



**CONESTOGA-ROVERS
& ASSOCIATES**

13431 Cullen Boulevard
Houston, Texas 77047
Telephone: (713) 734-3090 Fax: (713) 734-1800
<http://www.craworld.com>

PROJECT DATA BOOK

WILLIAMS FIELD SERVICES COMPANY



**WILLIAMS IGNACIO PLANT
NORTH EVAPORATION POND
3746 COUNTY ROAD 307
DURANGO, CO 81303**

Equal
Employment Opportunity
Employer

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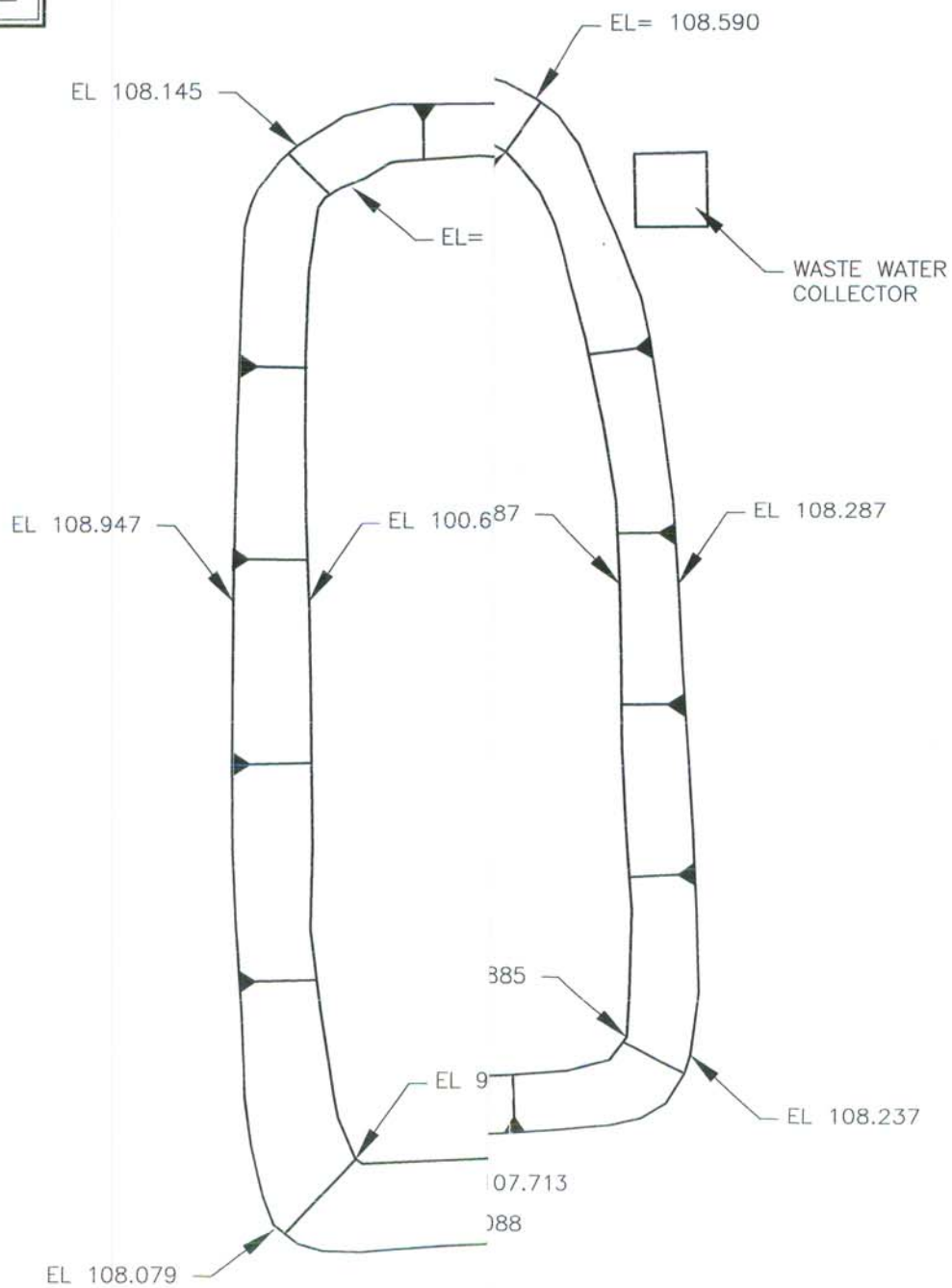
1.0 PROJECT DRAWING

2.0 TESTING DATA

- Field Density Testing
- Laboratory Destructive Seam QA Test Results

3.0 LINER QA/QC DATA

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- Panel Placement Log
- Geomembrane Seaming Record
- Geomembrane Trial Seam Log
- Field Seam Destructive Sample
- Repair Log
- 60mil Liner "As-Built" Drawing



TOTAL CONTAINMENT:
154,240.83 bbls



JOB No.
042667

FIGURE
1



**Western
Technologies
Inc.**
The Quality People
Since 1955

P.O. Box 4200
Durango, Colorado 81302
Phone: (970) 375-9033
Fax: (970) 375-9034

SOIL / AGGREGATE FIELD UNIT WEIGHT TESTS (FIELD DENSITY)

Client **CONESTOGA-ROVERS & ASSOCIATES (CRA)**
2135 S. LOOP 250 WEST
MIDLAND, TX 79703

Date of Report 11-21-05
Job No. 3155JM103
Event/Invoice No. 31550338-02
Authorized By **JUAN DELVILLAR**
Tested By **F. HAMPTON**
Page 1 of 1
Date 11-15-05
Date 11-16-05

Client **CONESTOGA-ROVERS & ASSOCIATES (CRA)**
Project **WILLIAMS IGNACIO NORTH POND, PROJECT #042667**
Location **IGNACIO, COLORADO**

Test Locations Designated By **CLIENT**

Test Procedures In-Place Unit Weight : **ASTM D2922**

Moisture Content : **ASTM D3017**

Gauge : **Make TROXLER**

Model 3430

Serial No. 23663

Standard Count: Unit Weight **2641** H₂O **719**

TEST NO.	IN-PLACE CHARACTERISTICS				LAB CHARACTERISTICS			COMPACTION		REQUIREMENTS	
	Hole Volume cu. ft.	Moisture % of Dry Unit Weight	Dry Unit Weight lbf / cu. ft.	Oversize %	ID	Maximum Dry Unit Weight lbf / cu. ft.	Optimum Moisture %	% of Maximum Dry Unit Weight	Moisture %	Compaction %	CONFORMANCE INDICATED
1		14.9	113.6	0	2	108.9	15.0	100 +		95	YES
2		20.3	104.7	0	2	108.9	15.0	96		95	YES
3		14.0	116.1	0	2	108.9	15.0	100 +		95	YES
4		14.1	112.6	0	2	108.9	15.0	100 +		95	YES
5		18.5	109.8	0	2	108.9	15.0	100 +		95	YES
6		14.1	114.5	0	2	108.9	15.0	100 +		95	YES

TEST NO.	TEST LOCATION, HORIZONTAL		TEST LOCATION, VERTICAL		MATERIAL TESTED
			Approximate Fill Depth, ft.	Elevation *	
1	NORTH POND BOTTOM, 70'W & 65'S OF NE CORNER		0.0	91.0	POND BOTTOM
2	NORTH POND BOTTOM, 63'N & 75'W OF SE CORNER		0.0	91.0	POND BOTTOM
3	NORTH POND BOTTOM, 62'S & 225'E OF NW CORNER		0.0	91.0	POND BOTTOM
4	NORTH POND BOTTOM, 35'S & 214'E OF NW CORNER		0.0	91.0	POND BOTTOM
5	NORTH POND BOTTOM, 91'S & 83'E OF NW CORNER		0.0	91.0	POND BOTTOM
6	NORTH POND BOTTOM, 45'S & 68'E OF NE CORNER		0.0	91.0	POND BOTTOM

LABORATORY DATA & COMPACTION CHARACTERISTICS						
LAB ID.	EVENT/ INVOICE NO.	DESCRIPTION OF MATERIAL	SOURCE OF MATERIAL	OPTIMUM MOISTURE, %	MAXIMUM DRY UNIT WEIGHT, lbf / cu. ft.	TEST METHOD
2	31550338-03	RED CLAY	NORTH POND BOTTOM	15.0	108.9	D698-A

Comments: * DATUM 100' = TOP OF POND

Distribution : CLIENT - (1)

TESTING WAS PERFORMED PER LOCAL INDUSTRY PRACTICES THAT MAY INCLUDE SLIGHT DEVIATIONS FROM THE STANDARDS.

TESTS REPORTED HEREIN ARE INDICATIVE OF CONDITIONS FOUND AT THE EXACT LOCATION AND TIME OF TESTING ONLY. THE ABOVE SERVICES AND REPORT WERE PERFORMED PURSUANT TO THE TERMS AND CONDITIONS OF THE CONTRACT BETWEEN WT AND CLIENT. WT WARRANTS THAT THIS WAS PERFORMED UNDER THE STANDARD OF REASONABLE CARE APPLICABLE TO SUCH TESTING GENERALLY. NO OTHER WARRANTY, GUARANTEE, OR REPRESENTATION, EXPRESSED OR IMPLIED, IS INCLUDED OR INTENDED.

