4</u>	<u>1.8</u>

Drytime: 4.9Static Flow: 0 114.8Avg. Microns: 159.5Color L: 100.73 a -0.03 b 1.24HETS: 9457, 116.9Technician: MT & RH

VAB.0001198181

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A

LETTER OF CERTIFICATION

Date: October 21, 1991

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Product: 5415

Railcar No.: PLWX 44686

Attention: Quality Control Manager

Order No.: 0002726-000

Date of Shipment: October 18, 1991

Customer P.O. No.: 10153

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	.05
Bulk Density, GM/CC	ABR-2B	.494
Brabender Dry Time, Mins.	ABR-7	4.9
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		4.1
Pan		1.3
Vinyl Chloride Monomer	ABGC-26	.001
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	3
Contamination, blk/brn	ABR-5A	6 / 7
METS IR, % of Control	ABR-13	120


Amy E. Bagwell
Laboratory Supervisor/Lead

VAB.0001198182

PVC RAILCAR ANALYSIS

Load Date: 9-29-91Product: 5415Car No.: 44686Time Logged In: 0100Logged In By: MSShip Date: 10/18/91Silo(s): 690, 691Customer: United Tech# 101530002726-000metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.05		.05		.03		.05	
Contamination	$\frac{4}{6}$	$\frac{5}{5}$	$\frac{6}{7}$	$\frac{4}{8}$	$\frac{6}{7}$	$\frac{5}{5}$	$\frac{6}{6}$	6/6 6/6
Bulk Density	.491		.491		.496		.498	
BD wo/antistat								
Hard Particle	$\frac{18}{3 \text{ du}}$	—	—	—	—	—	—	—
Viscosity	1.021							
RVCN	.001							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>1.01</u>	<u>18.56</u>	<u>15.43</u>	<u>8.56</u>	<u>3.33</u>	<u>2.03</u>	<u>.63</u>
% P	<u>0.0</u>	<u>2.0</u>	<u>37.1</u>	<u>30.9</u>	<u>17.9</u>	<u>6.7</u>	<u>4.1</u>	<u>1.3</u>

Drytime: 4.9Static Flow: 0 110.7 Avg. Microns: 172.9Color L: 100.03 a -0.11 b 1.19METS: 9300 , 120.0%Technician: M.T. & R.H.

LETTER OF CERTIFICATION

VISTA

Date: 9/18/91

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Product: 5415

Railcar No.: VIPX 45757

Attention: Quality Control Manager

Order No.: 0001653-000

Date of Shipment: 9/17/91

Customer P.O. No.: 10050

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.13
Bulk Density, GM/CC	ABR-2B	0.493
Brabender Dry Time, Mins.	ABR-7	5.0
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		4.3
Pan		1.4
Vinyl Chloride Monomer	ABGC-26	0.001
Inherent Viscosity	ABR-10	1.03
Hard Particle @ 7Min	ABR-12	4
Contamination, blk/brn	ABR-5A	4/7
METS IR, % of Control	ABR-13	119


H.D. Lucas

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 9-15-91

Product: 5815

Car No.: 45757

Time Logged In: 0100

Logged In By: MS

Ship Date: 9/17/91

Slit(s): 690, 691

Customer: SUNESSE

10050

0001653-000

UT PLAINWELL MI

NO metal

	(A)		(CA)		(CB)		(C)	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.12		.13		.11		.07	
Contamination	$\frac{4}{6}$	$\frac{3}{7}$	$\frac{3}{8}$	$\frac{5}{9}$	$\frac{4}{7}$	$\frac{2}{6}$	$\frac{2}{6}$	$\frac{4}{5}$
Bulk Density	491		493		496		493	
BD w/antistat								
Hard Particle	$\frac{18}{100}$	—	—	—	—	—	—	—
Viscosity	1.025							
RVCH	.001							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>4.26</u>	<u>22.48</u>	<u>11.13</u>	<u>5.81</u>	<u>2.75</u>	<u>2.15</u>	<u>.71</u>
% P	<u>0.0</u>	<u>9.5</u>	<u>45.0</u>	<u>22.3</u>	<u>12.0</u>	<u>5.5</u>	<u>4.3</u>	<u>1.4</u>

Drytime: 5.0

Static Flow: 2110.2 Avg. Microns: 191.6

Color L: 100.11 a: -0.07 b: 1.04

HETS: 9291, 119.4

Technician: M.T. & R.H.

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LETTER OF CERTIFICATION

Date: 20 August, 1991

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Product: 5415

Railcar No.: VIPX 45795

Attention: Quality Control Manager

Order No.: 0000988-000

Date of Shipment: 19 August, 91 Customer P.O. No.: 5949

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.15
Bulk Density, GM/CC	ABR-2B	0.501
Brabender Dry Time, Mins.	ABR-7	5.0
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.0
Pan		1.1
Vinyl Chloride Monomer	ABGC-26	0.004
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	1
Contamination, blk/brn	ABR-5A	5/ 6
METS IR, % of Control	ABR-13	119


Amy E. Bagwell

Laboratory Supervisor/Lead

VAB.0001198186

PVC RAILCAR ANALYSIS

Load Date: 8-16-91 Product: 5415 Car No.: 45795Time Logged In: 16:00 Logged In By: J. TeShip Date: 8/19/91 Silo(s): 690+691 Customer: United Tech
PO#5949 0000988-000no metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.13		.15		.12		.10	
Contamination	<u>4</u> 9	<u>5</u> 12	<u>3</u> 7	<u>4</u> 9	<u>5</u> 6	<u>3</u> 7	<u>4</u> 9	<u>2</u> 10
Bulk Density	.502		.500		.498		.503	
BD w/antistat								
Hard Particle	<u>12</u> 1HA	—	—	—	—	—	—	—
Viscosity	1.020							
RVCM	.004							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>3.04</u>	<u>25.48</u>	<u>11.50</u>	<u>5.47</u>	<u>2.40</u>	<u>1.50</u>	<u>.57</u>
%	<u>0.0</u>	<u>6.1</u>	<u>51.0</u>	<u>23.0</u>	<u>10.7</u>	<u>4.8</u>	<u>3.0</u>	<u>1.4</u>

Drytime: 5.0 Static Flow: 0 17.3 Avg. Microns: 190.9Color L: 100.12 a -0.08 b 1.19METS: 9620, 119.0 %Technician: MH+TE

A

CERTIFICATE OF ANALYSIS

VISTA

Date: August 19, 1991

Product: 5415

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Code No.: RMS-XK-21

Trailer No.: T-479

Attention: Quality Control Manager

Order No.: 0001250-000

Date of Shipment: August 19, 1991

Customer P.O. No.: 10013

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>		
Moisture, %	ABR-1A	<u>.12</u>		
Contamination, blk/brn	ABR-5A	<u>1.8</u>		
Hard Particles @ 7 min	ABR-12	<u>4</u>		
Bulk Density, gm/cc	ABR-2B	<u>.502</u>		
Brabender Dry Time, min.	ABR-07	<u>5.1</u>		
Resin Flow Time, tap/sec.	ABR-08	<u>0.78</u>		
Particle Size, % on	ABR-03	<u>40 mesh</u>	<u>200 mesh</u>	<u>Pan</u>
		<u>0.0</u>	<u>3.5</u>	<u>1.3</u>
Residual VCM, ppm	ABGC-26	<u>< 5.0</u> ***		
Inherent Viscosity	ABR-10	<u>1.02</u> ***		
METS IR, % of control	ABR-13	<u>125</u> ***		

*** Values for this property have been determined by our SQC Program
and are not tested on truck shipments.

Amy E. Bagwell
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS.

A

Date 8-19-91 Product 545 Trailer Number 7479 479
 Customer U.T.C. Silo 690+91 Time 09:15-10:10
 Technician D.T. + HPL Order No. 0001250-000

	MOIST		CON.T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.12		1.1/8		1. 7/4 R.P.	.502	5.1	L = 100.23 A = 0.01 B = 1.40		0 9.8
	2.		2.		2.	2.	2.			
MIDDLE	1.		1.		1.	1.	1.	L = A = B =		No Metal
	2.		2.		2.	2.	2.			
END	1.		1.		1.	1.	1.	L = A = B =		
	2.		2.		2.	2.	2.			

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 40 gms. Room plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glossy Part.
Gross Wt.									
Tare									
Net Wt.	0.00	2.05	20.60	13.52	7.93	3.37	1.77	0.65	
% on Mesh	0.0	4.1	41.2	27.0	16.2	6.7	3.5	1.3	

Screen Analysis _____ Min. On Rotap shaker 40 gms. Room plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glossy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

Vista Polymers
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Phone (601) 369-8111



LETTER OF CERTIFICATION

VISTA

Date: 7/23/91

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Product: 5415

Railcar No.: VIPX-45809

Attention: Quality Control Manager

Order No.: 0000301-000

Date of Shipment: 7/22/91

Customer P.O. No.: 3319

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.21
Bulk Density, GM/CC	ABR-2B	0.508
Brabender Dry Time, Mins.	ABR-7	5.2
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.1
Pan		1.2
Vinyl Chloride Monomer	ABGC-26	0.027
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	3
Contamination, blk/brn	ABR-5A	8/ 5
METS IR, % of Control	ABR-13	119

H.D. Lucas

Laboratory Supervisor/Lead

VAB.0001198190

PVC RAILCAR ANALYSIS

Load Date: 6-13-91 Product: 5415 Car No.: 45809

Time Logged In: 0400 Logged In By: TALVE

Ship Date: 7/22/91 Silo(s): 690-691 Customer: ESSEN
UT PLAINWELL M0000301-000 C10-3319

NO METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.13		.21		.14		.21	
Contamination	$\frac{2}{6}$	$\frac{3}{11}$	$\frac{7}{3}$	$\frac{5}{8}$	$\frac{7}{4}$	$\frac{6}{11}$	$\frac{8}{5}$	$\frac{6}{13}$
TPS per Grams								
Bulk Density	.512		.512		.504		.506	
BD w/antistat								
Hard Particle	$\frac{7}{3}$ P.P.	—	—	—	—	—	—	—
Viscosity	1.017							
RVCM	.027							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.08</u>	<u>21.58</u>	<u>14.78</u>	<u>7.35</u>	<u>2.94</u>	<u>1.57</u>	<u>0.62</u>
%	<u>0.0</u>	<u>2.2</u>	<u>43.2</u>	<u>27.6</u>	<u>14.8</u>	<u>5.9</u>	<u>3.1</u>	<u>1.2</u>

Drytime: 5.2 Static Flow: 0 17.8 Avg. Microns: 178.4

Color L: 100.48 a: -0.05 b: 1.23

HETS: 9.457, 119.4%

Technician: DT + MB

CERTIFICATE

Date: 17 July 91

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Code No.: RMS-XK-21

Trailer No.: T-351

Attention: Quality Control Manager

Order No.: 0000613-000

Date of Shipment: 17 July 91

Customer P.O. No.: 5922

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>		
Moisture, %	ABR-1A	.08		
Contamination, blk/brn	ABR-5A	4 / 5		
Hard Particles @ 7 min	ABR-12	1		
Bulk Density, gm/cc	ABR-2B	.515		
Brabender Dry Time, min.	ABR-07	5.1		
Resin Flow Time, tap/sec.	ABR-08	0 / 8.3		
Particle Size, % on	ABR-03	40 mesh	200 mesh	Pan
		0.0	6.2	1.6
Residual VCM, ppm	ABGC-26	< 5.0 ***		
Inherent Viscosity	ABR-10	1.02 ***		
METS IR, % of control	ABR-13	120 ***		

*** Values for this property have been determined by our SQC Program and are not tested on truck shipments.

James M. Gray
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 7-17-91 Product 5415 Trailer Number T-351
 Customer UNIRAYAL SNo 690-691 Time 1045
 Technician MB-TE Order No. 0000613-000

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.08		1.4		1.10 TE	1.515	1.5.1	L = 100.40 A = -0.03 B = 1.40		9/8.3
	2.		2.		2.	2.	2.			
MIDDLE	1.		1.		1.	1.	1.	L =		NO MEAN
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.	0.00	0.28	14.10	15.86	10.91	5.00	3.09	0.81	
% on Mesh	0.0	0.6	28.2	31.7	21.7	10.0	6.2	1.6	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

LETTER OF CERTIFICATION

VISTA

Date: 22 June 91

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Product: 5415

Railcar No.: GACX-73408

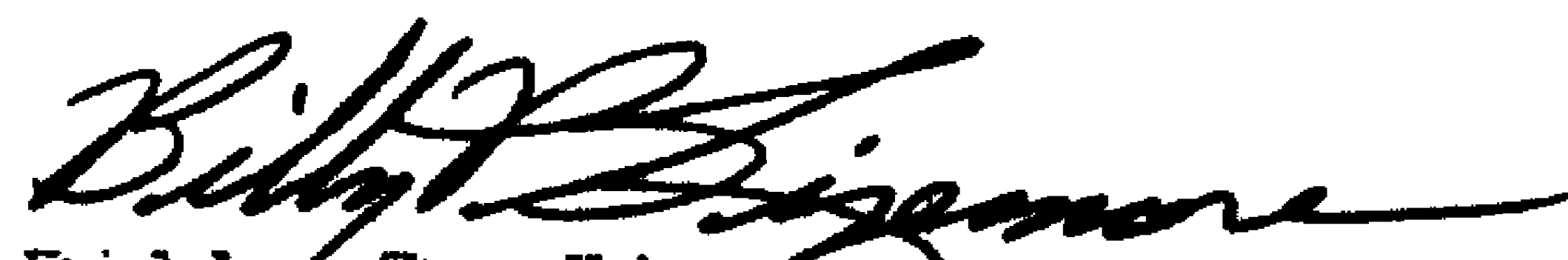
Attention: Quality Control Manager

Order No.: 0000056-000

Date of Shipment: 14 June 91

Customer P.O. No.: 3306

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.13
Bulk Density, GM/CC	ABR-2B	0.500
Brabender Dry Time, Mins.	ABR-7	4.9
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.2
Pan		1.3
Vinyl Chloride Monomer	ABGC-26	0.022
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	5
Contamination, blk/brn	ABR-5A	6/ 7
METS IR, % of Control	ABR-13	119


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 6-13-91 Product: 5415 Car No.: 13418

Time Logged In: 1800 Logged In By: 1

Ship Date: 14 Silo(s): 690-691 Customer: United Tech
0000056-000 CPO# 3306 Almond

no metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.12		.13		.11		.12	
Contamination	$\frac{3}{10}$	$\frac{3}{8}$	$\frac{6}{7}$	$\frac{4}{5}$	$\frac{3}{12}$	$\frac{2}{10}$	$\frac{4}{18}$	$\frac{3}{14}$
Bulk Density	.501		.500		.496		.504	
BD w/antistat								
Hard Particle	$\frac{28}{500}$	—	—	—	—	—	—	—
Viscosity	1017							
RVCM								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>.95</u>	<u>22.36</u>	<u>14.02</u>	<u>7.23</u>	<u>3.02</u>	<u>1.60</u>	<u>.65</u>
% P	<u>0.0</u>	<u>1.9</u>	<u>44.7</u>	<u>28.0</u>	<u>14.9</u>	<u>6.0</u>	<u>3.2</u>	<u>1.3</u>

Drytime: 4.9 Static Flow: 0 17.9 Avg. Microns: 178.3

Color L: 100.69 a -0.02 b 1.38

METS: 9.457, 119.4%

Technician: MIT & RH

Vista Polymers
A Division of
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Highway 25
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Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

LETTER OF CERTIFICATION

VISTA

Date: 16 Apr. 91

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Product: 5415

Railcar No.: UTCX-46440

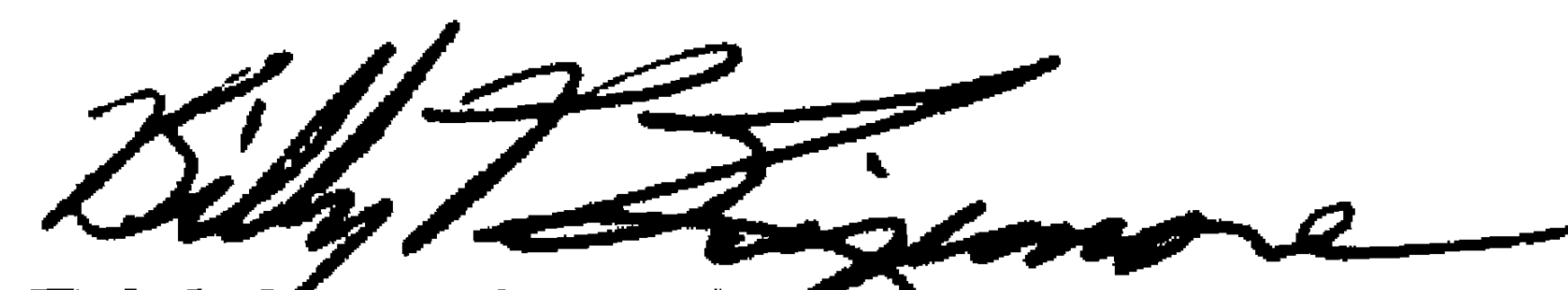
Attention: Quality Control Manager

Order No.: 883959-019

Date of Shipment: 15 Apr. 91

Customer P.O. No.: 35062

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.17
Bulk Density, GM/CC	ABR-2B	0.513
Brabender Dry Time, Mins.	ABR-7	4.9
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.6
Pan		1.2
Vinyl Chloride Monomer	ABGC-26	0.048
Inherent Viscosity	ABR-10	1.03
Hard Particle @ 7Min	ABR-12	2
Contamination, blk/brn	ABR-5A	5/ 30
METS IR, % of Control	ABR-13	121


Billy P. Sizemore

Laboratory Supervisor/Lead

VAB.0001198196

PVC RAILCAR ANALYSIS

Load Date: 5-13-91Product: 5415Car No.: 11TCX
46440Time Logged In: 18:00Logged In By: P.J.Ship Date: 15 May 91Silo(s): 690+691Customer: Issey883959-019CPO 035062

NO METAL	A <u>Top</u>		CA <u>Top</u>		CB <u>Top</u>		B <u>Top</u>	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.17		.16		.16		.17	
Contamination	<u>3</u> 18	<u>6</u> 25	<u>5</u> 30	<u>9</u> 50	<u>4</u> 27	<u>6</u> 35	<u>5</u> 31	<u>8</u> 41
Bulk Density	.518		.514		.510		.509	
BD wo/antistat								
Hard Particle	<u>8</u> 2 ms	—	—	—	—	—	—	—
Viscosity	1.029							
RVCM	.048							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.68</u>	<u>22.61</u>	<u>14.45</u>	<u>7.20</u>	<u>2.79</u>	<u>1.79</u>	<u>0.60</u>
%	<u>0.0</u>	<u>1.4</u>	<u>45.2</u>	<u>28.9</u>	<u>14.1</u>	<u>5.6</u>	<u>3.6</u>	<u>1.2</u>

Drytime: 4.9Static Flow: 0 18.3Avg. Microns: 177.8Color L: 100.37 a -0.01 b 1.38METS: 9.620, 121.1 %Technician: M.H.Y.K.

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LETTER OF CERTIFICATION

VISTA

Date: 17 Apr. 91

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Product: 5415

Railcar No.: VIPX-45901

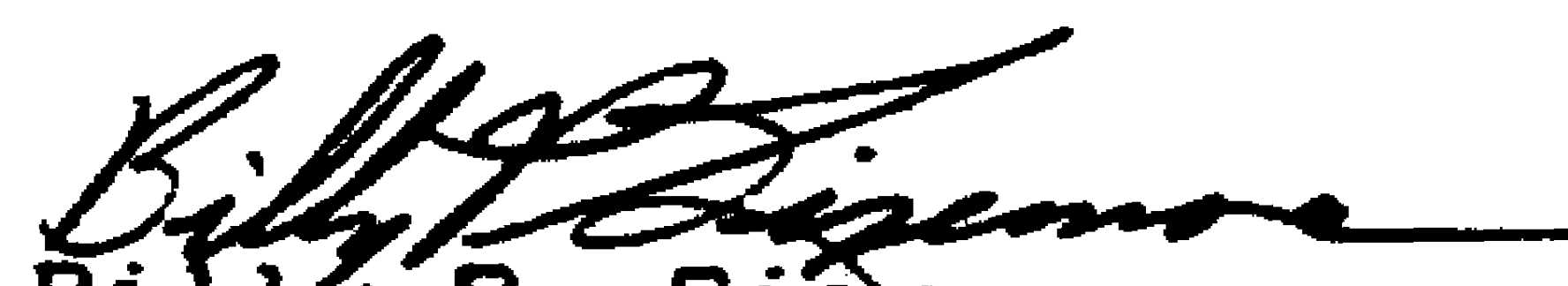
Attention: Quality Control Manager

Order No.: 883959-018

Date of Shipment: 16 Apr. 91

Customer P.O. No.: 35019

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.15
Bulk Density, GM/CC	ABR-2B	0.512
Brabender Dry Time, Mins.	ABR-7	4.8
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		2.9
Pan		1.1
Vinyl Chloride Monomer	ABGC-26	0.025
Inherent Viscosity	ABR-10	1.01
Hard Particle @ 7Min	ABR-12	1
Contamination, blk/brn	ABR-5A	3/ 7
METS IR, % of Control	ABR-13	120


Billy P. Sizemore

Laboratory Supervisor/Lead

VAB.0001198198

PVC RAILCAR ANALYSIS

Load Date: 4-8-91Product: 5415Car No.: 45901Time Logged In: 1800Logged In By: TEShip Date: 16Silo(s): 690-691Customer: AMU883959-018 CPD-35019NO METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.12		.11		.15		.12	
Contamination	<u>3</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>3</u>	<u>2</u>	<u>2</u>	<u>6</u>
<u>TOPS 100 GRAMS</u>	<u>7</u>	<u>4</u>	<u>14</u>	<u>3</u>	<u>10</u>	<u>6</u>	<u>9</u>	<u>6</u>
Bulk Density	.508		.573		.573		.576	
BD wo/antistat								
Hard Particle	<u>16</u> <u>3</u> <u>1</u> A.P.	—	—	—	—	—	—	—
Viscosity								
RVCM								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.58</u>	<u>24.71</u>	<u>13.56</u>	<u>6.93</u>	<u>2.56</u>	<u>1.43</u>	<u>0.57</u>
%	<u>0.0</u>	<u>1.2</u>	<u>49.4</u>	<u>27.1</u>	<u>13.2</u>	<u>5.1</u>	<u>2.9</u>	<u>1.1</u>

Drytime: 4-8Static Flow: 0 17.9Avg. Microns: 180.9Color L: 100.61 a -0.05 b 1.54METS: 1 %Technician: PT. + H.D.L.

LETTER OF CERTIFICATION

VISTA

Date: 3-15-91

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Product: 5415

Railcar No.: PLWX-44723

Attention: Quality Control Manager

Order No.: 883959-017

Date of Shipment: 3-14-91

Customer P.O. No.: 34938

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.12
Bulk Density, GM/CC	ABR-2B	0.510
Brabender Dry Time, Mins.	ABR-7	4.9
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		2.1
Pan		1.3
Vinyl Chloride Monomer	ABGC-26	0.997
Inherent Viscosity	ABR-10	1.03
Hard Particle @ 7Min	ABR-12	2
Contamination, blk/brn	ABR-5A	2/ 2
METS IR, % of Control	ABR-13	120


H.D. Lucas

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 3-13-91 Product: 5415Car No.: PLWX 44723Time Logged In: 0500Logged In By: TALLIEShip Date: 3-14-91Silo(s): 690-691Customer: ESSEX UTPlainville MiNo Metal883959-017

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.11		.12		.11		.12	
Contamination	$\frac{2}{2}$	$\frac{5}{3}$	$\frac{1}{4}$	$\frac{7}{3}$	$\frac{2}{2}$	$\frac{6}{4}$	$\frac{2}{1}$	$\frac{9}{2}$
Bulk Density	.510		.509		.509		.511	
BD wo/antistat								
Hard Particle	$\frac{7}{26}$	—	—	—	—	—	—	—
Viscosity	1.027							
RVCM	.997							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>1.0</u>	<u>26.17</u>	<u>12.86</u>	<u>6.23</u>	<u>2.11</u>	<u>1.07</u>	<u>.64</u>
%	<u>0.0</u>	<u>2.0</u>	<u>52.3</u>	<u>25.7</u>	<u>12.4</u>	<u>4.2</u>	<u>2.1</u>	<u>1.3</u>

Drytime: 4.9Static Flow: 0.9.3Avg. Microns: 184.7Color L: 100.64 a 0.02 b 1.41METS: 9300, 120.0%Technician: Co, ES, MT

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LETTER OF CERTIFICATION

4

VISTA

Date: 18 Feb. 91

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Product: 5415

Railcar No.: GACX-73389

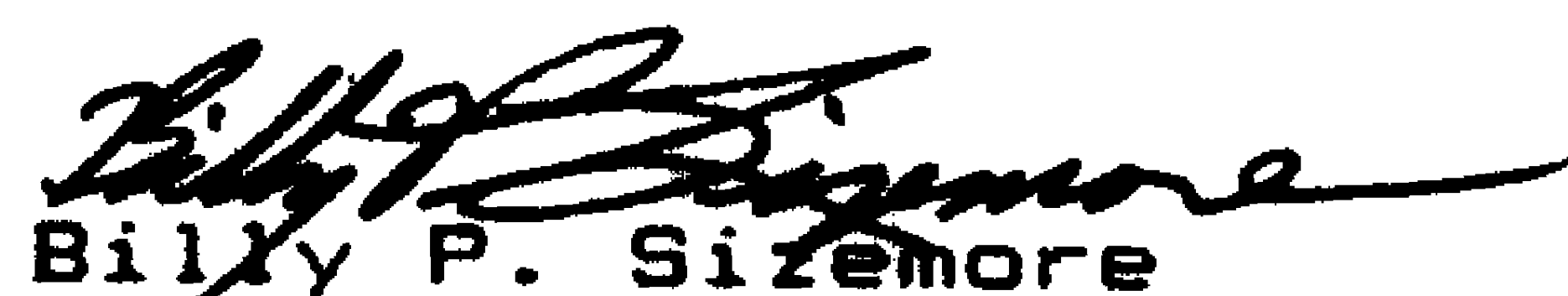
Attention: Quality Control Manager

Order No.: 883959-016

Date of Shipment: 15 Feb. 91

Customer P.O. No.: 34809

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.12
Bulk Density, GM/CC	ABR-2B	0.503
Brabender Dry Time, Mins.	ABR-7	5.1
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.8
Pan		1.2
Vinyl Chloride Monomer	ABGC-26	0.044
Inherent Viscosity	ABR-10	1.01
Hard Particle @ 7Min	ABR-12	1
Contamination, blk/brn	ABR-5A	4/ 9
METS IR, % of Control	ABR-13	117


Billy P. Sizemore

Laboratory Supervisor/Lead

VAB.0001198202

Vista Polymers

Highway 25

Aberdeen, MS 39730

PVC RAILCAR ANALYSIS

Load Date: 2-9-91Product: 5415Car No.: 73389 ^{GACX}Time Logged In: 23:00Logged In By: P.T.Ship Date: 15Silo(s): 690+91Customer: Issy Plinval34809883959-016

NO METAL	(A) ^{Top}		(CA) ^{Top}		(CB) ^{Top}		(B) ^{Top}	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.11		.10		.12		.11	
Contamination	<u>3</u> 10	<u>2</u> 9	<u>2</u> 10	<u>3</u> 9	<u>4</u> 9	<u>2</u> 11	<u>2</u> 7	<u>2</u> 5
Bulk Density	.892		.501		.506		.512	
BD wo/antistat								
Hard Particle	<u>1</u> 1 HA	—	—	—	—	—	—	—
Viscosity	1.014							
RVCM	.044							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.22</u>	<u>10.64</u>	<u>15.71</u>	<u>10.83</u>	<u>4.37</u>	<u>1.92</u>	<u>0.59</u>
%	<u>0.0</u>	<u>0.4</u>	<u>33.3</u>	<u>31.4</u>	<u>21.2</u>	<u>8.7</u>	<u>3.8</u>	<u>1.2</u>

Drytime: 5.1Static Flow: 0 18.7Avg. Microns: 166.7Color L: 100.84 a 0.10 b 1.39METS: 9.136 / 117.4 %Technician: TE-JS

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Highway 25
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Phone (601) 369-8111

CERTIFICATE OF ANALYSIS

VISTA

Date: 17 JAN. 91

Product: 5415

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Code No.: RMS-XK-21

Trailer No.: F 722

Attention: Quality Control Manager

Order No.: 859942-D12

Date of Shipment: 17 JAN. 91

Customer P.O. No.: 34692

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.06</u>
Contamination, blk/brn	ABR-5A	<u>8 / 8</u>
Hard Particles @ 7 min	ABR-12	<u>3</u>
Bulk Density, gm/cc	ABR-2B	<u>.516</u>
Brabender Dry Time, min.	ABR-07	<u>5.1</u>
Resin Flow Time, tap/sec.	ABR-08	<u>0.92</u>
Particle Size, % on	ABR-03	<u>40 mesh</u> <u>200 mesh</u> <u>Pan</u>
		<u>0.0</u> <u>3.4</u> <u>1.1</u>
Residual VCM, ppm	ABGC-26	<u>< 5.0</u> ***
Inherent Viscosity	ABR-10	<u>1.02</u> ***
METS IR, % of control	ABR-13	<u>117</u> ***

*** Values for this property have been determined by our SQC Program
and are not tested on truck shipments.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 1-17-91 Product 5415 Trailer Number 7-722
 Customer MTC Silo 690 Time 10/0
 Technician A.J. + H.D.K. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>06</u>	.....	1. <u>8/8</u>	.....	1. <u>4/3</u>	1. <u>516</u>	1. <u>5.1</u>	L = <u>100.76</u>		<u>9.2</u>
	2. ....	.....	2. ....	.....	2.	2.	2.	A = <u>-0.04</u>		
MIDDLE	1. ....	.....	1. ....	.....	1.	1.	1.	L =		
	2. ....	.....	2. ....	.....	2.	2.	2.	A =		
END	1. ....	.....	1. ....	.....	1.	1.	1.	L =		
	2. ....	.....	2. ....	.....	2.	2.	2.	A =		
								B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.25</u>	<u>19.21</u>	<u>14.65</u>	<u>9.47</u>	<u>4.07</u>	<u>1.71</u>	<u>0.54</u>	
% on Mesh	<u>0.00</u>	<u>0.5</u>	<u>38.4</u>	<u>29.3</u>	<u>19.2</u>	<u>8.1</u>	<u>3.4</u>	<u>1.1</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198205

Vista Polymers
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Vista Chemical Company

Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

LETTER OF CERTIFICATION

Date: 21 Jan. 91

Product: 5415

VISTA

Customer: United Technologies
800 E. Bridge St.
Plainwell, MI 49080

Railcar No.: UTCX-46422

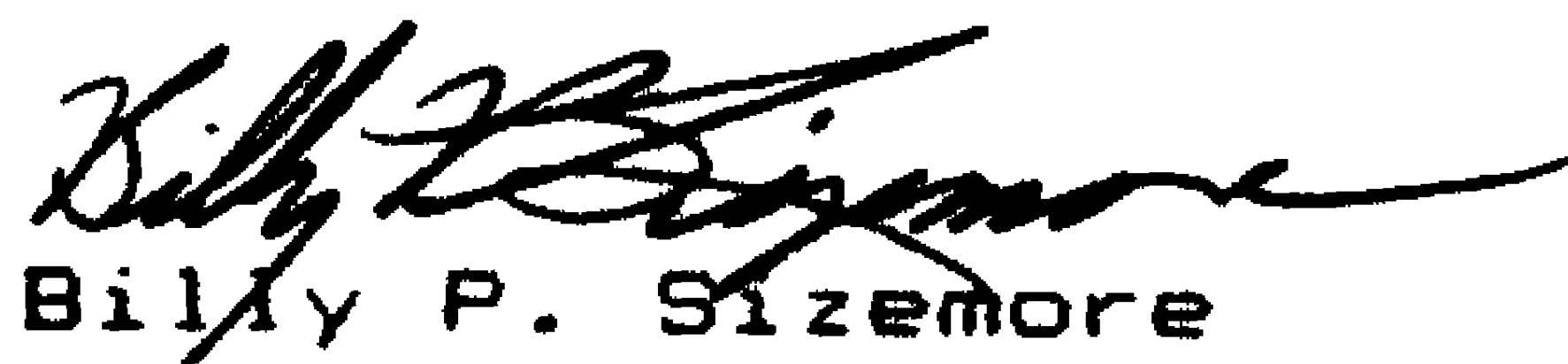
Attention: Quality Control Manager

Order No.: 883959-015

Date of Shipment: 17 Jan. 91

Customer P.O. No.: 34692

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Volatiles, %	ABR-1A	0.15
Bulk Density, GM/CC	ABR-2B	0.507
Brabender Dry Time, Mins.	ABR-7	4.9
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		2.8
Pan		0.8
Vinyl Chloride Monomer	ABGC-26	0.021
Inherent Viscosity	ABR-10	1.02
Hard Particle @ 7Min	ABR-12	5
Contamination, blk/brn	ABR-5A	3/ 2
METS IR, % of Control	ABR-13	115


Billy P. Sizemore

Laboratory Supervisor/Lead

VAB.0001198206

PVC RAILCAR ANALYSIS

Load Date: 1-10-91 Product: 5415 Car No.: 46422

Time Logged In: 23:30 Logged In By: R31

Ship Date: 17 JAN. 91 Silo(s): 690,691 Customer: ESSAY

34692

883959-015

no metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.12	<u>16p</u>	.10	<u>16p</u>	.11	<u>16p</u>	.15	<u>16p</u>
Contamination	$\frac{1}{3}$	$\frac{6}{2}$	$\frac{2}{2}$	$\frac{7}{4}$	$\frac{1}{3}$	$\frac{8}{5}$	$\frac{3}{2}$	$\frac{9}{3}$
Bulk Density	.520		.521		.503		.484	
BD wo/antistat								
Hard Particle	<u>8</u> <u>5GE</u>	—	—	—	—	—	—	—
Viscosity	<u>1.015</u>							
RVCM	<u>.021</u>							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.18</u>	<u>17.54</u>	<u>15.35</u>	<u>10.35</u>	<u>3.65</u>	<u>1.40</u>	<u>0.40</u>
%	<u>0.0</u>	<u>2.4</u>	<u>35.1</u>	<u>30.7</u>	<u>20.9</u>	<u>7.3</u>	<u>2.8</u>	<u>0.8</u>

Drytime: 4.9 Static Flow: 0 17.9 Avg. Microns: 173.0

Color L: 100.42 a .11 b 1.63

METS: 85651 114.8 %

Technician: G & TE

VULCAN PLASTICS

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

CERTIFICATE OF ANALYSIS

Date: January 2, 1992

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

Railcar No.: VIPX 45747

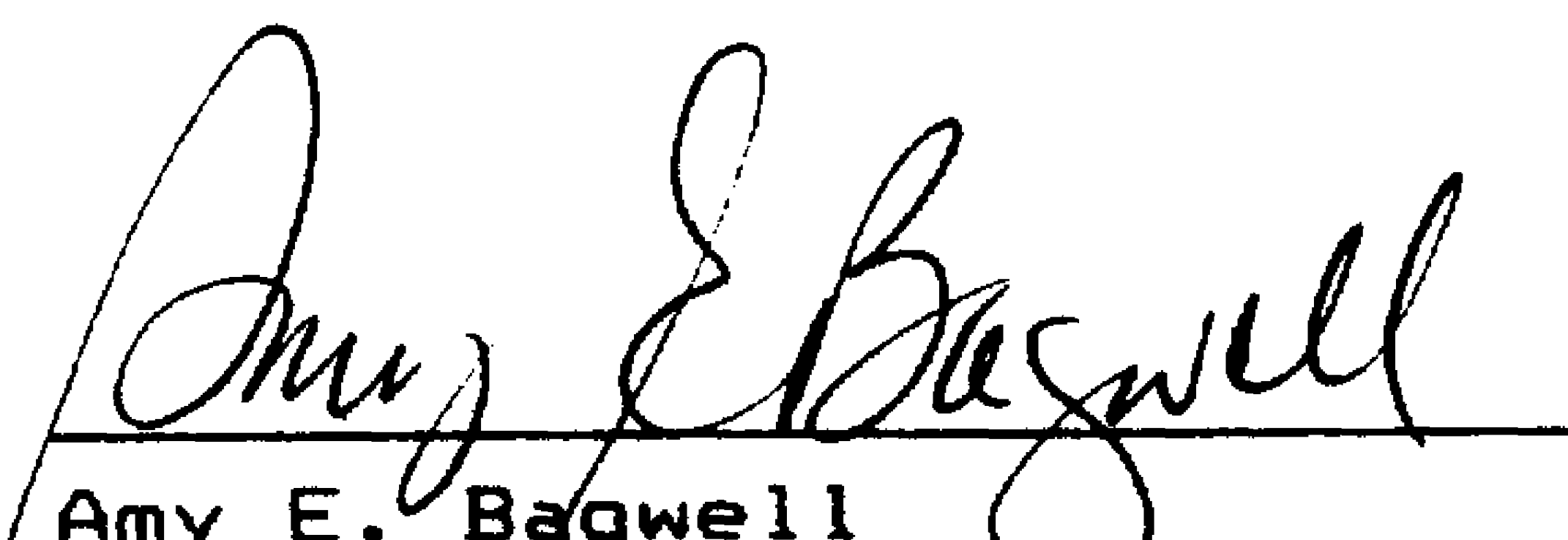
Attention: Billy Turner

Order No.: 0005156-004

Ship Date: December 30, 1991

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.11
Bulk Density, gm/cc	ABR-2A	0.562
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		5.4
Pan		1.6
Residual VCM, ppm	ABGC-26	0.009
Inherent Viscosity	ABR-10	0.93


Amy E. Bagwell
Laboratory Supervisor/Lead

A

PVC RAILCAR ANALYSIS

Load Date: 11-29-91 Product: 5385 Car No.: 45747Time Logged In: 1730 Logged In By: EShip Date: 12/30 Silo(s): 676, 677, 685 Customer: Vulcan
0005156-004No Metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.02		.02		.07		.11	
Contamination	<u>8</u> 5	—	<u>4</u> 8	—	<u>6</u> 6	—	<u>7</u> 3	—
Bulk Density	.572		.566		.556		.553	
Fluff								
Hard Particle	<u>31</u> 4 p.p.	—	—	—	—	—	—	—
Viscosity	.925							
RVCM	.009							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.18</u>	<u>15.94</u>	<u>15.07</u>	<u>9.56</u>	<u>4.62</u>	<u>2.70</u>	<u>0.80</u>
%	<u>0.0</u>	<u>2.4</u>	<u>31.9</u>	<u>30.1</u>	<u>19.4</u>	<u>9.2</u>	<u>5.4</u>	<u>1.6</u>

Drytime: 4.8 Static Flow: 0 / 7.8 Avg. Microns: 168.0Color L: 100.76 a -0.17 b 2.71Technician: J.T. + HPL