REVIEWED BY

[Signature]

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Since 1955

P.O. Box 4200
Durango, Colorado 81302
Phone: (970) 375-9033
Fax: (970) 375-9034

PHYSICAL PROPERTIES OF SOILS & AGGREGATES

Client **CONESTOGA-ROVERS & ASSOCIATES (CRA)**
2135 S. LOOP 250 WEST
MIDLAND, TX 79703

Date of Report **11-21-05**

Job No. **3155JM103**

Event / Invoice No. **31550338-03**

Lab No. **1031116-1**

Authorized by **JIM ROSE**

Date **11-16-05**

Sampled by **F. HAMPTON**

Date **11-16-05**

Submitted by **F. HAMPTON**

Date **11-16-05**

Project **WILLIAMS IGNACIO NORTH POND, PROJECT #042667**

Location **IGNACIO, COLORADO**

Contractor **CRA**

Arch. / Engr. **WFS**

Type / Use of Material **RED CLAY**

Supplier / Source **NATIVE**

Sample Source / Location **NORTH POND LINING**

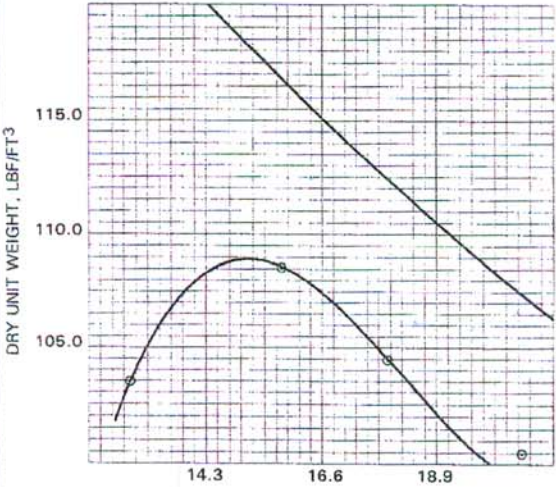
Source / Location Desig. By **CLIENT**

Testing Authorized :

Date **11-16-05**

Special Instructions :

TEST RESULTS

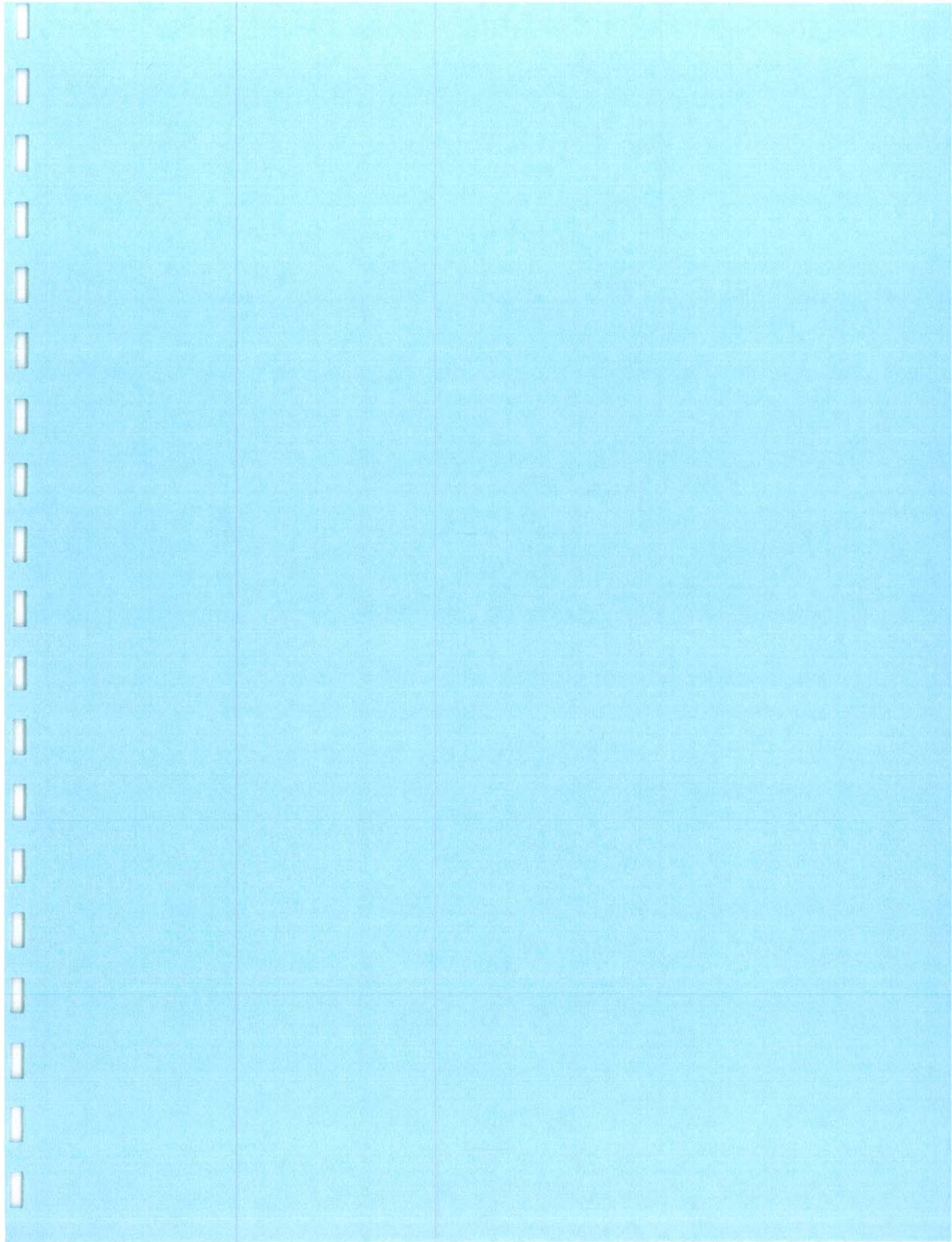
SIEVE ANALYSIS : FINER THAN NO. 200 :			LABORATORY COMPACTION CHARACTERISTICS : ASTM D698 METHOD A				
SIEVE	ACCUMULATIVE % PASSING	SPECIFICATION					
							
			<p>DRY UNIT WEIGHT, LB/FT³</p> <p>MOISTURE, % DRY WEIGHT</p>				
			<p>SAMPLE PREPARATION: <input checked="" type="checkbox"/> WET <input type="checkbox"/> DRY</p> <p>RAMMER USED: <input checked="" type="checkbox"/> 2 IN. CIRCULAR FACE <input type="checkbox"/> OTHER</p> <p><input type="checkbox"/> MECHANICAL <input checked="" type="checkbox"/> MANUAL</p> <p>MAXIMUM DENSITY, LB/FT³ → 108.9</p> <p>OPTIMUM MOISTURE CONTENT, % → 15.0</p> <p>OVERSIZE AGGREGATE :</p> <p>ASSUMED BULK SPECIFIC GRAVITY : 2.65</p> <p>ASSUMED ABSORPTION, % : 1.0</p> <p>% OVERSIZE IN LAB SAMPLE : 0</p> <p>ASSUMED SPECIFIC GRAVITY IN ZERO AIR VOID CURVE : 2.65</p>				
TEST PROCEDURE			RESULT	SPECS	TEST PROCEDURE	RESULT	SPECS
LIQUID & PLASTIC PROPERTIES :					RESISTANCE TO DEGRADATION OF SMALL-SIZE COARSE AGGREGATES BY ABRASION :		
LIQUID LIMIT →					GRADING 100 REV, % LOSS →		
ESTIMATED % RETAINED ON NO. 40 PLASTIC LIMIT →					GRADING 500 REV, % LOSS →		
SAMPLE AIR DRIED <input type="checkbox"/> YES <input type="checkbox"/> NO PLASTICITY INDEX →							
MOISTURE CONTENT :					SPECIFIC GRAVITY :		
PORTION TESTED % DRY WEIGHT →					MAX. PARTICLE SIZE, IN. SPECIFIC GRAVITY @ 20°C →		
EXPANSION / COMPRESSION PROPERTIES OF COHESIVE SOIL :					pH DETERMINATION :		
WT PROCEDURE <input type="checkbox"/> EXPANSION <input type="checkbox"/> COMPRESSION, % →							
MAXIMUM SWELL PRESSURE, KSF →					SOLUBLE SALTS :		
SURCHARGE, KSF						PPM →	
INITIAL WATER CONTENT, % DRY DENSITY, PCF					MINIMUM RESISTIVITY :		
						OHM-CM →	
SOIL CLASSIFICATION :			GROUP SYMBOL:				
			NAME:				

Comments :

Copies to : CLIENT - (1)

THE SERVICES REFERRED TO HEREIN WERE PERFORMED IN ACCORDANCE WITH THE STANDARD OF CARE PRACTICED LOCALLY FOR THE REFERENCED METHOD(S) AND RELATE ONLY TO THE CONDITION(S) OR SAMPLE(S) TESTED AS STATED HEREIN. WESTERN TECHNOLOGIES INC. MAKES NO OTHER WARRANTY OR REPRESENTATION, EXPRESSED OR IMPLIED, AND HAS NOT CONFIRMED INFORMATION INCLUDING SOURCE OF MATERIALS SUBMITTED BY OTHERS.

REVIEWED BY





TRI / Environmental, Inc.
A Texas Research International Company

November 23, 2005

Mail To:

Mr. Shawn Cooper
Conestoga-Rovers & Associates, Inc.
13431 Cullen B lvd.
Houston, TX 77047

e-mail: scooper@croworld.com
Fax: 832-485-5213

Bill To:

Ms. Connie Kaiser
<== Same (Proj# 042667)

Fax: 713-734-3391

Dear Mr. Cooper:

Thank you for consulting TRI/Environmental, Inc. (TRI) for your geosynthetics testing needs.
TRI is pleased to submit this final report for laboratory testing.

Project: **Ignacio Plant CO.**

TRI Job Reference Number: **E2251-50-08**

Material(s) Tested: **17 Heat Fusion Weld Seam(s)**

Test(s) Requested: **SAME DAY Peel and Shear
(ASTM D 6392/GRI GM19/D 4437/NSF 54)**

Codes

AD	Adhesion failure (100% Peel)
BRK	Break in sheeting away from Seam edge
SE	Break in sheeting at edge of seam
AD-BRK	Break in sheeting after some adhesion failure - partial peel
SIP	Separation in the plane of the sheet (leaving the bond intact)
FTB	Film tearing bond (all non "AD" failures)
NON-FTB	100% peel

If you have any questions or require any additional information, please call us at
1-800-880-8378.

Sincerely,

Sam R. Allen
Vice President and Division Manager
Geosynthetic Services Division
www.GeosyntheticTesting.com



DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS

TRI Client: Conestoga-Rovers & Associates, Inc.

Project: Ignacio Plant CO.

Material: HDPE

SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54)

TRI Log #: E2251-50-08

PARAMETER		TEST REPLICATE NUMBER					MEAN
		1	2	3	4	5	
Sample ID: DS-1							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	142	139	144	139	143	Peel A 141
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	122	155	140	143	126	Peel B 137
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		190	184	186	188	187	Shear 187
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	
Sample ID: DS-2							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	136	131	130	132	134	Peel A 133
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	137	140	140	146	141	Peel B 141
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		186	189	187	187	187	Shear 187
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	

The testing is based upon accepted industry practice as well as the test method listed. Test results reported herein do not apply to samples other than those tested. TRI neither accepts responsibility for nor makes claim as to the final use and purpose of the material. TRI observes and maintains client confidentiality. TRI limits reproduction of this report, except in full, without prior approval of TRI.



DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS

TRI Client: Conestoga-Rovers & Associates, Inc.

Project: Ignacio Plant CO.

Material: HDPE

SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54)

TRI Log #: E2251-50-08

PARAMETER		TEST REPLICATE NUMBER					MEAN
		1	2	3	4	5	
Sample ID: DS-3							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	154	120	129	145	139	Peel A 137
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	141	154	134	136	141	Peel B 141
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		192	183	191	188	186	Shear 188
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	
Sample ID: DS-4							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	136	141	141	144	136	Peel A 140
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	124	124	123	123	126	Peel B 124
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		187	183	190	188	190	Shear 188
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS

TRI Client: Conestoga-Rovers & Associates, Inc.

Project: Ignacio Plant CO.

Material: HDPE

SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54)

TRI Log #: E2251-50-08

PARAMETER		TEST REPLICATE NUMBER					MEAN
		1	2	3	4	5	
Sample ID: DS-5							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	139	136	131	131	137	Peel A 135
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	141	139	124	148	138	Peel B 138
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		187	188	188	189	189	Shear 188
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	
Sample ID: DS-6							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	139	141	148	134	129	Peel A 138
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	132	131	142	163	145	Peel B 143
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		191	190	186	190	187	Shear 189
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS

TRI Client: Conestoga-Rovers & Associates, Inc.

Project: Ignacio Plant CO.

Material: HDPE

SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54)

TRI Log #: E2251-50-08

PARAMETER		TEST REPLICATE NUMBER					MEAN
		1	2	3	4	5	
Sample ID: DS-7							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	127	128	131	127	126	Peel A 128
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	130	126	131	130	129	Peel B 129
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		187	183	184	184	187	Shear 185
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	
Sample ID: DS-8							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	136	132	138	142	137	Peel A 137
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	131	134	133	145	136	Peel B 136
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		186	188	186	189	186	Shear 187
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS

TRI Client: Conestoga-Rovers & Associates, Inc.

Project: Ignacio Plant CO.

Material: HDPE

SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54)

TRI Log #: E2251-50-08

PARAMETER		TEST REPLICATE NUMBER					MEAN
		1	2	3	4	5	
Sample ID: DS-9							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	126	122	127	128	127	Peel A 126
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	127	125	126	124	127	Peel B 126
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		190	191	188	188	193	Shear 190
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	
Sample ID: DS-10							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	140	134	138	136	134	Peel A 136
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	133	131	148	152	126	Peel B 138
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		187	187	185	188	186	Shear 187
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS

TRI Client: Conestoga-Rovers & Associates, Inc.

Project: Ignacio Plant CO.

Material: HDPE

SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54)

TRI Log #: E2251-50-08

PARAMETER		TEST REPLICATE NUMBER					MEAN
		1	2	3	4	5	
Sample ID: DS-11							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	145	141	144	136	139	Peel A 141
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	132	126	125	126	125	Peel B 127
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		183	181	185	186	185	Shear 184
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	
Sample ID: DS-12							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	127	153	151	124	147	Peel A 140
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	146	132	129	141	126	Peel B 135
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		172	164	166	170	172	Shear 169
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS

TRI Client: Conestoga-Rovers & Associates, Inc.

Project: Ignacio Plant CO.

Material: HDPE

SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54)

TRI Log #: E2251-50-08

PARAMETER		TEST REPLICATE NUMBER					MEAN
		1	2	3	4	5	
Sample ID: DS-13							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	142	143	145	142	141	Peel A 143
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	140	147	139	139	138	Peel B 141
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		171	1167	168	170	167	Shear 369
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	
Sample ID: DS-14							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	148	151	142	142	150	Peel A 147
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	139	140	142	145	140	Peel B 141
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		169	169	170	170	171	Shear 170
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	

The testing is based upon accepted industry practice as well as the test method listed. Test results reported herein do not apply to samples other than those tested. TRI neither accepts responsibility for nor makes claim as to the final use and purpose of the material. TRI observes and maintains client confidentiality. TRI limits reproduction of this report, except in full, without prior approval of TRI.



DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS

TRI Client: Conestoga-Rovers & Associates, Inc.

Project: Ignacio Plant CO.

Material: HDPE

SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54)

TRI Log #: E2251-50-08

PARAMETER		TEST REPLICATE NUMBER					MEAN
		1	2	3	4	5	
Sample ID: DS-15							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	133	133	135	134	130	Peel A 133
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	151	149	137	143	140	Peel B 144
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		170	175	169	176	174	Shear 173
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	
Sample ID: DS-16							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	132	136	133	133	132	Peel A 133
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	127	126	130	140	134	Peel B 131
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		191	189	185	188	185	Shear 188
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	

The testing is based upon accepted industry practice as well as the test method listed. Test results reported herein do not apply to samples other than those tested. TRI neither accepts responsibility for nor makes claim as to the final use and purpose of the material. TRI observes and maintains client confidentiality. TRI limits reproduction of this report, except in full, without prior approval of TRI.



DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS

TRI Client: Conestoga-Rovers & Associates, Inc.

Project: Ignacio Plant CO.

Material: HDPE

SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54)

TRI Log #: E2251-50-08

PARAMETER		TEST REPLICATE NUMBER					MEAN
		1	2	3	4	5	
Sample ID: DS-17							
Weld: Heat Fusion							
Side A	Peel Strength (ppi)	137	138	132	147	137	Peel A 138
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side B	Peel Strength (ppi)	142	139	140	143	141	Peel B 141
	Peel Incursion (%)	<25	<25	<25	<25	<25	
	Peel Locus of Failure Code	SE	SE	SE	SE	SE	
	Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear Strength (ppi)		168	164	168	169	170	Shear 168
Shear Elongation @ Break (%)		>50	>50	>50	>50	>50	

The testing is based upon accepted industry practice as well as the test method listed. Test results reported herein do not apply to samples other than those tested. TRI neither accepts responsibility for nor makes claim as to the final use and purpose of the material. TRI observes and maintains client confidentiality. TRI limits reproduction of this report, except in full, without prior approval of TRI.

POLY-FLEX, INC.

2000 W. Marshall Drive Grand Prairie, Texas 75051 USA
888-765-9359 972-337-7269 Fax 972-337-7269

CERTIFICATION DOCUMENTS

To: Lone Star Lining
1201 Sturgeon Court
Arlington, TX 76001

Date: 12/12/2005
Poly-Flex Proj # : 251029
Customer PO:
Project Name: Williams Plant
Order #: 727253

Attn: Kent Jett
E-mail: kent@lonestarliningco.com
Number of pages including cover: 5

Departure Date: 12/9/2005
Destination: Durango, CO

Trip No: 240052

Freight: PPD

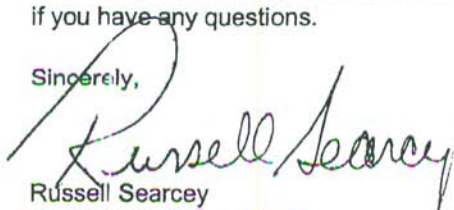
Additional Notes:

Distribution of Documents:

Shipment Inspection Sheet: 1
Roll Certification: 2
Resin Certification: 1
Other:

Attached please find documents for the above referenced shipment. Please let us know if you have any questions.

Sincerely,



Russell Searcey
1-888-765-9359 ext 7269

CERTIFICATION SHEET

DATE: December 12, 2005

POLY-FLEX, INC.

PROJECT NO: 251029

ORDER NO: 727253

2000 W. Marshall Drive
Grand Prairie, Texas 75051

TRIP NO: 240052

CERTIFIED BY: 

[illegible]

[Signature]

[illegible]



CoA Date: 08/31/2005

Certificate of Analysis

Shipped To: POLY AMERICA
2000 W. MARSHALL
GRAND PRAIRIE TX 75051
USA

Recipient: Averitte
Fax:

CPC Delivery #: 86966439
PO #: 211215
Weight: 189700 LB
Ship Date: 08/31/2005
Package: BULK
Mode: Hopper Car
Car #: PSPX006619
Seal No: 166953

Product:
MARLEX POLYETHYLENE K306 BULK

NCTL, ASTM D5397-95 Appendix (modified), Avg: >500 Hours
(not tested on each lot)

Lot Number: 7250833

Property	Test Method	Value	Unit
Melt Index	ASTM D1238	0.1	g/10mi
HLM Flow Rate	ASTM D1238	13.2	g/10mi
Density	ASTM D1505	0.937	g/cm3

The data set forth herein have been carefully compiled by Chevron Phillips Chemical Company LP. However, there is no warranty of any kind, either expressed or implied, applicable to its use, and the user assumes all risk and liability in connection therewith.

Jackie Edwards
Certification Systems Specialist

For CoA questions contact Tom Scheirman at 832-813-4637

Poly-Flex

Material Shipment Roll List

Tractor # _____ Trailer # _____ Date: 12-Dec-05 TRIP 240052

Drop # 1 Drop # _____ Drop # _____ Drop # _____

Poly-Flex # 251029(727253) Poly-Flex # _____ Poly-Flex # _____ Poly-Flex # _____

Customer: Williams Ing Customer: _____ Customer: _____ Customer: _____

Destination: Durango, CO Destination: _____ Destination: _____ Destination: _____

Carrier: P/A Carrier: _____ Carrier: _____ Carrier: _____

	Blend	Roll Number	Weight	Roll Description
1	7250833	GS-6-05- 0946- 5	3,469	23' X 500' X .060HD
2	GTS-08-0600	2005707372		15' X 600' X 08oz Textile
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27			3,469	
28				

I certify that all loading requirements and roll conditions were inspected and approved.

C.E.M.
Truck Loader

POLY-FLEX, INC.

2000 W. Marshall Drive Grand Prairie, Texas 75051 USA
888-765-9359 972-337-7269 Fax 972-337-7269

CERTIFICATION DOCUMENTS

To: Lone Star Lining
1201 Sturgeon Court
Arlington, TX 76001

Date: 11/16/2005
Poly-Flex Proj # : 251029
Customer PO: 25032-1
Project Name: Williams Ignacio
Order #: 719830

Attn: Kent Jett
E-mail: kent@lonestarliningco.com
Number of pages including cover: 4

Departure Date: 11/15/2005
Destination: Durango, CO

Trip No: 238746
Freight: PPD

Additional Notes:

Distribution of Documents:

Shipment Inspection Sheet: 1
Roll Certification: 1
Resin Certification: 1
Other:

Attached please find documents for the above referenced shipment. Please let us know if you have any questions.

Sincerely,



Russell Searcey
1-888-765-9359 ext 7269

CERTIFICATION SHEET

DATE: November 16, 2005

POLY-FLEX, INC.

PROJECT NO: 251029

ORDER NO: 719830

**2000 W. Marshall Drive
Grand Prairie, Texas 75051**

TRIP NO: 238746

CERTIFIED BY:

[illegible]

Poly-Flex

Material Shipment Roll List

Tractor # _____ Trailer # _____ Date: 15-Nov-05 TRIP 238746

Drop #	1	Drop #	_____	Drop #	_____	Drop #	_____
Poly-Flex #	251029(719830)	Poly-Flex #	_____	Poly-Flex #	_____	Poly-Flex #	_____
Customer:	Williams Ignacio	Customer:	_____	Customer:	_____	Customer:	_____
Destination:	Durango, CO	Destination:	_____	Destination:	_____	Destination:	_____
Carrier:	D & H	Carrier:	_____	Carrier:	_____	Carrier:	_____

	Blend	Roll Number	Weight	Roll Description
1	7250832	GS-6-05- 0877- 5	3,469	23' X 500' X .060HD
2	7250832	GS-6-05- 0880- 5	3,455	23' X 500' X .060HD
3	7250832	GS-6-05- 0884- 5	3,470	23' X 500' X .060HD
4	7250832	GS-6-05- 0885- 5	3,480	23' X 500' X .060HD
5	7250832	GS-6-05- 0886- 5	3,500	23' X 500' X .060HD
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27			17,374	
28				

I certify that all loading requirements and roll conditions were inspected and approved.