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CERTIFICATE OF ANALYSIS

Date: January 2, 1992

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

Railcar No.: VIPX 45891

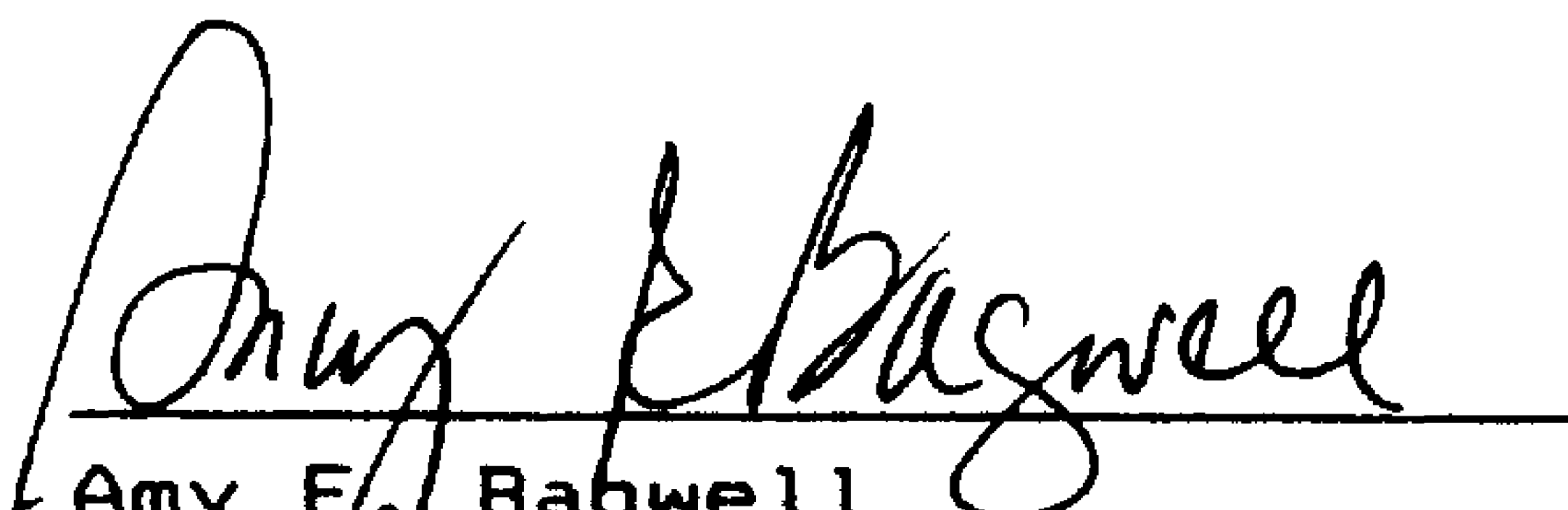
Attention: Billy Turner

Order No.: 0005156-003

Ship Date: December 30, 1991

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.04
Bulk Density, gm/cc	ABR-2A	0.582
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		4.7
Pan		1.4
Residual VCM, ppm	ABGC-26	0.001
Inherent Viscosity	ABR-10	0.93


Amy E. Bagwell
Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 12-1-91Product: 5385Car No.: 45891Time Logged In: 1200Logged In By: ESShip Date: 12/30Silo(s): 676, 677, 685Customer: Type I Vulcan0005156-003No Metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.04		.02		.02		.02	
Contamination	<u>6</u> 6	—	<u>9</u> 23	—	<u>10</u> 7	—	<u>9</u> 23	—
Bulk Density	.584		.570		.590		.578	
Fluff								
Hard Particle	<u>28</u> 4 H ₂ O	—	—	—	—	—	—	—
Viscosity	.934							
RVCM	.001							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>3.36</u>	<u>18.00</u>	<u>12.89</u>	<u>8.48</u>	<u>4.13</u>	<u>2.33</u>	<u>0.72</u>
%	<u>0.0</u>	<u>6.7</u>	<u>36.0</u>	<u>25.8</u>	<u>17.1</u>	<u>8.3</u>	<u>4.7</u>	<u>1.4</u>

Drytime: 5.0Static Flow: 0 17.6Avg. Microns: 179.3Color L: 99.91 a 0.04 b 1.86Technician: D.T. HAL

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Phone (601) 369-8111

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CERTIFICATE OF ANALYSIS

Date: December 30, 1991

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

Railcar No.: GACX 73412

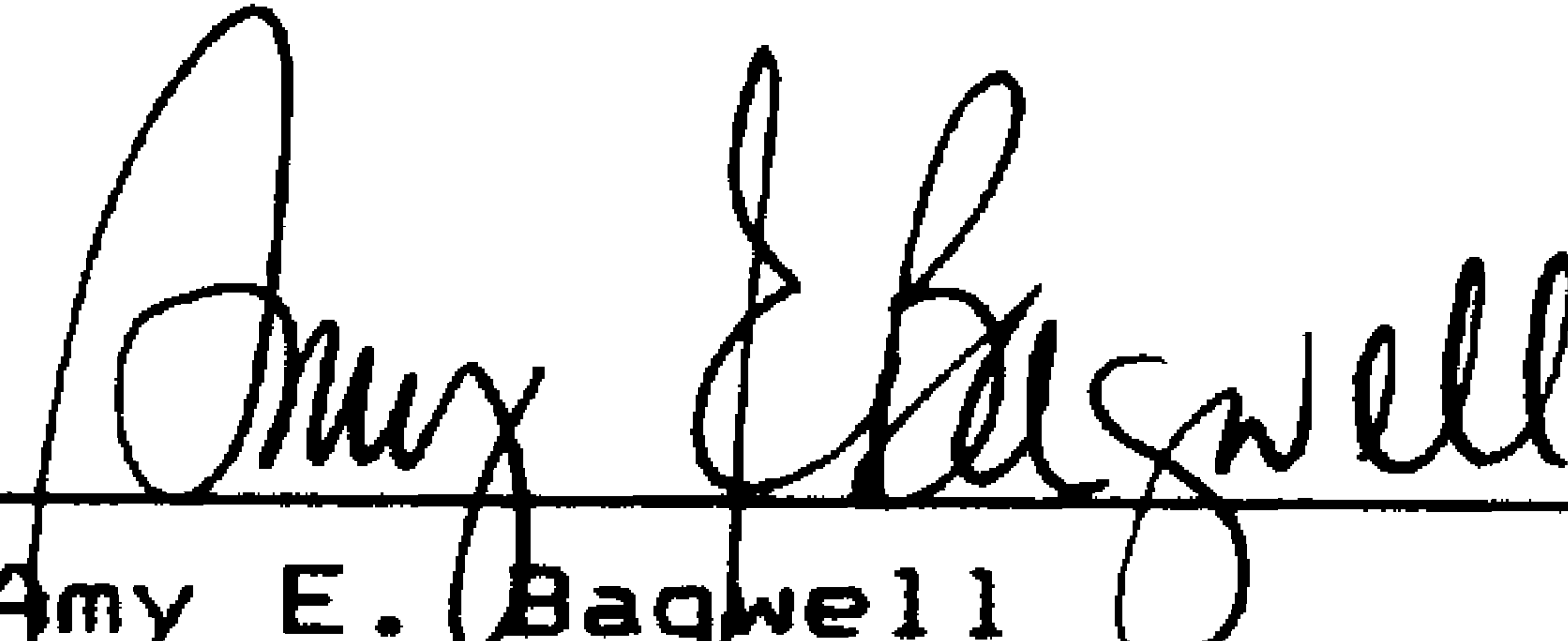
Attention: Billy Turner

Order No.: 0005156-000

Ship Date: December 27, 1991

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.13
Bulk Density, gm/cc	ABR-2A	0.570
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.6
Pan		1.2
Residual VCM, ppm	ABGC-26	0.047
Inherent Viscosity	ABR-10	0.94


Amy E. Bagwell
Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 12/2/91Product: 5385Car No.: 73412Time Logged In: 2400Logged In By: HLZShip Date: 12/27Silo(s): 676/77/85Customer: Hulcan0005156-000no metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.11		.13		.10		.10	
Contamination	<u>6</u> 8	—	<u>4</u> 9	—	<u>5</u> 7	—	<u>6</u> 9	—
Bulk Density	.567		.568		.577		.569	
Fluff	.563		.565		.569		.568	
Hard Particle	— —	—	—	—	—	—	—	—
Viscosity	.94							
RVCM	.047							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.17</u>	<u>19.64</u>	<u>14.64</u>	<u>8.43</u>	<u>3.72</u>	<u>1.79</u>	<u>.60</u>
%	<u>0.0</u>	<u>2.3</u>	<u>39.3</u>	<u>29.3</u>	<u>16.9</u>	<u>7.4</u>	<u>3.6</u>	<u>1.2</u>

Drytime: —Static Flow: 0 18.2Avg. Microns: 175.0Color L: 100.18 a -.12 b 1.76Technician: MM + TE

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CERTIFICATE OF ANALYSIS

Date: December 30, 1991

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

Railcar No.: VIPX 45277

Attention: Billy Turner

Order No.: 0005156-001

Ship Date: December 27, 1991

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.05
Bulk Density, gm/cc	ABR-2A	0.592
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		6.3
Pan		1.5
Residual VCM, ppm	ABGC-26	0.009
Inherent Viscosity	ABR-10	0.90


Amy E. Bagwell
Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 12-23-91Product: 5385Car No.: 45277Time Logged In: 0635Logged In By: MSShip Date: 12/27Silo(s): 676, 677, 685Customer: Vulcan0005156-001No META L

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.02		.02		.05		.05	
Contamination	$\frac{5}{2}$	—	$\frac{6}{3}$	—	$\frac{25}{13}$	—	$\frac{6}{9}$	—
Bulk Density	.598		.587		.594		.590	
Fluff								
Hard Particle	$\frac{21}{3RP}$	—	—	—	—	—	—	—
Viscosity	.904							
RVCM	.009							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.16</u>	<u>15.65</u>	<u>13.70</u>	<u>10.18</u>	<u>5.48</u>	<u>3.15</u>	<u>0.75</u>
%	<u>0.0</u>	<u>2.3</u>	<u>31.3</u>	<u>27.4</u>	<u>20.2</u>	<u>11.0</u>	<u>6.3</u>	<u>15</u>

Drytime: 4.8Static Flow: 0.178Avg. Microns: 165.9Color L: 99.59 a 0.18 b 1.89Technician: D.T. + M.B.

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CERTIFICATE OF ANALYSIS

Date: December 30, 1991

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

Railcar No.: ACFX 41182

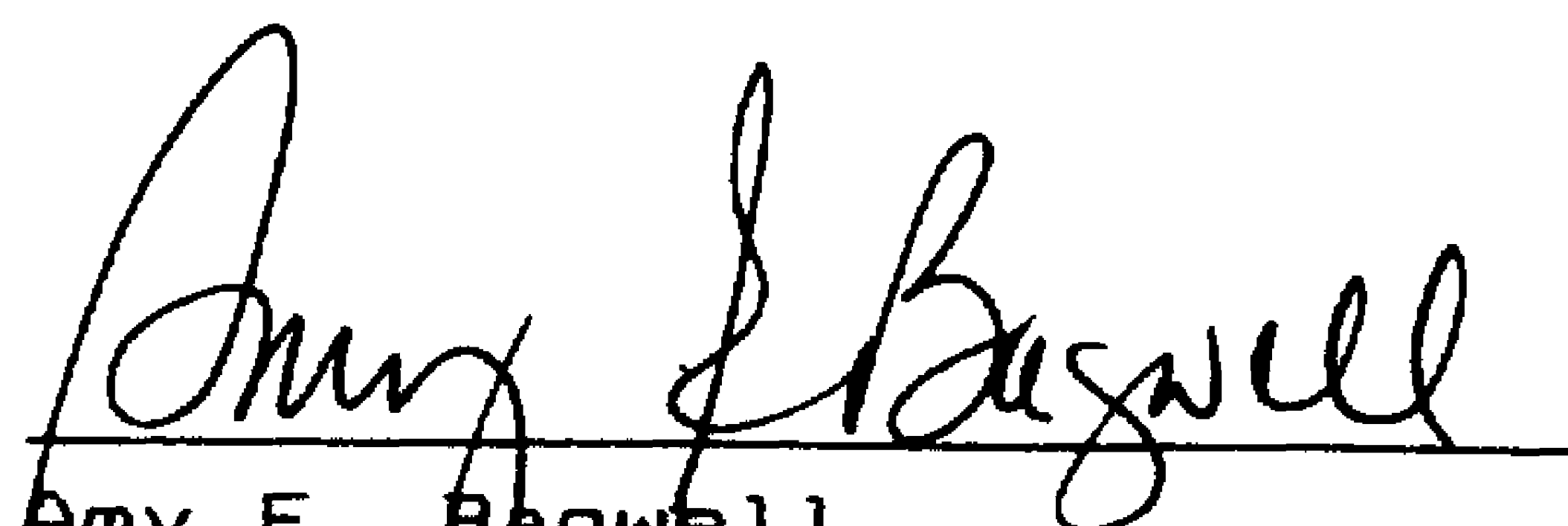
Attention: Billy Turner

Order No.: 0005156-002

Ship Date: December 27, 1991

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.12
Bulk Density, gm/cc	ABR-2A	.563
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		3.4
Pan		1.0
Residual VCM, ppm	ABGC-26	.137
Inherent Viscosity	ABR-10	.94


Amy E. Bagwell
Laboratory Supervisor/Lead

Vista Polymer

Highway 285

Aberdeen, ME 04930

PVC RAILCAR ANALYSIS

Load Date: 12-2-91Product: 5415

5385

Car No.: 41182Time Logged In: 1700Logged In By: MMShip Date: 12/27Silo(s): 690, 691Customer: ITT Vulcan0005156-002No Metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.12		.02		.12		.02	
Contamination	<u>6</u> 8	—	<u>5</u> 6	—	<u>7</u> 5	—	<u>8</u> 6	—
Bulk Density	<u>.551</u>		<u>.566</u>		<u>.564</u>		<u>.566</u>	
BD w/o/antistat	.560		.582		.584		.583	
Hard Particle	<u>29</u> 3 P.P.	—	—	—	—	—	—	—
Viscosity	.936							
RVCM	.137							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>2.30</u>	<u>22.76</u>	<u>12.92</u>	<u>6.88</u>	<u>2.90</u>	<u>1.70</u>	<u>0.50</u>
%	<u>0.0</u>	<u>4.6</u>	<u>45.5</u>	<u>25.8</u>	<u>13.9</u>	<u>5.8</u>	<u>3.4</u>	<u>1.0</u>

Drytime: 4.9Static Flow: 0 17.6Avg. Microns: 184.0Color L: 100.47 a -0.19 b 1.85METS: 1 %Technician: DAHDL

VAB.0001198218

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CERTIFICATE OF ANALYSIS

Date: December 4, 1991

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

Railcar No.: VIPX 45921

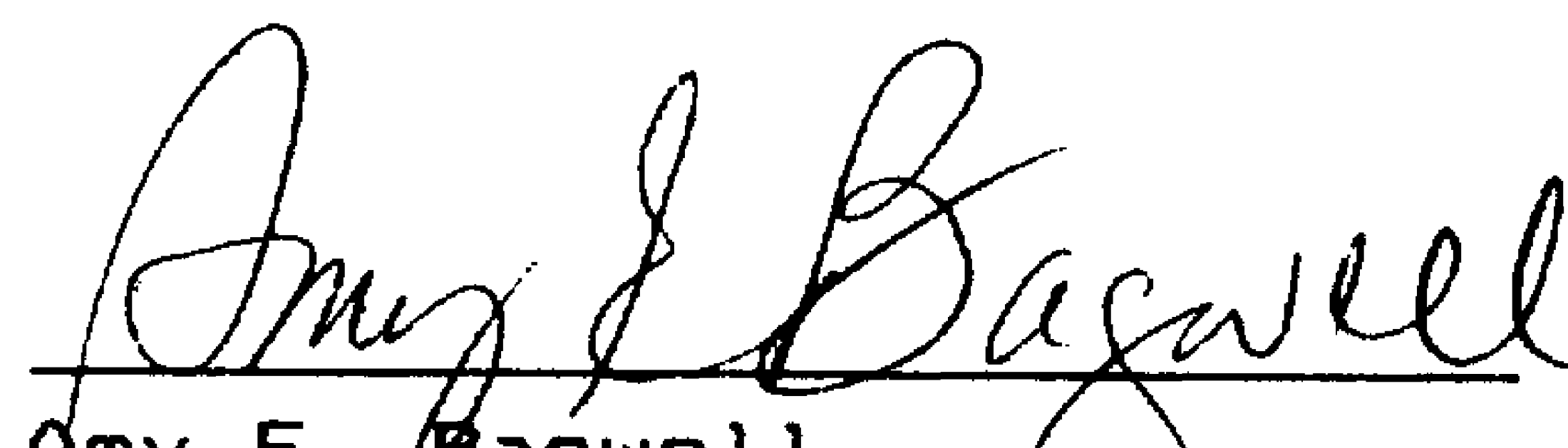
Attention: Billy Turner

Order No.: 0004107-003

Ship Date: November 27, 1991

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.09
Bulk Density, gm/cc	ABR-2A	.526
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		10.2
Pan		2.1
Residual VCM, ppm	ABGC-26	.275
Inherent Viscosity	ABR-10	.93


Amy E. Bagwell
Laboratory Supervisor/Lead

VAB.0001198219

PVC RAILCAR ANALYSIS

Load Date: 11-16-91 Product: 5385 Car No.: 45921Time Logged In: 1800 Logged In By: CoShip Date: 11/27/91 Silo(s): 676, 677, 685 Customer: TIP-Vulcan
0004107-003No metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	<u>[REDACTED]</u>	<u>1.09</u>	<u>1.02</u>		<u>.03</u>		<u>.02</u>	
Contamination	<u>11</u>	<u>—</u>	<u>8</u>	<u>—</u>	<u>13</u>	<u>—</u>	<u>8</u>	<u>—</u>
	<u>11</u>		<u>14</u>		<u>52</u>		<u>19</u>	
Bulk Density	<u>.521</u>		<u>.510</u>		<u>.563</u>		<u>.510</u>	
Fluff								
Hard Particle	<u>39</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	<u>24.1</u>							
Viscosity	<u>,931</u>							
RVCM	<u>,275</u>							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.38</u>	<u>9.00</u>	<u>13.40</u>	<u>13.00</u>	<u>7.90</u>	<u>5.11</u>	<u>1.05</u>
%	<u>0.0</u>	<u>0.8</u>	<u>18.0</u>	<u>26.8</u>	<u>26.3</u>	<u>15.8</u>	<u>10.2</u>	<u>2.1</u>

Drytime: — Static Flow: 0, 8.1 Avg. Microns: 149.0Color L: 100.23 a -0.16 b 1.63Technician: D. J. HDL

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CERTIFICATE OF ANALYSIS

Date: November 27, 1991

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Railcar No.: UTCX 46452

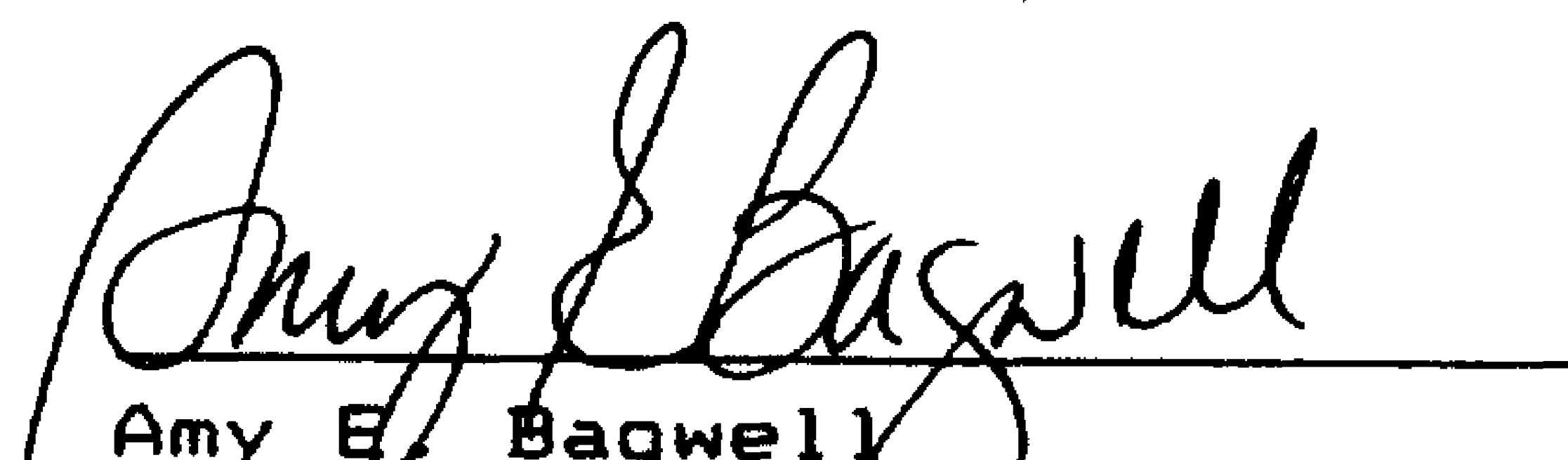
Attention: Billy Turner

Order No.: 0004107-001

Ship Date: November 26, 1991

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.12
Bulk Density, gm/cc	ABR-2A	.549
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		8.9
Pan		0.5
Residual VCM, ppm	ABGC-26	.274
Inherent Viscosity	ABR-10	.94


Amy E. Bagwell
Laboratory Supervisor

PVC RAILCAR ANALYSIS

BN
10/26Load Date: 11-15-91 Product: 5385 Car No.: 46452Time Logged In: 1800 Logged In By: COShip Date: 11/26/91 Silo(s): 676, 677 Customer: III P Vulcan
0004107-001No Metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.12		.02		.04		.02	
Contamination	<u>6</u> <u>4</u>	—	<u>7</u> <u>4</u>	—	<u>8</u> <u>9</u>	—	<u>9</u> <u>6</u>	—
Bulk Density	.523		.574		.525		.574	
Fluff								
Hard Particle	<u>50</u> 47 MB	—	—	—	—	—	—	—
Viscosity	.942							
RVCM	.274							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.86</u>	<u>10.37</u>	<u>13.80</u>	<u>12.26</u>	<u>7.04</u>	<u>4.45</u>	<u>0.25</u>
%	<u>0.0</u>	<u>1.7</u>	<u>20.7</u>	<u>27.6</u>	<u>26.5</u>	<u>14.1</u>	<u>8.9</u>	<u>0.5</u>

Drytime: — Static Flow: 0 18.5 Avg. Microns: 155.7Color L: 100.34 a -0.08 b 1.55Technician: P.T. HPL

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Aberdeen,
Phone (601)

CERTIFICATE OF ANALYSIS

Date: November 27, 1991

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

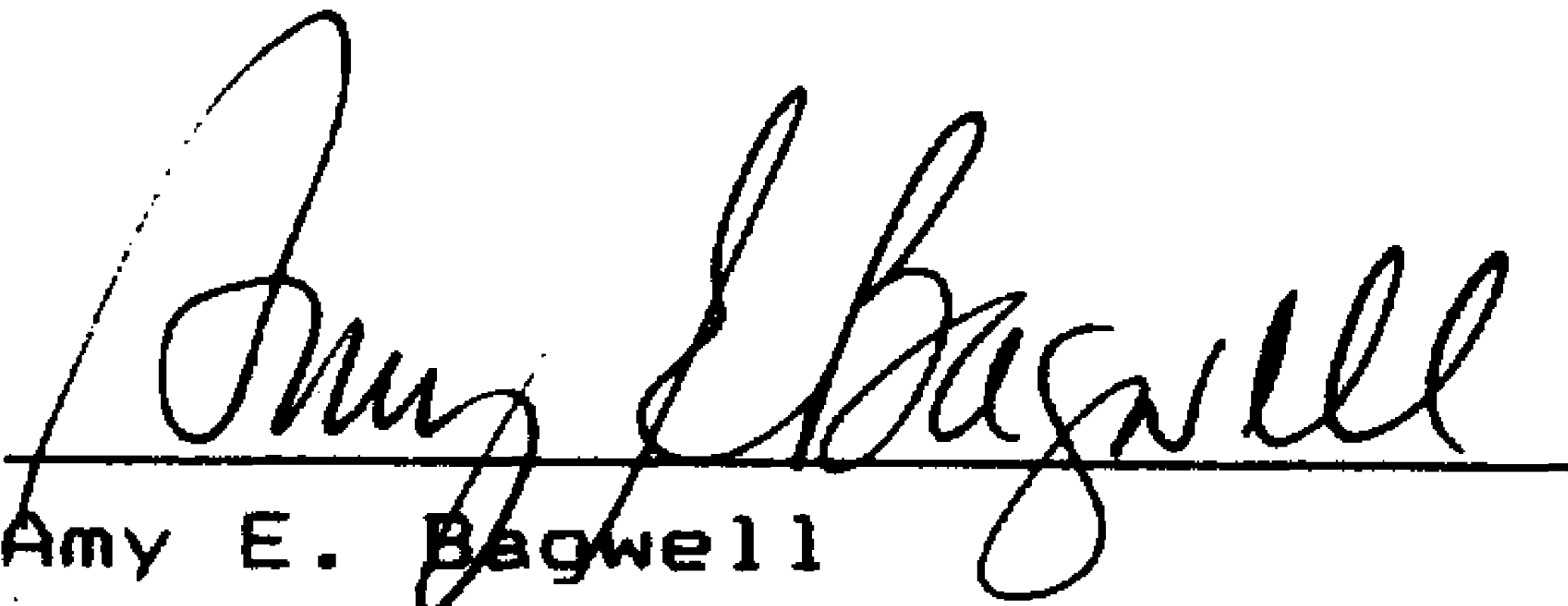
Railcar No.: UTCX 46575

Attention: Billy Turner

Order No.: 0004107-000

Ship Date: November 26, 1991

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.02
Bulk Density, gm/cc	ABR-2A	.577
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		16.0
Pan		4.5
Residual VCM, ppm	ABGC-26	.158
Inherent Viscosity	ABR-10	.92


Amy E. Bagwell
Laboratory Supervisor

PVC RAILCAR ANALYSIS

BN
11/26

A

Load Date: 11-16-91 Product: 5385 Car No.: 46575Time Logged In: 0600 Logged In By: DotShip Date: 11/26/91 Silo(s): 689 Customer: III P Vulcan
0004107-000NO METAL

	<u>A</u>		<u>CA</u> 1800		<u>CB</u> 1800		<u>B</u>	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.02		.02		.02		.02	
Contamination	<u>37</u> <u>165</u>	—	<u>25</u> <u>144</u>	—	<u>12</u> <u>49</u>	—	<u>18</u> <u>36</u>	—
Bulk Density	.577		.580		.523		.510	
Flow Res, 11-18-91	.577		.571		.578		.507	
Hard Particle ^{Te}	—	—	—	—	—	—	—	
Viscosity	.924							
RVCM	.158							
40 Mesh/Glassies								

Screen Analysis

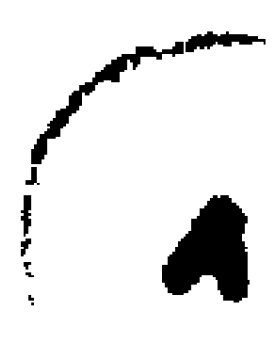
Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.21</u>	<u>5.54</u>	<u>10.40</u>	<u>13.28</u>	<u>10.44</u>	<u>8.00</u>	<u>2.25</u>
%	<u>0.0</u>	<u>0.4</u>	<u>11.1</u>	<u>20.8</u>	<u>26.3</u>	<u>20.9</u>	<u>16.0</u>	<u>4.5</u>

Drytime: _____ Static Flow: 0 14.2 Avg. Microns: 135.1Color L: 100.55 a -0.08 b 1.31Technician: Dot FHL

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CERTIFICATE OF ANALYSIS

Date: November 19, 1991

Product: 5385

VISTA

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

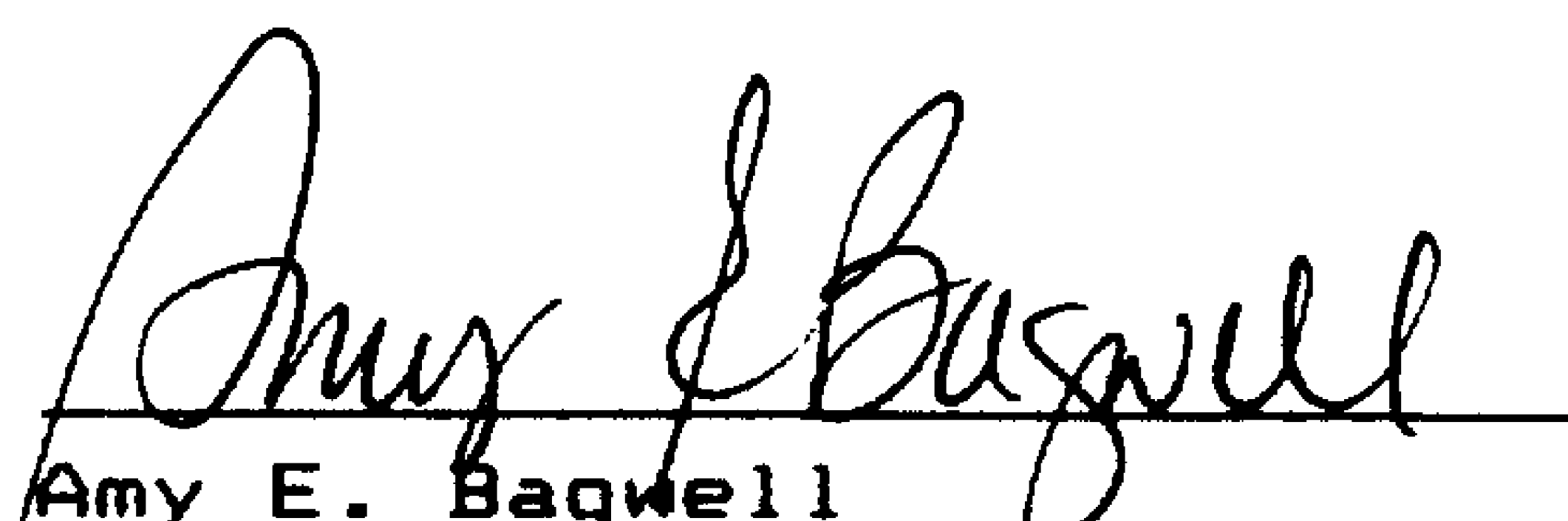
Railcar No.: PLCX 4373B

Attention: Billy Turner

Order No.: 000369B-002

Ship Date: November 15, 1991

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.02
Bulk Density, gm/cc	ABR-2A	.574
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		18.3
Pan		2.4
Residual VCM, ppm	ABGC-26	.003
Inherent Viscosity	ABR-10	.93


Amy E. Bagwell
Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 11-9-91 Product: 5385 Car No: 43738Time Logged In: 1700 Logged In By: RJLShip Date: 11/15/91 Silo(s): 677 Customer: III B Vulcan
0003698-002NO METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.02		.02		.02		.02	
Contamination	<u>15</u> <u>17</u>	—	<u>9</u> <u>21</u>	—	<u>14</u> <u>19</u>	—	<u>8</u> <u>33</u>	—
Bulk Density	.572		.573		.575		.574	
Fluff								
Hard Particle	<u>50</u> <u>23 R.P.</u>	—	—	—	—	—	—	—
Viscosity	.933							
RVCM	.003							
40 Mesh/Glassies	1		1		1		0	

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.07</u>	<u>3.53</u>	<u>10.56</u>	<u>13.88</u>	<u>14.87</u>	<u>9.15</u>	<u>1.20</u>
%	<u>0.0</u>	<u>0.1</u>	<u>7.1</u>	<u>21.1</u>	<u>29.3</u>	<u>21.7</u>	<u>18.3</u>	<u>2.4</u>

Drytime: 5.1 Static Flow: 0 1/0.2 Avg. Microns: 1324Color L: 99.02 a 0.06 b 1.56Technician: D.T. + HDL

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4

CERTIFICATE OF ANALYSIS

Date: November 19, 1991

Product: 5385

VISTA

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

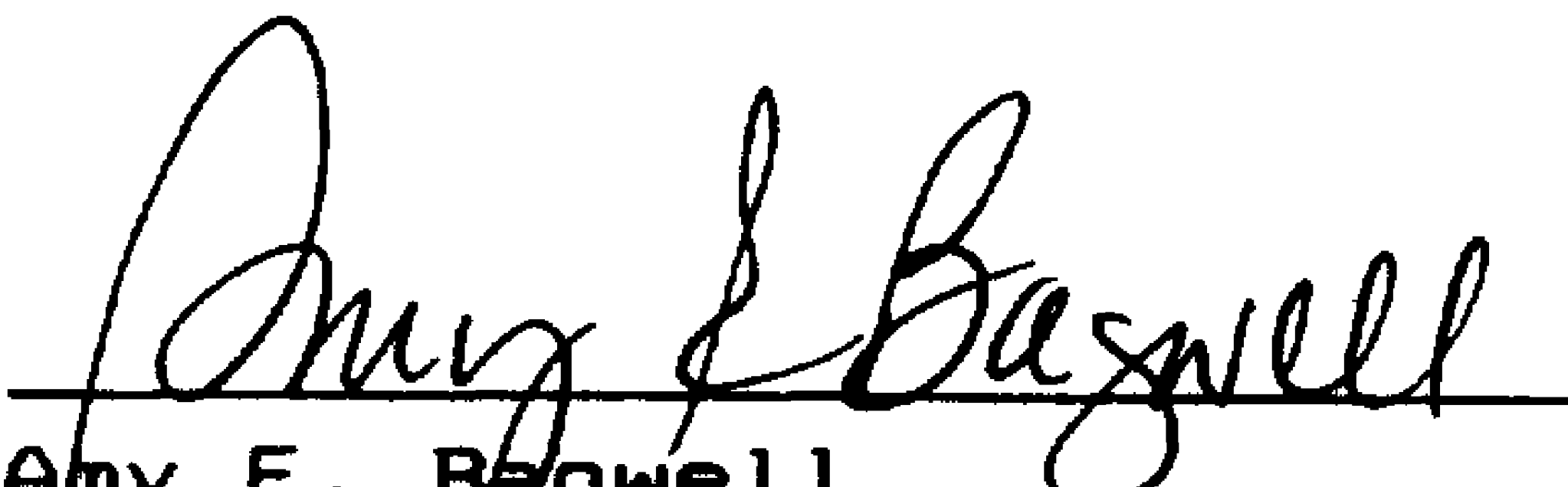
Railcar No.: VIPX 45711

Attention: Billy Turner

Order No.: 0003698-001

Ship Date: November 15, 1991

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.14
Bulk Density, gm/cc	ABR-2A	.547
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		16.0
Pan		2.7
Residual VCM, ppm	ABGC-26	.260
Inherent Viscosity	ABR-10	.93


Amy E. Bagwell
Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 11-11-91Product: 5385Car No.: 45711Time Logged In: 2400Logged In By: MJShip Date: 11/15/91Silo(s): 685,676Customer: Type III P0003698-001

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.02		.02		.01		.14	
Contamination	<u>3</u> 4	—	<u>10</u> 13	—	<u>8</u> 4	—	<u>6</u> 12	—
Bulk Density	.577		.517		.569		.525	
Fluff with H ₂ SiL			.524				.528	
Hard Particle	<u>50</u> 35 ml	—	—	—	—	—	—	—
Viscosity	.931							
RVCM	.260							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>20</u>	<u>.11</u>	<u>4.33</u>	<u>10.42</u>	<u>14.20</u>	<u>11.36</u>	<u>7.98</u>	<u>1.33</u>
% P	<u>20</u>	<u>.2</u>	<u>8.7</u>	<u>20.8</u>	<u>28.9</u>	<u>22.7</u>	<u>16.0</u>	<u>2.7</u>

Drytime: 4.8Static Flow: 0 19.2Avg. Microns: 134.3Color L: 99.91 a -0.12 b 1.82Technician: M.T. & M.B.