C.E.M.
Truck Loader



CoA Date: 08/31/2005

Certificate of Analysis

Shipped To: POLY AMERICA
2000 W. MARSHALL
GRAND PRAIRIE TX 75051
USA

Recipient: Averitte
Fax:

CPC Delivery #: 86966438
PO #: 211215
Weight: 185500 LB
Ship Date: 08/31/2005
Package: BULK
Mode: Hopper Car
Car #: CHVX890184
Seal No: 186940

Product:
MARLEX POLYETHYLENE K308 BULK

NCTL ASTM D5397-95 Appendix (modified), Avg: > 500 Hours
(not tested on each lot)

Lot Number: 7250832

Property	Test Method	Value	Unit
Melt Index	ASTM D1238	0.1	g/10mi
HLMI Flow Rate	ASTM D1238	12.0	g/10mi
Density	ASTM D1505	0.937	g/cm3

The data set forth herein have been carefully compiled by Chevron Phillips Chemical Company LP. However, there is no warranty of any kind, either expressed or implied, applicable to its use, and the user assumes all risk and liability in connection therewith.

Jackie Edwards
Certification Systems Specialist

For CoA questions contact Tom Schekman at 832-813-4637

POLY-FLEX, INC.

2000 W. Marshall Drive Grand Prairie, Texas 75051 USA
888-765-9359 972-337-7269 Fax 972-337-7269

CERTIFICATION DOCUMENTS

To: Lone Star Lining
1201 Sturgeon Court
Arlington, TX 76001

Date: 11/15/2005
Poly-Flex Proj #: 250261
Customer PO:
Project Name: Williams Ignacio
Order #: 719783

Attn: Kent Jett
E-mail: kent@lonestarliningco.com
Number of pages including cover: 5

Departure Date: 11/14/2005
Destination: Durango, CO

Trip No: 238745
Freight: PPD

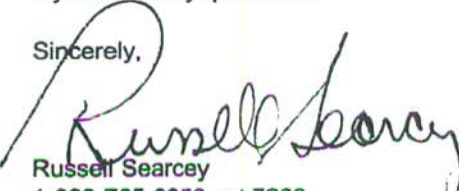
Additional Notes:

Distribution of Documents:

Shipment Inspection Sheet: 1
Roll Certification: 1
Resin Certification: 2
Other:

Attached please find documents for the above referenced shipment. Please let us know if you have any questions.

Sincerely,


Russell Searcey
1-888-765-9359 ext 7269

CERTIFICATION SHEET

DATE: November 15, 2005

POLY-FLEX, INC.

PROJECT NO: 251029

ORDER NO: 719783

2000 W. Marshall Drive
Grand Prairie, Texas 75051

TRIP NO: 719783

CERTIFIED BY:

[illegible]

Poly-Flex

Material Shipment Roll List

Tractor #	_____	Trailer #	_____	Date:	14-Nov-05	TRIP	238745
Drop #	1	Drop #	_____	Drop #	_____	Drop #	_____
Poly-Flex #	251029(719783)	Poly-Flex #	_____	Poly-Flex #	_____	Poly-Flex #	_____
Customer:	Williams Ignacio	Customer:	_____	Customer:	_____	Customer:	_____
Destination:	Durango, Co	Destination:	_____	Destination:	_____	Destination:	_____
Carrier:	D & H	Carrier:	_____	Carrier:	_____	Carrier:	_____

	Blend	Roll Number	Weight	Roll Description
1	7250830	GS-6-05- 0820- 5	3,469	23' X 500' X .060HD
2	7250832	GS-6-05- 0848- 5	3,488	23' X 500' X .060HD
3	7250832	GS-6-05- 0849- 5	3,480	23' X 500' X .060HD
4	7250832	GS-6-05- 0850- 5	3,490	23' X 500' X .060HD
5	7250832	GS-6-05- 0851- 5	3,469	23' X 500' X .060HD
6	7250832	GS-6-05- 0852- 5	3,469	23' X 500' X .060HD
7	7250832	GS-6-05- 0853- 5	3,465	23' X 500' X .060HD
8	7250832	GS-6-05- 0856- 5	3,450	23' X 500' X .060HD
9	7250832	GS-6-05- 0858- 5	3,450	23' X 500' X .060HD
10	7250832	GS-6-05- 0859- 5	3,470	23' X 500' X .060HD
11	7250832	GS-6-05- 0860- 5	3,460	23' X 500' X .060HD
12	7250832	GS-6-05- 0861- 5	3,450	23' X 500' X .060HD
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27			41,610	
28				

I certify that all loading requirements and roll conditions were inspected and approved.

C.E.M.
Truck Loader



CoA Date: 08/29/2005

Certificate of Analysis

Shipped To: POLY AMERICA
2000 W. MARSHALL
GRAND PRAIRIE TX 75051
USA

Recipient: Averitte
Fax:

CPC Delivery #: 86965601
PO #: 211215
Weight: 189500 LB
Ship Date: 08/29/2005
Package: BULK
Mode: Hopper Car
Car #: PSPX002286
Seal No: 186935

Product:
MARLEX POLYETHYLENE K306 BULK

NCTL, ASTM D5397-95 Appendix (modified), Avg: >500 Hours
(not tested on each lot)

Lot Number: 7250830

Property	Test Method	Value	Unit
Melt Index	ASTM D1238	0.1	g/10mi
HLMI Flow Rate	ASTM D1238	10.0	g/10mi
Density	ASTM D1505	0.937	g/cm3

The data set forth herein have been carefully compiled by Chevron Phillips Chemical Company LP. However, there is no warranty of any kind, either expressed or implied, applicable to its use, and the user assumes all risk and liability in connection therewith.

Jackie Edwards
Certification Systems Specialist

For CoA questions contact Tom Scheirman at 832-813-4637



CoA Date: 08/31/2005

Certificate of Analysis

Shipped To: POLY AMERICA
2000 W. MARSHALL
GRAND PRAIRIE TX 75051
USA

Recipient: Averitte
Fax:

CPC Delivery #: 88966438
PO #: 211215
Weight: 185500 LB
Ship Date: 08/31/2005
Package: BULK
Mode: Hopper Car
Car #: CHVX890184
Seal No: 166940

Product:
MARLEX POLYETHYLENE K306 BULK

NCTL, ASTM D5397-95 Appendix (modified), Avg: > 500 Hours
(not tested on each lot)

Lot Number: 7250832

Property	Test Method	Value	Unit
Melt Index	ASTM D1238	0.1	g/10mi
HLMI Flow Rate	ASTM D1238	12.0	g/10mi
Density	ASTM D1505	0.937	g/cm3

The data set forth herein have been carefully compiled by Chevron Phillips Chemical Company LP. However, there is no warranty of any kind, either expressed or implied, applicable to its use, and the user assumes all risk and liability in connection therewith.

Jackie Edwards
Certification Systems Specialist

For CoA questions contact Tom Schekman at 832-813-4637

CERTIFICATION DOCUMENTS

To: Lone Star Lining Company
1201 Sturgeon Court Suite 123
Arlington, TX 76001

Date: 11/22/2004
Poly-Flex Proj # : 240815
Customer PO: 24027-1
Project Name: Williams Field

Attn: Kent Jett
Email: kent@lonestarliningco.com
Number of pages including cover: 7

Departure Date: 11/19/2004
Destination: Durango, CO
Carrier:

Trip No: 208569
Order: 635060

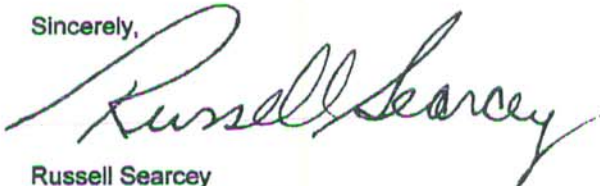
Additional Notes:

Distribution of Documents:

Shipment Inspection Sheet: 1
Roll Certification: 3
Resin Certification: 2
Other:

Attached please find documents for the above referenced shipment. Please let us know if you have any questions.

Sincerely,



Russell Searcey
1-888-765-9359 ext 7269

CERTIFICATION SHEET

DATE: November 22, 2004

POLY-FLEX, INC.

PROJECT NO: 240815

ORDER NO: 635060

2000 W. Marshall Drive
Grand Prairie, Texas 75051

TRIP NO: 208569

CERTIFIED BY: 

[illegible]

CERTIFICATION SHEET

DATE: November 22, 2004

POLY-FLEX, INC.

PROJECT NO: 240815

ORDER NO: 640272

2000 W. Marshall Drive
Grand Prairie, Texas 75051

TRIP NO: 208569

CERTIFIED BY: E. R. Bruno

[illegible]

CERTIFICATION SHEET

DATE: November 22, 2004

POLY-FLEX, INC.

PROJECT NO: 240815

ORDER NO: 640272

2000 W. Marshall Drive
Grand Prairie, Texas 75051

TRIP NO: 208569

CERTIFIED BY:

[illegible]

Poly-Flex

Material Shipment Roll List

Tractor #	_____	Trailer #	_____	Date:	19-Nov-04	TRIP	208569
Drop #	1	Drop #	1	Drop #	_____	Drop #	_____
Poly-Flex #	240815(635060)	Poly-Flex #	240815(640272)	Poly-Flex #	_____	Poly-Flex #	_____
Customer:	Williams Field	Customer:	Williams Field	Customer:	_____	Customer:	_____
Destination:	Durango, CO	Destination:	Durango, CO	Destination:	_____	Destination:	_____
Carrier:	Long Gone	Carrier:	_____	Carrier:	_____	Carrier:	_____

	Blend	Roll Number	Weight	Roll Description
1	D40520970	A0-6-04- 0699- 5	3,500	23' X 500' X .060HD
2	D40520970	A0-6-04- 0701- 5	3,510	23' X 500' X .060HD
3	D40520970	A0-6-04- 0703- 5	3,460	23' X 500' X .060HD
4	D40520970	A0-6-04- 0704- 5	3,472	23' X 500' X .060HD
1	D40520970	A0-6-04- 0705- 5	3,480	23' X 500' X .060HD
2	D40520970	A0-6-04- 0712- 5	3,464	23' X 500' X .060HD
3	GTM-16-0300	9110146734 (m.c.f.)	564	15' X 300' X 16oz Textile
4	GTM-16-0300	9110236144 (M.F.I.G.)	580	15' X 300' X 16oz Textile
5	8230918	GR-8-03- 0432- X	1,270	23' X 130' X .080HDR Short
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23			23,300	
24				

I certify that all loading requirements and roll conditions were inspected and approved.

C.E.M.
Truck Loader



Poly-America
Ms. Dee Averitte
9723377407
2000 W. Marshall
GRAND PRAIRIE TX 75051

SHIPPED TO:
POLY-AMERICA, L.P.
Grand Prairie, Tx
2000 WEST MARSHALL DR
GRAND PRAIRIE TX 75051

Material: Our / Your reference
FINATHENE 37120 @ (441840) /

Please find below test data and pertinent information on ATOFINA HDPE material shipped to your plant.

Batch D40520970 Quantity 190,750 LB Railcar ACFX067555

Characteristic	Unit	Value
Density	g/cc	0.938
Melt Index 2.16/190	g/10 min	0.11
Melt Index 21.6/190	g/10 min	12.6
Railcar Prefix	-	ACFX
Railcar Number	-	067555
Railcar Seal Numbers	-	AB133599

Sincerely,
Curt Clark
Bayport Laboratory Supervisor

ATOFINA
12212 Port Road
Pasadena, TX 77507

P. O. Box 5010
LaPorte, TX 77572

281-474-6965

Questions? Contact Customer Service at 1-800-344-3462

Quality Certificate	
Date	07/21/2004
Purchase order Ref/date	179516
Delivery item/date	81289652 000001 / 07/21/2004
Order item	30667826 000001
Customer number	80117916



CoA Date: 08/19/2003

Certificate of Analysis

Shipped To: POLY AMERICA
2000 W. MARSHALL
GRAND PRAIRIE TX 75051
USA

Recipient: Dee Averitte
Fax: 1-972-337-7407

CPC Delivery #: 86437005
PO #: 84216
Weight: 193900 LB
Ship Date: 08/19/2003
Package: BULK
Mode: Hopper Car
Car #: PSPX005807

Product:
MARLEX POLYETHYLENE K306 BULK

NCTL, ASTM D5397-95 Appendix (modified), Avg: >500 Hours
(not tested on each lot)

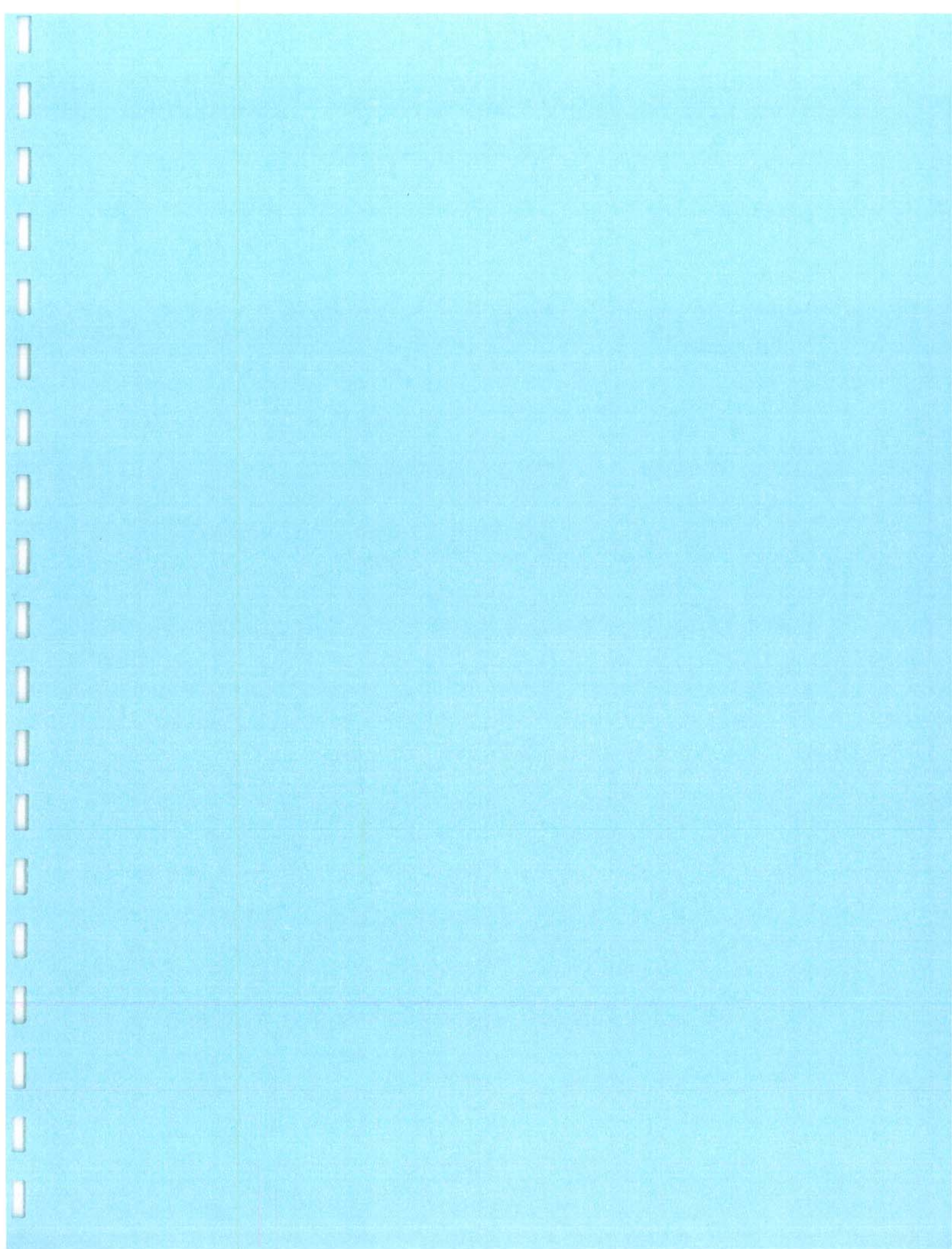
Lot Number: 8230918

Property	Test Method	Value	Unit
Melt Index	ASTM D1238	0.100	g/10mi
HLM Flow Rate	ASTM D1238	11.40	g/10mi
Density	ASTM D1505	0.9370	g/cm3

The data set forth herein have been carefully compiled by Chevron Phillips Chemical Company LP. However, there is no warranty of any kind, either expressed or implied, applicable to its use, and the user assumes all risk and liability in connection therewith.

Paul S. Newbold
Sr. Certification Systems Specialist

For CoA questions contact Peter Schelrman at 713-289-4799



Lone Star Lining Company

1201 Sturgeon Court, Suite 123 Arlington, Texas 76001
817-466-2577 817-466-3307 FAX

PANEL PLACEMENT LOG

PROJECT NAME:
PROJECT NUMBER:

Williams - Ignacio

25032

QC REP.:

MATERIAL:

DR

60 mil HDPE

Panel Number	Smooth (S) / Textured (T)	Roll Number	Date Installed	Time Installed	Panel Width (ft)	Panel Length (ft)		Smooth Area (sf)	Textured Area (sf)
						Side A	Side B		
P 1	S	0880	11/17/2005	13:45	22.5	502	502	11295.0	0.0
P 2	S	0886	11/17/2005	13:55	22.5	36	36	810.0	0.0
P 3	S	0886	11/17/2005	14:10	22.5	467	467	10507.5	0.0
P 4	S	0858	11/17/2005	14:30	22.5	78	78	1755.0	0.0
P 5	S	0858	11/17/2005	15:00	22.5	424	424	9540.0	0.0
P 6	S	0861	11/17/2005	15:05	22.5	130	130	2925.0	0.0
P 7	S	0861	11/17/2005	15:30	22.5	374	374	8415.0	0.0
P 8	S	0877	11/17/2005	15:32	22.5	185	185	4162.5	0.0
P 9	S	0877	11/17/2005	16:00	22.5	316	316	7110.0	0.0
P 10	S	0859	11/17/2005	16:15	22.5	244	244	5490.0	0.0
P 11	S	0859	11/17/2005	16:32	22.5	256	256	5760.0	0.0
P 12	S	0852	11/18/2005	8:05	22.5	395	395	8887.5	0.0
P 13	S	0852	11/18/2005	8:25	22.5	197	197	4432.5	0.0
P 14	S	0885	11/18/2005	8:38	22.5	369	369	8302.5	0.0
P 15	S	0885	11/18/2005	9:10	22.5	134	134	3015.0	0.0
P 16	S	0850	11/18/2005	9:30	22.5	427	427	9607.5	0.0
P 17	S	0850	11/18/2005	9:40	22.5	74	74	1665.0	0.0
P 18	S	0853	11/18/2005	9:50	22.5	492	492	11070.0	0.0
P 19	S	0884	11/18/2005	10:25	22.5	503	503	11317.5	0.0
P 20	S	0851	11/18/2005	10:40	22.5	63	63	1417.5	0.0
P 21	S	0851	11/18/2005	10:45	22.5	438	438	9855.0	0.0
P 22	S	0849	11/18/2005	11:10	22.5	121	121	2722.5	0.0
P 23	S	0849	11/18/2005	13:25	22.5	23	2	281.3	0.0
P 24	S	0849	11/18/2005	13:30	22.5	30	30	675.0	0.0
P 25	S	0849	11/18/2005	13:35	22.5	29	29	652.5	0.0
P 26	S	0849	11/18/2005	13:36	22.5	29	29	652.5	0.0
P 27	S	0849	11/18/2005	13:41	22.5	31	31	697.5	0.0
P 28	S	0849	11/18/2005	13:45	22.5	31	31	697.5	0.0
P 29	S	0849	11/18/2005	13:49	22.5	28	28	630.0	0.0
P 30	S	0849	11/18/2005	13:55	22.5	29	29	652.5	0.0
P 31	S	0849	11/18/2005	14:00	22.5	29	29	652.5	0.0
P 32	S	0849	11/18/2005	14:02	22.5	28	28	630.0	0.0
P 33	S	0849	11/18/2005	14:09	22.5	27	27	607.5	0.0
P 34	S	0849	11/18/2005	14:20	22.5	27	27	607.5	0.0
P 35	S	0712	11/18/2005	14:45	22.5	28	28	630.0	0.0
P 36	S	0712	11/18/2005	14:47	22.5	29	29	652.5	0.0
P 37	S	0712	11/18/2005	14:48	22.5	30	30	675.0	0.0
P 38	S	0712	11/18/2005	14:54	22.5	30	30	675.0	0.0
P 39	S	0712	11/18/2005	14:55	22.5	31	31	697.5	0.0
P 40	S	0712	11/18/2005	14:56	22.5	30	30	675.0	0.0
P 41	S	0712	11/18/2005	14:57	22.5	33	33	742.5	0.0
P 42	S	0712	11/18/2005	14:59	22.5	34	34	765.0	0.0
P 43	S	0712	11/18/2005	15:02	22.5	35	35	787.5	0.0
P 44	S	0712	11/18/2005	15:05	22.5	34	34	765.0	0.0