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CERTIFICATE OF ANALYSIS

Date: December 13, 1991

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

Railcar No.: VIPX 45805

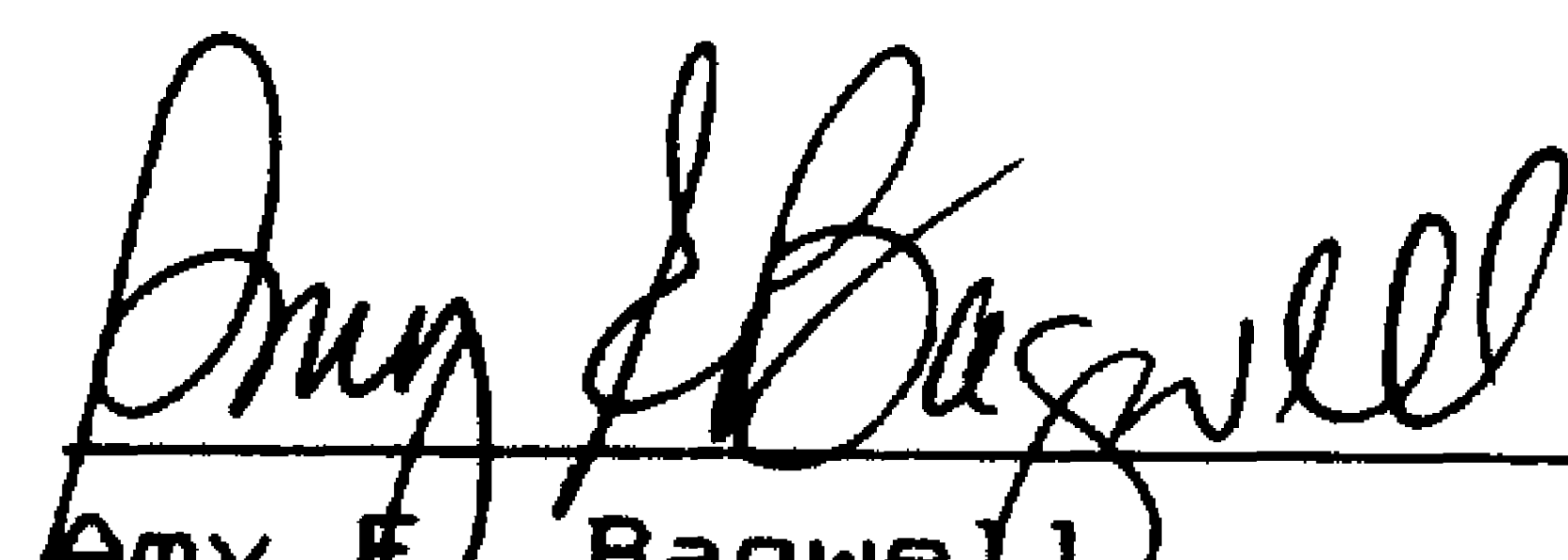
Attention: Billy Turner

Order No.: 0004691-000

Ship Date: December 10, 1991

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.14
Bulk Density, gm/cc	ABR-2A	0.584
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		8.7
Pan		1.9
Residual VCM, ppm	ABGC-26	0.863
Inherent Viscosity	ABR-10	0.93



Amy E. Bagwell
Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 12-3-91Product: 5385Car No.: 45805Time Logged In: 1400Logged In By: MAJShip Date: 12/10/91Silo(s): 689Customer: W.P. Vulcan0004691-000no mtd

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.13		.14		.11		.10	
Contamination	<u>12</u> <u>25</u>	—	<u>32</u> <u>28</u>	—	<u>7</u> <u>19</u>	—	<u>3</u> <u>18</u>	—
Bulk Density	.581		.589		.580		.585	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.927							
RVCM	.863							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>.20</u>	<u>9.93</u>	<u>14.89</u>	<u>12.50</u>	<u>7.16</u>	<u>4.34</u>	<u>.93</u>
%	<u>0.0</u>	<u>.4</u>	<u>19.9</u>	<u>29.8</u>	<u>25.0</u>	<u>14.3</u>	<u>8.7</u>	<u>1.9</u>

Drytime: —Static Flow: 0 17.7Avg. Microns: —Color L: 100.50 a -.14 b 1.61Technician: MAJ + TE

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CERTIFICATE OF ANALYSIS

Date: December 13, 1991

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

Railcar No.: ACFX 41146

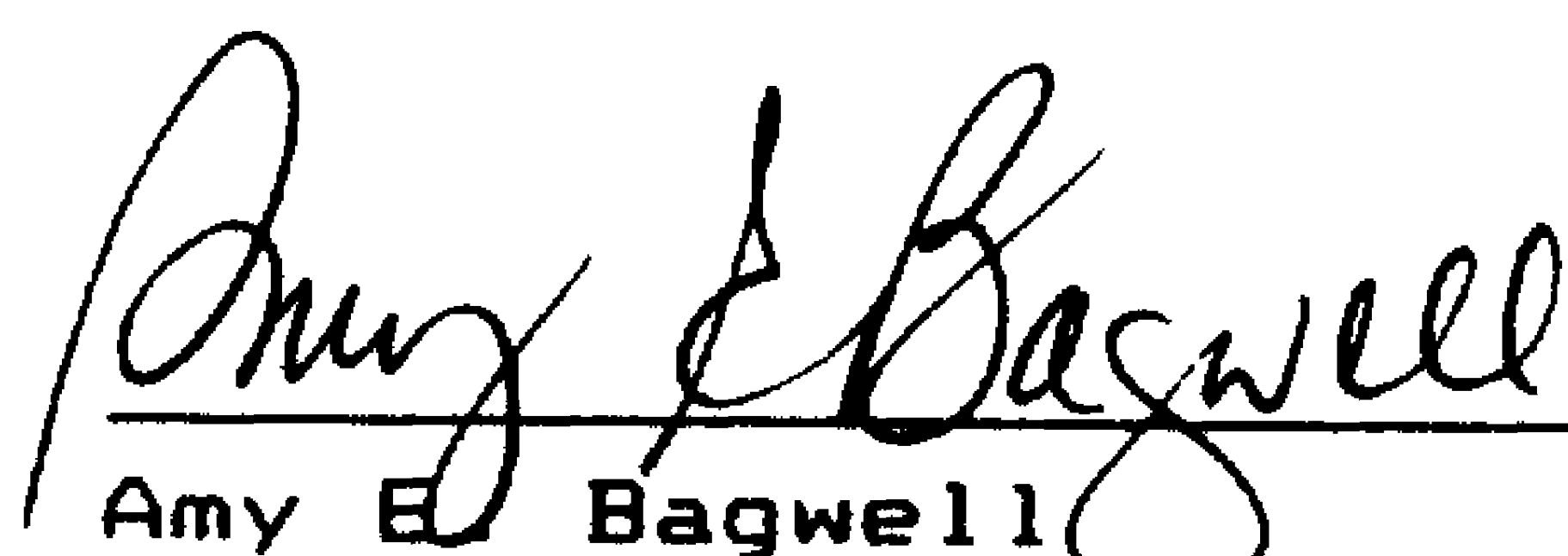
Attention: Billy Turner

Order No.: 0004691-001

Ship Date: December 10, 1991

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.15
Bulk Density, gm/cc	ABR-2A	0.580
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		9.2
Pan		2.6
Residual VCM, ppm	ABGC-26	0.142
Inherent Viscosity	ABR-10	0.90


Amy E. Bagwell
Laboratory Supervisor/Lead

VAB.0001198231

Vista Polymers

Highway 25

Aberdeen, MS 39730 A

PVC RAILCAR ANALYSIS

Load Date: 12-4-91 Product: 5385 Car No.: 41146Time Logged In: 0500 Logged In By: COShip Date: 12/10/91 Silo(s): 689 Customer: MP Vulcan
0004691-001no metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.11		.13		.15		.10	
Contamination	<u>13</u> 15	—	<u>3</u> 26	—	<u>3</u> 53	—	<u>9</u> 57	—
Bulk Density	.579		.580		.582		.580	
Fluff								
Hard Particle	— —	—	—	—	—	—	—	—
Viscosity	.896							
RVCM	.142							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>.11</u>	<u>7.42</u>	<u>15.53</u>	<u>13.19</u>	<u>7.54</u>	<u>4.61</u>	<u>1.31</u>
%	<u>0.0</u>	<u>.2</u>	<u>14.8</u>	<u>31.0</u>	<u>27.1</u>	<u>15.1</u>	<u>9.2</u>	<u>2.6</u>

Drytime: — Static Flow: 0 / 8.0 Avg. Microns: 146.6Color L: 100.43 a -1.27 b 2.06Technician: MATE

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CERTIFICATE OF ANALYSIS

Date: December 4, 1991

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

Railcar No.: ACFX 41181

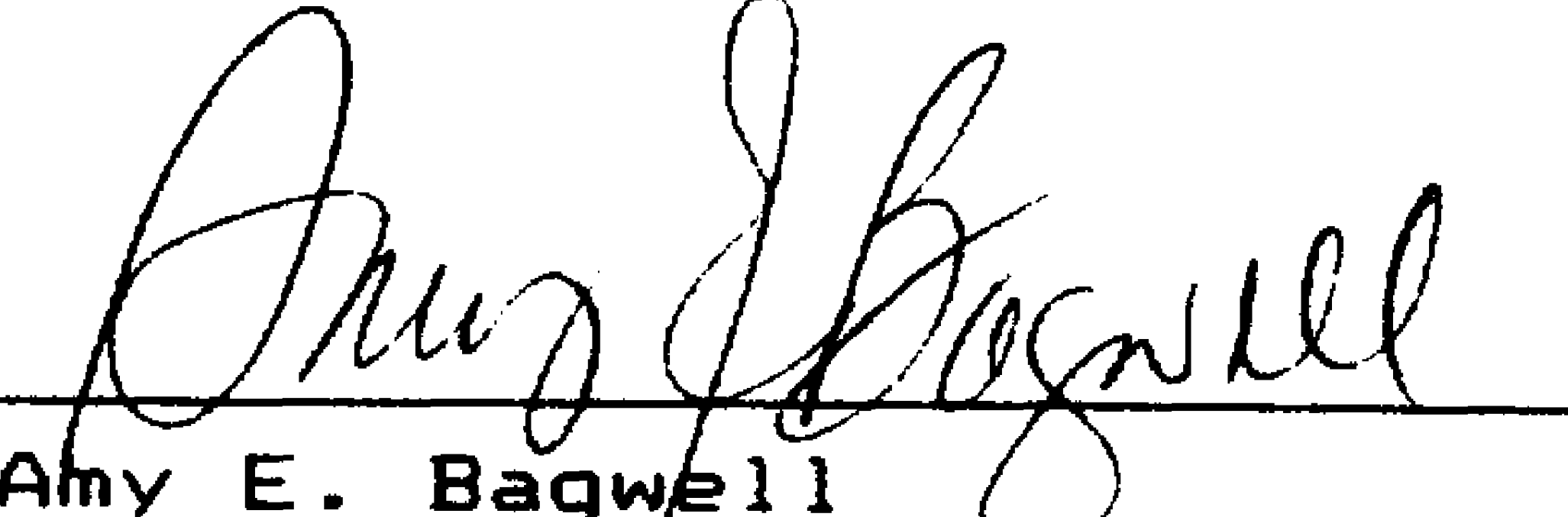
Attention: Billy Turner

Order No.: 0004107-002

Ship Date: November 27, 1991

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.04
Bulk Density, gm/cc	ABR-2A	.559
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		9.4
Pan		2.0
Residual VCM, ppm	ABGC-26	.110
Inherent Viscosity	ABR-10	.94


Amy E. Bagwell
Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 11-26-91 Product: 5385 Car No.: 41181Time Logged In: 0705 Logged In By: MSShip Date: 11/27/91 Silo(s): 676 Customer: III P-Vulcan
0004107-002

No Meta L

	<u>1100</u> (A)		<u>1100</u> (CA)		<u>1100</u> (CB)		<u>1100</u> (B)	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.02		.03		.04		.02	
Contamination	<u>8</u> 8	—	<u>24</u> 10	—	<u>9</u> 8	—	<u>47</u> 10	—
Bulk Density	.570		.564		.562		.530	
Fluff	.566		.566		.566		.513	
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.939							
RVCM	.110							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.33</u>	<u>10.00</u>	<u>14.22</u>	<u>12.22</u>	<u>7.33</u>	<u>4.70</u>	<u>1.02</u>
%	<u>0.0</u>	<u>0.7</u>	<u>20.0</u>	<u>28.4</u>	<u>24.8</u>	<u>14.7</u>	<u>9.4</u>	<u>2.0</u>

Drytime: _____ Static Flow: 0, 9.8 Avg. Microns: 151.5Color L: 100.11 a -0.06 b 1.49Technician: D. J. H. D. L.

Vista Polymers

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Aberdeen, MS 39730

PVC RAILCAR ANALYSIS

Load Date: _____ Product: 5385 Car No.: 41181

Time Logged In: _____ Logged In By: _____

Ship Date: _____ Silo(s): Yes. Customer: _____

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture								
Contamination	—	—	—	—	—	—	—	—
Bulk Density								.530
Fluff								.517
Hard Particle	—	—	—	—	—	—	—	—
Viscosity								
RVCM								
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	_____	_____	_____	_____	_____	_____	_____	_____
%	_____	_____	_____	_____	_____	_____	_____	_____

Drytime: _____ Static Flow: _____ / _____ Avg. Microns: _____

Color L: _____ a _____ b _____

Technician: D. To

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LETTER OF CERTIFICATION

VISTA

Date: 25 Nov. 91

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

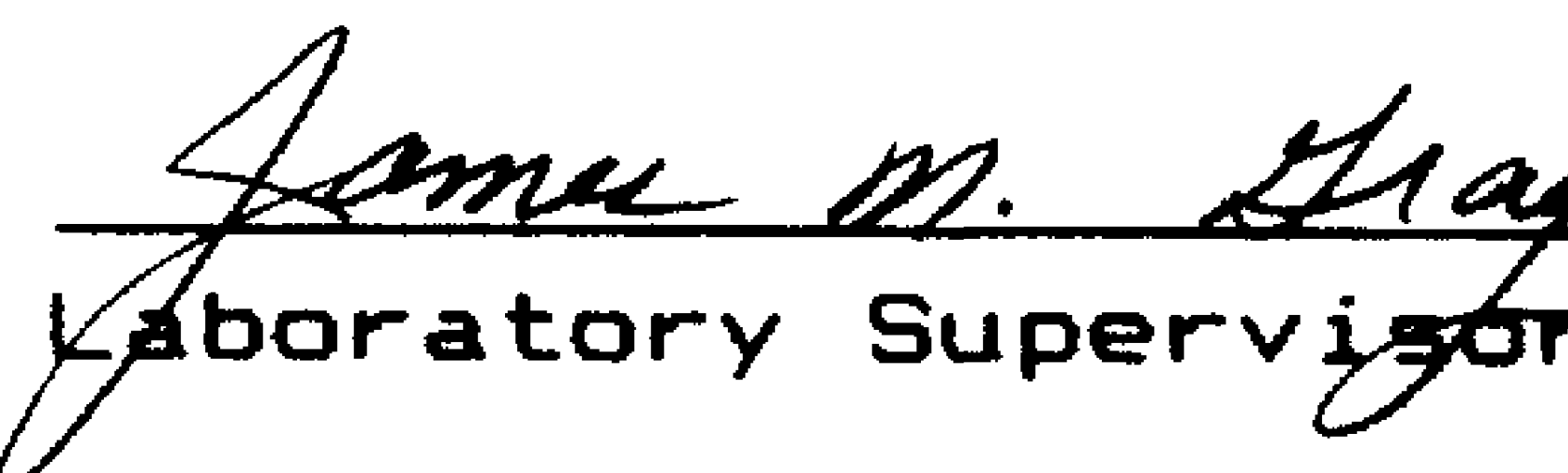
Attention: Billy Turner

Trailer No: T-868

Ship Date: 25 Nov. 91

Order No.: 000 3992-003

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.07</u>
Bulk Density, gm/cc	ABR-2A	<u>.550</u>
Particle Size, % on	ABR-3	
40 Mesh		<u>0.0</u>
200 Mesh		<u>8.2</u>
Pan		<u>1.9</u>
Residual VCM, ppm	ABGC-26	Not more than 8.5 PPM
Inherent Viscosity	ABR-10	This material was produced to yield an inherent viscosity in the range of .90 to .95.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 11-25-91 Product 5385 Trailer Number T-868
 Customer Vulcan Silo 677,685 Time 1130
 Technician MA Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. .07		1. 4 6		1. 18 2 HA	1. .550	1. 5.0	L = 99.93 A = -.08 B = 1.71	Flow of 18.3	
	2.		2.		2.	2.	2.			
MIDDLE	1.		1.		1.	1.	1.	L = A = B =		
	2.		2.		2.	2.	2.			
END	1.		1.		1.	1.	1.	L = A = B =		
	2.		2.		2.	2.	2.			

Particle Size Distribution:

Screen Analysis 10 Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

								Pan	Glassy Part.
Mesh Size	40	60	80	100	120	140	200		
Gross Wt.									
Tare									
Net Wt.	0.00	1.11	14.11	12.36	11.15	7.15	4.11	.96	
% on Mesh	0.0	2.2	28.2	24.7	20.5	14.3	8.2	1.9	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

								Pan	Glassy Part.
Mesh Size	40	60	80	100	120	140	200		
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

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LETTER OF CERTIFICATION

VISTA

Date: 25 Nov. 91

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

Attention: Billy Turner

Trailer No: T-415

Ship Date: 25 Nov. 91

Order No.: 0003992-002

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.04</u>
Bulk Density, gm/cc	ABR-2A	<u>.562</u>
Particle Size, % on	ABR-3	
40 Mesh		<u>0.0</u>
200 Mesh		<u>9.4</u>
Pan		<u>2.0</u>
Residual VCM, ppm	ABGC-26	Not more than 8.5 PPM
Inherent Viscosity	ABR-10	This material was produced to yield an inherent viscosity in the range of .90 to .95.

James M. Gray
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

A

Date 11-24-91 Product 5385 Trailer Number T-415
 Customer VULCAN Silo 676 Time 0615
 Technician MKS Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC.	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>0.04</u>	.....	1. <u>19/3</u>	.....	1. <u>18/2mg</u>	1. <u>.562</u>	1. <u>4.9</u>	L = <u>100.22</u>	<u>Flow</u> <u>8.0</u>	
	2. ....	.....	2. ....	.....	2.	2.	2.	A = <u>0.04</u>		
MIDDLE	1. ....	.....	1. ....	.....	1.	1.	1.	L =		
	2. ....	.....	2. ....	.....	2.	2.	2.	A =		
END	1. ....	.....	1. ....	.....	1.	1.	1.	L =		
	2. ....	.....	2. ....	.....	2.	2.	2.	A =		
								B =		

Particle Size Distribution:

Screen Analysis 10 Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

								Pan	Glassy Part.
Mesh Size	40	60	80	100	120	140	200		
Gross Wt.	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tare	.....	.....	.....	.....	.....	.....	.....	.....	.....
Net Wt.	<u>0.00</u>	<u>.20</u>	<u>8.40</u>	<u>14.68</u>	<u>13.26</u>	<u>7.64</u>	<u>4.70</u>	<u>1.00</u>	
% on Mesh	<u>0.0</u>	<u>.4</u>	<u>16.8</u>	<u>29.3</u>	<u>26.8</u>	<u>15.3</u>	<u>9.4</u>	<u>2.0</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

								Pan	Glassy Part.
Mesh Size	40	60	80	100	120	140	200		
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198239

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A

LETTER OF CERTIFICATION

VISTA

Date: 25 Nov. 91

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

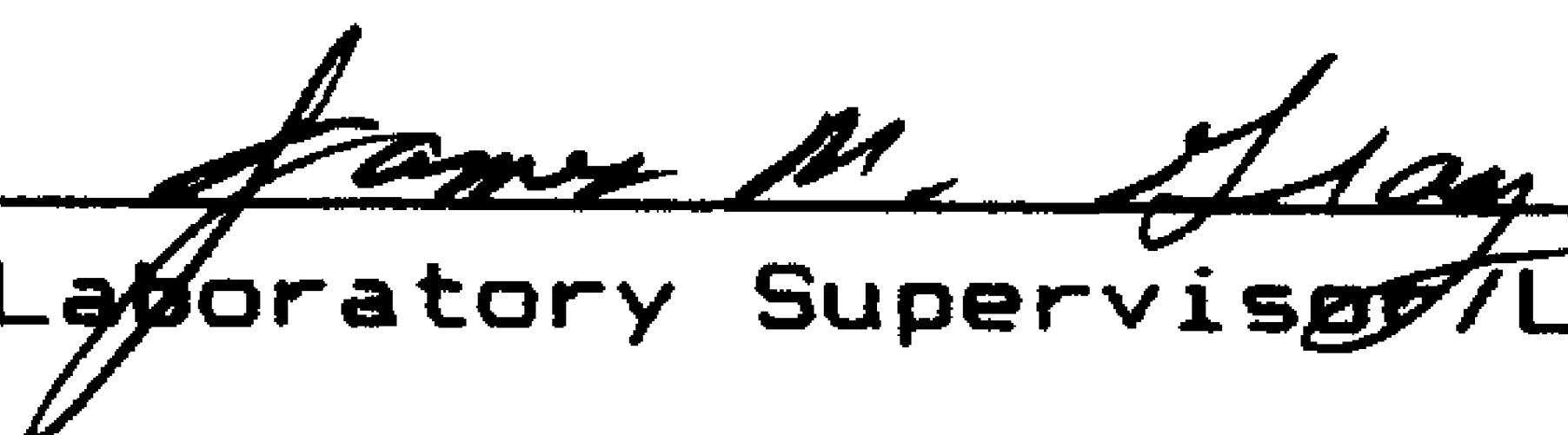
Attention: Billy Turner

Trailer No: T-810

Ship Date: 25 Nov. 91

Order No.: 000 3992-001

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.08</u>
Bulk Density, gm/cc	ABR-2A	<u>.572</u>
Particle Size, % on	ABR-3	
40 Mesh		<u>0.0</u>
200 Mesh		<u>10.2</u>
Pan		<u>2.3</u>
Residual VCM, ppm	ABGC-26	Not more than 8.5 PPM
Inherent Viscosity	ABR-10	This material was produced to yield an inherent viscosity in the range of .90 to .95.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 11-23-91 Product 5385 Trailer Number T-810
 Customer Vulcan Silo 685 Time 0200
 Technician M41 Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>0.08</u>		1. <u>5</u>		1. <u>15</u> <u>2HA</u>	1. <u>.572</u>	1. <u>5.0</u>	L = <u>100.33</u> A = <u>-14</u>	<u>Flow</u> <u>7.9</u>	
	2.		2.		2.	2.	2.	B = <u>1.55</u>		
MIDDLE	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
								B =		

Particle Size Distribution:

Screen Analysis 10 Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>.09</u>	<u>7.81</u>	<u>13.92</u>	<u>14.82</u>	<u>7.59</u>	<u>5.11</u>	<u>1.15</u>	
% on Mesh	<u>0.0</u>	<u>.2</u>	<u>15.6</u>	<u>27.8</u>	<u>28.7</u>	<u>15.2</u>	<u>10.2</u>	<u>2.3</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

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LETTER OF CERTIFICATION

VISTA

Date: 23 Nov. 91

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

Attention: Billy Turner

Trailer No: T-810

Ship Date: 23 Nov. 91

Order No.: 000 3992-000

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.08</u>
Bulk Density, gm/cc	ABR-2A	<u>.517</u>
Particle Size, % on	ABR-3	
40 Mesh		<u>0.0</u>
200 Mesh		<u>8.4</u>
Pan		<u>2.0</u>
Residual VCM, ppm	ABGC-26	Not more than 8.5 PPM
Inherent Viscosity	ABR-10	This material was produced to yield an inherent viscosity in the range of .90 to .95.

James M. Gray
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

A

Date 11-22-91 Product 5385 Trailer Number T-810
 Customer Vulcan Silo 685 Time 0530
 Technician MAJ Order No. 0003992-000

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>08</u>	.....	1. <u>4/7</u>	.....	1. <u>1/2</u> <u>24H</u>	1. <u>.517</u>	1. <u>5.0</u>	L = <u>100.36</u> A = <u>-15</u> B = <u>1.60</u>	<u>Flow</u> <u>@ 10.2</u>	
	2. ....	.....	2. ....	.....	2.	2.	2.			
MIDDLE	1. ....	.....	1. ....	.....	1.	1.	1.	L = A = B =		
	2. ....	.....	2. ....	.....	2.	2.	2.			
END	1. ....	.....	1. ....	.....	1.	1.	1.	L = A = B =		
	2. ....	.....	2. ....	.....	2.	2.	2.			

Particle Size Distribution:

Screen Analysis 10 Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.58</u>	<u>9.70</u>	<u>15.71</u>	<u>12.51</u>	<u>6.58</u>	<u>4.20</u>	<u>1.00</u>	
% on Mesh	<u>0.0</u>	<u>1.2</u>	<u>19.4</u>	<u>31.4</u>	<u>24.4</u>	<u>13.2</u>	<u>8.4</u>	<u>2.0</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198243

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Vista Chemical Company

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Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

A

CERTIFICATE OF ANALYSIS

Date: November 19, 1991

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Railcar No.: VIPX 45910

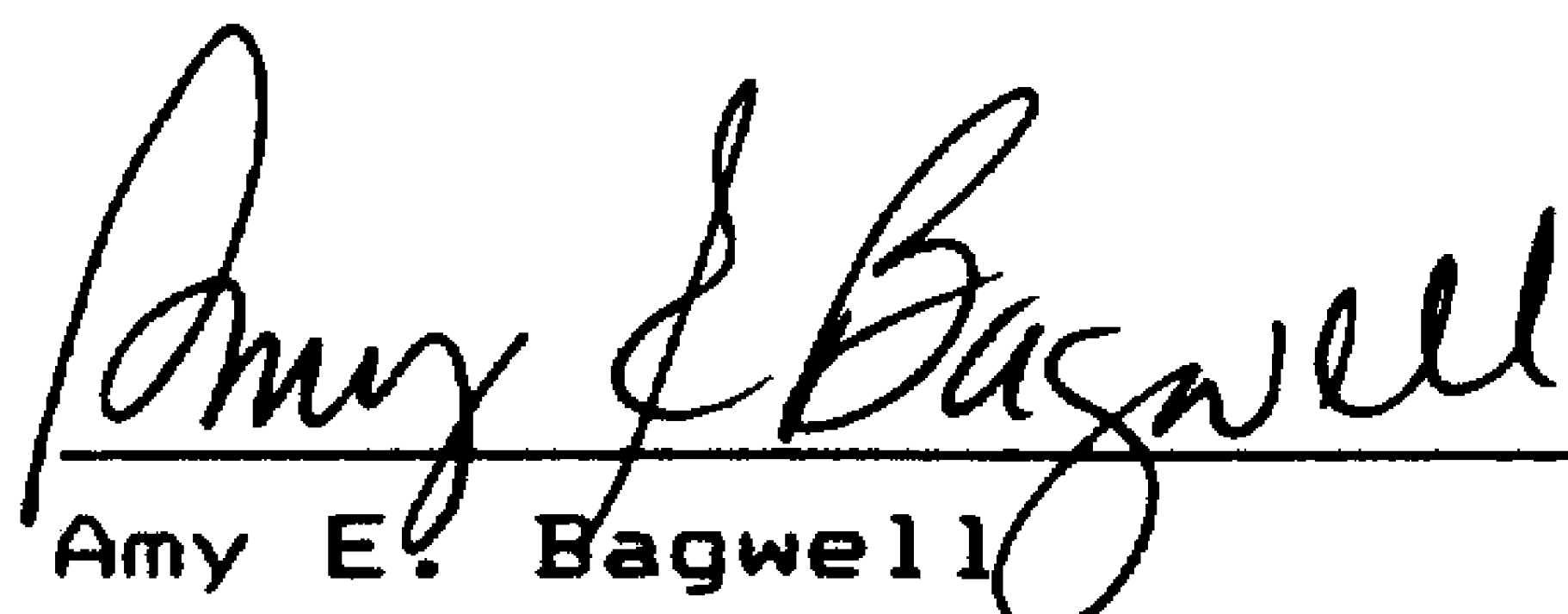
Attention: Billy Turner

Order No.: 0003698-000

Ship Date: November 15, 1991

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.15
Bulk Density, gm/cc	ABR-2A	.576
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		11.0
Pan		2.4
Residual VCM, ppm	ABGC-26	1.984
Inherent Viscosity	ABR-10	.93


Amy E. Bagwell
Laboratory Supervisor/Lead

VAB.0001198244

PVC RAILCAR ANALYSIS

Load Date: 10-15-91Product: 5385Car No.: 45910Time Logged In: 0100Logged In By: M.T.VulcanShip Date: 11/15/91Silo(s): 685Customer: Type III0003698-000No Metal

	<u>A</u> NT		<u>CA</u> NT		<u>CB</u> NT		<u>B</u> NT	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.15		.03		.07		.02	
Contamination	<u>18</u> 4	—	<u>19</u> 8	—	<u>4</u> 1	—	<u>13</u> 7	—
Bulk Density	.582		.583		.568		.572	
Fluff								
Hard Particle	<u>50</u> 27 <u>ACT.</u>	—	—	—	—	—	—	—
Viscosity	.925							
RVCM	1.984							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.13</u>	<u>5.58</u>	<u>14.45</u>	<u>14.54</u>	<u>8.56</u>	<u>5.51</u>	<u>1.18</u>
%	<u>0.0</u>	<u>0.3</u>	<u>11.2</u>	<u>28.9</u>	<u>29.1</u>	<u>17.1</u>	<u>11.0</u>	<u>2.4</u>

Drytime: 5.0Static Flow: 0, 9.1Avg. Microns: 142.4Color L: 100.11 a -0.01 b 1.51Technician: D.J.M.B.

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

A

LETTER OF CERTIFICATION

VISTA

Date: November 19, 1991

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

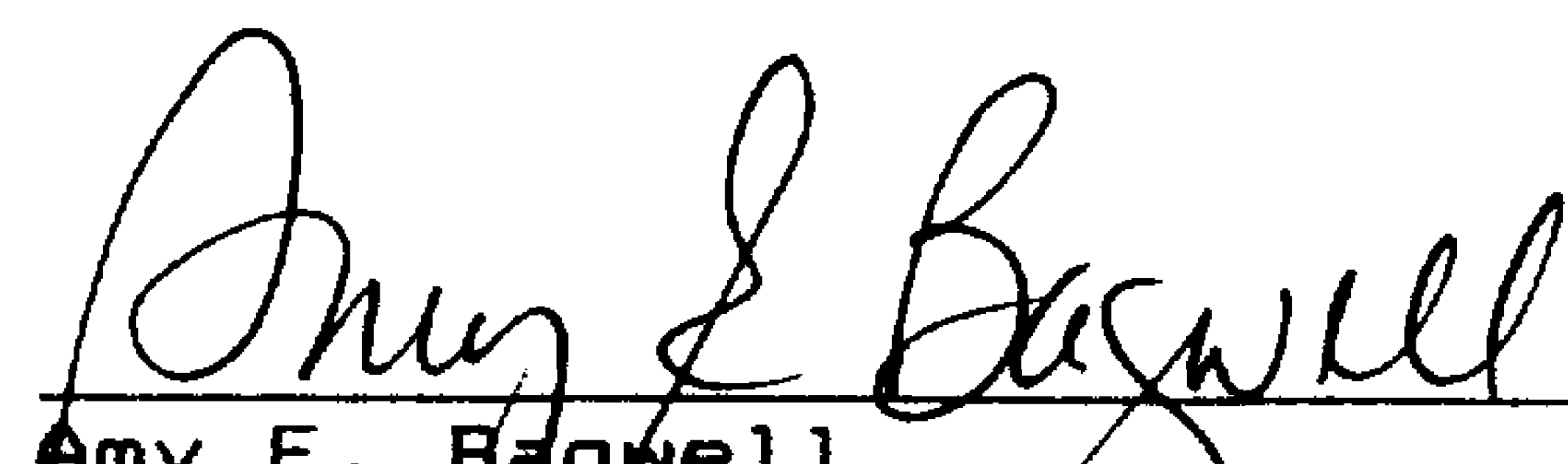
RAILCAR No.: PLWX 44461

Attention: Billy Turner

Order No.: 0008000-001

Ship Date: November 13, 1991

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.13
Bulk Density, gm/cc	ABR-2A	.580
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		10.1
Pan		2.4
Residual VCM, ppm	ABGC-26	.256
Inherent Viscosity	ABR-10	.93


Amy E. Bagwell
Laboratory Supervisor/Lead

VAB.0001198246

PVC RAILCAR ANALYSIS

Load Date: 10-23-91 Product: 5385 Car No.: 44461Time Logged In: 0630 Logged In By: ESShip Date: 11/13/91 Silo(s): 676, 677, 685 Customer: THE Vulcan
0008000-001no metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.08		.11		.13		.12	
Contamination	$\frac{15}{100}$	—	$\frac{12}{125}$	—	$\frac{15}{105}$	—	$\frac{12}{160}$	—
Bulk Density	.585		.582		.580		.576	
Fluff	.579		.576		.578		.577	
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.926							
RVCM	.256							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>.22</u>	<u>11.03</u>	<u>13.90</u>	<u>11.54</u>	<u>6.93</u>	<u>5.05</u>	<u>1.21</u>
%	<u>0.0</u>	<u>.4</u>	<u>22.1</u>	<u>27.8</u>	<u>23.3</u>	<u>13.9</u>	<u>10.1</u>	<u>2.4</u>

Drytime: — Static Flow: 0 18.2 Avg. Microns: 151.8Color L: 100.32 a -.07 b 1.62Technician: MATE

Vista Polymers
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Vista Chemical Company

Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

A

LETTER OF CERTIFICATION

Date: November 19, 1991

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: VIPX 45870

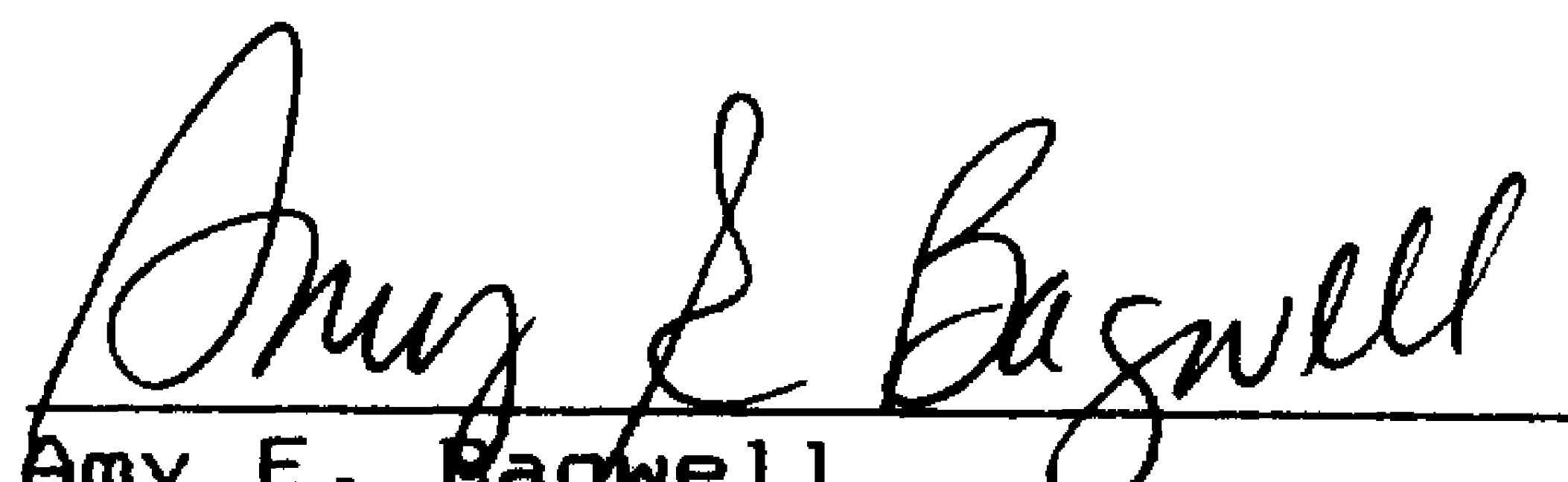
Attention: Billy Turner

Order No.: 0008000-000

Ship Date: November 13, 1991

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.05
Bulk Density, gm/cc	ABR-2A	.578
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		7.6
Pan		1.9
Residual VCM, ppm	ABGC-26	1.964
Inherent Viscosity	ABR-10	.93


Amy E. Bagwell
Laboratory Supervisor/Lead

VAB.0001198248

PVC RAILCAR ANALYSIS

Load Date: 10-15-91 Product: 5385 Car No.: 45870Time Logged In: 1800 Logged In By: DTShip Date: 11/13/91 Silo(s): 689 Customer: III P. Vulcan
0008000-000no metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.05		.01		.02		.03	
Contamination	<u>15</u> 39	—	<u>35</u> 18	—	<u>29</u> 17	—	<u>20</u> 53	—
Bulk Density	578		.581		.580		574	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.936							
RVCM	1.964							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>00</u>	<u>.14</u>	<u>10.34</u>	<u>15.72</u>	<u>12.26</u>	<u>6.12</u>	<u>3.28</u>	<u>.95</u>
% P	<u>00</u>	<u>.3</u>	<u>20.7</u>	<u>31.4</u>	<u>25.9</u>	<u>12.2</u>	<u>7.6</u>	<u>1.9</u>

Drytime: _____ Static Flow: 0 17.7 Avg. Microns: 153.5Color L: 100.02 a -0.08 b 1.67Technician: M. T & SS

LETTER OF CERTIFICATION

VISTA

Date: *6-14-91*

Product: *5385*

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Trailer No.: *T-810*

Lot No.:

Attention: Billy Turner

Order No.: *0000265-000*

Date of Shipment: *6-14-91*

Property -----	Test Method -----	Analysis -----
Volatiles, %	8.950	<i>.03</i>
Bulk Density, GM/CC	8.410	<i>.580</i>
Brabender Dry Time, Mins.	8.450	<i>—</i>
Particle Size, % on	8.300	
40 Mesh		<i>0.00</i>
200 Mesh		<i>6.6</i>
Pan		<i>2.4</i>
Vinyl Chloride Monomer	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of <i>.90</i> to <i>.95</i> .

David Thompson
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 6-14-91 Product 5385 Trailer Number F810
 Customer VULCAN Silo 689 Time 22:00-23:15
 Technician A.T. & M.B. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>0.03</u>		1. <u>7</u>		1. <u>-</u>	1. <u>.580</u>	1. <u>-</u>	L = <u>100.02</u>		<u>0.4</u>
	2. <u>.....</u>		2. <u>8</u>					A = <u>-0.11</u>		
MIDDLE	1. <u>.....</u>		1. <u>.....</u>		1. <u>.....</u>	1. <u>.....</u>	1. <u>.....</u>	L = <u>.....</u>		<u>No Metal</u>
	2. <u>.....</u>		2. <u>.....</u>		2. <u>.....</u>	2. <u>.....</u>	2. <u>.....</u>	A = <u>.....</u>		
END	1. <u>.....</u>		1. <u>.....</u>		1. <u>.....</u>	1. <u>.....</u>	1. <u>.....</u>	L = <u>.....</u>		
	2. <u>.....</u>		2. <u>.....</u>		2. <u>.....</u>	2. <u>.....</u>	2. <u>.....</u>	A = <u>.....</u>		
								B = <u>.....</u>		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.17</u>	<u>12.30</u>	<u>15.57</u>	<u>11.60</u>	<u>5.90</u>	<u>3.28</u>	<u>1.21</u>	
% on Mesh	<u>0.0</u>	<u>0.3</u>	<u>24.6</u>	<u>31.2</u>	<u>23.1</u>	<u>11.8</u>	<u>6.6</u>	<u>2.4</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001498251

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111



CERTIFICATE OF ANALYSIS

Date: January 2, 1992

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385

VISTA

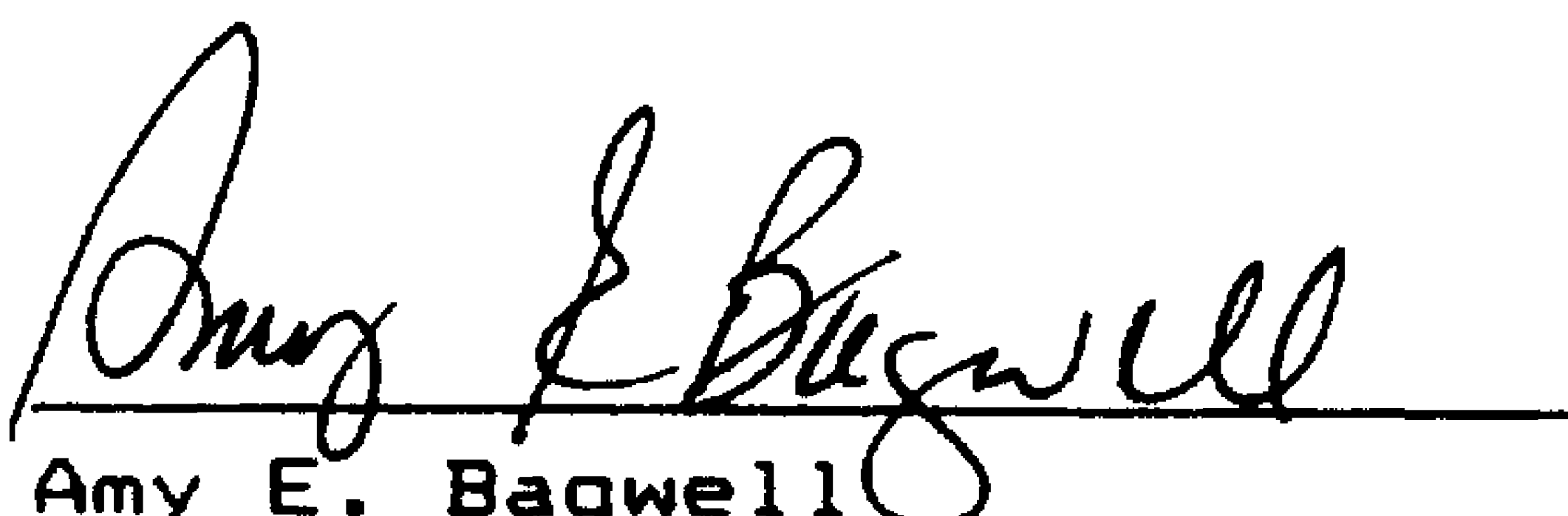
Railcar No.: ACFX 41155

Attention: Billy Turner

Order No.: 0005156-005

Ship Date: December 30, 1991

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.04
Bulk Density, gm/cc	ABR-2A	0.573
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		10.9
Pan		2.8
Residual VCM, ppm	ABGC-26	0.243
Inherent Viscosity	ABR-10	0.93


Amy E. Bagwell
Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 12-4-91 Product: 5385 Car No.: 41155Time Logged In: 1130 Logged In By: MSShip Date: 12/30 Silo(s): 674, 677, 685 Customer: Type Vulcan
0005156-005no metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.04		.03		.01		.01	
Contamination	$\frac{3}{2}$	—	$\frac{5}{2}$	—	$\frac{7}{5}$	—	$\frac{3}{3}$	—
Bulk Density	.581		.580		.563		.570	
Fluff								
Hard Particle	$\frac{15}{960}$	—	—	—	—	—	—	—
Viscosity	.925							
RVCM	.243							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>.55</u>	<u>13.18</u>	<u>12.35</u>	<u>10.15</u>	<u>6.90</u>	<u>5.46</u>	<u>1.40</u>
%	<u>0.0</u>	<u>1.1</u>	<u>26.4</u>	<u>24.7</u>	<u>20.3</u>	<u>13.8</u>	<u>10.9</u>	<u>2.8</u>

Drytime: 4.9 Static Flow: 0, 10.9 Avg. Microns: 155.0Color L: 97.43 a 0.91 b -2.12Technician: G + MB

LETTER OF CERTIFICATION

VISTA

Date: 6-14-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Trailer No.: T-479

Lot No.:

Attention: Billy Turner

Order No.: 0000265-001

Date of Shipment: 6-14-91

Property -----	Test Method -----	Analysis -----
Volatiles, %	8.950	.03
Bulk Density, GM/CC	8.410	.576
Brabender Dry Time, Mins.	8.450	—
Particle Size, % on	8.300	
40 Mesh		0.00
200 Mesh		6.8
Pan		2.5
Vinyl Chloride Monomer	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of .90 to .96

David Thompson
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 6-14-91 Product 5385 Trailer Number F479
 Customer VULCAN Silo 689 Time 22:00-22:40
 Technician D.T. + M.B. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>03</u>		1. <u>4</u> <u>3</u>		1. <u>—</u>	1. <u>.576</u>	1. <u>—</u>	L = <u>100.02</u> A = <u>-2/0</u> B = <u>1.34</u>		<u>0</u> <u>9.8</u>
	2.		2.		2.	2.	2.			
MIDDLE	1.		1.		1.	1.	1.	L =		<u>NO METAL</u>
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	B =		
	2.		2.		2.	2.	2.	L =		
								A =		
								B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.14</u>	<u>12.24</u>	<u>15.68</u>	<u>11.58</u>	<u>5.76</u>	<u>3.38</u>	<u>1.23</u>	
% on Mesh	<u>0.0</u>	<u>0.3</u>	<u>24.5</u>	<u>31.4</u>	<u>23.0</u>	<u>11.5</u>	<u>6.8</u>	<u>2.5</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198255

LETTER OF CERTIFICATION

VISTA

Date: 6-16-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Trailer No.: T-723

Lot No.:

Attention: Billy Turner

Order No.: 0000265-003

Date of Shipment: 6-16-91

Property	Test Method	Analysis
Volatiles, %	8.950	.03
Bulk Density, GM/CC	8.410	.576
Brabender Dry Time, Mins.	8.450	—
Particle Size, % on	8.300	
40 Mesh		0.00
200 Mesh		7.9
Pan		2.0
Vinyl Chloride Monomer	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of .90 to .95

David Thompson
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

A

Date 6-16-91 Product 5385 Trailer Number T-723
 Customer VULCAN Silo 677 Time 00:30 - 01:00
 Technician P.T.A.O. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>13</u>		1. <u>3</u>		1. <u>—</u>	1. <u>.576</u>	1. <u>—</u>	L = <u>100.25</u>		<u>0</u> <u>10.6</u>
	2.		2.		2.	2.	2.	A = <u>0.10</u>		
MIDDLE	1.		1.		1.	1.	1.	L =		<u>No</u> <u>Metal</u>
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.25</u>	<u>12.25</u>	<u>14.18</u>	<u>11.48</u>	<u>6.64</u>	<u>3.96</u>	<u>0.99</u>	
% on Mesh	<u>0.0</u>	<u>0.5</u>	<u>24.5</u>	<u>28.4</u>	<u>23.4</u>	<u>13.3</u>	<u>7.9</u>	<u>2.0</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198257

LETTER OF CERTIFICATION

VISTA

Date: 6-16-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Trailer No.: F-810

Lot No.:

Attention: Billy Turner

Order No.: 0000265-002

Date of Shipment: 6-16-91

Property -----	Test Method -----	Analysis -----
Volatiles, %	8.950	.06
Bulk Density, GM/CC	8.410	.573
Brabender Dry Time, Mins.	8.450	—
Particle Size, % on	8.300	
40 Mesh		.00
200 Mesh		7.5
Pan		2.0
Vinyl Chloride Monomer	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of .90 to .95.