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PANEL PLACEMENT LOG

PROJECT NAME:

Williams - Ignacio

QC REP.:

DR

PROJECT NUMBER:

25032

MATERIAL:

60 mil HDPE

[illegible]

Lone Star Lining Company

1201 Sturgeon Court, Suite 123 Arlington, Texas 76001
817-466-2577 817-466-3307 FAX

GEOMEMBRANE SEAMING RECORD

PROJECT NAME: Williams - Ignacio
PROJECT NUMBER: 25032
QC REP: DR

AIR TEST TIME (MIN) 5 min
PSI DROP (MAX) 2

* For Machine Setup and Weather Conditions please refer to the Trial Weld Log

SEAM INFO					NON-DESTRUCTIVE TESTING INFO							
Seam Number	Date	Lgth (ft)	Start Time	Tech INI*	Date	Tech INI	Start Time	Start Press	Press Drop	AT P/F	Vbox P/F	Location Start End
1 / 2	11/17/2005	23	14:00	ES	11-19	BT	8:15	30	0	PASS		FULL SEAM
2 / 3	11/17/2005	36	14:15	FZ	11-19	BT	8:24	30	0	PASS		FULL SEAM
1 / 3	11/17/2005	429	14:24	FZ	11-19	BT	8:40	30	0	PASS		FULL SEAM
3 / 4	11/17/2005	23	14:32	MG	11-19	BT	8:45	30	0	PASS		FULL SEAM
3 / 5	11/17/2005	422	15:06	ES	11-19	BT	8:35	30	0	PASS		FULL SEAM
5 / 6	11/17/2005	23	15:11	FT	11-19	BT	9:00	30	0	PASS		FULL SEAM
3 / 6	11/17/2005	47	16:35	ES	11-19	BT	8:50	30	0	PASS		FULL SEAM
4 / 6	11/17/2005	76	16:47	ES	11-19	BT	8:40	30	0	PASS		FULL SEAM
5 / 7	11/17/2005	373	15:31	FT	11-19	BT	9:35	30	0	PASS		FULL SEAM
7 / 8	11/17/2005	23	15:39	MG	11-19	BT	9:11	30	0	PASS		FULL SEAM
5 / 8	11/18/2005	61	7:56	FT	11-19	BT	9:08	30	0	PASS		FULL SEAM
6 / 8	11/18/2005	130	8:10	FT	11-19	BT	9:00	30	0	PASS		FULL SEAM
1 / 4	11/17/2005	76	15:53	FZ	11-19	BT	8:40	30	0	PASS		FULL SEAM
7 / 9	11/17/2005	314	16:05	MG	11-19	BT	9:39	30	0	PASS		FULL SEAM
7 / 10	11/18/2005	56	8:00	MG	11-19	BT	9:17	30	0	PASS		FULL SEAM
8 / 10	11/18/2005	184	8:19	MG	11-19	BT	9:16	30	0	PASS		FULL SEAM
9 / 10	11/17/2005	23	16:20	FZ	11-19	BT	9:22	30	0	PASS		FULL SEAM
9 / 11	11/17/2005	255	16:40	FZ	11-19	BT	9:34	30	0	PASS		FULL SEAM
11 / 12	11/18/2005	23	8:14	ES	11-19	BT	11:40	30	0	PASS		FULL SEAM
9 / 12	11/18/2005	61	8:34	FZ	11-19	BT	9:28	30	0	PASS		FULL SEAM
10 / 12	11/18/2005	244	8:46	FZ	11-19	BT	10:15	30	0	PASS		FULL SEAM
11 / 13	11/18/2005	196	8:32	ES	11-19	BT	9:50	30	0	PASS		FULL SEAM
11 / 14	11/18/2005	63	9:12	ES	11-19	BT	10:43	30	0	PASS		FULL SEAM
12 / 14	11/18/2005	305	9:26	ES	11-19	BT	10:16	30	0	PASS		FULL SEAM
13 / 14	11/18/2005	23	8:55	FT	11-19	BT	10:47	30	0	PASS		FULL SEAM
13 / 15	11/18/2005	131	9:21	FT	11-19	BT	10:55	30	0	PASS		FULL SEAM
13 / 16	11/18/2005	57	9:53	FT	11-19	BT	10:50	30	0	PASS		FULL SEAM
14 / 16	11/18/2005	366	10:04	FT	11-19	BT	10:21	30	0	PASS		FULL SEAM
15 / 16	11/18/2005	23	9:40	MG	11-19	BT	10:53	30	0	PASS		FULL SEAM
15 / 17	11/18/2005	71	10:00	MG	11-19	BT	9:57	30	0	PASS		FULL SEAM
15 / 18	11/18/2005	62	10:15	MG	11-19	BT	10:54	30	0	PASS		FULL SEAM
16 / 18	11/18/2005	423	10:30	MG	11-19	BT	10:23	30	0	PASS		FULL SEAM
17 / 18	11/18/2005	23	10:00	FZ	11-19	BT	10:13	30	0	PASS		FULL SEAM
18 / 19	11/18/2005	491	11:04	FZ	11-19	BT	10:15	30	0	PASS		FULL SEAM
17 / 19	11/18/2005	12	11:00	FZ	11-19	BT	11:03	30	0	PASS		FULL SEAM
17 / 20	11/18/2005	61	10:50	FZ	11-19	BT	10:00	30	0	PASS		FULL SEAM
20 / 19	11/18/2005	23	10:25	ES	11-19	BT	11:03	30	0	PASS		FULL SEAM
21 / 22	11/18/2005	23	11:24	ES	11-19	BT	11:13	30	0	PASS		FULL SEAM
20 / 22	11/18/2005	61	11:32	ES	11-19	BT	10:05	30	0	PASS		FULL SEAM
19 / 22	11/18/2005	57	11:46	ES	11-19	BT	11:07	30	0	PASS		FULL SEAM
19 / 21	11/18/2005	436	13:16	ES	11-19	BT	10:33	30	0	PASS		FULL SEAM
24 / 23	11/18/2005	21	13:53	MG	11-18	BT	14:15	30	0	PASS		FULL SEAM

Lone Star Lining Company

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GEOMEMBRANE SEAMING RECORD

PROJECT NAME: Williams - Ignacio
PROJECT NUMBER: 25032
QC REP: DR

AIR TEST TIME (MIN) 5 min
PSI DROP (MAX) 2

* For Machine Setup and Weather Conditions please refer to the Trial Weld Log

SEAM INFO					NON-DESTRUCTIVE TESTING INFO								
Seam Number	Date	Lgth (ft)	Start Time	Tech INI*	Date	Tech INI	Start Time	Start Press	Press Drop	AT P/F	Vbox P/F	Location Start End	
24 / 25	11/18/2005	27	13:59	MG	11-18	BT	14:17	30	0	PASS		FULL SEAM	
25 / 26	11/18/2005	28	13:53	FT	11-18	BT	14:19	30	0	PASS		FULL SEAM	
26 / 27	11/18/2005	28	14:05	FT	11-18	BT	14:25	30	0	PASS		FULL SEAM	
27 / 28	11/18/2005	29	14:10	MG	11-18	BT	14:26	30	0	PASS		FULL SEAM	
28 / 29	11/18/2005	28	14:19	FT	11-18	BT	14:27	30	0	PASS		FULL SEAM	
29 / 30	11/18/2005	28	14:15	FZ	11-18	BT	14:34	30	0	PASS		FULL SEAM	
30 / 31	11/18/2005	29	14:24	FZ	11-18	BT	14:35	30	0	PASS		FULL SEAM	
31 / 32	11/18/2005	28	14:20	MG	11-18	BT	14:37	30	0	PASS		FULL SEAM	
32 / 33	11/18/2005	28	14:28	FT	11-18	BT	14:43	30	0	PASS		FULL SEAM	
33 / 34	11/18/2005	27	14:30	MG	11-18	BT	14:44	30	0	PASS		FULL SEAM	
34 / 35	11/18/2005	27	14:46	MG	11-18	BT	16:13	30	0	PASS		FULL SEAM	
35 / 36	11/18/2005	28	14:58	MG	11-18	BT	16:12	30	0	PASS		FULL SEAM	
36 / 37	11/18/2005	29	14:48	FT	11-18	BT	16:11	30	0	PASS		FULL SEAM	
37 / 38	11/18/2005	29	14:58	FT	11-18	BT	16:05	30	0	PASS		FULL SEAM	
38 / 39	11/18/2005	29	15:09	FT	11-18	BT	16:04	30	0	PASS		FULL SEAM	
39 / 40	11/18/2005	30	15:21	FT	11-18	BT	16:03	30	0	PASS		FULL SEAM	
40 / 41	11/18/2005	29	15:12	MG	11-18	BT	15:55	30	0	PASS		FULL SEAM	
41 / 42	11/18/2005	30	15:02	ES	11-18	BT	15:54	30	0	PASS		FULL SEAM	
42 / 43	11/18/2005	31	15:13	ES	11-18	BT	15:53	30	0	PASS		FULL SEAM	
43 / 44	11/18/2005	31	15:25	MG	11-18	BT	15:47	30	0	PASS		FULL SEAM	
44 / 45	11/18/2005	33	15:25	ES	11-18	BT	15:46	30	0	PASS		FULL SEAM	
45 / 46	11/18/2005	14	15:40	ES	11-18	BT	15:45	30	0	PASS		FULL SEAM	
47 / 22	11/18/2005	49	16:05	FZ	11-19	BT	11:30	30	0	PASS		FULL SEAM	
48 / 47	11/18/2005	25	16:02	FT	11-19	BT	11:29	30	0	PASS		FULL SEAM	
48 / 49	11/18/2005	22	16:52	FZ	11-19	BT	11:24	30	0	PASS		FULL SEAM	
49 / 47	11/18/2005	11	16:50	FZ	11-19	BT	11:43	30	0	PASS		FULL SEAM	
50 / 49	11/18/2005	33	16:30	FZ	11-19	BT	11:35	30	0	PASS		FULL SEAM	
50 / 51	11/18/2005	47	16:43	FT	11-19	BT	11:36	30	0	PASS		FULL SEAM	
23 / 2	11/18/2005	21	15:40	FZ	11-19	BT	8:13	30	0	PASS		FULL SEAM	
24 / 2	11/18/2005	13	15:38	FZ	11-19	BT	8:13	30	0	PASS		FULL SEAM	
24 / 1	11/18/2005	10	15:35	FZ	11-19	BT	8:07	30	0	PASS		FULL SEAM	
25 / 1	11/18/2005	23	15:30	FZ	11-19	BT	8:05	30	0	PASS		FULL SEAM	
26 / 1	11/18/2005	23	15:25	FZ	11-19	BT	8:05	30	0	PASS		FULL SEAM	
27 / 1	11/18/2005	23	15:21	FZ	11-19	BT	7:55	30	0	PASS		FULL SEAM	
28 / 1	11/18/2005	23	15:17	FZ	11-19	BT	7:50	30	0	PASS		FULL SEAM	
29 / 1	11/18/2005	23	15:12	FZ	11-19	BT	7:50	30	0	PASS		FULL SEAM	
30 / 1	11/18/2005	23	15:08	FZ	11-19	BT	7:48	30	0	PASS		FULL SEAM	
31 / 1	11/18/2005	23	15:04	FZ	11-19	BT	7:17	30	0	PASS		FULL SEAM	
32 / 1	11/18/2005	23	15:00	FZ	11-19	BT	7:33	30	0	PASS		FULL SEAM	
33 / 1	11/18/2005	23	14:55	FZ	11-19	BT	7:25	30	0	PASS		FULL SEAM	
34 / 1	11/18/2005	23	14:50	FZ	11-19	BT	7:24	30	0	PASS		FULL SEAM	
35 / 1	11/18/2005	23	16:49	MG	11-19	BT	7:24	30	0	PASS		FULL SEAM	

Lone Star Lining Company

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GEOMEMBRANE SEAMING RECORD

PROJECT NAME: Williams - Ignacio
PROJECT NUMBER: 25032
QC REP: DR

AIR TEST TIME (MIN) 5 min
PSI DROP (MAX) 2

* For Machine Setup and Weather Conditions please refer to the Trial Weld Log

		SEAM INFO			NON-DESTRUCTIVE TESTING INFO								
Seam Number	Date	Lgth	Start	Tech	Date	Tech	Start	Start	Press	AT	Vbox	Location	
		(ft)	Time	INI*		INI	Time	Press	Drop	P/F	P/F	Start	End
36 / 1	11/18/2005	23	16:44	MG	11-19	BT	16:59	30	0	PASS		FULL SEAM	
37 / 1	11/18/2005	23	16:39	MG	11-19	BT	16:56	30	0	PASS		FULL SEAM	
38 / 1	11/18/2005	23	16:34	MG	11-19	BT	16:55	30	0	PASS		FULL SEAM	
39 / 1	11/18/2005	23	16:29	MG	11-19	BT	16:52	30	0	PASS		FULL SEAM	
40 / 1	11/18/2005	23	16:24	MG	11-19	BT	16:46	30	0	PASS		FULL SEAM	
41 / 1	11/18/2005	23	16:20	MG	11-19	BT	16:45	30	0	PASS		FULL SEAM	
42 / 1	11/18/2005	23	16:15	MG	11-19	BT	16:36	30	0	PASS		FULL SEAM	
43 / 1	11/18/2005	23	16:08	MG	11-19	BT	16:34	30	0	PASS		FULL SEAM	
44 / 1	11/18/2005	23	16:03	MG	11-19	BT	16:34	30	0	PASS		FULL SEAM	
45 / 1	11/18/2005	23	15:58	MG	11-19	BT	16:23	30	0	PASS		FULL SEAM	
46 / 1	11/18/2005	15	15:55	MG	11-19	BT	16:23	30	0	PASS		FULL SEAM	
47 / 50	11/18/2005	16	16:48	FZ	11-19	BT	13:45	30	0	PASS		FULL SEAM	
50 / 22	11/19/2005	13	8:48	MG	11-19	BT	13:52	30	0	PASS		FULL SEAM	
51 / 22	11/19/2005	23	8:53	MG	11-19	BT	13:43	30	0	PASS		FULL SEAM	
51 / 52	11/19/2005	44	8:00	ES	11-19	BT	11:37	30	0	PASS		FULL SEAM	
52 / 53	11/19/2005	43	7:58	MG	11-19	BT	11:43	30	0	PASS		FULL SEAM	
53 / 54	11/19/2005	44	8:01	FT	11-19	BT	11:44	30	0	PASS		FULL SEAM	
54 / 55	11/19/2005	45	8:13	MG	11-19	BT	11:45	30	0	PASS		FULL SEAM	
55 / 56	11/19/2005	45	8:15	ES	11-19	BT	11:51	30	0	PASS		FULL SEAM	
52 / 22	11/19/2005	23	8:59	MG	11-19	BT	13:53	30	0	PASS		FULL SEAM	
53 / 22	11/19/2005	11	9:03	MG	11-19	BT	13:55	30	0	PASS		FULL SEAM	
53 / 21	11/19/2005	12	9:06	MG	11-19	BT	13:58	30	0	PASS		FULL SEAM	
54 / 21	11/19/2005	23	9:08	MG	11-19	BT	13:54	30	0	PASS		FULL SEAM	
55 / 21	11/19/2005	23	9:14	MG	11-19	BT	14:01	30	0	PASS		FULL SEAM	
56 / 21	11/19/2005	23	9:19	MG	11-19	BT	14:05	30	0	PASS		FULL SEAM	
57 / 21	11/19/2005	23	10:39	FT	11-19	BT	14:04	30	0	PASS		FULL SEAM	
58 / 21	11/19/2005	23	10:46	FT	11-19	BT	14:08	30	0	PASS		FULL SEAM	
59 / 21	11/19/2005	23	10:50	FT	11-19	BT	14:02	30	0	PASS		FULL SEAM	
60 / 21	11/19/2005	23	10:55	FT	11-19	BT	14:03	30	0	PASS		FULL SEAM	
61 / 21	11/19/2005	23	10:59	FT	11-19	BT	14:07	30	0	PASS		FULL SEAM	
62 / 21	11/19/2005	23	11:03	FT	11-19	BT	14:23	30	0	PASS		FULL SEAM	
63 / 21	11/19/2005	23	11:08	FT	11-19	BT	14:24	30	0	PASS		FULL SEAM	
64 / 21	11/19/2005	23	11:13	FT	11-19	BT	14:26	30	0	PASS		FULL SEAM	
65 / 21	11/19/2005	23	11:17	FT	11-19	BT	14:34	30	0	PASS		FULL SEAM	
66 / 21	11/19/2005	23	11:21	FT	11-19	BT	14:35	30	0	PASS		FULL SEAM	
67 / 21	11/19/2005	23	11:25	FT	11-19	BT	14:40	30	0	PASS		FULL SEAM	
68 / 21	11/19/2005	23	11:29	FT	11-19	BT	14:42	30	0	PASS		FULL SEAM	
69 / 21	11/19/2005	109	11:34	FT	11-19	BT	13:37	30	0	PASS		FULL SEAM	
68 / 69	11/19/2005	26	10:25	MG	11-19	BT	13:30	30	0	PASS		FULL SEAM	
68 / 67	11/19/2005	26	10:17	ES	11-19	BT	13:30	30	0	PASS		FULL SEAM	
67 / 66	11/19/2005	27	10:06	MG	11-19	BT	13:25	30	0	PASS		FULL SEAM	
66 / 65	11/19/2005	27	10:07	FT	11-19	BT	13:24	30	0	PASS		FULL SEAM	

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PROJECT NAME:	<u>Williams - Ignacio</u>
PROJECT NUMBER:	<u>25032</u>
QC REP:	<u>DR</u>

AIR TEST TIME (MIN)	5 min
PSI DROP (MAX)	2

* For Machine Setup and Weather Conditions please refer to the Trial Weld Log

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GEOMEMBRANE TRIAL SEAM LOG

PROJECT NAME:

Williams - Ignacio

PROJECT NUMBER:

25032

QC REP.:

DR

	SMOOTH (ppi)		TEXTURED (ppi)	
	PEEL	SHEAR	PEEL	SHEAR
FUSION (min.)	91	120		
EXTRUSION (min.)	91	120		

[illegible]

1201 Sturgeon Court, Suite 123 Arlington, Texas 76001
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PROJECT NAME:	Williams - Ignacio
PROJECT NUMBER:	25032
MATERIAL:	60 mil HDPE
QC REP.:	DR

	SMOOTH (ppi)		TEXTURED (ppi)	
	PEEL	SHEAR	PEEL	SHEAR
FUSION (min.)	91	120		
EXTRUSION (min.)	91	120		