David Thompson
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 6-16-91 Product 5385 Trailer Number T-810
 Customer VULCAN Silo 676 Time 00:30-01:15
 Technician P.T. A.J. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. 06		1. 4/8		1. —	1. 573	1. —	L = 10.22		9/10.0
	2.		2.		2.	2.	2.	A = 0.11		
MIDDLE	1.		1.		1.	1.	1.	B = 1.63		No Metal
	2.		2.		2.	2.	2.	L =		
END	1.		1.		1.	1.	1.	A =		
	2.		2.		2.	2.	2.	B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	0.00	0.40	12.70	14.44	11.27	6.50	3.76	1.00	
% on Mesh	0.0	0.8	25.4	28.8	22.5	13.0	7.6	2.0	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198259

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

LETTER OF CERTIFICATION

Date: 20 June 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: UTCX-46444

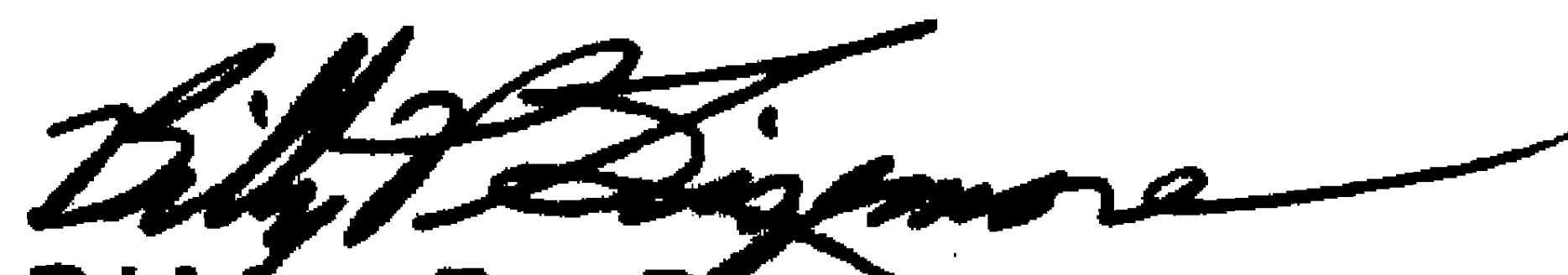
Attention: Billy Turner

Order No.: 0000158-005

Date of Shipment: 11 June 91

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.03
Bulk Density, gm/cc	ABR-2A	.565
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		5.7
Pan		1.9
Residual VCM, ppm	ABGC-26	.070
Inherent Viscosity	ABR-10	.92


Billy P. Sizemore

Laboratory Supervisor/Lead

A

PVC RAILCAR ANALYSIS

Load Date: 6-7-91Product: 5385Car No.: 46444

2TCX

Time Logged In: 1500Logged In By: TALLIEShip Date: 11 June 91 Silo(s): 689Customer: TII P Kalamall0000158-005NO METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.03		.02		.03		.02	
Contamination	<u>9</u> 19	—	<u>8</u> 16	—	<u>5</u> 9	—	<u>7</u> 10	—
Bulk Density	.550		.553		.583		.584	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.924							
RVCM	.070							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.48</u>	<u>15.60</u>	<u>149.5</u>	<u>10.13</u>	<u>5.18</u>	<u>28.7</u>	<u>0.95</u>
%	<u>0.0</u>	<u>1.0</u>	<u>31.2</u>	<u>29.5</u>	<u>20.3</u>	<u>10.4</u>	<u>5.7</u>	<u>1.9</u>

Drytime: _____

Static Flow: 0.98Avg. Microns: 163.8Color L: 92.80 a 0.12 b 1.69Technician: P.T. HPL

LETTER OF CERTIFICATION



VISTA

Date: 17 June 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

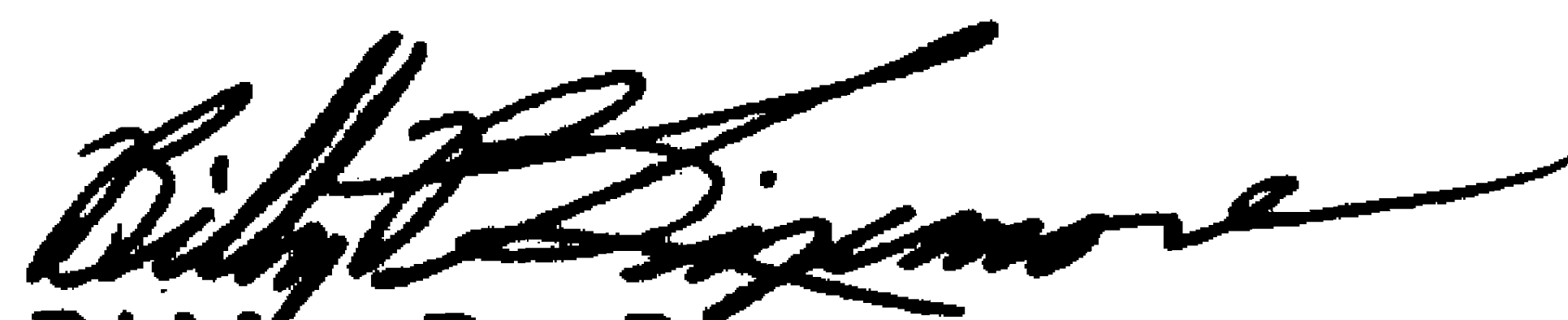
RAILCAR No.: UTCX-46402

Attention: Billy Turner

Order No.: 0000158-004

Date of Shipment: 10 June 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	.12
Bulk Density, gm/cc	ABR-2A	.573
Particle Size, % on	ABR-3	
40 Mesh		0.0
200 Mesh		7.6
Pan		2.6
Residual VCM, ppm	ABGC-26	.368
Inherent Viscosity	ABR-10	.93


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 6-8-91Product: 5385Car No.: 46402Time Logged In: 2400Logged In By: MSShip Date: 10 June 91Silo(s): 689Customer: Valcor0000158-004no metal

	69-91 A Ru		69-91 CA Ru		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.09		.11		.12		.10	
Contamination	<u>17</u> 81	—	<u>10</u> 51	—	<u>15</u> 72	—	<u>11</u> 76	—
Bulk Density	.567		.575		.572		.576	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.926							
RVCN	.368							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>.12</u>	<u>10.78</u>	<u>15.25</u>	<u>12.37</u>	<u>6.47</u>	<u>3.78</u>	<u>1.29</u>
%	<u>0.0</u>	<u>.2</u>	<u>21.6</u>	<u>30.5</u>	<u>24.6</u>	<u>12.9</u>	<u>7.6</u>	<u>2.6</u>

Drytime: —Static Flow: 0 / 8.5Avg. Microns: 152.9Color L: 100.07 a -0.03 b 1.47Technician: MY + TE

LETTER OF CERTIFICATION

VISTA

Date: 19 June 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: GACX-73382

Attention: Billy Turner

Order No.: 0000158-002

Date of Shipment: 7 June 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.11
Bulk Density, gm/cc.	ABR-2A	0.572
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		9.4
Pan		2.8
Residual VCM, ppm	ABGC-26	0.190
Inherent Viscosity	ABR-10	0.93


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 6-1-91Product: 5385Car No.: 73382Time Logged In: 0850Logged In By: Pat.Ship Date: 7 June 91Silo(s): 689 685Customer: THP0000158-002Valium Pl.6-7-91
CHno metal

	<u>A</u>		<u>CA</u>		<u>CB</u>		<u>B</u>	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.09		.10		.08		.11	
Contamination	<u>15</u> 30	—	<u>12</u> 26	—	<u>17</u> 35	—	<u>12</u> 30	—
Bulk Density	.567		.572		.577		.570	
Fluff								
Hard Particle	<u>—</u> —	—	—	—	—	—	—	—
Viscosity								
RVCM	.190							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.03</u>	<u>5.29</u>	<u>13.81</u>	<u>15.85</u>	<u>9.03</u>	<u>4.70</u>	<u>1.40</u>
%	<u>0.0</u>	<u>.1</u>	<u>10.6</u>	<u>27.6</u>	<u>31.7</u>	<u>18.1</u>	<u>9.4</u>	<u>2.8</u>

Drytime: —Static Flow: 0.18.9Avg. Microns: 141.3Color L: 99.90 a -.06 b 1.36Technician: MATE

LETTER OF CERTIFICATION

VISTA

Date: 19 June 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: VIPX-45907

Attention: Billy Turner

Order No.: 0000158-001

Date of Shipment: 6 June 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.03
Bulk Density, gm/cc	ABR-2A	0.580
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		5.9
Pan		2.0
Residual VCM, ppm	ABGC-26	0.065
Inherent Viscosity	ABR-10	0.94


Billy P. Sizemore

Laboratory Supervisor/Lead

1

PVC RAILCAR ANALYSIS

Load Date: 6-6-91Product: 5385Car No.: 45 907Time Logged In: 0600Logged In By: 6Ship Date: 6 June 91Silo(s): 676, 677, 685Customer: IFP Vulcan0000158-001No metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.02		.03		.02		.01	
Contamination	$\frac{7}{12}$	—	$\frac{4}{9}$	—	$\frac{3}{4}$	—	$\frac{4}{7}$	—
Bulk Density	.579		.579		.580		.580	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.936							
RVCM	.065							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>0.28</u>	<u>15.16</u>	<u>15.15</u>	<u>10.16</u>	<u>5.09</u>	<u>2.97</u>	<u>1.02</u>
%	<u>0.0</u>	<u>.6</u>	<u>30.3</u>	<u>30.3</u>	<u>20.7</u>	<u>10.2</u>	<u>5.9</u>	<u>2.0</u>

Drytime: _____

Static Flow: 0 18.5Avg. Microns: 162.4Color L: 100.15 a -0.03 b 1.87Technician: M.T. & R.H.

LETTER OF CERTIFICATION

VISTA

Date: 13 June 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: UTCX-46510

Attention: Billy Turner

Order No.: 0000158-004

Date of Shipment: 10 June 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.20
Bulk Density, gm/cc	ABR-2A	0.544
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		7.0
Pan		2.9
Residual VCM, ppm	ABGC-26	0.230
Inherent Viscosity	ABR-10	0.92


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: _____ Product: 5385 Car No.: 46510

Time Logged In: _____ Logged In By: _____

Ship Date: _____ Silo(s): _____ Customer: _____

Resample

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture								
Contamination	$\frac{5}{29}$	—	$\frac{2}{138}$	—	$\frac{7}{37}$	—	$\frac{5}{27}$	—
Bulk Density	.580		.569		.501		.524	
HISIL ELUSE					.477		.500	
Hard Particle	—	—	—	—	↑ COULD NOT CORRECT IN COMPUTER	—	↑	—
Viscosity								
RVCM								
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	_____	_____	_____	_____	_____	_____	_____	_____
%	_____	_____	_____	_____	_____	_____	_____	_____

Drytime: _____ Static Flow: _____ / _____ Avg. Microns: _____

Color L: _____ a _____ b _____

Technician: *HJL*

PVC RAILCAR ANALYSIS

Load Date: 5-24-91 Product: 5385 Car No.: 46510Time Logged In: 1400 Logged In By: M.TShip Date: _____ Silo(s): Resample Customer: _____

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture								
Contamination	—	—	—	—	—	—	—	—
Bulk Density								
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity								
RVCM								
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	—	—	—	—	—	—	—	—
%	—	—	—	—	—	—	—	—

Drytime: _____ Static Flow: _____ / _____ Avg. Microns: _____

Color L: _____ a _____ b _____

Technician: _____

PVC RAILCAR ANALYSIS

Load Date: 5-20-91 Product: 5385 Car No.: 46510Time Logged In: 0200 Logged In By: D.T.Ship Date: _____ Silo(s): 689 Customer: _____

no metal

*5-23-91
M.T.
1800*

	<u>A</u>		<u>CA</u>		<u>CB</u>		<u>B</u>	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.19		.20		.16		.15	
Contamination	$\frac{50}{80}$	—	$\frac{50}{100}$	—	$\frac{20}{60}$	—	$\frac{5}{36}$	—
Bulk Density	.579		.581		.560		.483	
Fluff	.573		.570		.474		.492	
Hard Particle	—	—	—	—	—	—	—	—
Viscosity								
RVCM	.230							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>.33</u>	<u>10.90</u>	<u>15.80</u>	<u>12.28</u>	<u>5.66</u>	<u>3.48</u>	<u>1.43</u>
%	<u>0.0</u>	<u>.7</u>	<u>21.8</u>	<u>31.6</u>	<u>24.7</u>	<u>11.3</u>	<u>7.0</u>	<u>2.9</u>

Drytime: _____ Static Flow: 0 111.3 Avg. Microns: 154.7Color L: 99.51 a .21 b 162Technician: C + ES

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730
Phone (601) 369-8111

LETTER OF CERTIFICATION

VISTA

Date: 6-2-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Trailer No.: T-722

Lot No.:

Attention: Billy Turner

Order No.: 0000074-001

Date of Shipment: 6-2-91

Property -----	Test Method -----	Analysis -----
Volatiles, %	8.950	.20
Bulk Density, GM/CC	8.410	.556
Brabender Dry Time, Mins.	8.450	—
Particle Size, % on	8.300	
40 Mesh		0.00
200 Mesh		13.2
Pan		3.1
Vinyl Chloride Monomer	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of .90 to .95.

Laboratory Supervisor/Lead

VAB.0001198272

PVC BULK TRAILER ANALYSIS

Date 6-1-91 Product 5385 Trailer Number T-722
 Customer VULCAN Plastics Silo 689 Time 0725
 Technician C. F. E. S. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>20</u>	.....	1. <u>7/49</u>	.....	1. <u>—</u>	1. <u>.556</u>	1. <u>—</u>	L = <u>99.73</u>		
	2. ....	.....	2. ....	.....	2.	2.	2.	A = <u>0.26</u>		Flow 98.6
MIDDLE	1. ....	.....	1. ....	.....	1.	1.	1.	B = <u>1.16</u>		
	2. ....	.....	2. ....	.....	2.	2.	2.	L =		
END	1. ....	.....	1. ....	.....	1.	1.	1.	A =		
	2. ....	.....	2. ....	.....	2.	2.	2.	B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.	_____	_____	_____	_____	_____	_____	_____	_____	_____
Tare	_____	_____	_____	_____	_____	_____	_____	_____	_____
Net Wt.	<u>0.00</u>	<u>.06</u>	<u>4.65</u>	<u>11.31</u>	<u>15.24</u>	<u>10.74</u>	<u>6.58</u>	<u>1.56</u>	_____
% on Mesh	<u>0.00</u>	<u>.1</u>	<u>9.3</u>	<u>22.6</u>	<u>30.2</u>	<u>21.5</u>	<u>13.2</u>	<u>3.1</u>	_____

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.	_____	_____	_____	_____	_____	_____	_____	_____	_____
Tare	_____	_____	_____	_____	_____	_____	_____	_____	_____
Net Wt.	_____	_____	_____	_____	_____	_____	_____	_____	_____
% on Mesh	_____	_____	_____	_____	_____	_____	_____	_____	_____

Remarks _____

LETTER OF CERTIFICATION

VISTA

Date: 6-2-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Trailer No.: 7-810

Lot No.:

Attention: Billy Turner

Order No.: 0000074-000

Date of Shipment: 6-2-91

Property	Test Method	Analysis
Volatiles, %	8.950	.07
Bulk Density, GM/CC	8.410	.572
Brabender Dry Time, Mins.	8.450	—
Particle Size, % on	8.300	
40 Mesh		0.00
200 Mesh		9.3
Pan		1.6
Vinyl Chloride Monomer	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of .90 to .95.

David Thompson
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 5-31-91 Product 5385 Trailer Number 7-810
 Customer Vulcan Silo 689 Time 2245-23:15
 Technician A.J. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>1.07</u>		1. <u>8/42</u>		1.	1. <u>1.572</u>	1.	L = <u>9982</u> A = <u>-0.14</u> B = <u>1.27</u>	<u>No Meth 2</u>	<u>Flow</u> <u>9.4</u>
	2.		2.		2.	2.	2.			
MIDDLE	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	B =		
	2.		2.		2.	2.	2.	L =		
								A =		
								B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.12</u>	<u>6.58</u>	<u>15.72</u>	<u>14.43</u>	<u>7.70</u>	<u>4.66</u>	<u>0.81</u>	
% on Mesh	<u>0.0</u>	<u>0.2</u>	<u>13.2</u>	<u>30.8</u>	<u>29.5</u>	<u>15.4</u>	<u>9.3</u>	<u>1.6</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

LETTER OF CERTIFICATION

VISTA

Date: 30 May 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: UTCX-46566

Attention: Billy Turner

Order No.: 806125-281

Date of Shipment: 28 May 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.07
Bulk Density, gm/cc	ABR-2A	0.570
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		7.5
Pan		2.4
Residual VCM, ppm	ABGC-26	0.532
Inherent Viscosity	ABR-10	0.92


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 5-27-91Product: 5385Car No.: 46566Time Logged In: 0630Logged In By: MSShip Date: 28 MaySilo(s): 689Customer: Vulcan Pl.806125-281

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.06		.05		.07		.03	
Contamination	<u>20</u> 150 Fisheyes		<u>10</u> 140 Fisheyes		<u>17</u> 125 Fisheyes		<u>8</u> 115 Fisheyes	
Bulk Density	.572		.576		.563		.568	
Fluff								
Hard Particle								
Viscosity	.923							
RVCM								
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.30</u>	<u>10.25</u>	<u>1530</u>	<u>1268</u>	<u>6.62</u>	<u>3.75</u>	<u>1.18</u>
%	<u>0.0</u>	<u>0.6</u>	<u>20.5</u>	<u>30.6</u>	<u>25.2</u>	<u>13.2</u>	<u>7.5</u>	<u>2.4</u>

Drytime: _____

Static Flow: 0 18.9Avg. Microns: 153.0Color L: 98.68 a 20.17 b 1.30Technician: M.T + DL

LETTER OF CERTIFICATION

VISTA

Date: 31 May 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: PLCX-43944

Attention: Billy Turner

Order No.: 806125-288

Date of Shipment: 30 May 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.10
Bulk Density, gm/cc	ABR-2A	0.575
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		6.6
Pan		1.8
Residual VCM, ppm	ABGC-26	0.207
Inherent Viscosity	ABR-10	0.93


H.D. Lucas

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 5-29-91 Product: 5385Car No.: 43944Time Logged In: 2425Logged In By: TALLIEShip Date: 5/30/91Silo(s): 626-677-685Customer: VULCAN
806125-288No Metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.10		.09		.04		.10	
Contamination	<u>2</u> 34	—	<u>7</u> 56	—	<u>5</u> 49	—	<u>6</u> 45	—
Bulk Density	.580		.580		.579		.560	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.933							
RVCM	.207							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.93</u>	<u>15.56</u>	<u>13.71</u>	<u>10.23</u>	<u>5.43</u>	<u>3.31</u>	<u>0.89</u>
%	<u>0.0</u>	<u>1.9</u>	<u>31.1</u>	<u>27.4</u>	<u>20.3</u>	<u>10.9</u>	<u>6.6</u>	<u>1.8</u>

Drytime: _____ Static Flow: 0.18.7 Avg. Microns: 164.5Color L: 99.86 a 0.04 b 1.65Technician: CO & E S

LETTER OF CERTIFICATION

VISTA

Date: 31 May 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: PLWX-44372

Attention: Billy Turner

Order No.: 806125-280

Date of Shipment: 29 May 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.13
Bulk Density, gm/cc	ABR-2A	0.572
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		8.9
Pan		2.2
Residual VCM, ppm	ABGC-26	0.174
Inherent Viscosity	ABR-10	0.94


H.D. Lucas

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 5-27-91Product: 5385Car No.: 44372Time Logged In: 1100Logged In By: TallieShip Date: 5/29/91Silo(s): 676Customer: Vulcan806125-280no metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.11		.13		.09		.10	
Contamination	<u>4</u> 7	—	<u>3</u> 11	—	<u>5</u> 10	—	<u>4</u> 8	—
Bulk Density	.575		.569		.574		.569	
Fluff								
Hard Particle	<u>12</u> 1 TE	—	—	—	—	—	—	—
Viscosity	.938							
RVCN	.174							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.45</u>	<u>12.96</u>	<u>12.53</u>	<u>10.88</u>	<u>6.58</u>	<u>4.45</u>	<u>1.10</u>
%	<u>0.0</u>	<u>2.9</u>	<u>25.9</u>	<u>25.1</u>	<u>21.8</u>	<u>13.2</u>	<u>8.9</u>	<u>2.2</u>

Drytime: 5.0Static Flow: 0.17.9Avg. Microns: 159.9Color L: 98.82 a -.10 b 1.82Technician: MATE

LETTER OF CERTIFICATION

4
VISTA

Date: 30 May 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: ACFX-41172

Attention: Billy Turner

Order No.: 806125-282

Date of Shipment: 28 May 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.12
Bulk Density, gm/cc	ABR-2A	0.583
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		6.4
Pan		1.6
Residual VCM, ppm	ABGC-26	0.786
Inherent Viscosity	ABR-10	0.94


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 5-27-91Product: 5385Car No.: 41172Time Logged In: 0100Logged In By: MSShip Date: 28 May 91Silo(s): 685, 677Customer: HP806125-282No Melt

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.10		.09		.10		.12	
Contamination	$\frac{1}{12}$	---	$\frac{1}{12}$	---	$\frac{2}{15}$	---	$\frac{3}{14}$	---
Bulk Density	.586		.582		.582		.583	
Fluff								
Hard Particle	---	---	---	---	---	---	---	---
Viscosity	,935							
RVCM								
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.02</u>	<u>15.02</u>	<u>13.90</u>	<u>10.42</u>	<u>5.70</u>	<u>3.20</u>	<u>0.81</u>
%	<u>0.0</u>	<u>2.0</u>	<u>30.0</u>	<u>27.8</u>	<u>20.8</u>	<u>11.4</u>	<u>6.4</u>	<u>1.6</u>

Drytime: _____

Static Flow: 0, 8.1Avg. Microns: 164.2Color L: 100.13 a -0.07 b 1.42Technician: HL/AS

LETTER OF CERTIFICATION

4

VISTA

Date: 29 May 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: VIPX-45842

Attention: Billy Turner

Order No.: 806125-279

Date of Shipment: 24 May 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.03
Bulk Density, gm/cc	ABR-2A	0.566
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		8.1
Pan		1.9
Residual VCM, ppm	ABGC-26	0.287
Inherent Viscosity	ABR-10	0.93


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 5-24-91Product: 5385Car No.: 45842Time Logged In: 1300Logged In By: M.T.Ship Date: 24 May 91Silo(s): 677-685-676Customer: 806125-279

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.02		.02		.03		.02	
Contamination	<u>7</u> 11	—	<u>4</u> 13	—	<u>3</u> 12	—	<u>6</u> 15	—
Bulk Density	.582		.585		.583		.515	
Fluff	.580		.578		.582		.526	
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.926							
RVCM	.287							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.70</u>	<u>14.17</u>	<u>13.91</u>	<u>10.84</u>	<u>6.11</u>	<u>4.06</u>	<u>0.96</u>
%	<u>0.00</u>	<u>1.4</u>	<u>28.3</u>	<u>27.8</u>	<u>20.3</u>	<u>12.2</u>	<u>8.1</u>	<u>1.9</u>

Drytime: _____

Static Flow: 0/10.7Avg. Microns: 160.4Color L: 100.52 a -0.05 b 1.56Technician: M.T. & R.H.

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LETTER OF CERTIFICATION

Date: 24 Apr. 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: PLCX-46869

Attention: Billy Turner

Order No.: 806125-277

Date of Shipment: 22 Apr. 91

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.05
Bulk Density, gm/cc	ABR-2A	0.589
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		5.6
Pan		0.6
Residual VCM, ppm	ABGC-26	0.100
Inherent Viscosity	ABR-10	0.93


Billy P. Sizemore

Laboratory Supervisor/Lead

VAB.0001198286

PVC RAILCAR ANALYSIS

Load Date: 4-21-91 Product: 5385 Car No.: 46869Time Logged In: 1600 Logged In By: CoShip Date: 22 Silo(s): 676, 672, 685 Customer: III Pipe
806125-277

NO METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.05		.03		.02		.03	
Contamination	$\frac{4}{5}$	—	$\frac{8}{8}$	—	$\frac{7}{9}$	—	$\frac{4}{8}$	—
Bulk Density	.588		.589		.590		.588	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.931							
RVCM	.100							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.98</u>	<u>17.88</u>	<u>13.74</u>	<u>9.18</u>	<u>4.76</u>	<u>2.82</u>	<u>0.30</u>
%	<u>0.0</u>	<u>2.0</u>	<u>35.8</u>	<u>27.5</u>	<u>19.0</u>	<u>9.5</u>	<u>5.6</u>	<u>0.6</u>

Drytime: _____ Static Flow: 0.89 Avg. Microns: 170.4Color L: 100.07 a -0.01 b 1.67Technician: P.T. + HDL

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LETTER OF CERTIFICATION

VISTA

Date: 24 Apr. 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

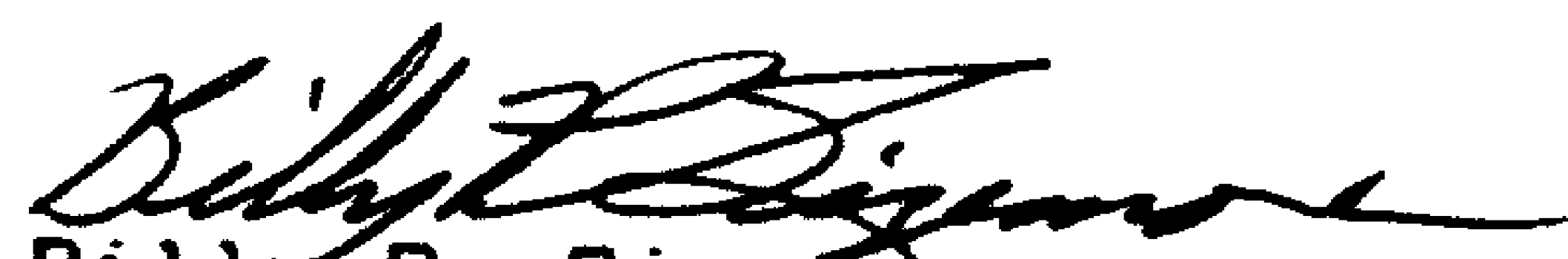
RAILCAR No.: PLCX-44686

Attention: Billy Turner

Order No.: 806125-276

Date of Shipment: 22 Apr. 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.12
Bulk Density, gm/cc	ABR-2A	0.571
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		4.0
Pan		1.5
Residual VCM, ppm	ABGC-26	0.397
Inherent Viscosity	ABR-10	0.92


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 4-20-91 Product: 5385 Car No.: PLWX 44686Time Logged In: 01:00 Logged In By: PeteShip Date: 22 Silo(s): 689 Customer: III Pipe
806125-276No Metal

	<u>A</u>		<u>CA</u>		<u>CB</u>		<u>0730 B</u>	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.12		.03		.02		.03	
Contamination	<u>3</u> 30	—	<u>11</u> 91	—	<u>5</u> 24	—	<u>2</u> 11	—
Bulk Density	.570		.571		.573		.571	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.920							
RVCM	.397							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.29</u>	<u>19.86</u>	<u>15.14</u>	<u>8.53</u>	<u>3.51</u>	<u>1.98</u>	<u>0.74</u>
%	<u>0.0</u>	<u>0.6</u>	<u>39.7</u>	<u>30.3</u>	<u>16.9</u>	<u>7.0</u>	<u>4.0</u>	<u>1.5</u>

Drytime: _____ Static Flow: 0 19.0 Avg. Microns: 171.7Color L: 99.67 a 0.06 b 1.96Technician: ES + CO

LETTER OF CERTIFICATION

VISTA

Date: 4-18-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Trailer No.: T-2480

Lot No.:

Attention: Billy Turner

Order No.: 905570-004

Date of Shipment: 4-18-91

Property -----	Test Method -----	Analysis -----
Volatiles, %	8.950	.03
Bulk Density, GM/CC	8.410	.585
Brabender Dry Time, Mins.	8.450	5.0
Particle Size, % on	8.300	
40 Mesh		0.00
200 Mesh		7.2
Pan		1.5
Vinyl Chloride Monomer	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of .90 to .95.

David Thompson
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 4-18-91 Product 5385 Trailer Number T-2480
 Customer Vukan Plastics Silo 685 Time 20:15-23:10
 Technician P.T. + R.H. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.03		1.8		1.	1.	1.50	L = 99.65		0/8.5
			44		—	.585		A = -0.10		
	2.		2.		2.	2.	2.	B = 1.17		
MIDDLE	1.		1.		1.	1.	1.	L =		NO METAL
								A =		
	2.		2.		2.	2.	2.	B =		
END	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	0.00	1.55	17.75	11.99	9.00	5.05	3.60	0.76	
% on Mesh	0.0	3.1	35.5	24.0	18.6	10.1	7.2	1.5	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198291

LETTER OF CERTIFICATION

VISTA

Date: 4-18-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Trailer No.: T-2809

Lot No.:

Attention: Billy Turner

Order No.: 905570-003

Date of Shipment: 4-18-91

Property	Test Method	Analysis
-----	-----	-----
Volatiles, %	B.950	.03
Bulk Density, GM/CC	B.410	.583
Brabender Dry Time, Mins.	B.450	5.0
Particle Size, % on	B.300	
40 Mesh		6.00
200 Mesh		7.0
Pan		1.7
Vinyl Chloride Monomer	B.955	Not more than 8.5 PPM
Inherent Viscosity	B.600	This material was produced to yield an inherent viscosity in the range of .90 to .95.

David Thompson
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

A

Date 4-18-91 Product 5385 Trailer Number T-2809
 Customer Vulkan Asbestos Silo 685 Time 20:15-22:45
 Technician P.T. + R.H. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.03		1.0		1. —	1. 583	1. 50	L = 99.63 A = -0.09		0/8.8
	2.		2.		2.	2.	2.	B = 1.18		
MIDDLE	1.		1.		1.	1.	1.	L =		NO METAL
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare <u>P</u>									
Net Wt.	0.00	1.59	17.69	12.16	8.80	5.10	3.50	0.85	
% on Mesh	0.00	3.2	35.4	24.3	18.2	10.2	7.0	1.7	

Screen Analysis _____ Min. On Rotap shaker .49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAR 0001198293

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Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

LETTER OF CERTIFICATION

Date: 22 Apr. 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: VIPX-45870

VISTA

Attention: Billy Turner

Order No.: 806125-275

Date of Shipment: 18 Apr. 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.08
Bulk Density, gm/cc	ABR-2A	0.586
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		4.9
Pan		1.4
Residual VCM, ppm	ABGC-26	0.340
Inherent Viscosity	ABR-10	0.93


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 4-17-91 Product: 5385 Car No.: 45870Time Logged In: 1730 Logged In By: P.T.Ship Date: 18 Silo(s): 676+677 Customer: III Pipe
806125-275No METAL

	(A)		(CA)		(CB)		(B)	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.07		.08		.07		.06	
Contamination	$\frac{3}{7}$	—	$\frac{2}{9}$	—	$\frac{2}{10}$	—	$\frac{3}{8}$	—
Bulk Density	.586		.584		.585		.588	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.934							
RVCM	.340							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>3.65</u>	<u>18.63</u>	<u>12.16</u>	<u>7.10</u>	<u>4.86</u>	<u>2.44</u>	<u>0.70</u>
%	<u>0.00</u>	<u>7.3</u>	<u>37.3</u>	<u>24.3</u>	<u>15.1</u>	<u>9.7</u>	<u>4.9</u>	<u>1.4</u>

Drytime: _____ Static Flow: 0.178 Avg. Microns: 180.7Color L: 100.04 a-0.06 b 1.51Technician: A.J. & R.H.

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A

LETTER OF CERTIFICATION

Date: 17 Apr. 91

Product: 5385

VISTA

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: VIPX-45809

Attention: Billy Turner

Order No.: 806125-274

Date of Shipment: 16 Apr. 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.16
Bulk Density, gm/cc	ABR-2A	0.581
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		7.3
Pan		1.7
Residual VCM, ppm	ABGC-26	0.066
Inherent Viscosity	ABR-10	0.94


Billy P. Sizemore

Laboratory Supervisor/Lead

VAB.0001198296

PVC RAILCAR ANALYSIS

VIPX

Load Date: 4-5-91 Product: 5385 Car No.: 45809Time Logged In: 15:30 Logged In By: PetoShip Date: 16 Silo(s): 676, 677, 685 Customer: Pulman Plastics
806125-274

- NO MCM -	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.03		.10		.16		.12	
Contamination	<u>2</u> 6	—	<u>1</u> 5	—	<u>3</u> 8	—	<u>4</u> 9	—
Bulk Density	.581		.581		.581		.582	
Fluff								
Hard Particle	<u>2</u> 1 pc	—	—	—	—	—	—	—
Viscosity	.939							
RVCM	.066							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.20</u>	<u>15.39</u>	<u>13.31</u>	<u>9.94</u>	<u>5.58</u>	<u>3.65</u>	<u>0.86</u>
%	<u>0.0</u>	<u>2.4</u>	<u>30.8</u>	<u>26.6</u>	<u>20.0</u>	<u>11.2</u>	<u>7.3</u>	<u>1.7</u>

Drytime: 4.9 Static Flow: 0 18.9 Avg. Microns: 164.8Color L: 100.34 a -0.07 b 1.32Technician: TE-JPS

LETTER OF CERTIFICATION

VISTA

Date: 4-17-91
Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Product: 5385
Trailer No.: T-2480
Lot No.:

Attention: Billy Turner

Order No.: 905570-001

Date of Shipment: 4-17-91

Property -----	Test Method -----	Analysis -----
Volatiles, %	8.950	1.1
Bulk Density, GM/CC	8.410	5.81
Brabender Dry Time, Mins.	8.450	5.2
Particle Size, % on	8.300	
40 Mesh		0.00
200 Mesh		7.4
Pan		3.0
Vinyl Chloride Monomer	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.90 to 0.95.

Artis Jones
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 4-17-91 Product 5385 Trailer Number T-2480
 Customer NALCOM plastic 685 Time 2310
 Technician A.S. & R.H. Order No. 905570-001

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RYCM
	Top	Bottom	Top	Bottom						
FRONT	1.11		1.3		1.12	1.	1.	L = 100.23		0 80
			8		4	.581	5.2	A = -0.10		
	2.		2.		2.	2.	2.	B = 1.34		
MIDDLE	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		
END	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	0.00	0.84	14.11	14.13	10.77	5.79	3.68	1.50	
% on Mesh	0.00	1.7	28.2	28.3	21.5	9.9	7.4	3.0	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198299

LETTER OF CERTIFICATION

VISTA

Date: 4-17-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

Trailer No.: T-2809

Lot No.:

Attention: Billy Turner

Order No.: 925570-002

Date of Shipment: 4-17-91

Property	Test Method	Analysis
Volatiles, %	8.950	1.0
Bulk Density, GM/CC	8.410	1.579
Brabender Dry Time, Mins.	8.450	5.1
Particle Size, % on	8.300	
40 Mesh		0.00
200 Mesh		7.3
Pan		2.8
Vinyl Chloride Monomer	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of .90 to .95.

Arthur Jones
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 4-17-91 ^A Product 5385 Trailer Number 1-2809
 Customer Vukon PLAST. Silo 685, 677, Time 2300
 Technician A.J. Order No. 905570-002

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>10</u>		1. <u>2</u>		1. <u>14</u>	1. <u>.579</u>	1. <u>5.1</u>	L = <u>100.20</u>	<u>2</u>	
	2. <u>6</u>		2. <u>6</u>		2. <u>5</u>			A = <u>-0.11</u>		
								B = <u>1.32</u>	<u>7.9</u>	
MIDDLE	1.		1.		1.		1.	L =		
	2.		2.		2.		2.	A =		
								B =		
END	1.		1.		1.		1.	L =		
	2.		2.		2.		2.	A =		
								B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.78</u>	<u>14.10</u>	<u>14.13</u>	<u>10.68</u>	<u>5.82</u>	<u>3.65</u>	<u>1.42</u>	
% on Mesh	<u>0.00</u>	<u>1.6</u>	<u>28.2</u>	<u>28.3</u>	<u>21.4</u>	<u>10.4</u>	<u>7.3</u>	<u>2.8</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198301

Vista Polymers
A Division of
Vista Chemical Company

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Phone (601) 369-8111

LETTER OF CERTIFICATION

Date: 15 Apr. 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: GACX-73389

Attention: Billy Turner

Order No.: 806125-272

Date of Shipment: 12 Apr. 91

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.08
Bulk Density, gm/cc	ABR-2A	0.578
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		11.2
Pan		2.2
Residual VCM, ppm	ABGC-26	0.070
Inherent Viscosity	ABR-10	0.94


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 4-12-91 Product: 5385 Car No.: 73389 GACXTime Logged In: 0630 Logged In By: CoShip Date: 12 Apr. 91 Silo(s): 672,685 Customer: Vulcan Plastics806125-272No METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.06		.05		.06		.08	
Contamination	$\frac{3}{6}$	—	$\frac{2}{5}$	—	$\frac{3}{5}$	—	$\frac{2}{4}$	—
Bulk Density	.577		.579		.571		.585	
Fluff								
Hard Particle	—	—	—	—	—	—	1	—
Viscosity	.936							
RVCM	.070							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.60</u>	<u>0.90</u>	<u>9.44</u>	<u>12.13</u>	<u>12.77</u>	<u>7.91</u>	<u>5.62</u>	<u>1.12</u>
%	<u>0.60</u>	<u>1.8</u>	<u>19.9</u>	<u>24.3</u>	<u>25.8</u>	<u>15.8</u>	<u>11.2</u>	<u>2.2</u>

Drytime: — Static Flow: 0110.3 Avg. Microns: 150.5Color L: 100.16 a -0.02 b 1.32Technician: A.J. + R.H.

4

LETTER OF CERTIFICATION

VISTA

Date: 15 Apr. 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: VIPX-45910

Attention: Billy Turner

Order No.: 806125-271

Date of Shipment: 11 Apr. 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.13
Bulk Density, gm/cc	ABR-2A	0.585
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		5.6
Pan		1.8
Residual VCM, ppm	ABGC-26	0.047
Inherent Viscosity	ABR-10	0.93


H.D. Lucas

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

4

Load Date: 4-10-91Product: 5385Car No.: 45910Time Logged In: 1800Logged In By: TEShip Date: 4-11-91Silo(s): 677/685Customer: Vulcan806125-271No Metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.10		.04		.13		.02	
Contamination	$\frac{2}{7}$	—	$\frac{4}{7}$	—	$\frac{2}{5}$	—	$\frac{8}{11}$	—
Bulk Density	.595		.578		.575		.590	
Fluff								
Hard Particle	$\frac{50 \text{ MT}}{1}$	—	—	—	—	—	—	—
Viscosity	.934							
RVCM	.047							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>4.22</u>	<u>18.80</u>	<u>10.88</u>	<u>7.80</u>	<u>4.41</u>	<u>2.82</u>	<u>.88</u>
%	<u>0.0</u>	<u>8.4</u>	<u>37.6</u>	<u>21.8</u>	<u>16.0</u>	<u>8.8</u>	<u>5.6</u>	<u>1.8</u>

Drytime: 5.0Static Flow: 0.18.0Avg. Microns: 181.9Color L: 100.40 a 0.07 b 1.37Technician: Q + ED

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LETTER OF CERTIFICATION

4

Date: 12 Apr. 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: VIPX-45820

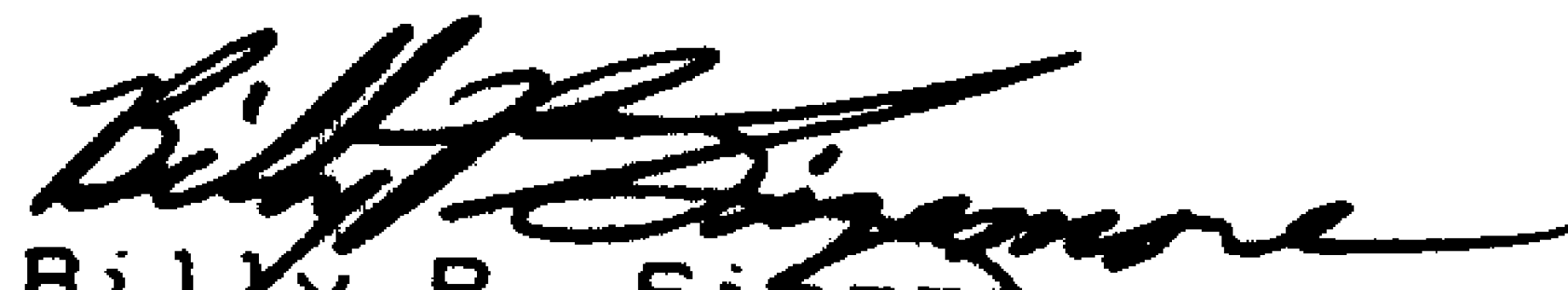
VISTA

Attention: Billy Turner

Order No.: B06125-270

Date of Shipment: 12 Apr. 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.21
Bulk Density, gm/cc	ABR-2A	0.591
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		5.2
Pan		1.6
Residual VCM, ppm	ABGC-26	0.705
Inherent Viscosity	ABR-10	0.94


Billy P. Sizemore

Laboratory Supervisor/Lead

A
PVC RAILCAR ANALYSIS

Load Date: 4-10-91 Product: 5385 Car No.: 45820 ^{21PX}

Time Logged In: 0300 Logged In By: G

Ship Date: 10 Apr. 91 Silo(s): 676, 677, 685 Customer: Vulcan
806125-270

- NO METAL -	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.18		.17		.18		.21	
Contamination	<u>3</u> 18	—	<u>3</u> 10	—	<u>1</u> 10	—	<u>4</u> 13	—
Bulk Density	.599		.581		.601		.582	
Fluff								
Hard Particle	— —	—	—	—	—	—	—	—
Viscosity	.936							
RVCM	.705							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>3.33</u>	<u>20.93</u>	<u>10.72</u>	<u>7.32</u>	<u>4.09</u>	<u>2.59</u>	<u>0.80</u>
%	<u>0.0</u>	<u>6.7</u>	<u>41.9</u>	<u>21.4</u>	<u>15.0</u>	<u>8.2</u>	<u>5.2</u>	<u>1.6</u>

Drytime: — Static Flow: 0 18.8 Avg. Microns: 182.2

Color L: 100.23 a 0.01 b 1.46

Technician: TE-JPS

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A

LETTER OF CERTIFICATION

VISTA

Date: 3-19-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

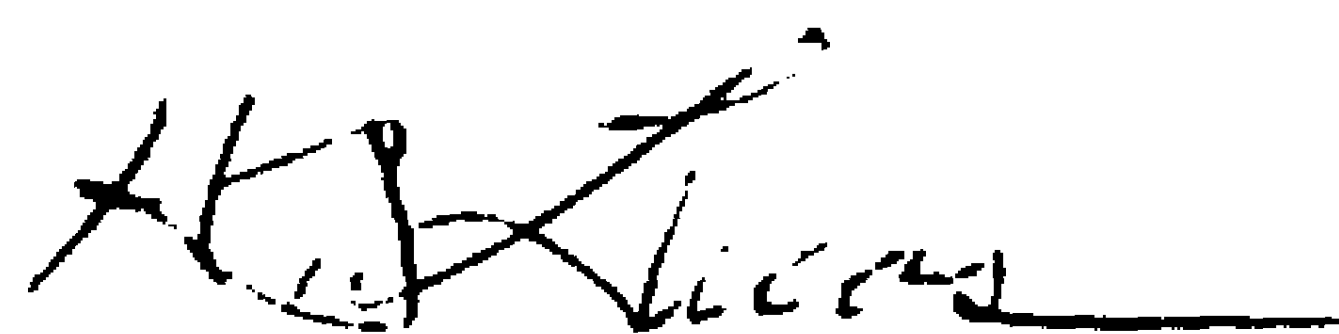
RAILCAR No.: VIPX-45856

Attention: Billy Turner

Order No.: 806125-269

Date of Shipment: 3-18-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.14
Bulk Density, gm/cc	ABR-2A	0.556
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		9.1
Pan		1.9
Residual VCM, ppm	ABGC-26	0.351
Inherent Viscosity	ABR-10	0.93


H.D. Lucas

Laboratory Supervisor/Lead

VAB.0001198308

PVC RAILCAR ANALYSIS

4

Load Date: 3-17-91Product: 5385Car No.: 45856

VIPX

Time Logged In: _____

Logged In By: AJShip Date: 3-18-91 Silo(s): 677-685 Customer: Vulcan Plast.
806125-269

NO METAL	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.14		.10		.08		.09	
Contamination	$\frac{1}{7}$	—	$\frac{1}{9}$	—	$\frac{1}{8}$	—	$\frac{1}{8}$	—
Bulk Density	.576		.560		.545		.542	
Fluff	.584		.555		.595		.590	
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.931							
RVCM	.351							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.39</u>	<u>9.40</u>	<u>13.35</u>	<u>12.98</u>	<u>7.84</u>	<u>4.56</u>	<u>0.95</u>
%	<u>0.0</u>	<u>0.8</u>	<u>18.8</u>	<u>26.7</u>	<u>27.0</u>	<u>15.7</u>	<u>9.1</u>	<u>1.9</u>

Drytime: —Static Flow: 0.185 Avg. Microns: 150.4Color L: 100.37 a 0.00 b 1.26Technician: TE-JPS

F-1

LETTER OF CERTIFICATION

VISTA

Date: 3-19-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

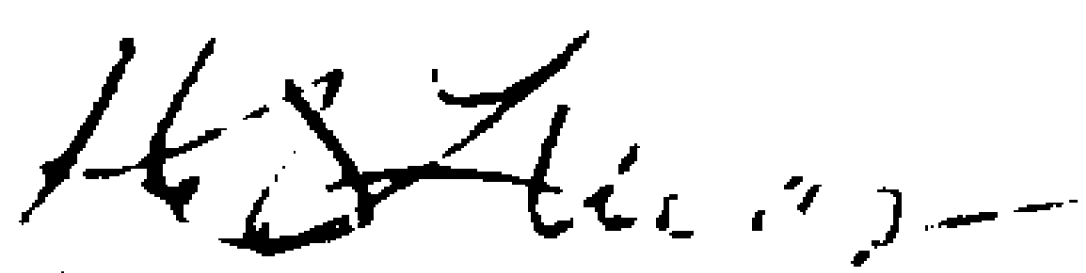
RAILCAR No.: UTCX-46499

Attention: Billy Turner

Order No.: 806125-268

Date of Shipment: 3-18-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.16
Bulk Density, gm/cc	ABR-2A	0.548
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		4.0
Pan		1.6
Residual VCM, ppm	ABGC-26	0.500
Inherent Viscosity	ABR-10	0.91


H.D. Lucas

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 3-16-91Product: 5385Car No: 46499Time Logged In: 1700Logged In By: R3Ship Date: 3-18-91Silo(s): 689Customer: Vulcan Plastics
806/25-268

No METAL	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.16		.09		.08		.10	
Contamination	<u>2</u> 12	—	<u>3</u> 16	—	<u>4</u> 15	—	<u>3</u> 12	—
Bulk Density	.556		.552		.542		.543	
Fluff								
Hard Particle	— —	—	—	—	—	—	—	—
Viscosity	.912							
RVCM	.500							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.20</u>	<u>21.06</u>	<u>15.41</u>	<u>7.46</u>	<u>3.12</u>	<u>1.98</u>	<u>0.81</u>
%	<u>0.0</u>	<u>0.4</u>	<u>42.1</u>	<u>30.8</u>	<u>14.9</u>	<u>6.2</u>	<u>4.0</u>	<u>1.6</u>

Drytime: —Static Flow: 0 17.8Avg. Microns: 173.4Color L: 99.5K a 0.08 b 1.93Technician: TE-JPS

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LETTER OF CERTIFICATION

VISTA

Date: 3-19-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

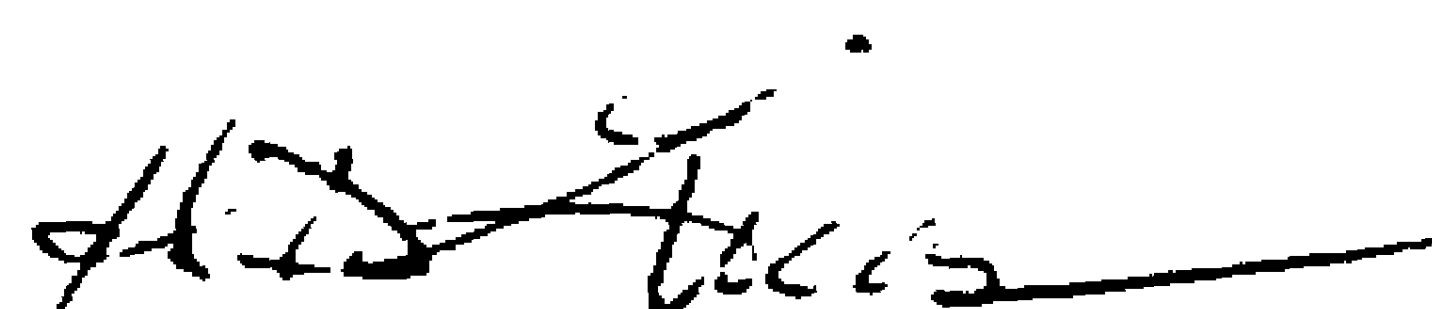
RAILCAR No.: PLWX-44673

Attention: Billy Turner

Order No.: 806125-267

Date of Shipment: 3-18-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.14
Bulk Density, gm/cc	ABR-2A	0.577
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		6.5
Pan		1.5
Residual VCM, ppm	ABGC-26	0.605
Inherent Viscosity	ABR-10	0.94


H.D. Lucas

Laboratory Supervisor/Lead

VAB.0001198312

PVC RAILCAR ANALYSIS

Load Date: 3-14-91 Product: 5385Car No.: 44673Time Logged In: 1545Logged In By: A.J.Ship Date: 3-18-91 Silo(s): _____Customer: III Pipe806125-267Vulcan Plastics

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture								
Contamination	—	—	—	—	—	—	—	—
Bulk Density	<u>.534</u>	<u>.539</u>						
Fluff	<u>.487</u>	<u>.593</u>						
Hard Particle	—	—	—	—	—	—	—	—
Viscosity		<u>.946</u>						
RVCM								
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	—	—	—	—	—	—	—	—
%	—	—	—	—	—	—	—	—

Drytime: _____ Static Flow: / Avg. Microns: _____

Color L: _____ a _____ b _____

Technician: A.J.

LETTER OF CERTIFICATION

VISTA

Date: 3-15-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: PLWX-44717

Attention: Billy Turner

Order No.: 806125-266

Date of Shipment: 3-14-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.06
Bulk Density, gm/cc	ABR-2A	0.564
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		3.7
Pan		1.7
Residual VCM, ppm	ABGC-26	0.012
Inherent Viscosity	ABR-10	0.92


H.D. Lucas

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 3-13-91 Product: 5385Car No.: 44717Time Logged In: 0500Logged In By: TALLIEShip Date: 3-14-91 Silo(s): 689Customer: Vulcan Plastics
806125-266

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.06		.06		.04		.05	
Contamination	<u>50</u> <u>175</u>	—	<u>5</u> <u>105</u>	—	<u>40</u> <u>180</u>	—	<u>38</u> <u>170</u>	—
Bulk Density	<u>563</u>		<u>564</u>		<u>563</u>		<u>565</u>	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	<u>.920</u>							
RVCM	<u>.012</u>							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.25</u>	<u>23.01</u>	<u>14.89</u>	<u>6.91</u>	<u>2.43</u>	<u>1.86</u>	<u>0.83</u>
%	<u>0.00</u>	<u>0.5</u>	<u>26.0</u>	<u>29.8</u>	<u>13.4</u>	<u>4.9</u>	<u>3.7</u>	<u>1.7</u>

Drytime: —Static Flow: 018.6 Avg. Microns: 176.6Color L: 100.06 a 0.07 b 1.74Technician: A.J. & R.H.

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1

LETTER OF CERTIFICATION

VISTA

Date: 3-13-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: UTCX-46511

Attention: Billy Turner

Order No.: 806125-265

Date of Shipment: 3-12-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.06
Bulk Density, gm/cc	ABR-2A	0.585
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		6.0
Pan		1.6
Residual VCM, ppm	ABGC-26	0.127
Inherent Viscosity	ABR-10	0.93


H.D. Lucas

Laboratory Supervisor/Lead

VAB.0001198316

PVC RAILCAR ANALYSIS

Load Date: 3-12-91Product: 5385Car No.: 46511

UTCX

Time Logged In: 06:15Logged In By: DT.Ship Date: 3-12-91Silo(s): 676, 77, 85Customer: THP

806125-265

Vulcan plastics

NO METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.01		.01		.06		.03	
Contamination	$\frac{4}{13}$	—	$\frac{1}{10}$	—	$\frac{2}{3}$	—	$\frac{2}{12}$	—
Bulk Density	.583		.583		.585		.589	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.934							
RVCM	.127							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.09</u>	<u>18.22</u>	<u>12.79</u>	<u>8.42</u>	<u>4.87</u>	<u>3.01</u>	<u>0.80</u>
%	<u>0.00</u>	<u>2.2</u>	<u>36.4</u>	<u>25.6</u>	<u>18.5</u>	<u>9.7</u>	<u>6.0</u>	<u>16</u>

Drytime: —Static Flow: 0 / 8.8Avg. Microns: 169.5Color L: 99.47 a 0.07 b 1.34Technician: A.J. + J.S.

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LETTER OF CERTIFICATION

VISTA

Date: 3-14-91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: PLWX-44680

Attention: Billy Turner

Order No.: 806125-264

Date of Shipment: 3-12-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.11
Bulk Density, gm/cc	ABR-2A	0.585
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		6.6
Pan		1.5
Residual VCM, ppm	ABGC-26	0.227
Inherent Viscosity	ABR-10	0.93


H.D. Lucas

Laboratory Supervisor/Lead

VAB.0001198318

PVC RAILCAR ANALYSIS

Load Date: 3-11-91Product: 5385Car No.: 44680Time Logged In: 03:30Logged In By: DTShip Date: 3-12-91Silo(s): 689Customer: TIFVULCAN PLASTICS806125-264NO METAL06:15

	<u>A</u>		<u>CA</u>		<u>CB</u>		<u>B</u>	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	<u>.11</u>		<u>.07</u>		<u>.11</u>		<u>.07</u>	
Contamination	<u>1</u> <u>9</u>	<u>—</u>	<u>2</u> <u>10</u>	<u>—</u>	<u>4</u> <u>19</u>	<u>—</u>	<u>2</u> <u>10</u>	<u>—</u>
Bulk Density	<u>.590</u>		<u>.580</u>		<u>.578</u>		<u>.591</u>	
Fluff								
Hard Particle	<u>—</u> <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Viscosity	<u>.933</u>							
RVCM	<u>.227</u>							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.14</u>	<u>17.42</u>	<u>12.92</u>	<u>9.38</u>	<u>5.12</u>	<u>2.31</u>	<u>0.75</u>
%	<u>0.00</u>	<u>2.3</u>	<u>34.8</u>	<u>25.8</u>	<u>18.8</u>	<u>10.2</u>	<u>6.6</u>	<u>1.5</u>

Drytime: —Static Flow: 0 17.6Avg. Microns: 168.2Color L: 99.95 a 0.05 b 1.34Technician: AJ + JS

LETTER OF CERTIFICATION

Date: 8 Feb. 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: VIPX-45785

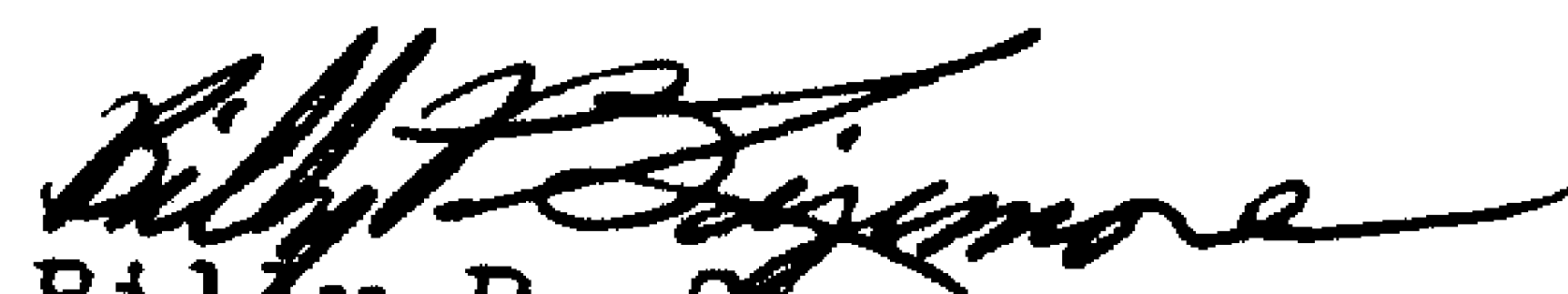
Attention: Billy Turner

Order No.: 806125-263

Date of Shipment: 6 Feb. 91

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.08
Bulk Density, gm/cc	ABR-2A	0.580
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		7.7
Pan		2.0
Residual VCM, ppm	ABGC-26	0.169
Inherent Viscosity	ABR-10	0.93


Billy P. Sizemore

Laboratory Supervisor/Lead

PVC RAILCAR ANALYSIS

Load Date: 2-5-91 Product: 5385Car No.: 45785Time Logged In: 2300Logged In By: A.J.Ship Date: 6 FebSilo(s): 676-677-685Customer: Vulcan Plastics806125-263NO METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.07		.08		.06		.07	
Contamination	$\frac{6}{200}$	—	$\frac{4}{175}$	—	$\frac{5}{28}$	—	$\frac{3}{22}$	—
Bulk Density	.576		.575		.583		.584	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.927							
RVCM	.169							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.16</u>	<u>14.31</u>	<u>12.23</u>	<u>11.38</u>	<u>5.96</u>	<u>3.85</u>	<u>0.99</u>
%	<u>0.00</u>	<u>2.3</u>	<u>28.6</u>	<u>24.5</u>	<u>23.0</u>	<u>11.9</u>	<u>7.7</u>	<u>2.0</u>

Drytime: —Static Flow: 0.18.1Avg. Microns: 161.7Color L: 100.85 a 0.27 b 2.04Technician: A.J. & R.H.

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Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

4

LETTER OF CERTIFICATION

Date: 5 Feb. 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: ACFX-41150

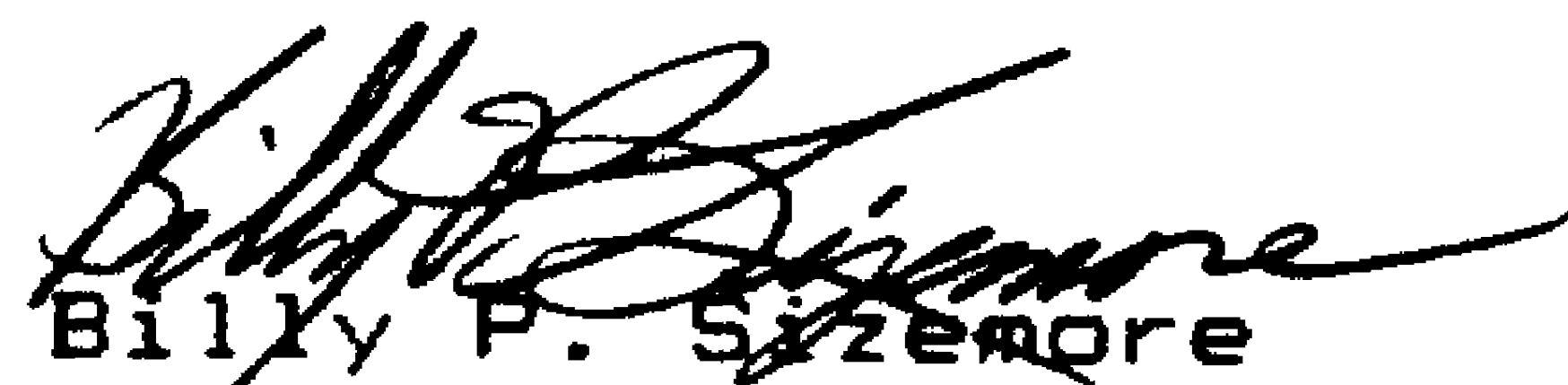
Attention: Billy Turner

Order No.: 806125-261

Date of Shipment: 4 Feb. 91

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.10
Bulk Density, gm/cc	ABR-2A	0.578
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		7.7
Pan		2.1
Residual VCM, ppm	ABGC-26	0.206
Inherent Viscosity	ABR-10	0.93


Billy P. Sizemore

Laboratory Supervisor/Lead

A

PVC RAILCAR ANALYSIS

ACFX

Load Date: 2-3-91

Product:

5385

Car No.:

41150

Time Logged In: 1300

Logged In By:

R31

Ship Date: 4 Feb. 91Silo(s): 685

Customer:

Vulcan Pl

806125-261

NO META1	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.02		.01		.09		.10	
Contamination	$\frac{1}{16}$	—	$\frac{5}{100}$	—	$\frac{1}{17}$	—	$\frac{1}{19}$	—
Bulk Density	.576		.577		.584		.574	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.929							
RVCM	100							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.6K</u>	<u>16.39</u>	<u>11.98</u>	<u>10.22</u>	<u>5.37</u>	<u>3.83</u>	<u>1.03</u>
%	<u>0.0</u>	<u>3.3</u>	<u>32.8</u>	<u>24.0</u>	<u>19.4</u>	<u>10.7</u>	<u>7.7</u>	<u>2.1</u>

Drytime: —Static Flow: 0 18.9Avg. Microns: 167.0Color L: 100.06 a 0.1K b 1.6KTechnician: TE - JPS

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

A

LETTER OF CERTIFICATION

Date: 5 Feb. 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: ACFX-53140

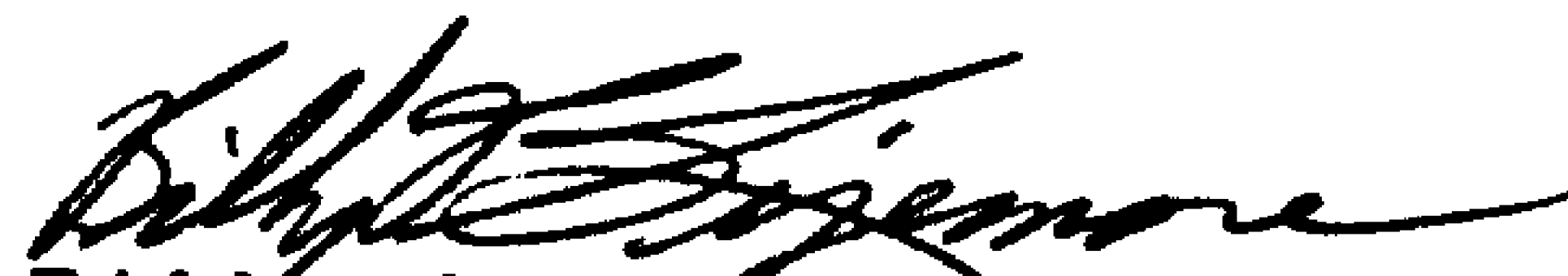
Attention: Billy Turner

Order No.: 806125-262

Date of Shipment: 4 Feb. 91

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.11
Bulk Density, gm/cc	ABR-2A	0.579
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		7.4
Pan		2.4
Residual VCM, ppm	ABGC-26	0.248
Inherent Viscosity	ABR-10	0.93


Billy P. Sizemore

Laboratory Supervisor/Lead

VAB.0001198324

PVC RAILCAR ANALYSIS

Load Date: 2-2-91Product: 5385Car No.: 53140Time Logged In: 2245Logged In By: TEShip Date: 4 Feb. 91 Silo(s): 677Customer: Vulcan Protein806125-262

NO META |	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.04		.06		.11		.10	
Contamination	$\frac{2}{16}$	—	$\frac{2}{18}$	—	$\frac{1}{8}$	—	$\frac{1}{16}$	—
Bulk Density	.579		.579		.581		.578	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.925							
RVCM	.248							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>2.26</u>	<u>14.70</u>	<u>11.53</u>	<u>10.73</u>	<u>5.50</u>	<u>3.68</u>	<u>1.18</u>
%	<u>0.0</u>	<u>4.5</u>	<u>29.4</u>	<u>23.1</u>	<u>22.2</u>	<u>11.0</u>	<u>7.4</u>	<u>2.4</u>

Drytime: —Static Flow: 0 19.4Avg. Microns: 166.3Color L: 100.15 a 0.11 b 1.65Technician: TE-JPS

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

4

LETTER OF CERTIFICATION

Date: 4 Feb 91

Product: 5385

Customer: Vulcan Plastics
207 Burham
Athens, AL 35611

RAILCAR No.: UTCX-46464

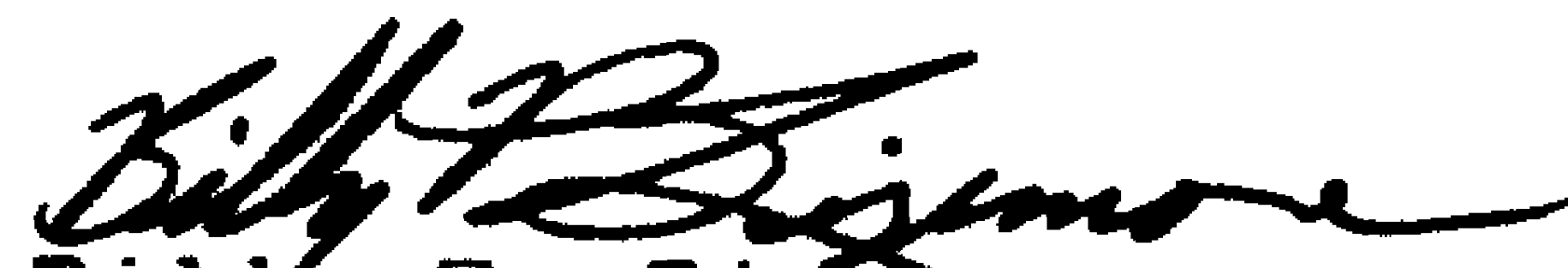
Attention: Billy Turner

Order No.: 806125-260

Date of Shipment: 1 Feb. 91

VISTA

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	0.03
Bulk Density, gm/cc	ABR-2A	0.577
Particle Size, % on	ABR-3	
40 Mesh		0.00
200 Mesh		6.0
Pan		1.7
Residual VCM, ppm	ABGC-26	0.192
Inherent Viscosity	ABR-10	0.92


Billy P. Sizemore

Laboratory Supervisor/Lead

VAB.0001198326

PVC RAILCAR ANALYSIS

Load Date: 1-30-91 Product: 5385 Car No.: 46464Time Logged In: 0530 Logged In By: CBShip Date: _____ Silo(s): 689 Customer: Vulcan PlasticsNo Metal

	(A)		(CA)		(CB)		(B)	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.05		.06		.05		.06	
Contamination	$\frac{2}{5}$	—	$\frac{53}{48}$	—	$\frac{4}{8}$	—	$\frac{12}{17}$	—
Bulk Density	.582		.574		.579		.575	
Fluff								
Hard Particle	—	—	—	—	—	—	—	—
Viscosity	.924							
RVCM	.219							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>1.40</u>	<u>16.06</u>	<u>12.97</u>	<u>10.50</u>	<u>5.05</u>	<u>3.18</u>	<u>0.86</u>
%	<u>0.00</u>	<u>2.8</u>	<u>32.1</u>	<u>25.9</u>	<u>21.0</u>	<u>11.1</u>	<u>6.4</u>	<u>1.7</u>

Drytime: _____ Static Flow: 0.19.1 Avg. Microns: 167Color L: 99.92 a 0.15 b 1.63Technician: A.I. R.H.

WEXFORD

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

To: Mark Manion

Date Fax Sent: 8/30/91

OFFGRADE RAILCARS

Railcar No.: VIPX 45703

Product: Pond Resin

Load Date: 8/08/91

Ship Date:

10/31/91

Customer:

Wayford

State:

GA

<u>Test</u>	<u>A</u>	<u>CA</u>	<u>CB</u>	<u>B</u>
Moisture	.43	.31	.32	.37
Contamination, Blk.	1000+	1000+	1000+	1000+
Contamination, Brn.	1000+	1000+	1000+	1000+
Bulk Density, gm/cc	.480	.440	.427	.467
% on 40 Mesh	0.9	3.4	3.4	0.8
% thru 140 Mesh	15.7	14.5	14.8	15.4
% on Pan	5.3	5.8	5.4	6.2
L Color	69.70	74.11	73.54	71.25
b Color	6.28	6.20	6.30	6.09
Inherent Viscosity	0.863	0.879	0.878	0.871
RVCM	0.003	0.198	0.002	0.001

J. Richard Williams
Quality Control Supervisor

PVC RAILCAR ANALYSIS OFFGRADE

Load Date: 8-8-91 Product: POND Car No.: 45703

Time Logged In: 2400 Logged In By: MT

Ship Date: _____ Silo(s): 675 Customer: _____

<u>METAL</u>	<u>18 small</u>	<u>17 small</u>	<u>16 small</u>	<u>22 small</u>
	<u>(A)</u>	<u>8/23 (CA) HA</u>	<u>8/23 (CB) HA</u>	<u>(B)</u>
Moisture	<u>.43</u>	<u>.31</u>	<u>.32</u>	<u>.37</u>
Contamination	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
Bulk Density	<u>.480</u>	<u>.440</u>	<u>.427</u>	<u>.467</u>
Color "L"	<u>69.70</u>	<u>74.11</u>	<u>73.54</u>	<u>71.25</u>
Color "a"	<u>0.70</u>	<u>0.66</u>	<u>0.58</u>	<u>0.80</u>
Color "b"	<u>6.28</u>	<u>6.20</u>	<u>6.30</u>	<u>6.09</u>
Static Flow	<u>0 / 11.6</u>	<u>2 / 16.3</u>	<u>2 / 13.8</u>	<u>1 / 10.5</u>
Viscosity	<u>.863</u>	<u>.879</u>	<u>.878</u>	<u>.871</u>
RVCM	<u>.003</u>	<u>.198</u>	<u>.002</u>	<u>.001</u>

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
<u>A</u>	Weight	<u>0.45</u>	<u>1.18</u>	<u>10.58</u>	<u>11.89</u>	<u>10.81</u>	<u>7.31</u>	<u>5.21</u>	<u>2.64</u>
	%	<u>0.9</u>	<u>2.4</u>	<u>21.2</u>	<u>23.8</u>	<u>21.4</u>	<u>14.6</u>	<u>10.4</u>	<u>5.3</u>
<u>CA</u>	Weight	<u>1.70</u>	<u>1.59</u>	<u>11.54</u>	<u>11.84</u>	<u>10.16</u>	<u>6.40</u>	<u>4.37</u>	<u>2.89</u>
	%	<u>3.4</u>	<u>3.2</u>	<u>23.1</u>	<u>23.7</u>	<u>19.3</u>	<u>12.8</u>	<u>8.7</u>	<u>5.8</u>
<u>CB</u>	Weight	<u>1.69</u>	<u>1.65</u>	<u>10.80</u>	<u>11.55</u>	<u>10.35</u>	<u>6.64</u>	<u>4.72</u>	<u>2.69</u>
	%	<u>3.4</u>	<u>3.3</u>	<u>21.6</u>	<u>23.1</u>	<u>20.5</u>	<u>13.3</u>	<u>9.4</u>	<u>5.4</u>
<u>B</u>	Weight	<u>0.40</u>	<u>1.48</u>	<u>11.47</u>	<u>12.15</u>	<u>10.36</u>	<u>6.69</u>	<u>4.58</u>	<u>3.10</u>
	%	<u>0.8</u>	<u>3.0</u>	<u>22.9</u>	<u>24.3</u>	<u>20.2</u>	<u>13.4</u>	<u>9.2</u>	<u>6.2</u>

Technician: ES

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

To: Mark Manion

Date Fax Sent: 11/18/91

OFFGRADE RAILCARS

Railcar No.: ACFX 41163

Product: Debox

Load Date: 11/14/91

Ship Date: 12/30/91

Customer: Weyford

State: GA

<u>Test</u>	<u>A</u>	<u>CA</u>	<u>CB</u>	<u>B</u>
Moisture	.22	.04	.22	.08
Contamination, Blk.	50	100	55	100
Contamination, Brn.	100	250	200	500
Bulk Density, gm/cc	.415	.554	.402	.543
% on 40 Mesh	0.0	0.0	0.0	0.0
% thru 140 Mesh	36.4	29.6	38.5	24.1.
% on Pan	8.9	6.4	9.7	5.4
L Color	99.17	99.35	98.30	99.33
b Color	1.76	1.87	2.24	1.99
Inherent Viscosity (Top)	0.813	0.868	0.807	0.868
Inherent Viscosity (Bot)	0.809	0.886	0.779	0.877
RVCM	0.219	0.069	0.081	0.073

J. Richard Williams
Quality Control Supervisor

VAB.0001198331

PVC RAILCAR ANALYSIS OFFGRADE

Load Date: 11-14-91 Product: Debut Car No.: 41163

Time Logged In: 1800 Logged In By: Co

Ship Date: _____ Silo(s): 681-682 Customer: _____

no metal

	A	CA	CB	B
Moisture	.22	.04	.22	.08
Contamination	50 / 100	100 / 250	55 / 200	100 / 500
Bulk Density	.415	.554	.402	.543
Color "L"	99.17	99.35	98.30	99.33
Color "a"	0.11	0.11	0.25	0.04
Color "b"	1.76	1.87	2.24	1.99
Static Flow	0 / 10.6	0 / 9.0	0 / 10.4	0 / 9.4
Viscosity	^T .813 / ^B .809	^T .868 / ^B .886	^T .807 / ^B .779	^T .868 / ^B .877
RVCN	.219	.069	.081	.073

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
A	Weight	0.00	.05	3.19	7.61	10.75	9.95	13.74	4.45
	%	0.0	.1	6.4	15.2	22.0	19.9	27.5	8.9
CA	Weight	0.00	.06	4.79	9.79	10.58	9.68	11.58	3.21
	%	0.0	.1	9.6	19.6	21.7	19.4	23.2	6.4
CB	Weight	0.00	.08	2.85	6.96	10.62	10.42	14.40	4.83
	%	0.0	.2	5.7	13.9	20.9	20.8	28.8	9.7
B	Weight	0.00	0.04	6.05	11.30	11.53	9.13	9.34	2.69
	%	0.0	0.1	12.1	22.6	22.8	18.3	18.7	5.4

Technician: Co & ES

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

To: Mark Manion

Date Fax Sent: 10/19/91

OFFGRADE RAILCARS

Railcar No.: VIPX 45765

Product: Debox

Load Date: 10/09/91

Ship Date: 11/14/91

Customer: Weyford

State: GA

Test	A	CA	CB	B
Moisture	.12	.08	.03	.15
Contamination, Blk.	22	25	98	42
Contamination, Brn.	30	20	47	29
Bulk Density, gm/cc	.530	.530	.556	.586
% on 40 Mesh	0.0	0.0	0.8	0.0
% thru 140 Mesh	28.2	28.9	9.8	12.2
% on Pan	6.0	5.7	1.8	2.1
L Color	100.03	100.03	99.01	99.72
b Color	1.34	1.28	0.79	1.23
Inherent Viscosity (Top)	0.933	0.939	0.829	0.918
Inherent Viscosity (Bot)	0.953	0.938	0.915	0.894
RVCM	0.025	0.036	2.689	0.001

J. Richard Williams
Quality Control Supervisor

VAB.0001198333

PVC RAILCAR ANALYSIS OFFGRADE

Load Date: 10-9-91 Product: D-BOX Car No.: 45765

Time Logged In: 1500 Logged In By: TE

Ship Date: _____ Silo(s): 681/682 Customer: _____

<u>No metal</u>	<u>1830</u> <u>A</u>	<u>1830</u> <u>CA</u>	<u>CB</u>	<u>B</u>
Moisture	.12	.08	.03	.15
Contamination	221 30	25 120	98 147	42 129
Bulk Density	.530	.530	.556	.586
Color "L"	100.03	100.03	99.01	99.72
Color "a"	0.15	0.17	0.35	0.22
Color "b"	1.34	1.28	0.79	1.23
Static Flow	0 114.2	0 114.6	0 19.4	0 18.3
Viscosity	^T .933 / ^B .953	^T .939 / ^B .938	^T .829 / ^B .915	^T .918 / ^B .894
RVCN	.025	.036	2.689	.001

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
<u>A</u>	Weight	<u>0.00</u>	<u>0.15</u>	<u>4.00</u>	<u>2.82</u>	<u>11.93</u>	<u>11.07</u>	<u>11.08</u>	<u>2.98</u>
	%	<u>0.0</u>	<u>0.3</u>	<u>8.0</u>	<u>15.6</u>	<u>24.2</u>	<u>23.7</u>	<u>22.2</u>	<u>6.0</u>
<u>CA</u>	Weight	<u>0.10</u>	<u>0.16</u>	<u>4.45</u>	<u>8.03</u>	<u>11.93</u>	<u>10.85</u>	<u>11.60</u>	<u>2.83</u>
	%	<u>0.0</u>	<u>0.3</u>	<u>8.9</u>	<u>16.1</u>	<u>24.1</u>	<u>21.7</u>	<u>23.2</u>	<u>5.7</u>
<u>CB</u>	Weight	<u>0.42</u>	<u>0.95</u>	<u>12.00</u>	<u>12.95</u>	<u>11.86</u>	<u>6.94</u>	<u>4.02</u>	<u>0.88</u>
	%	<u>0.8</u>	<u>1.9</u>	<u>24.0</u>	<u>25.9</u>	<u>23.7</u>	<u>13.9</u>	<u>8.0</u>	<u>1.8</u>
<u>B</u>	Weight	<u>0.00</u>	<u>0.60</u>	<u>11.38</u>	<u>12.80</u>	<u>11.53</u>	<u>7.56</u>	<u>5.05</u>	<u>1.03</u>
	%	<u>0.0</u>	<u>1.2</u>	<u>22.8</u>	<u>25.6</u>	<u>23.1</u>	<u>15.1</u>	<u>10.1</u>	<u>2.1</u>

Technician: D.T.F.M.B.

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

4

To: Mark Manion

Date Fax Sent: 5/29/91

OFFGRADE RAILCARS

Railcar No.: GACX 73385

Product: 5415

Load Date: 4/29/91

Ship Date: 11/11/91

Customer: WuFord /

State: WI

Test	A	CA	CB	B
Moisture	.15	.16	.14	.19
Contamination, Blk.	2	2	1	2
Contamination, Brn.	6	7	9	11
Bulk Density, gm/cc	.523	.510	.523	.516
7 Minute Hard Particle	50	50	3	50
% on 40 Mesh	0.0	Composite Result		
% thru 140 Mesh	4.9			
% on Pan	1.3			
L Color	100.61			
b Color	1.51			
Inherent Viscosity	1.038			
RVCM	0.021			

J. Richard Williams
Quality Control Supervisor

VAB.0001198335

PVC RAILCAR ANALYSIS

Load Date: 4-29-91 Product: 5415 Car No.: 73385Time Logged In: 18:45 Logged In By: PTShip Date: _____ Silo(s): 69091 Customer: _____

No Bionic Beads

- NO MEMI -	A ^{Top}		CA ^{Top}		CB ^{Top}		B ^{Top}	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.15		.16		.14		.19	
Contamination	<u>0</u> 5	<u>2</u> 6	<u>1</u> 7	<u>2</u> 7	<u>0</u> 9	<u>1</u> 5	<u>1</u> 11	<u>2</u> 9
Bulk Density	.523		.510		.523		.516	
BD wo/antistat								
Hard Particle	<u>50</u> 50 HA	<u>50</u> 50 AP	<u>50</u> 50 GE		<u>6</u> 3 G.E	<u>-</u>	<u>50</u> 50 G.E	
Viscosity	1.038							
RVCM	12/low A							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.18</u>	<u>17.04</u>	<u>16.84</u>	<u>9.80</u>	<u>3.71</u>	<u>1.81</u>	<u>0.67</u>
%	<u>0.0</u>	<u>0.4</u>	<u>34.1</u>	<u>33.7</u>	<u>19.5</u>	<u>7.4</u>	<u>3.6</u>	<u>1.3</u>

Drytime: 4.9 Static Flow: 0 18.1 Avg. Microns: 168.2Color L: 100.61 a 0.02 b 1.51METS: 1 %Technician: TE-JPS

VISTA POLYMERS
A DIVISION OF
VISTA CHEMICAL COMPANY

0071321
00004383501
VISTA CHEMICAL COMPANY
P. O. BOX 71321

0002255000

11/05/91

30604

0

PAGE 1

CHICAGO

60694

IL

CUST# 8883713
WEXFORD INTERNATIONAL
P O BOX 520

WEXFORD INTERNATIONAL
C/O HAWK PLASTICS
COOSA PINES SIDING

MENDHAM

07945

NJ

COOSA PINES

35044

AL

12314

-0000000

0002255-000

NET DUE IN 30 DAYS

FOB ORIGIN FRT PPD RAIL

0002255-000

0/00/00

1 B GRADE/DEBOX RESIN(A1)
RESR# 10815

175,400.00 LB

.190000

33,326.00

VIPX 45814

THIS REPLACES ORDER 1885 WHICH DID NOT SHIP.

PRICE CHANGED FROM \$.19 TO \$.18 ON NOV 5. PER JIM
BEIGHTOL
THIS IS NOW OFF CUSTOMER HOLD. PLEASE SHIP THIS
NOV 6.

7
SP

11/6
VIPX 45814
BINF.

REQUEST DATE: 91/11/16
PROMISE DATE: 91/11/06

* ACKNOWLEDGEMENT *

33,326.00

VISTA

Aberdeen Chemical Plant

LOADING ORDERDATE PREPARED: _____ CAR NO.: VIP4 45814ORDER NO.: _____ PRODUCT TYPE: DeBoy

SHIP DATE: _____ PRODUCT FROM: _____

CUSTOMER: Wexford Inter. Al CUSTOMER LOCATION: _____SPECIAL INSTRUCTIONS: Clean and inspect RailcarAUTHORIZED SIGNATURE: P. Bagwell**YARD LOADING**LOADED/SAMPLED BY: BR-FM A-5CATIME/DATE: 8-16-91 2400

COMMENTS: _____

LAB APPROVALAPPROVED BY: H. L. L.TIME/DATE: 1500 10/4/91**YARD OPERATOR SHIPPING INSPECTION**

CAR/TRAILER INSPECTED BY: _____ TIME/DATE: _____

PRODUCT LAST CONTAINED: _____ CAR/TRAILER APPROVED YES NO

APPROVAL FOR LOADING: _____ GENERAL APPEARANCE - GOOD / FAIR / POOR

RAILCAR INSPECTION✓ = o.k.
x = Problem

COMPARTMENT

A CA CB B
2

PRODUCT IN CAR

DOMELIDS

WALKWAYS

HANDWHEELS

CAPS

LOCKING ARMS

CAP HOLDERS/LOCKS

PUNCTURES

TRAILER INSPECTION

TIRES _____

TRAILER BODY CONDITION _____

DOME LIDS (INCLUDING GASKETS) _____

HOSES (IF USED) _____

UNLOADING/SAMPLE VALVES _____

LANDING GEAR (DOLLEY LEGS) _____

DUST CAPS (U/L LINE CAP) _____

MUD FLAPS _____

WINTERIZATION _____

NEED TO WASH ☐ YES ☐ NO

COMMENTS: _____

VAB.0001198338

TRANSMISSION CONFIRMATION REPORT No.=000125

DATE/TIME	OCT 28, 1991 3:47PM
DURATION	40s
TRANSMITTER (FROM)	VISTA QC LAB-ABERDEEN 601 369 3642
RECEIVER (TO)	----- 2015436820
PAGES XMITTED	02
PAGES ERRORED	
RESULT	OK
COMM. MODE	G3
RESOLUTION	NORMAL

VAB.0001198339

55-0000349

Jones

TRUCK LINES, INC.

Jay —

201-543-6820

Jay Mastros

VIPK 45814

JKW - Please refax
this Delay to

Done
10/28/91
JKW

AB.0001198340

Vista Polymers

Highway 25
P.O.Box 91

Aberdeen, MS 39730

1

From

Date: 10-28-91

Richard Williams	

To

J. Masaru	

Comments:

Number of pages excluding cover --

1

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

4

To: Mark Manion

Date Fax Sent: 9/03/91

OFFGRADE RAILCARS

Railcar No.: VIPX 45814

Product: Debox

Load Date: 8/16&27/91

Ship Date: 9/30/91

Customer: Worland International

State: AL

<u>Test</u>	<u>A</u>	<u>CA</u>	<u>CB</u>	<u>B</u>
Moisture	.02	.08	.08	.04
Contamination, Blk.	2	2	3	3
Contamination, Brn.	146	139	183	120
Bulk Density, gm/cc	.553	.553	.543	.573
% on 40 Mesh	0.0	0.0	0.0	0.2
% thru 140 Mesh	19.2	15.7	20.4	11.6
% on Pan	2.6	2.1	5.3	2.3
L Color	99.16	99.29	100.28	99.51
b Color	1.75	1.71	1.50	1.33
Inherent Viscosity (Top)			0.759	0.746
Inherent Viscosity (Bot)	0.662	0.659	0.925	0.837
RVCM	0.011	0.019	0.368	0.015

Compartment A & CA contain 5265 offgrade. There were no top IV samples

J. Richard Williams
Quality Control Supervisor

VAB.0001198342

Vista Polymers

Highway 25

Aberdeen, MS 39730

changed To DeBox from 5265 Per AB 8-22-91

PVC RAILCAR ANALYSIS
OFFGRADE

4

Load Date: 8-16-91 Product: DeBox Car No.: 45814Time Logged In: 0430 Logged In By: M.G.Ship Date: _____ Silo(s): 688 Customer: _____No Metal8-27-91

	(A)	(CA)	(CB)	(B)
Moisture	.02	.08	.08	.04
Contamination	2 1/46	2 1/39	3 1/83	3 1/20
Bulk Density	.553	.553	.543	.573
Color "L"	99.16	99.29	100.28	99.51
Color "a"	0.75	0.70	0.16	0.39
Color "b"	1.75	1.71	1.50	1.33
Static Flow	0 17.6	0 17.6	0 18.9	0 17.7
Viscosity	.662	.659	TOP .759 BTM .925	TOP .746 BTM .837
RVCM	.011	.019	.368	.015

Screen Analysis

		NO TOPS ON A/CA - <u>ALL 5265 offgrade</u> AB 8/27/91							
Mesh		40	60	80	100	120	140	200	Pan
A	Weight	0.00	0.08	4.38	8.75	14.09	13.11	8.29	1.31
	%	0.0	0.2	8.8	17.5	28.1	26.2	16.6	2.6
CA	Weight	0.00	0.06	5.15	10.08	14.55	12.44	6.80	1.05
	%	0.0	0.1	10.3	20.2	28.8	24.9	13.6	2.1
CB	Weight	0.01	3.10	10.04	10.28	9.64	6.80	7.53	2.64
	%	0.0	6.2	20.1	20.6	19.1	13.6	15.1	5.3
B	Weight	0.09	1.36	11.22	11.49	12.04	8.04	4.66	1.16
	%	0.2	2.7	22.4	23.0	24.0	16.1	9.3	2.3

Technician: ES

VAB.0001198343

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

To: Mark Manion

Date Fax Sent: 9/25/91

OFFGRADE RAILCARS

Railcar No.: ACFX 41166

Product: Debox

Load Date: 9/21/91

Ship Date: 10/4/91

Customer: Weyford

State: _____

Test	A	CA	CB	B
Moisture	.06	.04	.09	.05
Contamination, Blk.	5	9	6	65
Contamination, Brn.	66	75	88	45
Bulk Density, gm/cc	.544	.518	.548	.521
% on 40 Mesh	0.0	0.0	0.0	0.0
% thru 140 Mesh	10.0	4.9	9.6	4.8
% on Pan	2.5	1.8	2.4	1.4
L Color	100.02	99.43	100.02	98.99
b Color	1.49	1.39	1.47	1.28
Inherent Viscosity (Top)	0.885	0.971	0.868	0.893
Inherent Viscosity (Bot)	0.927	0.963	0.964	0.928
RVCM	0.038	0.062	0.006	0.095

J. Richard Williams
Quality Control Supervisor

VAB.0001198344

PVC RAILCAR ANALYSIS OFFGRADE

4

Load Date: 9-21-91 Product: DBox Car No.: 41166

Time Logged In: 0200 Logged In By: D.T.

Ship Date: _____ Silo(s): 681+682 Customer: _____

no mlt

	A	CA	CB	B
Moisture	.06	.04	.09	.05
Contamination	5 166	9 175	6 188	6 5145
Bulk Density	.544	.518	.548	.521
Color "L"	100.02	99.43	100.02	98.99
Color "a"	-.10	.05	-.11	.10
Color "b"	1.49	1.39	1.47	1.28
Static Flow	0 19.1	0 12.0	0 18.9	0 12.2
Viscosity	<u>BTM</u> .927 / <u>TOP</u> .885	<u>BTM</u> .963 / <u>TOP</u> .971	<u>BTM</u> .964 / <u>TOP</u> .868	<u>BTM</u> .928 / <u>TOP</u> .893
RVCN	.038	.062	.006	.095

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
A	Weight	0.00	.40	11.29	14.82	12.08	6.42	3.75	1.23
	%	0.0	.8	22.6	29.6	24.2	12.8	7.5	2.5
CA	Weight	0.00	2.29	19.35	13.90	8.89	3.53	1.54	.92
	%	0.0	4.6	38.7	27.8	16.9	7.1	3.1	1.8
CB	Weight	0.00	.50	11.60	14.55	11.94	6.41	3.58	1.21
	%	0.0	1.0	23.2	29.1	24.3	12.8	7.2	2.4
B	Weight	0.00	2.24	19.40	13.43	8.79	3.70	1.68	.70
	%	0.0	4.5	38.8	26.9	17.6	7.4	3.4	1.4

Technician: C + ES

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

To: Mark Manion

Date Fax Sent: 10/02/91

4

OFFGRADE RAILCARS

Railcar No.: ACFX 41136

Product: Debox

Load Date: 9/28/91

Ship Date: 10/4/91

Customer: Weyford

State: _____

Test	A	CA	CB	B
Moisture	.05	.09	.07	.06
Contamination, Blk.	3	6	56	4
Contamination, Brn.	44	99	500	47
Bulk Density, gm/cc	.574	.571	.547	.556
% on 40 Mesh	0.0	0.0	0.2	0.2
% thru 140 Mesh	8.00	11.0	7.7	12.1
% on Pan	1.5	2.4	1.8	2.4
L Color	99.41	99.28	98.38	99.12
b Color	1.36	1.52	1.19	1.27
Inherent Viscosity (Top)	0.802	0.925	0.869	0.900
Inherent Viscosity (Bot)	0.938	0.920	0.883	0.856
RVCM, ppm	1.067	0.440	0.096	0.196

J. Richard Williams
Quality Control Supervisor

VAB.0001198346

PVC RAILCAR ANALYSIS OFFGRADE

Load Date: 9-28-91

Product:

DabokCar No.: 41136Time Logged In: 0100Logged In By: MS

Ship Date: _____

Silo(s): 681, 682

Customer: _____

no metal

	A	CA	CB	B
Moisture	.05	.09	.07	.06
Contamination	3 144	6 199	56 1500	4 147
Bulk Density	.574	.571	.547	.556
Color "L"	99.41	99.28	98.38	99.12
Color "a"	-.08	.01	.29	-.07
Color "b"	1.36	1.52	1.19	1.27
Static Flow	0 17.7	0 18.5	0 18.1	0 18.3
Viscosity	T.802/.938	T.925/.920	T.869/.883	T.900/.856
RVCN	1.067	0.440	0.096	0.196

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
A	Weight	<u>0.00</u>	<u>0.34</u>	<u>11.51</u>	<u>16.15</u>	<u>12.15</u>	<u>5.95</u>	<u>3.24</u>	<u>.75</u>
	%	<u>0.0</u>	<u>0.7</u>	<u>23.0</u>	<u>32.3</u>	<u>24.1</u>	<u>11.9</u>	<u>6.5</u>	<u>1.5</u>
CA	Weight	<u>0.00</u>	<u>.57</u>	<u>11.28</u>	<u>14.51</u>	<u>11.52</u>	<u>6.53</u>	<u>4.28</u>	<u>1.18</u>
	%	<u>0.0</u>	<u>1.1</u>	<u>22.6</u>	<u>29.0</u>	<u>23.2</u>	<u>13.1</u>	<u>8.6</u>	<u>2.4</u>
CB	Weight	<u>0.12</u>	<u>2.39</u>	<u>14.21</u>	<u>12.90</u>	<u>11.03</u>	<u>5.65</u>	<u>2.95</u>	<u>0.91</u>
	%	<u>0.2</u>	<u>4.8</u>	<u>28.4</u>	<u>25.8</u>	<u>21.8</u>	<u>11.3</u>	<u>5.9</u>	<u>1.8</u>
B	Weight	<u>0.08</u>	<u>2.44</u>	<u>7.95</u>	<u>12.82</u>	<u>13.22</u>	<u>7.68</u>	<u>4.85</u>	<u>1.18</u>
	%	<u>0.2</u>	<u>4.9</u>	<u>15.9</u>	<u>25.6</u>	<u>25.9</u>	<u>15.4</u>	<u>9.7</u>	<u>2.4</u>

Technician: CO + JPS

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

To: Mark Manion

Date Fax Sent: 9/24/91

4

OFFGRADE RAILCARS

Railcar No.: ACFX 52783

Product: POND

Load Date: 9/04/91

Ship Date: 9/30/91

Customer: Worland International

State: GA

Test	A	CA	CB	B
Moisture	.51	.42	.45	.46
Contamination, Blk.	1000+	1000+	1000+	1000+
Contamination, Brn.	1000+	1000+	1000+	1000+
Bulk Density, gm/cc	.481	.486	.471	.459
% on 40 Mesh	8.1	9.7	1.3	0.3
% thru 140 Mesh	13.6	12.1	17.9	23.7
% on Pan	6.1	5.5	7.5	10.0
L Color	76.98	76.66	74.46	75.35
b Color	6.21	6.30	5.88	6.38
Inherent Viscosity	0.898	0.904	0.896	0.875
RVCM	0.365	0.434	0.272	0.266

J. Richard Williams
Quality Control Supervisor

PVC RAILCAR ANALYSIS OFFGRADE

 Load Date: 9-4-91 Product: Pan4 Car No.: 52783

 Time Logged In: 12:00 Logged In By: J.T.

 Ship Date: _____ Silo(s): 675 Customer: _____

	<u>8</u> A	<u>12</u> CA	<u>9</u> CB	<u>15</u> B
Moisture	.51	.42	.45	.46
Contamination	1000 / 1000	1000 / 1000	1000 / 1000	1000 / 1000
Bulk Density	.481	.486	.471	.459
Color "L"	76.98	76.66	74.46	75.35
Color "a"	0.41	0.41	.25	.37
Color "b"	6.21	6.30	5.88	6.38
Static Flow	0 / 12.3	1 / 10.5	1 / 11.3	no / Flow
Viscosity	.898	.904	.896	.875
RVCM	.365	.434	.272	.266

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
A	Weight	<u>4.01</u>	<u>6.74</u>	<u>12.46</u>	<u>9.12</u>	<u>6.83</u>	<u>4.21</u>	<u>3.74</u>	<u>3.05</u>
	%	<u>8.1</u>	<u>13.5</u>	<u>24.9</u>	<u>18.2</u>	<u>13.3</u>	<u>8.4</u>	<u>7.5</u>	<u>6.1</u>
CA	Weight	<u>4.85</u>	<u>7.30</u>	<u>12.62</u>	<u>8.85</u>	<u>6.36</u>	<u>3.93</u>	<u>3.32</u>	<u>2.74</u>
	%	<u>9.7</u>	<u>14.6</u>	<u>25.2</u>	<u>17.7</u>	<u>12.8</u>	<u>7.9</u>	<u>6.6</u>	<u>5.5</u>
CB	Weight	<u>.63</u>	<u>3.19</u>	<u>11.60</u>	<u>10.73</u>	<u>8.85</u>	<u>5.95</u>	<u>5.19</u>	<u>3.76</u>
	%	<u>1.3</u>	<u>6.4</u>	<u>23.2</u>	<u>21.5</u>	<u>17.8</u>	<u>11.9</u>	<u>10.4</u>	<u>7.5</u>
B	Weight	<u>.13</u>	<u>1.16</u>	<u>8.25</u>	<u>10.28</u>	<u>10.51</u>	<u>7.90</u>	<u>6.83</u>	<u>4.96</u>
	%	<u>.3</u>	<u>2.3</u>	<u>16.5</u>	<u>20.6</u>	<u>21.1</u>	<u>15.8</u>	<u>13.7</u>	<u>10.0</u>

Technician: _____

PVC RAILCAR ANALYSIS
OFFGRADELoad Date: 8-11-91Product: DeBOXCar No.: 45901Time Logged In: 1540Logged In By: ESShip Date: 9/18/91Silo(s): 681 & 682Customer: WEXFORD INTERNATIONAL
TORONTO ONTARIO CAN

No metal

	A	CA	CB	B
Moisture	.02	.02	.01	.04
Contamination	50 / 500	25 / 100	35 / 300	20 / 95
Bulk Density	.556	.491	.569	.506
Color "L"	99.19	100.27	99.30	100.35
Color "a"	0.54	-0.10	0.48	-0.04
Color "b"	1.66	1.42	1.68	1.55
Static Flow	0 / 9.3	0 / 25.2	0 / 10.6	0 / 15.4
Viscosity	.759 / T.924	.923 / T.865	.770 / T.789	.918 / T.921
RVCN	.282	.002	.289	.010

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
A	Weight	0.00	0.25	6.75	9.80	11.84	10.60	8.84	1.75
	%	0.0	0.5	13.5	19.6	24.0	21.2	17.7	3.5
CA	Weight	0.00	0.02	8.92	14.41	13.28	7.28	4.28	0.98
	%	0.0	0.0	17.8	28.8	28.2	14.6	8.6	2.0
CB	Weight	0.00	0.30	7.43	10.30	12.17	10.50	7.70	1.35
	%	0.0	0.6	14.9	20.6	24.8	21.0	15.4	2.7
B	Weight	0.00	0.20	10.20	15.20	12.40	6.33	3.70	0.58
	%	0.0	0.4	20.4	30.4	27.5	12.7	7.4	1.2

Technician: D.T.F.P.L.

To: Mark Manion

Date Fax Sent: 8/26/91

(1

OFFGRADE RAILCARS

Railcar No.: PLWX 44283

Product: Debox

Load Date: 8/17/91

Ship Date: 9/06/91

Customer: Wynford International

State: _____

Toronto CANADA

Test	A	CA	CB	B
Moisture	.48	.14	.45	.47
Contamination, Blk.	52	65	70	65
Contamination, Brn.	65	75	59	80
Bulk Density, gm/cc	.454	.457	.457	.482
% on 40 Mesh	0.0	0.0	0.0	0.4
% thru 140 Mesh	34.5	12.7	34.6	23.6
% on Pan	8.1	3.0	6.2	4.9
L Color	99.10	98.85	98.79	98.78
b Color	1.70	1.82	1.99	1.91
Inherent Viscosity (Top)	0.777	0.778	*	*
Inherent Viscosity (Bot)	0.898	0.776	0.865	0.896
RVCM	0.051	0.033	0.146	0.111

* Waiting on yard to obtain samples.

J. Richard Williams
Quality Control Supervisor

PVC RAILCAR ANALYSIS OFFGRADE

Load Date: 8-17-91 Product: Debar Car No.: 44283

Time Logged In: 0330 Logged In By: MA

Ship Date: _____ Silo(s): 681, 682 Customer: _____

Metal (2)

	<u>A</u>	<u>CA</u>	<u>CB</u>	<u>B</u>
Moisture	.48	.14	.45	.47
Contamination	52 / 65	65 / 75	70 / 59	65 / 80
Bulk Density	.454	.457	.457	.482
Color "L"	99.10	98.85	98.79	98.78
Color "a"	0.23	0.24	0.24	0.24
Color "b"	1.70	1.82	1.99	1.91
Static Flow	0 / 8.9	0 / 9.0	0 / 8.9	0 / 8.7
Top Viscosity <i>at</i>	.777 / .898	.778 / .776	1.865	1.896
RVCN	0.051	0.033	0.146	0.111

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
<u>A</u>	Weight	0.0	.31	5.40	6.83	9.11	10.83	13.20	4.05
	% P	0.0	.6	10.8	13.7	18.7	21.7	26.4	8.1
<u>CA</u>	Weight	0.0	0.15	8.50	13.24	13.51	8.24	4.84	1.48
	% P	0.0	.3	17.0	26.5	27.0	16.5	9.7	3.0
<u>CB</u>	Weight	0.0	.66	4.46	6.93	8.96	11.35	14.21	3.12
	% P	0.0	1.3	8.9	13.9	18.6	22.7	28.4	6.2
<u>B</u>	Weight	.18	.90	6.67	9.22	10.86	10.13	9.33	2.47
	% P	.4	1.8	13.3	18.4	22.2	20.3	18.7	4.9

Technician: MT & MB

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

To: Mark Manion

Date Fax Sent: 6/28/91

OFFGRADE RAILCARS

Railcar No.: PLCX 46853

Product: Debox

Load Date: 6/25/91

Ship Date: 8/30

Customer: Weyford

State: AL

Test	A	CA	CB	B
Moisture	.23	.19	.26	.03
Contamination, Blk.	2	2000	50	20
Contamination, Brn.	10	2000	500	100
Bulk Density, gm/cc	.584	.560	.560	.578
% on 40 Mesh	0.0	0.0	0.0	0.0
% thru 140 Mesh	8.6	23.3	10.3	11.2
% on Pan	1.9	4.8	2.1	2.4
L Color	99.94	98.57	99.83	97.91
b Color	1.39	1.60	1.63	2.00
Inherent Viscosity (Top)	0.682	0.824	0.633	0.678
Inherent Viscosity (Bot)	0.933	0.854	0.938	0.604
RVCM	0.203	0.039	0.224	0.072

J. Richard Williams
Quality Control Supervisor

VAB.0001198353

PVC RAILCAR ANALYSIS OFFGRADE

Load Date: 6-25-91 Product: DPox Car No.: 46853

Time Logged In: 14:00 Logged In By: D.T.

Ship Date: _____ Silo(s): 681+682 Customer: _____

No metal	A	CA	CB	B
Moisture	.23	.19	.26	.23
Contamination	21/10	2000/2000t	50/150t ^{Fresh eyes}	20/100
Bulk Density	.584	.560	.560	.578
Color "L"	99.94	98.57	99.83	97.91
Color "a"	-0.17	0.22	0.01	0.82
Color "b"	1.39	1.60	1.63	2.00
Static Flow	018.0	0110.4	017.6	017.4
Viscosity	T.682/.933	T.824/.854	T.633/.938	T.678/.604
RVCM	.203	.039	.224	.072

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
A	Weight	0.0	1.35	15.01	13.77	9.66	5.78	3.34	.94
	% P	0.0	2.7	30.0	27.5	19.6	11.6	6.7	1.9
CA	Weight	0.00	0.12	6.32	10.15	11.23	10.23	9.23	2.40
	% P	0.00	.2	12.6	20.3	23.1	20.5	18.5	4.8
CB	Weight	0.00	0.13	8.36	14.48	13.62	7.98	4.09	1.07
	% P	0.00	.3	16.7	29.0	27.7	16.0	8.2	2.1
B	Weight	0.00	0.52	11.46	12.46	11.63	8.17	4.41	1.22
	% P	0.00	1.0	22.9	24.9	23.7	16.3	8.8	2.4

Technician: MT + R31

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

To: Mark Manion

Date Fax Sent: 8/14/91

A

OFFGRADE RAILCARS

Railcar No.: VIPX 45732

Product: Pond

Load Date: 8/10/91

Ship Date: 8/23/91

Customer: Weyford

State: GA

<u>Test</u>	<u>A</u>	<u>CA</u>	<u>CB</u>	<u>B</u>
Moisture	.30	.30	.32	.32
Contamination, Blk.	1000+	1000+	1000+	1000+
Contamination, Brn.	1000+	1000+	1000+	1000+
Bulk Density, gm/cc	.408	.409	.413	.480
% on 40 Mesh	0.5	0.4	0.6	11.2
% thru 140 Mesh	11.0	10.7	10.6	8.5
% on Pan	3.8	3.7	3.7	3.2
L Color	74.11	73.81	73.37	74.01
b Color	6.12	6.12	6.00	6.10
Inherent Viscosity	0.862	0.859	0.861	0.853
RVCM	0.001	0.024	0.084	0.040

J. Richard Williams
Quality Control Supervisor

VAB.0001198355

PVC RAILCAR ANALYSIS OFFGRADE

 Load Date: 8-10-91 Product: Pond Car No.: 45732

 Time Logged In: 0910 Logged In By: ES

 Ship Date: _____ Silo(s): 675 Customer: _____
METAL (1) (15) (10) (25)

	A	CA	CB	B
Moisture	.30	.30	.32	.32
Contamination	1000 ⁺ / 1000 ⁺	1000 ⁺ / 1000 ⁺	1000 ⁺ / 1000 ⁺	1000 ⁺ / 1000 ⁺
Bulk Density	.408	.409	.413	.480
Color "L"	74.11	73.81	73.37	74.01
Color "a"	0.17	0.16	0.20	0.89
Color "b"	6.12	6.12	6.00	6.10
Static Flow	No Flow	No Flow	No Flow	1 / 19.8
Viscosity	.862	.859	.861	.853
RVCM	.001	.024	.084	.040

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
A	Weight	<u>0.24</u>	<u>2.00</u>	<u>13.35</u>	<u>12.34</u>	<u>10.32</u>	<u>6.50</u>	<u>3.59</u>	<u>1.89</u>
	%	<u>0.5</u>	<u>4.0</u>	<u>26.7</u>	<u>24.7</u>	<u>20.1</u>	<u>13.0</u>	<u>7.2</u>	<u>3.8</u>
CA	Weight	<u>0.19</u>	<u>2.11</u>	<u>13.55</u>	<u>12.16</u>	<u>10.35</u>	<u>6.32</u>	<u>3.52</u>	<u>1.86</u>
	%	<u>0.4</u>	<u>4.2</u>	<u>27.1</u>	<u>24.3</u>	<u>20.7</u>	<u>12.6</u>	<u>7.0</u>	<u>3.7</u>
CB	Weight	<u>0.28</u>	<u>1.38</u>	<u>13.80</u>	<u>12.89</u>	<u>10.32</u>	<u>6.04</u>	<u>3.43</u>	<u>1.87</u>
	%	<u>0.6</u>	<u>2.8</u>	<u>27.6</u>	<u>25.8</u>	<u>20.5</u>	<u>12.1</u>	<u>6.9</u>	<u>3.7</u>
B	Weight	<u>5.62</u>	<u>2.56</u>	<u>12.78</u>	<u>11.45</u>	<u>8.64</u>	<u>4.73</u>	<u>2.67</u>	<u>1.58</u>
	%	<u>11.2</u>	<u>5.1</u>	<u>25.6</u>	<u>22.9</u>	<u>17.2</u>	<u>9.5</u>	<u>5.3</u>	<u>3.2</u>

 Technician: ES + JS

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

A

To: Mark Manion

Date Fax Sent: 5/29/91

OFFGRADE RAILCARS

Railcar No.: ACFX 52783

Product: POND

Load Date: 5/24/91

Ship Date: _____

Customer: Weyford

State: _____

Test	A	CA	CB	B
Moisture	.88	.32	.83	.92
Contamination, Blk.	1000+	1000+	1000+	1000+
Contamination, Brn.	1000+	1000+	1000+	1000+
Bulk Density, gm/cc	.442	.445	.453	.456
% on 40 Mesh	2.3	0.8	0.4	0.3
% thru 140 Mesh	15.1	11.6	18.1	10.6
% on Pan	5.4	3.9	6.9	3.5
L Color	82.67	80.31	84.47	74.71
b Color	7.15	6.79	7.08	5.33
Inherent Viscosity	0.865	0.836	0.814	0.816
RVCM	0.021	0.019	0.025	0.115

J. Richard Williams
Quality Control Supervisor

VAB.0001198357

PVC RAILCAR ANALYSIS OFFGRADE

Load Date: 5-24-91 Product: POND Car No.: 52783

Time Logged In: 0600 Logged In By: C

Ship Date: _____ Silo(s): 675 Customer: _____

Metal 25

	A	CA	CB	B
Moisture	<u>88</u>	<u>.32</u>	<u>.83</u>	<u>.92</u>
Contamination	<u>1000+ / 1000+</u>	<u>1000+ / 1000+</u>	<u>1000+ / 1000+</u>	<u>1000+ / 1000+</u>
Bulk Density	<u>.442</u>	<u>.445</u>	<u>.453</u>	<u>.456</u>
Color "L"	<u>82.67</u>	<u>80.31</u>	<u>84.47</u>	<u>74.71</u>
Color "a"	<u>0.09</u>	<u>0.16</u>	<u>0.00</u>	<u>0.29</u>
Color "b"	<u>7.15</u>	<u>6.79</u>	<u>7.08</u>	<u>5.33</u>
Static Flow	<u>NO / Flow</u>	<u>NO / Flow</u>	<u>NO / Flow</u>	<u>NO / Flow</u>
Viscosity	<u>.865</u>	<u>.836</u>	<u>.814</u>	<u>.816</u>
RVCM	<u>.021</u>	<u>.019</u>	<u>.025</u>	<u>.115</u>

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
A	Weight	<u>1.13</u>	<u>1.61</u>	<u>11.24</u>	<u>10.64</u>	<u>10.44</u>	<u>6.82</u>	<u>4.83</u>	<u>2.72</u>
	% <u>P</u>	<u>2.3</u>	<u>3.2</u>	<u>22.5</u>	<u>21.3</u>	<u>22.0</u>	<u>13.6</u>	<u>9.7</u>	<u>5.4</u>
CA	Weight	<u>0.39</u>	<u>1.49</u>	<u>12.84</u>	<u>11.74</u>	<u>10.60</u>	<u>6.40</u>	<u>3.85</u>	<u>1.94</u>
	% <u>P</u>	<u>.8</u>	<u>3.0</u>	<u>25.7</u>	<u>23.5</u>	<u>22.6</u>	<u>12.8</u>	<u>7.7</u>	<u>3.9</u>
CB	Weight	<u>0.20</u>	<u>0.67</u>	<u>9.89</u>	<u>10.66</u>	<u>11.20</u>	<u>7.89</u>	<u>5.62</u>	<u>3.47</u>
	% <u>P</u>	<u>.4</u>	<u>1.3</u>	<u>19.8</u>	<u>21.3</u>	<u>23.3</u>	<u>15.8</u>	<u>11.2</u>	<u>6.9</u>
B	Weight	<u>0.13</u>	<u>0.74</u>	<u>10.27</u>	<u>12.63</u>	<u>12.56</u>	<u>7.32</u>	<u>3.54</u>	<u>1.73</u>
	%	<u>.3</u>	<u>1.5</u>	<u>20.5</u>	<u>25.3</u>	<u>27.2</u>	<u>14.6</u>	<u>7.1</u>	<u>3.5</u>

Technician: MT + R3

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

A

To: Mark Manion

Date Fax Sent: 7/10/91

OFFGRADE RAILCARS

Railcar No.: ACFX 41149

Product: Debox

Load Date: 7/05/91

Ship Date:

8/2/91

Customer:

Weyford

State:

AL

Test	A	CA	CB	B
Moisture	.03	.03	.12	.04
Contamination, Blk.	500	500	29	199
Contamination, Brn.	500	500	33	400
Bulk Density, gm/cc	.570	.564	.621	.594
% on 40 Mesh	0.1	0.1	0.0	0.2
% thru 140 Mesh	13.8	10.6	16.5	8.9
% on Pan	2.9	2.2	2.6	1.7
L Color	98.57	98.30	99.16	99.18
b Color	0.98	1.19	1.35	1.19
Inherent Viscosity (Top)	0.867	0.759	0.795	0.904
Inherent Viscosity (Bot)	0.870	0.752	0.805	0.893
RVCM	0.052	0.177	0.185	0.021

J. Richard Williams
Quality Control Supervisor

PVC RAILCAR ANALYSIS OFFGRADE

Load Date: 7-5-91 Product: DEBox Car No.: 41149

Time Logged In: 11:30 Logged In By: RJ

Ship Date: _____ Silo(s): 681, 682 Customer: _____

metal 8 7 0 2

	A	CA	CB	B
Moisture	.03	.03	.12	.04
Contamination	500 1500	500 1500	29 133	199 1400
Bulk Density	.570	.564	.621	.594
Color "L"	98.57	98.30	99.16	99.18
Color "a"	0.46	0.47	0.29	0.28
Color "b"	0.98	1.19	1.35	1.19
Static Flow	0 18.9	0 18.0	0 19.0	0 17.8
Viscosity	.870	.752	.805	.893
RVCM	.052	.177	.185	.021

Screen Analysis

Top View

Mesh 40 60 80 100 120 140 200 Pan

A	Weight	<u>0.04</u>	<u>0.25</u>	<u>9.36</u>	<u>12.13</u>	<u>12.70</u>	<u>8.63</u>	<u>5.46</u>	<u>1.46</u>
	%	<u>0.1</u>	<u>0.5</u>	<u>18.7</u>	<u>24.3</u>	<u>25.3</u>	<u>17.3</u>	<u>10.9</u>	<u>2.9</u>
CA	Weight	<u>0.03</u>	<u>0.42</u>	<u>9.12</u>	<u>12.40</u>	<u>13.81</u>	<u>8.95</u>	<u>4.20</u>	<u>1.10</u>
	%	<u>0.1</u>	<u>0.8</u>	<u>18.2</u>	<u>24.8</u>	<u>27.6</u>	<u>17.9</u>	<u>8.4</u>	<u>2.2</u>
CB	Weight	<u>0.00</u>	<u>0.40</u>	<u>8.05</u>	<u>10.21</u>	<u>12.81</u>	<u>10.27</u>	<u>6.97</u>	<u>1.30</u>
	%	<u>0.0</u>	<u>0.8</u>	<u>16.1</u>	<u>20.4</u>	<u>25.7</u>	<u>20.5</u>	<u>13.9</u>	<u>2.6</u>
B	Weight	<u>0.08</u>	<u>0.26</u>	<u>10.84</u>	<u>14.46</u>	<u>12.90</u>	<u>7.13</u>	<u>3.62</u>	<u>0.84</u>
	%	<u>0.2</u>	<u>0.5</u>	<u>21.7</u>	<u>28.9</u>	<u>25.5</u>	<u>14.3</u>	<u>7.2</u>	<u>1.7</u>

Technician: Dale HPL

Page _____ of _____ pages

Ship date 7/11/91
 Vinyl Sample Log
 2000533-000

Date 7/9/91
Product Type DE Box

VAB.0001198361

Blend Number	Time By	To	Sample No.	Moist.	Particle Size Distribution										HP Screen Set	Bulk G./C.C	Dry Time	Cont. % fines	Static Flow	L & N Values			CPA Glassy	Visc.	
					40	60	80	100	120	140	200	Pan	L	A						B					
41505			14	—																					
					0.00	0.25	1.09	1.29	1.25	7.83	4.42	0.98													
					0.0	0.5	2.0	2.5	2.5	15.7	8.8	2.0													
			13																						
			1	.04																					
			5	.07																					
			9	.05																					
			19	.07																					
			17	.04																					
			21	.03																					
			25	.04																					
			29	.02																					

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

4

To: Fayette Tasby

Date Fax Sent: 4/15/91

OFFGRADE RAILCARS

Railcar No.: UTCX 46427

Product: Debox

Load Date: 4/11/91

Ship Date: _____

Customer: _____

State: _____

<u>Test</u>	<u>A</u>	<u>CA</u>	<u>CB</u>	<u>B</u>
Moisture	.14	.12	.06	.12
Contamination, Blk.	60	40	15	100
Contamination, Brn.	150	200	57	1000
Bulk Density, gm/cc	.535	.536	.534	.535
% on 40 Mesh	0.0	0.0	0.0	0.0
% thru 140 Mesh	8.1	33.8	5.4	9.9
% on Pan	2.5	11.5	1.5	1.6
L Color	99.28	99.26	99.26	99.51
b Color	1.97	1.44	1.44	1.61
Inherent Viscosity (Top)	0.785	0.783	0.779	0.779
Inherent Viscosity (Bot)	0.774	0.774	0.979	0.950
RVCM	0.086	0.110	0.193	0.192

J. Richard Williams
Quality Control Supervisor

VAB.0001198362

PVC RAILCAR ANALYSIS OFFGRADE

Load Date: 4-11-79 Product: De-Box Car No.: 46427

Time Logged In: 1000 Logged In By: AT CO

Ship Date: _____ Silo(s): 690-681- Customer: _____

A.J. Changed to De-Box

	A	CA	CB	B
Moisture	.14	.12	.06	.12
Contamination	60 / 150	40 / 200	15 / 57	100 / 1800
Bulk Density	.535	.536	.534	.535
Color "L"	99.28	99.26	99.26	99.51
Color "a"	0.32	0.43	0.43	0.07
Color "b"	1.97	1.44	1.44	1.61
Static Flow	0 / 8.7	0 / 16.0	0 / 11.2	0 / 10.3
Viscosity	T. 785 / .774	T. 783 / .774	T. 779 / .979	T. 779 / .950
RVCM	.086	.110	.193	.192

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
A	Weight	<u>0.02</u>	<u>231</u>	<u>11.38</u>	<u>12.53</u>	<u>13.01</u>	<u>6.63</u>	<u>2.81</u>	<u>1.24</u>
	%	<u>0.0</u>	<u>4.6</u>	<u>22.8</u>	<u>25.1</u>	<u>26.1</u>	<u>13.3</u>	<u>5.6</u>	<u>2.5</u>
CA	Weight	<u>0.00</u>	<u>.39</u>	<u>6.90</u>	<u>7.82</u>	<u>9.52</u>	<u>8.38</u>	<u>11.17</u>	<u>5.77</u>
	%	<u>0.0</u>	<u>.8</u>	<u>13.8</u>	<u>15.6</u>	<u>19.4</u>	<u>16.6</u>	<u>22.3</u>	<u>11.5</u>
CB	Weight	<u>0.00</u>	<u>.43</u>	<u>22.00</u>	<u>13.70</u>	<u>7.73</u>	<u>3.30</u>	<u>1.94</u>	<u>.74</u>
	%	<u>0.0</u>	<u>.9</u>	<u>44.0</u>	<u>27.4</u>	<u>15.7</u>	<u>6.6</u>	<u>3.9</u>	<u>1.5</u>
B	Weight	<u>0.00</u>	<u>.19</u>	<u>12.72</u>	<u>15.73</u>	<u>11.79</u>	<u>5.24</u>	<u>4.14</u>	<u>.81</u>
	%	<u>0.0</u>	<u>.4</u>	<u>25.4</u>	<u>31.5</u>	<u>22.3</u>	<u>10.5</u>	<u>8.3</u>	<u>1.6</u>

Technician: _____

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

A

To: Mark Manion

Date Fax Sent: 5/20/91

OFFGRADE RAILCARS

Railcar No.: ACFX 41179

Product: Debox

Load Date: 5/16/91

Ship Date: _____

Customer: _____

State: _____

Test	A	CA	CB	B
Moisture	.06	.09	.13	.17
Contamination, Blk.	5	5	7	12
Contamination, Brn.	12	10	76	250
Bulk Density, gm/cc	.543	.558	.566	.576
% on 40 Mesh	0.0	0.0	0.0	0.3
% thru 140 Mesh	12.0	2.8	6.0	9.5
% on Pan	2.3	1.4	1.6	2.0
L Color	99.41	99.38	99.40	99.54
b Color	1.32	1.35	2.11	1.73
Inherent Viscosity (Top)	0.752	0.730	0.960	0.913
Inherent Viscosity (Bot)	0.751	0.758	0.970	0.904
RVCM	0.242	0.300	0.065	0.760

J. Richard Williams
Quality Control Supervisor

VAB.0001198364

PVC RAILCAR ANALYSIS OFFGRADE

Load Date: 5-16-91Product: DeBoxCar No.: 41179Time Logged In: 0300Logged In By: TALLIE

Ship Date: _____

Silo(s): 682

Customer: _____

<i>no metal</i>	A	CA	CB	B
Moisture	.06	.09	.13	.17
Contamination	5/12	5/10	7/176	12/250
Bulk Density	.543	.558	.566	.576
Color "L"	99.41	99.38	99.40	99.54
Color "a"	.13	.05	.09	.17
Color "b"	1.32	1.35	2.11	1.73
Static Flow	0 17.6	0 17.3	0 17.4	0 17.5
Viscosity	.751	.758	.970	.904
RVCM	.242	.300	.065	.760

Screen Analysis

Screen Analysis		Top Spec. 1,752		1,730		1,960		1,913	
	Mesh	40	60	80	100	120	140	200	Pan
A	Weight	<u>0.00</u>	<u>.20</u>	<u>7.35</u>	<u>12.48</u>	<u>14.60</u>	<u>9.43</u>	<u>4.84</u>	<u>1.14</u>
	%	<u>0.0</u>	<u>.4</u>	<u>14.7</u>	<u>25.0</u>	<u>29.0</u>	<u>18.9</u>	<u>9.7</u>	<u>2.3</u>
CA	Weight	<u>0.00</u>	<u>2.22</u>	<u>20.11</u>	<u>15.71</u>	<u>8.25</u>	<u>2.30</u>	<u>.70</u>	<u>.68</u>
	%	<u>0.0</u>	<u>4.4</u>	<u>40.2</u>	<u>31.4</u>	<u>16.6</u>	<u>4.6</u>	<u>1.4</u>	<u>1.4</u>
CB	Weight	<u>0.00</u>	<u>1.03</u>	<u>17.05</u>	<u>14.98</u>	<u>9.80</u>	<u>4.08</u>	<u>2.22</u>	<u>.80</u>
	%	<u>0.0</u>	<u>2.1</u>	<u>34.1</u>	<u>30.0</u>	<u>19.6</u>	<u>8.2</u>	<u>4.4</u>	<u>1.6</u>
B	Weight	<u>.13</u>	<u>1.40</u>	<u>14.00</u>	<u>12.64</u>	<u>10.82</u>	<u>6.36</u>	<u>3.76</u>	<u>.98</u>
	%	<u>.3</u>	<u>2.8</u>	<u>28.0</u>	<u>25.3</u>	<u>21.9</u>	<u>12.5</u>	<u>7.5</u>	<u>2.0</u>

Technician: Cot EJ

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

A

To: Mark Manion

Date Fax Sent: 5/01/91

OFFGRADE RAILCARS

Railcar No.: PLWX 44723

Product: 5415

Load Date: 4/19/91

Ship Date:

5/30/91

Customer:

Wexford Freedom

State:

W

Test	A	CA	CB	B
Moisture	.14	.11	.13	.14
Contamination, Blk.	3	2	5	2
Contamination, Brn.	1000	1000	100	95
Bulk Density, gm/cc	.497	.506	.493	.492
% on 40 Mesh	0.0	Composite Result		
% thru 140 Mesh	6.0			
% on Pan	1.8			
L Color	100.42			
b Color	1.55			
Inherent Viscosity	1.012			
RVCN	0.001			

J. Richard Williams
Quality Control Supervisor

VAB.0001198366

PVC RAILCAR ANALYSIS

Load Date: 4-19-91 Product: 5415 Car No.: 44723Time Logged In: 05:30 Logged In By: FT.Ship Date: 5/30/91 Silo(s): 690+691 Customer: Weyford/Wino metal

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.14		.11		.13		.14	
Contamination	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>5</u>	<u>2</u>	<u>2</u>	<u>2</u>
					95	100	30	95
Bulk Density	.497		.506		.493		.492	
BD wo/antistat								
Hard Particle	<u>7</u>	—	—	—	—	—	—	—
	2 pc							
Viscosity	<u>1.012</u>							
RVCM	.001							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>.66</u>	<u>21.50</u>	<u>13.59</u>	<u>7.76</u>	<u>3.47</u>	<u>2.09</u>	<u>.90</u>
%	<u>0.0</u>	<u>1.3</u>	<u>43.0</u>	<u>27.2</u>	<u>15.6</u>	<u>6.9</u>	<u>4.2</u>	<u>1.8</u>

Drytime: 4.8 Static Flow: 0 / 8.1 Avg. Microns: 174.5Color L: 100.42 a: .02 b: 1.55METS: 9.451 / 117.9 %Technician: G & E S

A

PVC RAILCAR ANALYSIS

Load Date: 5-1-91 Product: 5415 Car No.: 45800Time Logged In: 15:00 Logged In By: F.T.Ship Date: 2 May 91 Silo(s): 690+91 Customer: WeyerhaeuserNo METAL

	A <u>Top</u>		CA <u>Top</u>		CB <u>Top</u>		B <u>Top</u>	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.11		.10		.13		.12	
Contamination	<u>3</u> 4	<u>3</u> 7	<u>4</u> 5	<u>3</u> 6	<u>3</u> 9	<u>2</u> 7	<u>2</u> 6	<u>1</u> 8
Bulk Density	492		497		505		503	
200MIL "IONIC TEST"	0		0		0		0	
Hard Particle	<u>35</u> 500	—	—	—	—	—	—	—
Viscosity	1.028							
RVCM	.029							

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.76</u>	<u>22.37</u>	<u>14.27</u>	<u>7.46</u>	<u>3.04</u>	<u>1.67</u>	<u>0.45</u>
%	<u>0.00</u>	<u>1.5</u>	<u>44.7</u>	<u>28.5</u>	<u>15.0</u>	<u>6.1</u>	<u>3.3</u>	<u>.9</u>

Drytime: 5.2 Static Flow: 0.182 Avg. Microns: 178.0Color L: 100.71 a 0.00 b 1.36METS: 9.291 / 122.0 %Technician: RH-TE

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

A

To: Fayette Tasby

Date Fax Sent: 11/16/90

OFFGRADE RAILCARS

Railcar No.: UTCX 46548

Product: Pond

Load Date: 11/11/90

Ship Date:

4/30/91

Customer:

Weyford

State:

GA

Test	A	CA	CB	B
Moisture	.24	.21	.21	.23
Contamination, Blk.	1000+	1000+	1000+	1000+
Contamination, Brn.	1000+	1000+	1000+	1000+
Bulk Density, gm/cc	.425	.442	.445	.459
% on 40 Mesh	0.1	0.1	0.2	0.1
% thru 140 Mesh	21.0	24.5	19.8	13.4
% on Pan	7.2	8.7	6.3	0.6
L Color	80.63	81.25	77.57	78.55
b Color	6.38	6.31	7.57	7.38
Inherent Viscosity	0.866	0.802	0.805	0.855
RVCM	.247	41.741	22.206	21.831

J. Richard Williams
Quality Control Supervisor

PVC RAILCAR ANALYSIS OFFGRADE

Load Date: 11-11-90 Product: POND Car No.: 46548

Time Logged In: 1100 Logged In By: R31

Ship Date: _____ Silo(s): 675 Customer: _____

	<u>15</u>	<u>7</u>	<u>12</u>	<u>18</u>
	A	CA	CB	B
Moisture	.24	.21	.21	.23
Contamination	1000 / 1000	1000 / 1000	1000 / 1000	1000 / 1000
Bulk Density	.425	.442	.445	.459
Color "L"	80.63	81.25	77.57	78.55
Color "a"	.47	0.29	0.02	-0.04
Color "b"	6.38	6.31	7.57	7.38
Static Flow	no / Flow	4 / 15.5	9 / 17.7	5 / 15.7
Viscosity	.866	.802	.805	.855
RVCN	.247	41.741	22.206	21.831

Screen Analysis

	Mesh	40	60	80	100	120	140	200	Pan
<u>A</u>	Weight	.07	.38	7.39	10.45	18.38	7.15	6.90	3.59
	%	.1	.8	14.8	20.9	28.1	14.3	13.8	7.2
<u>CA</u>	Weight	0.03	0.30	7.54	9.93	12.82	6.58	7.90	4.39
	%	0.1	0.6	15.1	19.9	26.6	13.2	15.8	8.7
<u>CB</u>	Weight	0.09	0.32	7.05	10.50	14.60	7.14	6.75	3.17
	%	0.2	0.6	14.1	21.0	30.0	14.3	13.5	6.3
<u>B</u>	Weight	0.03	0.41	7.90	10.33	14.50	7.04	6.40	0.31
	%	0.1	0.8	15.8	20.7	35.1	14.1	12.8	0.6

Technician: P.T. HPL

VAB.0001198370

10:00

Vista Polymers

Highway 25
P. O. Box 91

Aberdeen, MS 39730

To: Fayette Tasby

Date Fax Sent: 2/01/91

OFFGRADE RAILCARS

Railcar No.: VIPX 45766

Product: 5385

Load Date: 12/28/90

Ship Date:

2/7/91

Customer: Newford 4/0 Freedom Plant.

State: WI

Test	A	CA	CB	B
Moisture	.20	.35 *	.21	.25
Contamination, Blk.	4	4	6	4
Contamination, Brn.	16	12	12	14
Bulk Density, gm/cc	.559	.530	.568	.553
% on 40 Mesh	0.0	Composite		
% thru 140 Mesh	11.2			
% on Pan	3.1 3.1			
L Color	100.32			
b Color	1.24			
Inherent Viscosity	0.932			
RVCM	.267			

* Original moisture check was .58. The .35 was after cleaning out bottom tubes.

J. Richard Williams
Quality Control Supervisor

VAB.0001198371

PVC RAILCAR ANALYSIS

Load Date: 1-8-91 Product: 5385 Car No.: 45766Time Logged In: 17:00 Logged In By: P.T.

Ship Date: _____ Silo(s): _____ Customer: _____

1-23-91

	A		CA 3TH		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture			.35	.22				
Contamination	3 day moist 1-30-91 RIGHT		LEFT		From Brake end			
		TZ		.25				
Bulk Density								
Fluff								
Hard Particle								
Viscosity								
RVCM								
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	_____	_____	_____	_____	_____	_____	_____	_____
%	_____	_____	_____	_____	_____	_____	_____	_____

Drytime: _____ Static Flow: _____ / _____ Avg. Microns: _____

Color L: _____ a _____ b _____

Technician: P.T.

PVC RAILCAR ANALYSIS

Load Date: 12-28-90 Product: 5385 Car No.: 45766Time Logged In: 05:00 Logged In By: PT.Ship Date: _____ Silo(s): 676, 677, 685 Customer: _____No METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.20		.58		.21		.25	
Contamination	$\frac{4}{16}$	—	$\frac{4}{12}$	—	$\frac{6}{12}$	—	$\frac{4}{14}$	—
Bulk Density	.559		.530		.568		.553	
Fluff								
Hard Particle	$\frac{25}{1165}$	—	—	—	—	—	—	—
Viscosity	.932							
RVCM	.267							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>.30</u>	<u>9.69</u>	<u>11.84</u>	<u>15.26</u>	<u>7.16</u>	<u>4.55</u>	<u>1.05</u>
%	<u>0.00</u>	<u>.6</u>	<u>19.4</u>	<u>23.7</u>	<u>30.8</u>	<u>14.3</u>	<u>9.1</u>	<u>2.1</u>

Drytime: 4.9 Static Flow: 0.70 Avg. Microns: 149.8Color L: 100.32 a -0.05 b 1.24Technician: G + RH

WOODGRAIN
MOLDING

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

A

CERTIFICATE OF ANALYSIS

Date: 12/12/91

Customer: Woodgrain Mouldings, Inc
P. O. Box 7380
Waco, TX 76710

VISTA

Product: 5265

Attention: Richard Burge

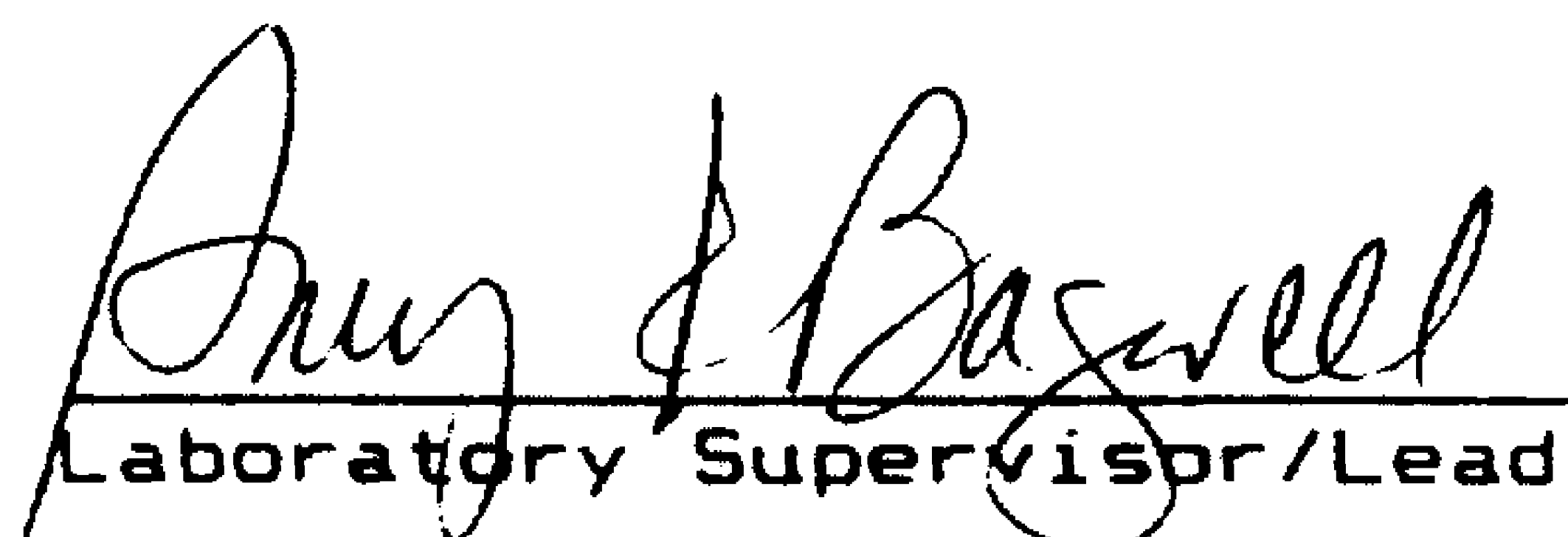
Order No.: 0004051-000

Date of Shipment: 12/11/91

Trailer No.: T-486926

Lot No: 04825

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.08</u>
Bulk Density, gm/cc	ABR-2A	<u>.555</u>
Particle Size, % on	ABR-3	
40 Mesh		<u>0.0</u>
200 Mesh		<u>6.1</u>
Pan		<u>2.0</u>
Residual VCM, ppm	ABGC-26	Not more than 8.5 PPM
Inherent Viscosity	ABR-10	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.70.


Laboratory Supervisor/Lead

Regulators or Bags

Page _____ of _____ pages

Vinyl Sample Log

Date

11-21-91

Product Type

5265

Blend Number	Time	To	Sample No.	Moist.	Particle Size Distribution							HP Screen Set	Bulk G./C.C.	Dry Time	Cont. %	Static Flow	L & N Values			CPA	Vi
					40	60	80	100	120	140	200	Pan					L	A	B		
04825	10 ⁰⁰ / RH	Bag 10	10 SKID														20	50	80		
					0.00	1.19	5.40	11.53	17.71	16.86	3.06	1.02					98.58	8.63	1.49		
					0.00	2.3	10.8	23.1	34.0	21.7	6.1	2.0					20	50	80		
			1	.08													20	50	80		151
			4	.06																	
			7	.01																	
			10	.06																	
			13	.01																	
			16	.07																	
			19	.02																	

RVM - .001

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

CERTIFICATE OF ANALYSIS

Date: 12-12-91

Customer: Woodgrain Mouldings, Inc
P. O. Box 7380
Waco, TX 76710

Product: 5265

Attention: Richard Burge

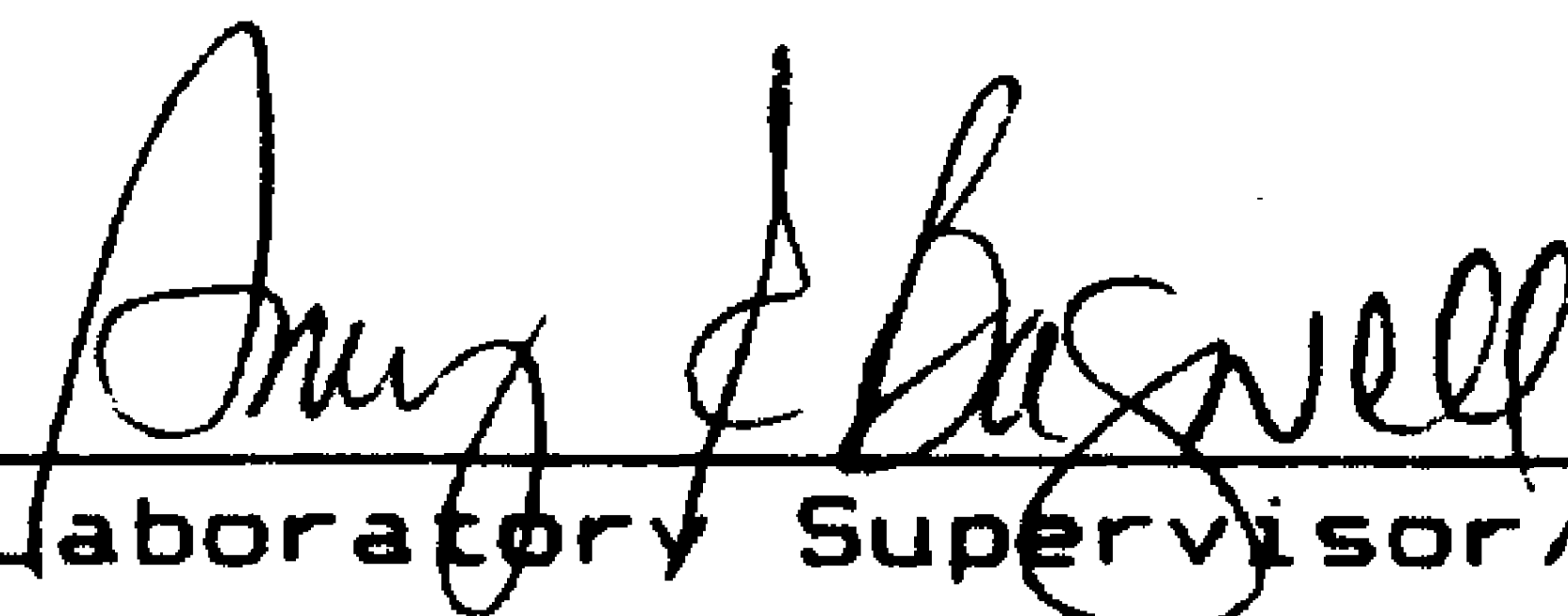
Order No.: 0004051-000

Date of Shipment: 12/11/91

Trailer No.: T-486926

Lot No: 04800

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.07</u>
Bulk Density, gm/cc	ABR-2A	<u>.431</u>
Particle Size, % on	ABR-3	
40 Mesh		<u>0.0</u>
200 Mesh		<u>16.2</u>
Pan		<u>2.4</u>
Residual VCM, ppm	ABGC-26	Not more than 8.5 PPM
Inherent Viscosity	ABR-10	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.70.


Laboratory Supervisor/Lead

Regulators or Bags

Page _____ of _____ pages

Vinyl Sample Log

Date 10-3-91

Product Type 5265

Blend Number	Time By	To	Sample No.	Moist.	Particle Size Distribution								HP Screen Set	Bulk G./C.C.	Dry Time	Cont. %	Static Flow	L & N Values			CPA		Vibe
					40	60	80	100	120	140	200	Pan						L	A	B	Glassy		
04800	19:30 / Rk	baf	1															20	90	90			Rvk
			10		0.00	0.02	3.72	8.48	14.55	13.73	8.09	1.34							98.08	0.58	1.71			.005
			SK'd		0.00	0.00	7.4	17.0	29.5	27.5	16.2	2.4	C	431			8.9	20	90	90			.65
			1	.04													2	20	90	90			.60
			4	.03													2	20	90	90			.60
			7	.04													1	20	50	90			
			10	.07													3	20	90	90			
			13	.05													3	20	90	90			
			16	.06													1	20	90	90			
			19	.05													5	20	90	90			

VAB

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

A

CERTIFICATE OF ANALYSIS

Date: 11-25-91

Customer: Woodgrain Mouldings, Inc
P. O. Box 7380
Waco, TX 76710

VISTA

Product: 5265

Attention: Richard Burge

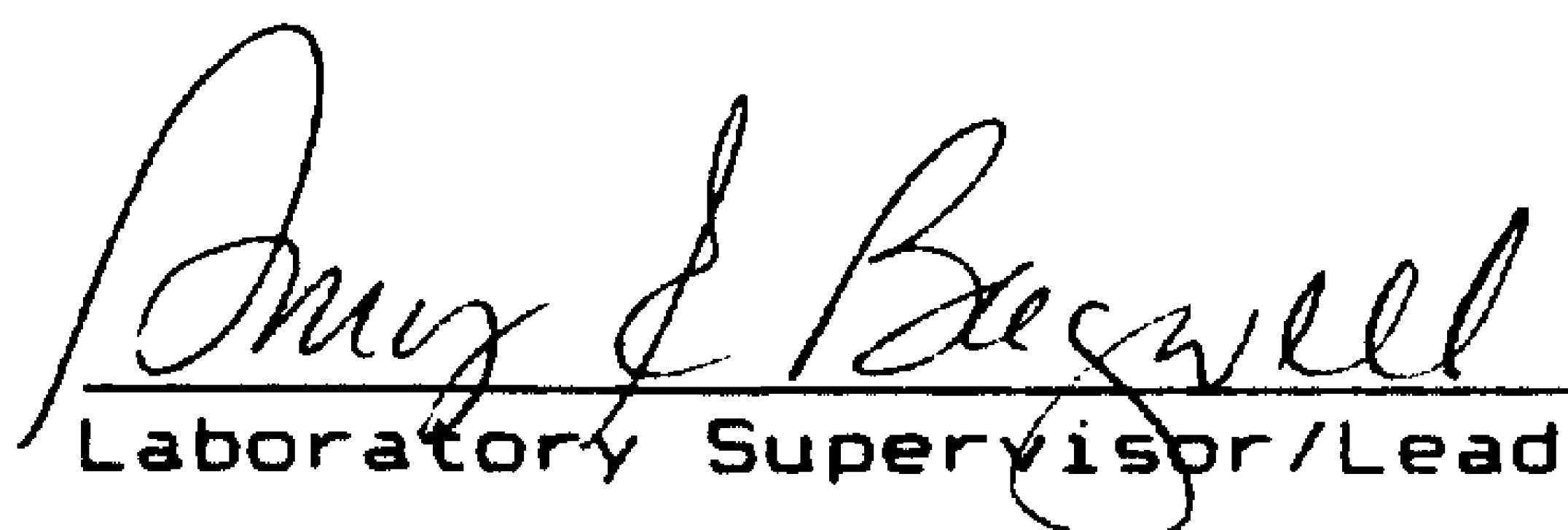
Order No.: 0003936-000

Date of Shipment: 11-22-91

Trailer No.: T-7691

Lot No.: 04825

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.08</u>
Bulk Density, gm/cc	ABR-2A	<u>.555</u>
Particle Size, % on	ABR-3	
40 Mesh		<u>0.0</u>
200 Mesh		<u>6.1</u>
Pan		<u>2.0</u>
Residual VCM, ppm	ABGC-26	Not more than 8.5 PPM
Inherent Viscosity	ABR-10	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.70.


Laboratory Supervisor/Lead

• Regulators or Bags

Page ____ of ____ pages

Vinyl Sample Log

Date 11-21-91
Product Type 5265

Blend Number	Time By / To	Sample No.	Moist.	Particle Size Distribution							HP Screen Set	Bulk G./C.C.	Dry Time	Cont. % Moisture	Static Flow	L & N Values			CPA	Vi
				40	60	80	100	120	140	200	Pan					L	A	B		
04825	1000 / RH	1														20	50	80		
		10																		
		SK'd		0.00	1.19	5.40	11.53	17.71	16.86	3.06	1.02				8.0	98.58	0.63	1.49		
		1	.08													20	50	80		.651
		4	.06																	.647
		7	.01																	
		10	.06													20	50	80		
		13	.01													20	50	80		
		16	.07																	
		19	.02																	

RVM+.001

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730-0091
Phone (601) 369-8111

A

CERTIFICATE OF ANALYSIS

Date: 11-10-91

Customer: Woodgrain Mouldings, Inc
P. O. Box 7380
Waco, TX 76710

VISTA

Product: 5265

Attention: Richard Burge

Order No.: 0003408-000

Date of Shipment: 11-10-91

Trailer No.: T-723

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.03</u>
Bulk Density, gm/cc	ABR-2A	<u>.537</u>
Particle Size, % on	ABR-3	
40 Mesh		<u>0.0</u>
200 Mesh		<u>20.6</u>
Pan		<u>2.4</u>
Residual VCM, ppm	ABGC-26	Not more than 8.5 PPM
Inherent Viscosity	ABR-10	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.70.

Melvin Tallie
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

A

Date 11-10-91 Product 5265 Trailer Number T-723
 Customer Woodgaw Midg Silo 686 Time 0815
 Technician M.T. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>0.03</u>		1. <u>6</u>		1. <u>—</u>	1. <u>.537</u>	1. <u>—</u>	L = <u>98.81</u>	<u>9</u> <u>8.6</u>	
	2. <u>—</u>		2. <u>8</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>0.47</u>		
MIDDLE	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	L = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>—</u>		
END	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	L = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>—</u>		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare <u>P</u>									
Net Wt.	<u>0.0</u>	<u>.08</u>	<u>1.90</u>	<u>6.92</u>	<u>14.40</u>	<u>15.07</u>	<u>10.31</u>	<u>1.18</u>	
% on Mesh	<u>0.0</u>	<u>.2</u>	<u>3.8</u>	<u>13.8</u>	<u>29.1</u>	<u>30.1</u>	<u>20.6</u>	<u>2.4</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198382

LETTER OF CERTIFICATION

VISTA

Date: *SEPT. 24, 1991*

Customer: **WOODGRAIN MOULDINGS, INC.**
P. O. Box 7380
Waco, TX 76710

Product: **5285**

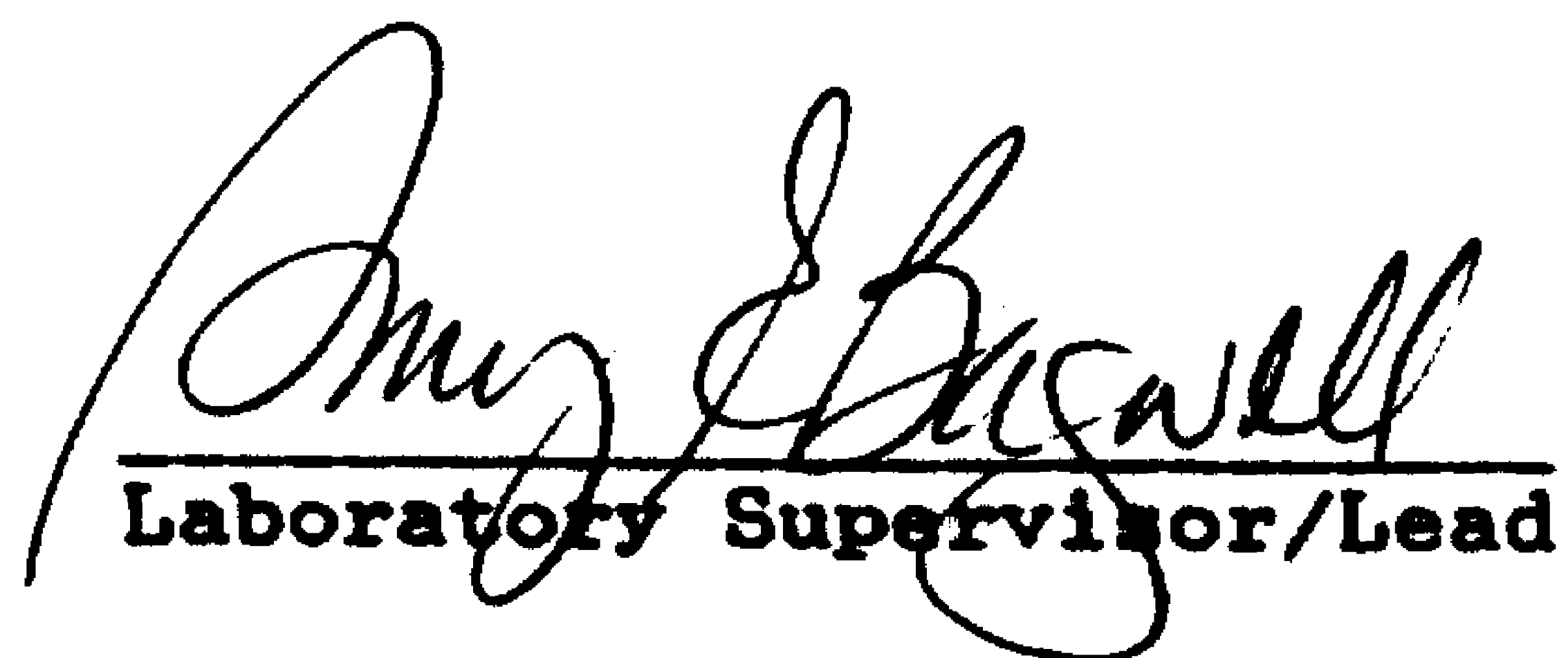
Trailer No.: *T-479*

Attention: **Richard Burge**

Order No.: *0001790-001*

Date of Shipment: *SEPT. 24, 1991*

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.07</u>
Bulk Density, gm/cc	8.410	<u>.552</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>17.1</u>
Pan		<u>2.3</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 9-24-91 Product 5265 Trailer Number T-479
 Customer Woodgrain Mfg. Sls 686 Time 1300
 Technician T.E. + MDB Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.07		1.3		1.	1.	1.	L = 98.76		
			9		—	.552	—	A = 0.67		
	2.		2.		2.	2.	2.	B = 1.92		0.79
MIDDLE	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		
END	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 48 gms. Resin plus 1.8 gms. Carb

	40	60	80	100	120	140	200	Pen	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	0.00	0.08	3.46	2.69	14.31	13.86	8.57	1.15	
% on Mesh	0.0	0.2	6.9	15.4	30.4	27.7	17.1	2.3	

Screen Analysis _____ Min. On Rotap shaker 48 gms. Resin plus 1.8 gms. Carb

	40	60	80	100	120	140	200	Pen	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

LETTER OF CERTIFICATION

VISTA

Date: 9/16/91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T 868

Attention: Richard Burge

Order No.: 0001790-000

Date of Shipment: 9/16/91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.12</u>
Bulk Density, gm/cc	8.410	<u>.559</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.00</u>
200 Mesh		<u>3.9</u>
Pan		<u>1.4</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 9-16-91 Product 5265 Trailer Number T-868
 Customer Woodgrain Silo 687 Time 0645-07:45
 Technician ms Order No. 0001790-000

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>12</u>		1. <u>4/8</u>		1. <u>—</u>	1. <u>.559</u>	1. <u>—</u>	L = <u>98.60</u>	<u>Flow</u> <u>9/7.1</u>	
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>.51</u> B = <u>1.62</u>		
MIDDLE	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	L = <u>—</u>		<u>No</u> <u>metal</u>
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>—</u> B = <u>—</u>		
END	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	L = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>—</u> B = <u>—</u>		

Particle Size Distribution:

Screen Analysis 10 Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glossy Part.
Mesh Size									
Gross Wt.									
Tare <u>T</u>									
Net Wt.	<u>0.00</u>	<u>0.38</u>	<u>8.60</u>	<u>14.24</u>	<u>16.87</u>	<u>8.01</u>	<u>1.93</u>	<u>0.70</u>	
% on Mesh	<u>0.0</u>	<u>0.8</u>	<u>16.0</u>	<u>28.5</u>	<u>33.4</u>	<u>16.0</u>	<u>3.9</u>	<u>1.4</u>	

Screen Analysis — Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glossy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198386

PVC BULK TRAILER ANALYSIS

A

Date 8-28-91 Product 5265 Trailer Number 7-415
 Customer Wood Grain Sile 686 Time 0615
 Technician ES Order No. _____

	MOIST		CONT.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.04		1.24		1. —	.527	1. —	L = 98.84 A = 0.98		Flow 9.0
	2.		2.		2.	2.	2.	B = 1.72		
MIDDLE	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	B =		
	2.		2.		2.	2.	2.	L =		
								A =		
								B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glossy Part.
Gross Wt.									
Tare									
Net Wt.	0.00	0.05	5.09	11.77	17.76	11.39	3.11	0.75	
% on Mesh	0.00	0.1	10.2	23.5	35.7	22.8	6.2	1.5	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glossy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198387

LETTER OF CERTIFICATION

VISTA

Date: 8-28-91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T-415

Attention: Richard Burge

Order No.: 0001397-001

Date of Shipment: 8-28-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.04</u>
Bulk Density, gm/cc	8.410	<u>.527</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.00</u>
200 Mesh		<u>6.2</u>
Pan		<u>1.5</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.

Eddie Smith
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

A

Date 8-23-91 Product 5265 Trailer Number T-722
 Customer Woodgrain Silo 686 Time 02:15-03:00
 Technician P.T. + HPL Order No. 000 1397-000

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>12</u>		1. <u>3</u>		1. <u>—</u>	1. <u>.536</u>	1. <u>—</u>	L = <u>99.02</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>0.86</u>		
MIDDLE	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	L = <u>—</u>	<u>0</u> <u>9.6</u>	<u>No metal</u>
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>—</u>		
END	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	L = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>—</u>		

Particle Size Distribution:

Screen Analysis Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.10</u>	<u>7.00</u>	<u>13.56</u>	<u>17.70</u>	<u>8.90</u>	<u>0.40</u>	<u>0.58</u>	
% on Mesh	<u>0.0</u>	<u>0.2</u>	<u>14.0</u>	<u>27.1</u>	<u>34.9</u>	<u>17.8</u>	<u>4.8</u>	<u>1.2</u>	

Screen Analysis Min On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198389

LETTER OF CERTIFICATION

VISTA

Date: 8-25-91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T-722

Attention: Richard Burge

Order No.: 000/397-000

Date of Shipment: 8-25-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.12</u>
Bulk Density, gm/cc	8.410	<u>.536</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.00</u>
200 Mesh		<u>4.8</u>
Pan		<u>1.2</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.

Eddie B. Smith
Laboratory Supervisor/Lead

LETTER OF CERTIFICATION

VISTA

Date: 7/30/91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: 7868

Attention: Richard Burge

Order No.: 0000658-000

Date of Shipment: 7/30/91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.10</u>
Bulk Density, gm/cc	8.410	<u>.548</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>9.5</u>
Pan		<u>2.6</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

A

Date 7-29-91 Product S265 Trailer Number T-868
 Customer WOODGRAIN Silo CB-45287 Time 2330
 Technician M.T. Order No. 0000658-000

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>10</u>		1. <u>6</u>		1. <u>—</u>	1. <u>548</u>	1. <u>—</u>	L = <u>98.59</u>	<u>0</u> / <u>22</u>	
	2. <u>—</u>		2. <u>18</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>0.57</u>		
MIDDLE	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	L = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>—</u>		
END	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	L = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>—</u>		

Particle Size Distribution:

Screen Analysis Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.	<u>0.0</u>	<u>0.12</u>	<u>4.39</u>	<u>8.76</u>	<u>19.37</u>	<u>11.55</u>	<u>4.74</u>	<u>1.30</u>	
% on Mesh	<u>0.0</u>	<u>0.2</u>	<u>8.8</u>	<u>17.5</u>	<u>38.3</u>	<u>23.1</u>	<u>9.5</u>	<u>2.6</u>	

Screen Analysis Min On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

LETTER OF CERTIFICATION

VISTA

Date: 7/22/91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T-810

Attention: Richard Burge

Order No.: 0000612-000

Date of Shipment: 7/22/91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.03</u>
Bulk Density, gm/cc	8.410	<u>.537</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>10.8</u>
Pan		<u>2.8</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 7-22-91 Product 5265 Trailer Number F810
 Customer Woodgmin Silo 680 Time 09:30-10:00
 Technician Det. M.B. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.03		1.2		1. -	1. .537	1. -	L = 98.64		
			15					A = 0.63		
	2.		2.		2.	2.	2.	B = 1.67		
MIDDLE	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		
END	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		

0
8.9
No Metal

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	0.00	0.24	6.15	10.44	15.73	11.44	5.38	1.40	
% on Mesh	0.0	0.5	12.3	20.8	30.0	22.8	10.8	2.8	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198394

LETTER OF CERTIFICATION

VISTA

Date: 14 Aug. 91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: F 723

Attention: Richard Burge

Order No.: 0001160-000

Date of Shipment: 14 Aug. 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.06</u>
Bulk Density, gm/cc	8.410	<u>.531</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>14.0</u>
Pan		<u>3.5</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 8-14-91 Product S265 Trailer Number T-723
 Customer Woodgrain Silo 684 Time 1110
 Technician mt Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.06		1.0		1.	1.531	1.	L = 98.89 A = .80 B = 1.82	Flow of 7.3	
	2.		2.		2.		2.			
MIDDLE	1.		1.		1.		1.	L = A =		
	2.		2.		2.		2.	B =		
END	1.		1.		1.		1.	L = A =		
	2.		2.		2.		2.	B =		

Particle Size Distribution:

Screen Analysis	10	Min	On Rotap shaker.	40 gms. Resin plus	1.0 gms. Carb					
						Pen	Glassy Part.			
Mesh Size	40	60	80	100	120	140	200			
Gross Wt.										
Tare T										
Net Wt.	0.00	.09	5.48	10.40	14.14	11.26	7.00	1.75		
% on Mesh	0.0	.2	11.0	20.8	28.0	22.5	14.0	3.5		
Screen Analysis		Min.	On Rotap shaker	40 gms. Resin plus	1.0 gms. Carb					
						Pen	Glassy Part.			
Mesh Size	40	60	80	100	120	140	200			
Gross Wt.										
Tare										
Net Wt.										
% on Mesh										

Remarks _____

PVC BULK TRAILER ANALYSIS

Date 7-28-91 Product 5265 Trailer Number T-479
 Customer Wood Grain Silo 45787-CA Comp Time 1020
 Technician ES Order No. 0000612-001

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>11</u>		1. <u>25</u>		1. <u>-</u>	1. <u>.545</u>	1. <u>-</u>	L = <u>98.59</u>		1. <u>053</u>
	2. <u>.....</u>		2. <u>.....</u>		2. <u>.....</u>	2. <u>.....</u>	2. <u>.....</u>	A = <u>0.57</u>		
MIDDLE	1. <u>.....</u>		1. <u>.....</u>		1. <u>.....</u>	1. <u>.....</u>	1. <u>.....</u>	B = <u>1.64</u>	<u>.661</u>	<u>Flow</u>
	2. <u>.....</u>		2. <u>.....</u>		2. <u>.....</u>	2. <u>.....</u>	2. <u>.....</u>			<u>98.2</u>
END	1. <u>.....</u>		1. <u>.....</u>		1. <u>.....</u>	1. <u>.....</u>	1. <u>.....</u>	L = <u>.....</u>		<u>No</u>
	2. <u>.....</u>		2. <u>.....</u>		2. <u>.....</u>	2. <u>.....</u>	2. <u>.....</u>	A = <u>.....</u>		<u>metal</u>
	1. <u>.....</u>		1. <u>.....</u>		1. <u>.....</u>	1. <u>.....</u>	1. <u>.....</u>	B = <u>.....</u>		
	2. <u>.....</u>		2. <u>.....</u>		2. <u>.....</u>	2. <u>.....</u>	2. <u>.....</u>			

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.12</u>	<u>4.39</u>	<u>8.76</u>	<u>19.37</u>	<u>11.55</u>	<u>4.74</u>	<u>1.30</u>	
% on Mesh	<u>0.00</u>	<u>0.2</u>	<u>8.8</u>	<u>17.5</u>	<u>38.3</u>	<u>23.1</u>	<u>9.5</u>	<u>2.6</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198397

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aberdeen, Mississippi 39730
Phone (601) 369-8111

LETTER OF CERTIFICATION

VISTA

Date: 7-28-91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T-479

Attention: Richard Burge

Order No.: 0000612-001

Date of Shipment: 7-28-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.11</u>
Bulk Density, gm/cc	8.410	<u>.545</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.00</u>
200 Mesh		<u>9.5</u>
Pan		<u>2.6</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.

Eddie L. Smith
Laboratory Supervisor/Lead

LETTER OF CERTIFICATION

VISTA

Date: 6-20-91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T-868

Attention: Richard Burge

Order No.: 0000298-000

Date of Shipment: 6-20-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.07</u>
Bulk Density, gm/cc	8.410	<u>.558</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>6.9</u>
Pan		<u>2.2</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.

Melvin Tallie
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 6-20-91 Product 5265 Trailer Number T-868
 Customer Wood grain Mid/Silo from A comp 45850 Time 1650
 Technician M.I. Order No. 0000298-000

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>2.7</u>		1. <u>1.6</u>		1. <u>-</u>	1. <u>558</u>	1. <u>-</u>	L = <u>99.15</u>	<u>0</u> / <u>6.9</u>	
	2. <u>12</u>		2. <u>12</u>		2. <u>-</u>	2. <u>558</u>	2. <u>-</u>	A = <u>0.41</u>		
MIDDLE	1. <u> </u>		1. <u> </u>		1. <u> </u>	1. <u> </u>	1. <u> </u>	L = <u> </u>		
	2. <u> </u>		2. <u> </u>		2. <u> </u>	2. <u> </u>	2. <u> </u>	A = <u> </u>		
END	1. <u> </u>		1. <u> </u>		1. <u> </u>	1. <u> </u>	1. <u> </u>	L = <u> </u>		
	2. <u> </u>		2. <u> </u>		2. <u> </u>	2. <u> </u>	2. <u> </u>	A = <u> </u>		

Particle Size Distribution:

Retest material

Screen Analysis Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glossy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt. <i>P</i>	<u>0.0</u>	<u>.82</u>	<u>7.87</u>	<u>11.00</u>	<u>15.16</u>	<u>10.73</u>	<u>3.47</u>	<u>1.08</u>	
% on Mesh	<u>0.0</u>	<u>1.6</u>	<u>15.7</u>	<u>22.0</u>	<u>30.1</u>	<u>21.5</u>	<u>6.9</u>	<u>2.2</u>	

Screen Analysis Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glossy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks

VAB.0001198400

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

4

LETTER OF CERTIFICATION

VISTA

Date: 7/8/91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T 809

Attention: Richard Burge

Order No.: 0000516-000

Date of Shipment: 7/8/91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.08</u>
Bulk Density, gm/cc	8.410	<u>.541</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.00</u>
200 Mesh		<u>9.5</u>
Pan		<u>2.6</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 7-8-91 Product 5265 Trailer Number T-809
 Customer WOODSTAIN SNo "A" Comp. 45787 Time 11:15-11:20
 Technician P.T. Order No. 0000516-000

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. 08		1. 9		1. —	1. .541	1. —	L = 98.59 A = 0.57	.667	.067
	2.		2.		2.	2.	2.	B = 1.64		
MIDDLE	1.		1.		1.	1.	1.	L =	0	14
	2.		2.		2.	2.	2.	A =	8.2	metal
END	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
								B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glossy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh	0.00	0.2	8.8	17.5	38.3	23.1	9.5	2.6	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glossy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks OFF loaded from R/c 45787 "A" comp.

LETTER OF CERTIFICATION

VISTA

Date: 6-2-91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T-479

Attention: Richard Burge

Order No.: 0000059-000

Date of Shipment: 6-2-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.12</u>
Bulk Density, gm/cc	8.410	<u>.544</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>9.5</u>
Pan		<u>2.6</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.

Curtis Quithon
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

Date 6-2-91 Product 5265 Trailer Number T-479
 Customer Woodgrain Silo "B" 45787 R/a Time 04:00 - 04:15
 Technician P.T. J. HPL Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>.12</u>		1. <u>5</u>		1. <u>—</u>	1. <u>.544</u>	1. <u>—</u>	L = <u>9859</u>		
	2. <u>—</u>		2. <u>6</u>		2. <u>—</u>		2. <u>—</u>	A = <u>0.57</u>		
MIDDLE	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	L = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	A = <u>—</u>		
END	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	L = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	A = <u>—</u>		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh	<u>0.00</u>	<u>0.2</u>	<u>8.8</u>	<u>17.5</u>	<u>38.3</u>	<u>23.1</u>	<u>9.5</u>	<u>2.4</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks OFF loaded from R/a !!!

LETTER OF CERTIFICATION

VISTA

Date: 5-19-91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T-480

Attention: Richard Burge

Order No.: 813897-114

Date of Shipment: 5-19-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.11</u>
Bulk Density, gm/cc	8.410	<u>.554</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>13.5</u>
Pan		<u>1.9</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.

Curtis Outman
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

A

Date 5-19-91 Product 3265 Trailer Number T-480
 Customer Woodgrain Silo 479 Time 0900
 Technician C. Outlaw + ES Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.11		1.40		1.	1.	1.	L = 98.55		
			90			554		A = .49		
	2.		2.		2.	2.	2.	B = 1.87		97.0
MIDDLE	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		
END	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.	0.00	.12	4.34	9.10	15.74	13.20	6.63	.95	
% on Mesh	0.0	.2	8.7	18.2	31.3	26.4	13.3	1.9	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198406

PVC BULK TRAILER ANALYSIS

A

Date 5-10-91 Product 5265 Trailer Number T 480
 Customer Woodgrain Silo 686 Time 2130
 Technician TE-m G Order No. 813899-113

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>0.06</u>		1. <u>1.4</u>		1. <u>—</u>	1. <u>.543</u>	1. <u>—</u>	L = <u>97.14</u>		<u>98.2</u>
	2. <u>.....</u>		2. <u>6</u>					A = <u>0.44</u>		
MIDDLE	1. <u>.....</u>		1. <u>.....</u>		1. <u>.....</u>	1. <u>.....</u>	1. <u>.....</u>	L = <u>.....</u>		<u>NO METAL</u>
	2. <u>.....</u>		2. <u>.....</u>		2. <u>.....</u>	2. <u>.....</u>	2. <u>.....</u>	A = <u>.....</u>		
END	1. <u>.....</u>		1. <u>.....</u>		1. <u>.....</u>	1. <u>.....</u>	1. <u>.....</u>	L = <u>.....</u>		
	2. <u>.....</u>		2. <u>.....</u>		2. <u>.....</u>	2. <u>.....</u>	2. <u>.....</u>	A = <u>.....</u>		
								B = <u>.....</u>		

Particle Size Distribution:

Screen Analysis Min On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.18</u>	<u>5.91</u>	<u>10.91</u>	<u>15.95</u>	<u>11.37</u>	<u>4.22</u>	<u>1.50</u>	
% on Mesh	<u>0.0</u>	<u>0.4</u>	<u>11.8</u>	<u>21.8</u>	<u>31.9</u>	<u>22.7</u>	<u>8.4</u>	<u>3.0</u>	

Screen Analysis Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks
.....
.....
.....

VAB.0001198407

LETTER OF CERTIFICATION

VISTA

Date: 5-12-91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T-480

Attention: Richard Burge

Order No.: 813899-113

Date of Shipment: 5-12-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.06</u>
Bulk Density, gm/cc	8.410	<u>.543</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>8.4</u>
Pan		<u>3.0</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.

Melvin Lallio
Laboratory Supervisor/Lead

LETTER OF CERTIFICATION

VISTA

Date: 5-04-91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

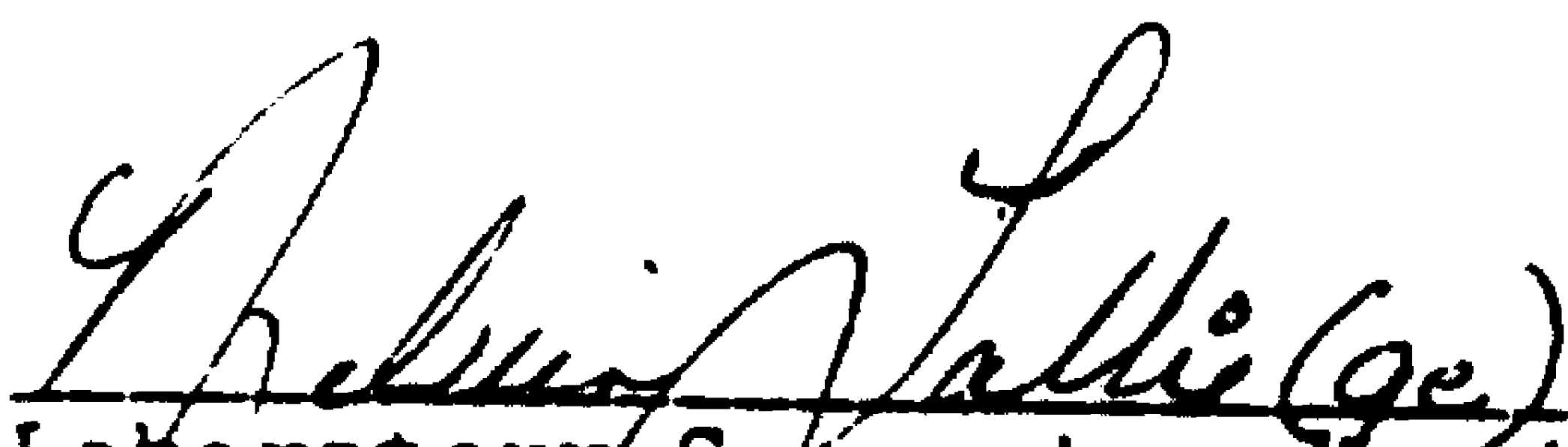
Trailer No.: T-479

Attention: Richard Burge

Order No.: 813899-112

Date of Shipment: 5-05-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.13</u>
Bulk Density, gm/cc	8.410	<u>.543</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>11.4</u>
Pan		<u>2.6</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

A

Date 5-4-91 Product 5265 Trailer Number T-479
 Customer Woodgrain Silo 686 Time 1500
 Technician C. Outlaw Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. 13		1. 7/15		1.	1. 543	1.	L = 99.04		
	2.		2.		2.	2.	2.	A = 1.50		
MIDDLE	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		
END	1.		1.		1.	1.	1.	L =		
	2.		2.		2.	2.	2.	A =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.	0.00	.13	5.38	9.93	15.36	11.93	5.69	1.30	
% on Mesh	0.0	.3	10.8	19.9	30.8	23.9	11.4	2.6	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198410

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

4

LETTER OF CERTIFICATION

VISTA

Date: 24 Apr. 91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: F-722

Attention: Richard Burge

Order No.: 813899-111

Date of Shipment: 24 Apr. 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>0.2</u>
Bulk Density, gm/cc	8.410	<u>1.549</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>23.0</u>
Pan		<u>3.3</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.


Laboratory Supervisor/Lead

VAB.0001198411

PVC BULK TRAILER ANALYSIS

Date 4-22-91 Product 5265 Trailer Number T-722
 Customer Woodgrain Silo 687-686 Time 2115
 Technician lo + MT Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1.02		1.93		1.	1.	1.	L = 98.52	0/85	
			95		—	549	—	A = 0.429		
	2.		2.		2.	2.	2.	B = 1.90		
MIDDLE	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		
END	1.		1.		1.	1.	1.	L =		
								A =		
	2.		2.		2.	2.	2.	B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt. <i>P</i>	0.0	.03	2.18	6.02	13.02	15.31	11.49	1.67	
% on Mesh	0.0	.1	4.4	12.0	26.6	30.6	23.0	3.3	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAR 0001198412

LETTER OF CERTIFICATION

VISTA

Date: 4.14.91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

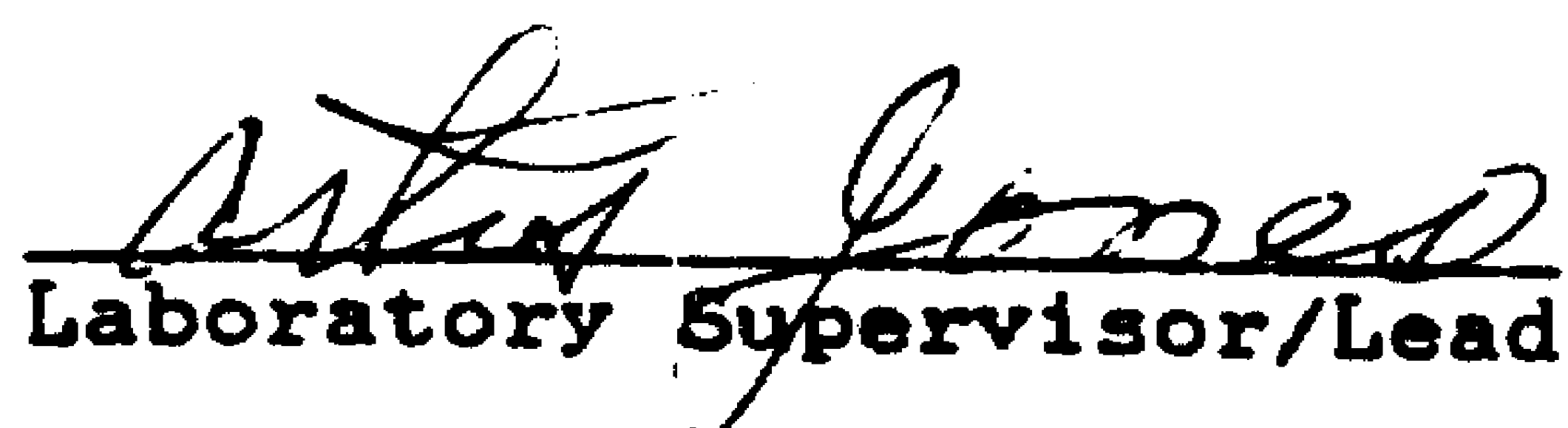
Trailer No.: T2480

Attention: Richard Burge

Order No.: 813899-110

Date of Shipment: 4-14-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>0.07</u>
Bulk Density, gm/cc	8.410	<u>1.547</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.00</u>
200 Mesh		<u>8.9</u>
Pan		<u>2.6</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.


Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

A

Date 4-14-91 Product 5265 Trailer Number 72480
 Customer Hoodgwin Silo 687, 688 Time 0800 - 0900
 Technician _____ Order No. 813855-110

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVEM
	Top	Bottom	Top	Bottom						
FRONT	1. .07		1. 1		1. —	1. .547	1. —	L = 98.75		10.6
	2.		2. 5		2.	2.	2.	A = 0.64		0
MIDDLE	1.		1.		1.	1.	1.	B = 1.58		7.8
	2.		2.		2.	2.	2.			
END	1.		1.		1.	1.	1.			
	2.		2.		2.	2.	2.			

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	0.00	0.10	5.46	10.77	16.22	11.96	4.47	12.0	
% on Mesh	0.00	.2	10.9	21.5	32.0	23.9	8.9	2.6	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198414

PVC BULK TRAILER ANALYSIS

Date 4-4-91 Product 5265 Trailer Number T-2809
 Customer Woolgrove Silo 686 Time 1000
 Technician C. Outlaw Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>.04</u>		1. <u>5/23</u>		1.	1. <u>535</u>	1.	L = <u>98.92</u>		
	2.		2. <u>6/10</u>		2.		2.	A = <u>.50</u>		
MIDDLE	1.		1.		1.		1.	L =		
	2.		2.		2.		2.	A =		
END	1.		1.		1.		1.	L =		
	2.		2.		2.		2.	A =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.	<u>0.0</u>	<u>.06</u>	<u>2.71</u>	<u>7.17</u>	<u>13.99</u>	<u>15.08</u>	<u>9.69</u>	<u>1.35</u>	
% on Mesh	<u>0.0</u>	<u>0.1</u>	<u>5.4</u>	<u>14.3</u>	<u>27.9</u>	<u>30.2</u>	<u>19.4</u>	<u>2.7</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198415

LETTER OF CERTIFICATION

VISTA

Date: 4-4-91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T2809

Attention: Richard Burge

Order No.: 813899-109

Date of Shipment: 4-4-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.04</u>
Bulk Density, gm/cc	8.410	<u>.535</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>19.4</u>
Pan		<u>2.7</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.

Melvin Tallie
Laboratory Supervisor/Lead

LETTER OF CERTIFICATION

VISTA

Date: 3-21-91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T-5646

Attention: Richard Burge

Order No.: 90-1144-001
LOT NO.: 04654

Date of Shipment: 3-20-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.19</u>
Bulk Density, gm/cc	8.410	<u>.547</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>12.8</u>
Pan		<u>1.8</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.


Laboratory Supervisor/Lead

BAG BLEND

Vinyl Sample Log

Date 2-5-91
Product Type 5265

AB.0001198418

[illegible]

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

A

LETTER OF CERTIFICATION

VISTA

Date: 3-11-91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

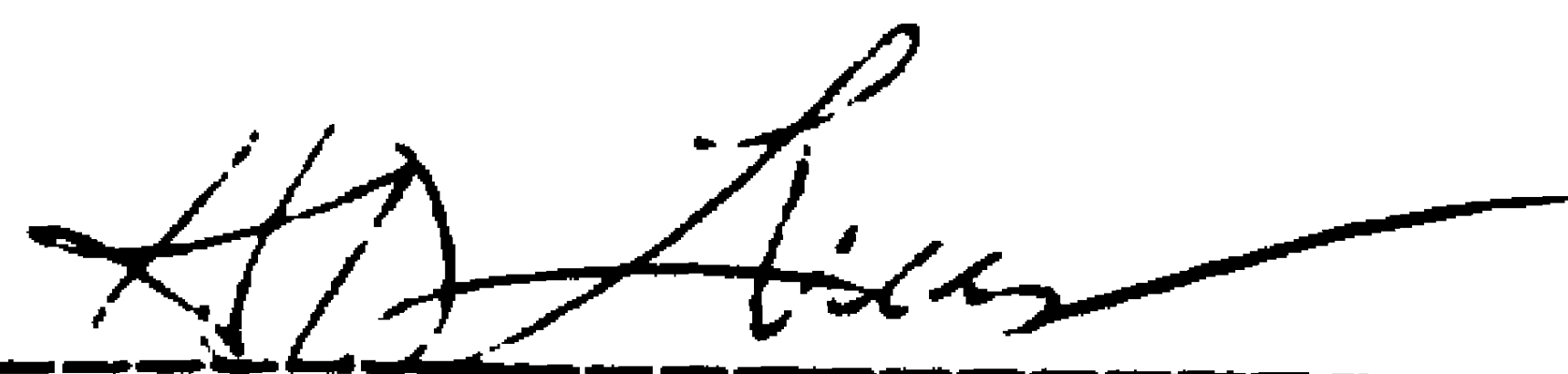
Trailer No.: T 694

Attention: Richard Burge

Order No.: 813899-108

Date of Shipment: 3-11-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.04</u>
Bulk Density, gm/cc	8.410	<u>.553</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.00</u>
200 Mesh		<u>12.3</u>
Pan		<u>1.6</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.



Laboratory Supervisor/Lead

VAB.0001198419

PVC BULK TRAILER ANALYSIS

A

Date 3-11-91 Product 5265 Trailer Number 694
 Customer Wood Grain Silo 679 Time 1345
 Technician A.J. & J.S. Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>0.4</u>		1. <u>3/8</u>		1. <u>—</u>	1. <u>553</u>	1. <u>—</u>	L = <u>98.29</u>		<u>9/8.1</u>
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>0.62</u>		
								B = <u>1.55</u>		
MIDDLE	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	L = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>—</u>		
								B = <u>—</u>		
END	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	L = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>—</u>		
								B = <u>—</u>		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>1.13</u>	<u>4.68</u>	<u>9.99</u>	<u>15.62</u>	<u>12.60</u>	<u>6.14</u>	<u>0.8</u>	
% on Mesh	<u>0.00</u>	<u>2.3</u>	<u>9.4</u>	<u>20.0</u>	<u>29.2</u>	<u>25.2</u>	<u>12.3</u>	<u>1.6</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

	40	60	80	100	120	140	200	Pan	Glassy Part.
Mesh Size									
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198420

LETTER OF CERTIFICATION

VISTA

Date: 2-25-91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: T-575

Attention: Richard Burge

Order No.: 813899-107

Date of Shipment: 2-25-91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>.10</u>
Bulk Density, gm/cc	8.410	<u>.538</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.00</u>
200 Mesh		<u>9.8</u>
Pan		<u>2.2</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.

Terry J. Edwards
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

A

Date 2-25-91 Product 5265 Trailer Number 7575
 Customer WOODGRAIN Silo 686 Time _____
 Technician ADL/AJ Order No. 813899-107

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>10</u>		1. <u>10/16</u>		1. <u>—</u>	1. <u>538</u>	1. <u>—</u>	L = <u>99.07</u>		
	2.		2.		2.	2.	2.	A = <u>0.58</u>		
MIDDLE	1.		1.		1.	1.	1.	B = <u>1.68</u>		
	2.		2.		2.	2.	2.	L =		
END	1.		1.		1.	1.	1.	A =		
	2.		2.		2.	2.	2.	B =		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.05</u>	<u>4.90</u>	<u>9.09</u>	<u>18.57</u>	<u>11.78</u>	<u>4.91</u>	<u>1.1</u>	
% on Mesh	<u>0.00</u>	<u>0.1</u>	<u>9.8</u>	<u>18.2</u>	<u>36.3</u>	<u>23.6</u>	<u>9.8</u>	<u>2.2</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198422

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

A

LETTER OF CERTIFICATION

VISTA

Date: 9 JAN. 91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

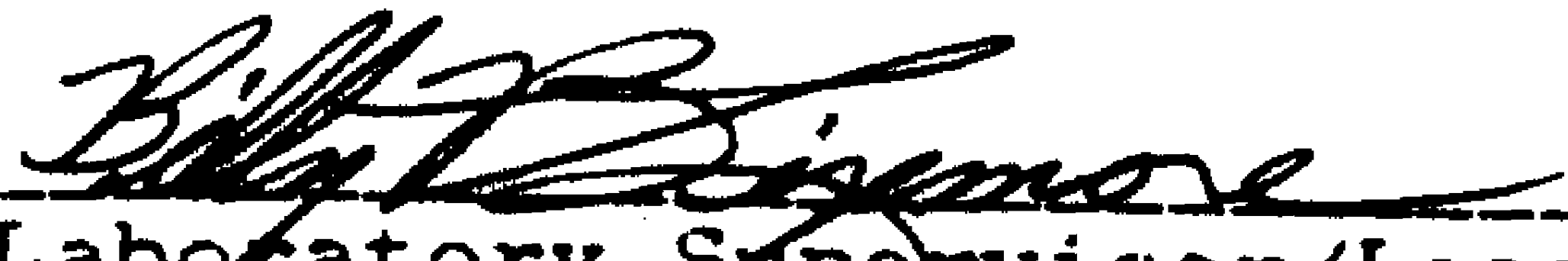
Trailer No.: T-2351

Attention: Richard Burge

Order No.: 813899-106

Date of Shipment: 10 JAN. 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	<u>0.02</u>
Bulk Density, gm/cc	8.410	<u>1.557</u>
Particle Size, % on	8.300	
40 Mesh		<u>0.0</u>
200 Mesh		<u>9.1</u>
Pan		<u>1.9</u>
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to 0.68.


Laboratory Supervisor/Lead

VAB.0001198423

PVC BULK TRAILER ANALYSIS

Date 1-9-91 Product 5265 Trailer Number F2351
 Customer WOODGRAIN Silo 688 Time 09:30-10:45
 Technician BT-HPL Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>0.2</u>		1. <u>5</u>		1. <u>—</u>	1. <u>.551</u>	1. <u>—</u>	L = <u>98.42</u>		
	2. <u>—</u>		2. <u>16</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>0.6</u>		
MIDDLE	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	B = <u>2.21</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	L = <u>—</u>	<u>0</u> <u>7.6</u>	<u>NO</u> <u>MEAL</u>
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>—</u>		
END	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	B = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	L = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	B = <u>—</u>		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare <u>T</u>									
Net Wt.	<u>0.00</u>	<u>0.20</u>	<u>5.09</u>	<u>9.48</u>	<u>19.40</u>	<u>10.73</u>	<u>4.54</u>	<u>0.97</u>	
% on Mesh	<u>0.0</u>	<u>0.4</u>	<u>10.2</u>	<u>19.0</u>	<u>32.9</u>	<u>21.5</u>	<u>9.1</u>	<u>1.9</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198424

LETTER OF CERTIFICATION

VISTA

Date: 9 JAN. 91

Customer: WOODGRAIN MOULDINGS, INC.
P. O. Box 7380
Waco, TX 76710

Product: 5265

Trailer No.: F-2479

Attention: Richard Burge

Order No.: 813899-105

Date of Shipment: 9 JAN. 91

<u>Property</u>	<u>Test Method</u>	<u>Analysis</u>
Moisture, %	ABR-1A	____.02____
Bulk Density, gm/cc	8.410	____.549____
Particle Size, % on	8.300	
40 Mesh		____0.0____
200 Mesh		____8.8____
Pan		____1.9____
Residual VCM, ppm	8.955	Not more than 8.5 PPM
Inherent Viscosity	8.600	This material was produced to yield an inherent viscosity in the range of 0.62 to to 0.68.

David Thompson
Laboratory Supervisor/Lead

PVC BULK TRAILER ANALYSIS

A

Date 1-9-91 Product 5265 Trailer Number T-2479
 Customer Woodgrain Silo 688 Time 09:30-10:30
 Technician Pete + HDL Order No. _____

	MOIST		CON'T.		GEL	BULK DENSITY	DRY TIME	COLOR	VISC	RVCM
	Top	Bottom	Top	Bottom						
FRONT	1. <u>0.02</u>		1. <u>7/14</u>		1. <u>—</u>	1. <u>.549</u>	1. <u>—</u>	L = <u>2842</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	A = <u>0.63</u>		
MIDDLE	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	B = <u>2.19</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	L = <u>—</u>	<u>8.0</u>	<u>No Metal</u>
END	1. <u>—</u>		1. <u>—</u>		1. <u>—</u>	1. <u>—</u>	1. <u>—</u>	A = <u>—</u>		
	2. <u>—</u>		2. <u>—</u>		2. <u>—</u>	2. <u>—</u>	2. <u>—</u>	B = <u>—</u>		

Particle Size Distribution:

Screen Analysis _____ Min On Rotap shaker. 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.	<u>0.00</u>	<u>0.18</u>	<u>5.06</u>	<u>9.50</u>	<u>19.37</u>	<u>10.83</u>	<u>4.44</u>	<u>0.93</u>	
% on Mesh	<u>0.0</u>	<u>0.4</u>	<u>10.1</u>	<u>19.0</u>	<u>38.1</u>	<u>21.7</u>	<u>8.8</u>	<u>1.9</u>	

Screen Analysis _____ Min. On Rotap shaker 49 gms. Resin plus 1.0 gms. Carb

Mesh Size	40	60	80	100	120	140	200	Pan	Glassy Part.
Gross Wt.									
Tare									
Net Wt.									
% on Mesh									

Remarks _____

VAB.0001198426

X-Rail Newark, NJ

CERTIFICATE OF ANALYSIS

VISTA

Date: 5/17/91

Customer: X-Rail Systems
116 Poinier Street
Newark, NJ 07114

Product: 5385-3S Resin

Attention: Ray Stone

Order No.: 855544-175

Date of Shipment: 5/13/91

Car No.: UTCX 48054

<u>Property</u>	<u>Compartment</u>				<u>Test Method</u>
	<u>A</u>	<u>CA</u>	<u>CB</u>	<u>B</u>	
Volatiles (Wt.%)	.12	.11	.03	.03	ABR-1A
Contamination, (Blk/Brn)	2/6	3/5	3/7	2/5	ABR-5A
Bulk Density, gm/cc.	.569	.582	.583	.569	ABR-2A
Particle Size	Composite Result				ABR-3
% on 40 Mesh					
% on 200 Mesh					
% on Pan					
"b" Color	1.60				ABR-9
RVCM, ppm	0.136				ABGC-26

This material was produced to yield an inherent viscosity of
0.90 -0.95



J. Richard Williams
Quality Control Supervisor

Vista Polymers
A Division of
Vista Chemical Company

Highway 25
Post Office Box 91

Aderdeen, Mississippi 39730-0091
Phone (601) 369-8111

CERTIFICATE OF ANALYSIS

VISTA

Date: 5/14/91

Customer: X-Rail Systems
116 Poinier Street
Newark, NJ 07114

Product: 5385-3S Resin

Attention: Ray Stone

Order No.: 894576-066

Date of Shipment: 5/13/91

Car No.: UTCX 48054

<u>Property</u>	<u>Compartment</u>				<u>Test Method</u>
	<u>A</u>	<u>CA</u>	<u>CB</u>	<u>B</u>	
Volatiles (Wt.%)	.12	.11	.03	.03	ABR-1A
Contamination, (Blk/Brn)	2/6	3/5	3/7	2/5	ABR-5A
Bulk Density, gm/cc.	.569	.582	.583	.569	ABR-2A
Particle Size	Composite Result				ABR-3
% on 40 Mesh					
% on 200 Mesh					
% on Pan					
"b" Color	1.60				ABR-9
RVCM, ppm	0.136				ABGC-26

This material was produced to yield an inherent viscosity of
0.90 -0.95

J. Richard Williams
Quality Control Supervisor

VAB.0001198429

PVC RAILCAR ANALYSIS

Load Date: 4-30-91 Product: 5385 Car No.: 48054

Time Logged In: 1400 Logged In By: PT

Ship Date: _____ Silo(s): 676/677/685 Customer: _____

N. METAL

	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.12		.11		.03		.03	
Contamination	$\frac{2}{6}$	—	$\frac{3}{5}$	—	$\frac{3}{7}$	—	$\frac{2}{5}$	—
Bulk Density	.569		.582		.583		.569	
Fluff								
Hard Particle	$\frac{50}{20}$ DL	—	—	—	—	—	—	—
Viscosity	.933							
RVCM	.136							
40 Mesh/Glassies	0		0		0		0	

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.0</u>	<u>.54</u>	<u>14.87</u>	<u>14.24</u>	<u>10.19</u>	<u>5.56</u>	<u>3.50</u>	<u>.86</u>
%	<u>0.0</u>	<u>1.1</u>	<u>89.7</u>	<u>28.5</u>	<u>20.9</u>	<u>11.1</u>	<u>7.0</u>	<u>1.7</u>

Drytime: 4.9 Static Flow: 0 18.2 Avg. Microns: 162.0

Color L: 100.39 a -0.08 b 1.60

Technician: MT & RH

Richard Williams authorized these 3 diversions
1 → X-Rail
2 → BP

SHIPMENT DIVERSIONS

DATE:

5/13

RAILCAR/TRAILER:

UTCX48054

PRODUCT:

5385 - 1

ORIGINAL CUSTOMER:

United DC

LOCATION:

Houston

ORIGINAL ORDER NUMBER:

894576-066

NEW CUSTOMER:

X-Rail (Alcan)

LOCATION:

Newark, NJ

NEW ORDER NUMBER:

855544-175

DIVERSION AUTHORIZED BY:

Aberdeen Laboratory

CUSTOMER SERVICE REP./
SUPERVISOR

Cam Cooper

To: Bob Battles

From: C.M. Cooper -

Bob, for these 3 diversions, would
you communicate with Richard Williams
to let him know what paper work he should
send to X-Rail / BP. Thanks

VAB.0001198431

MAY 13 1991 2:17PM #096 P.01

TO: VISTA 1

FROM: VISTA HOUSTON

CERTIFICATE OF ANALYSIS

VISTA

Date: 5/17/91

Customer: X-Rail Systems
116 Poinier Street
Newark, NJ 07114

Product: 5385-3S Resin

Attention: Ray Stone

Order No.: 855544-176

Date of Shipment: 5/15/91

Car No.: VIPX 45727

<u>Property</u>	<u>Compartment</u>				<u>Test Method</u>
	<u>A</u>	<u>CA</u>	<u>CB</u>	<u>B</u>	
Volatiles (Wt.%)	.10	.06	.11	.09	ABR-1A
Contamination, (Blk/Brn)	4/3	9/4	7/5	6/4	ABR-5A
Bulk Density, gm/cc.	.587	.593	.580	.581	ABR-2A
Particle Size					ABR-3
% on 40 Mesh					
% on 200 Mesh					
% on Pan					
	Composite Result				
"b" Color	1.59				ABR-9
RVCM, ppm	0.260				ABGC-26

This material was produced to yield an inherent viscosity of
0.90 -0.95



J. Richard Williams
Quality Control Supervisor

SHIPMENT DIVERSIONS

DATE:

5/15

RAILCAR/TRAILER:

VIPX45727

Ship date

PRODUCT:

5385

4/29

ORIGINAL CUSTOMER:

United D.C.

weight

LOCATION:

Houston

189,250

ORIGINAL ORDER NUMBER:

894 576-059

NEW CUSTOMER:

X-Rail (Alcan)

LOCATION:

Newark, NJ

NEW ORDER NUMBER:

8555 44-176

DIVERSION AUTHORIZED BY:

CUSTOMER SERVICE REP./
SUPERVISOR

Aberdeen Laboratory

Cy Coop

PVC RAILCAR ANALYSIS

Load Date: 4-26-91 Product: 5385 Car No.: 45727

Time Logged In: 24:00 Logged In By: Fate

Ship Date: _____ Silo(s): 676 Customer: Type I

- NO METAL -	A		CA		CB		B	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Moisture	.10		.06		.11		.09	
Contamination	<u>4</u> 3	—	<u>2</u> 4	—	<u>2</u> 5	—	<u>6</u> 4	—
Bulk Density	.587		.593		.580		.581	
Fluff								
Hard Particle	<u>28</u> 5 HA	—	—	—	—	—	—	—
Viscosity	.932							
RVCM	.260							
40 Mesh/Glassies								

Screen Analysis

Mesh	40	60	80	100	120	140	200	Pan
Weight	<u>0.00</u>	<u>0.91</u>	<u>18.91</u>	<u>13.29</u>	<u>8.80</u>	<u>4.40</u>	<u>2.83</u>	<u>0.79</u>
%	<u>0.0</u>	<u>1.8</u>	<u>37.8</u>	<u>26.6</u>	<u>17.2</u>	<u>8.8</u>	<u>5.7</u>	<u>1.6</u>

Drytime: 4.9 Static Flow: 0 17.6 Avg. Microns: 170.4

Color L: 100.20 a -0.10 b 1.59

Technician: TE - JPS