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Lone Star Lining Company

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REPAIR LOG

PROJECT NAME: Williams - Ignacio
PROJECT NUMBER: 25032

QC REP.: DR
MATERIAL: 60 mil HDPE

REPAIR #	DEFECT CODE*	REPAIR DATE	TECH ID	LOCATION			REPAIR TYPE*	SIZE (ft)	VACUUM TEST	
				Seam/Panel	Offset #1	Offset #2			P/F	DATE
R 1	DS1	11/19/2005	FZ	1 / 3 /	2'EEOs		P	5X4	PASS	11/19/05
R 2	DS2	11/19/2005	FZ	4 / 6 /	8'EEOs		P	5X2	PASS	11/19/05
R 3	DS3	11/19/2005	FZ	5 / 7 /	258'WBOS		P	5X2	PASS	11/19/05
R 4	DS4	11/19/2005	MT	8 / 10 /	7'EEOs		P	5X2	PASS	11/19/05
R 5	DS5	11/19/2005	MT	9 / 11 /	40'WBOS		P	5X2	PASS	11/19/05
R 6	DS6	11/19/2005	MT	12 / 14 /	27'EEOs		P	5X2	PASS	11/19/05
R 7	DS7	11/19/2005	MT	14 / 16 /	171'EEOs		P	5X2	PASS	11/19/05
R 8	DS8	11/19/2005	MT	16 / 18 /	35'EEOs		P	5X2	PASS	11/19/05
R 9	DS9	11/19/2005	MT	18 / 19 /	81'WBOS		P	5X2	PASS	11/19/05
R 10	DS10	11/19/2005	FZ	20 / 22 /	15'WBOS		P	5X2	PASS	11/19/05
R 11	DS11	11/19/2005	MT	21 / 19 /	50'WBOS		P	5X2	PASS	11/19/05
R 12	DS12	11/19/2005	FZ	43 / 1 /	13'WBOS		P	5X2	PASS	11/19/05
R 13	DS13	11/19/2005	FZ	25 / 1 /	13'WBOS		P	5X2	PASS	11/19/05
R 14	DS14	11/19/2005	FZ	18 / 17 /	13'NBOS		P	5X2	PASS	11/19/05
R 15	DS15	11/19/2005	FZ	51 / 22 /	13'WBOS		P	5X2	PASS	11/19/05
R 16	DS16	11/19/2005	FZ	69 / 21 /	47'WBOS		P	5X2	PASS	11/19/05
R 17	DS17	11/19/2005	MT	14 / 13 /	13'NBOS		P	5X2	PASS	11/19/05
R 18	T	11/19/2005	FZ	45 / 46 / 1			P	1X1	PASS	11/19/05
R 19	T	11/19/2005	FZ	44 / 45 / 1			P	1X1	PASS	11/19/05
R 20	T	11/19/2005	FZ	43 / 44 / 1			P	1X1	PASS	11/19/05
R 21	T	11/19/2005	FZ	42 / 43 / 1			P	1X1	PASS	11/19/05
R 22	T	11/19/2005	FZ	41 / 42 / 1			P	1X1	PASS	11/19/05
R 23	T	11/19/2005	FZ	40 / 41 / 1			P	1X1	PASS	11/19/05
R 24	T	11/19/2005	FZ	39 / 40 / 1			P	1X1	PASS	11/19/05
R 25	T	11/19/2005	FZ	38 / 39 / 1			P	1X1	PASS	11/19/05
R 26	T	11/19/2005	FZ	37 / 38 / 1			P	1X1	PASS	11/19/05
R 27	T	11/19/2005	FZ	36 / 37 / 1			P	1X1	PASS	11/19/05
R 28	T	11/19/2005	FZ	35 / 36 / 1			P	1X1	PASS	11/19/05
R 29	T	11/19/2005	FZ	34 / 35 / 1			P	1X1	PASS	11/19/05
R 30	T	11/19/2005	FZ	33 / 34 / 1			P	1X1	PASS	11/19/05
R 31	T	11/19/2005	FZ	32 / 33 / 1			P	1X1	PASS	11/19/05
R 32	T	11/19/2005	FZ	31 / 32 / 1			P	1X1	PASS	11/19/05
R 33	T	11/19/2005	FZ	30 / 31 / 1			P	1X1	PASS	11/19/05
R 34	T	11/19/2005	FZ	29 / 30 / 1			P	1X1	PASS	11/19/05
R 35	T	11/19/2005	FZ	28 / 29 / 1			P	1X1	PASS	11/19/05
R 36	T	11/19/2005	FZ	27 / 28 / 1			P	1X1	PASS	11/19/05
R 37	T	11/19/2005	FZ	26 / 27 / 1			P	1X1	PASS	11/19/05
R 38	T	11/19/2005	FZ	25 / 26 / 1			P	1X1	PASS	11/19/05
R 39	T	11/19/2005	MT	24 / 25 / 1			P	1X1	PASS	11/19/05
R 40	T	11/19/2005	MT	1 / 2 / 24			P	2X2	PASS	11/19/05
R 41	T	11/19/2005	MT	23 / 24 / 2			P	1X1	PASS	11/19/05
R 42	T	11/19/2005	MT	4 / 3 / 1			P	1X1	PASS	11/19/05
R 43	T	11/19/2005	MT	4 / 3 / 6			P	2X2	PASS	11/19/05
R 44	T	11/19/2005	MT	6 / 5 / 3			P	2X2	PASS	11/19/05

Lone Star Lining Company

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REPAIR LOG

PROJECT NAME: Williams - Ignacio
PROJECT NUMBER: 25032

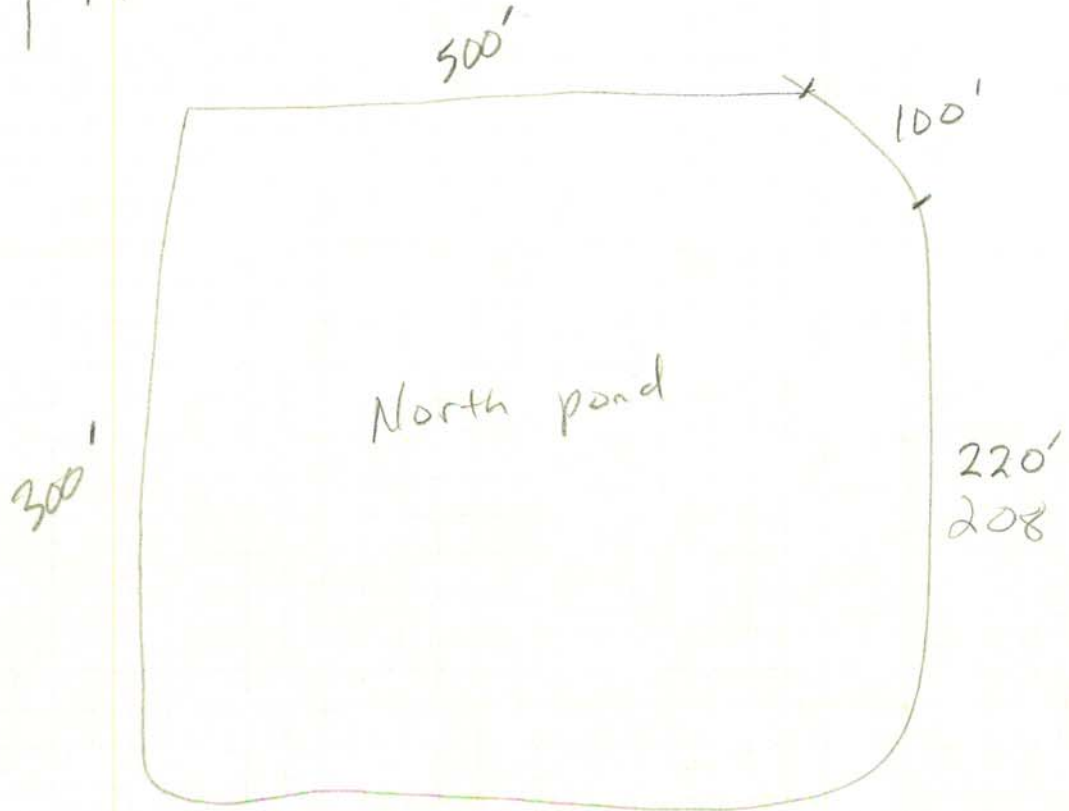
QC REP.: DR
MATERIAL: 60 mil HDPE

REPAIR #	DEFECT CODE*	REPAIR DATE	TECH ID	LOCATION			REPAIR TYPE*	SIZE (ft)	VACUUM TEST	
				Seam/Panel	Offset #1	Offset #2			P/F	DATE
R 45	T	11/19/2005	MT	6 / 5 / 8			P	1X1	PASS	11/19/05
R 46	T	11/19/2005	MT	8 / 7 / 5			P	1X1	PASS	11/19/05
R 47	B	11/19/2005	FZ	5 / 7 /	132'WBOS		P	2X2	PASS	11/19/05
R 48	T	11/19/2005	MT	10 / 9 / 7			P	1X1	PASS	11/19/05
R 49	T	11/19/2005	MT	8 / 7 / 10			P	2X2	PASS	11/19/05
R 50	T	11/19/2005	MT	10 / 9 / 12			P	2X2	PASS	11/19/05
R 51	T	11/19/2005	MT	12 / 11 / 9			P	2X2	PASS	11/19/05
R 52	B	11/19/2005	MT	9 / 11 /	96'WBOS		P	2X2	PASS	11/19/05
R 53	T	11/19/2005	MT	12 / 11 / 13			P	1X1	PASS	11/19/05
R 54	T	11/19/2005	MT	14 / 13 / 12			P	1X1	PASS	11/19/05
R 55	T	11/19/2005	MT	14 / 13 / 16			P	1X1	PASS	11/19/05
R 56	T	11/19/2005	MT	16 / 15 / 13			P	1X1	PASS	11/19/05
R 57	T	11/19/2005	MT	18 / 17 / 15			P	2X2	PASS	11/19/05
R 58	T	11/19/2005	MT	16 / 15 / 18			P	2X2	PASS	11/19/05
R 59	T	11/19/2005	MT	18 / 17 / 19			P	2X2	PASS	11/19/05
R 60	T	11/19/2005	MT	19 / 20 / 17			P	1X1	PASS	11/19/05
R 61	T	11/19/2005	MT	19 / 20 / 22			P	1X1	PASS	11/19/05
R 62	T	11/19/2005	MT	21 / 22 / 19			P	1X1	PASS	11/19/05
R 63	T	11/19/2005	FZ	49 / 48 / 47			P	2X2	PASS	11/19/05
R 64	T	11/19/2005	FZ	50 / 49 / 47			P	2X2	PASS	11/19/05
R 65	T	11/19/2005	FZ	50 / 47 / 22			P	5X4	PASS	11/19/05
R 66	T	11/19/2005	FZ	51 / 50 / 22			P	1X1	PASS	11/19/05
R 67	T	11/19/2005	FZ	52 / 51 / 22			P	1X1	PASS	11/19/05
R 68	T	11/19/2005	FZ	53 / 52 / 22			P	1X1	PASS	11/19/05
R 69	T	11/19/2005	FZ	21 / 22 / 53			P	3X4	PASS	11/19/05
R 70	T	11/19/2005	FZ	54 / 53 / 21			P	1X1	PASS	11/19/05
R 71	T	11/19/2005	FZ	55 / 54 / 21			P	1X1	PASS	11/19/05
R 72	T	11/19/2005	FZ	56 / 55 / 21			P	1X1	PASS	11/19/05
R 73	T	11/19/2005	FZ	57 / 56 / 21			P	2X2	PASS	11/19/05
R 74	T	11/19/2005	FZ	58 / 57 / 21			P	2X2	PASS	11/19/05
R 75	T	11/19/2005	MT	59 / 58 / 21			P	2X2	PASS	11/19/05
R 76	T	11/19/2005	MT	60 / 59 / 21			P	2X2	PASS	11/19/05
R 77	T	11/19/2005	MT	61 / 60 / 21			P	1X1	PASS	11/19/05
R 78	T	11/19/2005	MT	62 / 61 / 21			P	1X1	PASS	11/19/05
R 79	T	11/19/2005	MT	63 / 62 / 21			P	1X1	PASS	11/19/05
R 80	T	11/19/2005	MT	64 / 63 / 21			P	1X1	PASS	11/19/05
R 81	T	11/19/2005	MT	65 / 64 / 21			P	1X1	PASS	11/19/05
R 82	T	11/19/2005	MT	66 / 65 / 21			P	1X1	PASS	11/19/05
R 83	T	11/19/2005	MT	67 / 66 / 21			P	1X1	PASS	11/19/05
R 84	T	11/19/2005	MT	68 / 67 / 21			P	2X2	PASS	11/19/05
R 85	T	11/19/2005	MT	69 / 68 / 21			P	1X1	PASS	11/19/05
R 86	GV1	11/19/2005	FZ	/ 21 /	6'NofP69	1'WofAT	vent	1X1		
R 87	GV2	11/19/2005	FZ	/ 14 /	19'NofP16	1'WofAT	vent	1X1		
R 88	GV3	11/19/2005	FZ	/ 4 /	11'NofP6	1'WofAT	vent	1X1		

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PROJECT NAME:	Williams - Ignacio
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Page 3



523'
540'

541'
505'

