K

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: Ford Cell 2 MI

PROJECT NUMBER: 917-1203

OWNER: Ford Motor Co

LOCATION: Allen Park, MI

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

This certification is based on observations of the the surface of the subgrade only. No subterranean inspections or tests have been performed by National Seal Company, and NSC makes no representations or warranties regarding conditions which may exist below the surface of the subgrade. National Seal Company accepts no responsibility for conformance of the subgrade to this project's specifications.

Area Being Accepted: 6963E to 6706E, and 15 out from Toe of South Slope

NATIONAL SEAL REPRESENTATIVE:

Date: 7-20-92

Signature: James Scott Smith

Name: James Scott Smith

Title: Supt.

OWNERS REPRESENTATIVE:

Date: 7-20-92

Signature: Thomas A. Heasley

Name: Thomas A Heasley

Title: CQA officer

Company: Golder Construction Services

4/12

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: Ford Cell 2 MI

PROJECT NUMBER: 917-1203

OWNER: Ford Motor Co

LOCATION: Allen Park, MI

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

This certification is based on observations of the the surface of the subgrade only. No subterranean inspections or tests have been performed by National Seal Company, and NSC makes no representations or warranties regarding conditions which may exist below the surface of the subgrade. National Seal Company accepts no responsibility for conformance of the subgrade to this project's specifications.

Area Being Accepted: 6706E To 6645E, and 15' out from toe of the S.W. corner

NATIONAL SEAL REPRESENTATIVE:

Date: 7-20-92

Signature: James Scott Smith

Name: James Scott Smith

Title: Supt

OWNERS REPRESENTATIVE:

Date: 7-20-92 1538

Signature: Thomas A. Heasley

Name: Thomas Heasley

Title: CQA Officer

Company: Golder Construction Services

4/00

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: Ford Cell 2 MI

PROJECT NUMBER: 917-1207

OWNER: Ford Motor Co

LOCATION: Allen Park, MI

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

This certification is based on observations of the the surface of the subgrade only. No subterranean inspections or tests have been performed by National Seal Company, and NSC makes no representations or warranties regarding conditions which may exist below the surface of the subgrade. National Seal Company accepts no responsibility for conformance of the subgrade to this project's specifications.

Area Being Accepted: 3418 N to 3730N; and ~~15' out~~ TAB

~~from toe of west 2:1 slope~~ to 6800 E

NATIONAL SEAL REPRESENTATIVE:

Date: 7-22-92

Signature: [signature]

Name: James Scott Smith

Title: Supt

OWNERS REPRESENTATIVE:

Date: 7-22-92 (730)

Signature: Thomas A. Heasley

Name: Thomas Heasley

Title: CQA officer

Company: Golder Const. Services

400

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: Ford Cell 2 MI

PROJECT NUMBER: 917-1203

OWNER: Ford Motor Co.

LOCATION: Allen Park, MI

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

This certification is based on observations of the the surface of the subgrade only. No subterranean inspections or tests have been performed by National Seal Company, and NSC makes no representations or warranties regarding conditions which may exist below the surface of the subgrade. National Seal Company accepts no responsibility for conformance of the subgrade to this project's specifications.

Area Being Accepted: 3740 N to 3835 N ; and 10' out from the toe of the West Slope

NATIONAL SEAL REPRESENTATIVE:

Date: 7-24-92

Signature: James Scott

Name:

Title:

OWNERS REPRESENTATIVE:

Date: 7-24-92 (1535)

Signature: Thomas A. Heasley

Name: Thomas A. Heasley

Title: CQA Officer

Company: Golder Construction Co.

4/C

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: Ford Cell 2 MI

PROJECT NUMBER: 917-1203

OWNER: Ford Motor Co

LOCATION: Allen Park, MI

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

This certification is based on observations of the the surface of the subgrade only. No subterranean inspections or tests have been performed by National Seal Company, and NSC makes no representations or warranties regarding conditions which may exist below the surface of the subgrade. National Seal Company accepts no responsibility for conformance of the subgrade to this project's specifications.

Area Being Accepted: 3835N TO 6846E; and from Toe of North Slope ~~Hor.~~ TO 3740N

NATIONAL SEAL REPRESENTATIVE:

Date: 7-25-92

Signature: James Scott Smith

Name: James Scott Smith

Title: Supt.

OWNERS REPRESENTATIVE:

Date: 7-25-92 (7:25)

Signature: Thomas A. Heasley

Name: Thomas A Heasley

Title: CQA Officer

Company: Golder Const. Services

40

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: FORD CELL II M1

PROJECT NUMBER: 917-1203

OWNER: FORD MOTOR CO.

LOCATION: ALLEN PARK MICH

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

This certification is based on observations of the the surface of the subgrade only. No subterranean inspections or tests have been performed by National Seal Company, and NSC makes no representations or warranties regarding conditions which may exist below the surface of the subgrade. National Seal Company accepts no responsibility for conformance of the subgrade to this project's specifications.

Area Being Accepted: 6846E to 6980E: And from NORTH ANCHOR TRENCH to 3740 N.

NATIONAL SEAL REPRESENTATIVE:

Date: 7-27-92

Signature: [signature] 1:00pm

Name: JAMES SCOTT SMITH

Title: Supt.

OWNERS REPRESENTATIVE:

Date: 7-27-92

Signature: [signature] TAH

Name: JAMES A. LOFTUS

Title: SR. ENG. TECH

Company: GOLDEN CONST. SERVICES

NSC to REPAIR WET AREA AT NORTHWEST CORNER OF 2:1 SLOPE

4/CC

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: FORD / CELL 2 / M1

PROJECT NUMBER: 917-1203

OWNER: FORD MOTOR CO

LOCATION: ALLEN PARK MI

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

This certification is based on observations of the the surface of the subgrade only. No subterranean inspections or tests have been performed by National Seal Company, and NSC makes no representations or warranties regarding conditions which may exist below the surface of the subgrade. National Seal Company accepts no responsibility for conformance of the subgrade to this project's specifications.

Area Being Accepted: E6980 to E7150 FROM NORTH ANCHOR TRENCH to 10' SOUTH OF 2:1 toe

NATIONAL SEAL REPRESENTATIVE:

Date: 7-28-92

Signature: James Scott Smith 8:50 AM

Name: JAMES SCOTT SMITH

Title: SUPT.

OWNERS REPRESENTATIVE:

Date: 7-28-92

Signature: James A. Loftus

Name: JAMES A. LOFTUS

Title: SR. ENG TECH

Company: GCS

4/00

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: FORD/CELL 2/MI

PROJECT NUMBER: 917-1203

OWNER: FORD MOTOR CO.

LOCATION: ALLEN PARK, MI

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

This certification is based on observations of the the surface of the subgrade only. No subterranean inspections or tests have been performed by National Seal Company, and NSC makes no representations or warranties regarding conditions which may exist below the surface of the subgrade. National Seal Company accepts no responsibility for conformance of the subgrade to this project's specifications.

Area Being Accepted: NORTH SLOPE E7150 TO 3880N ON the East 15' Shelf at the Anchor Trench; To 10' OUT from the Toe of the North + East 2:1 Slope

NATIONAL SEAL REPRESENTATIVE:

Date: 7-29-92

Signature: [signature]

Name: James Scott Smith

Title: Supt

OWNERS REPRESENTATIVE:

Date: 7-29-92 (1530)

Signature: Thomas A. Heasley

Name: Thomas Heasley

Title: CQA Officer

Company: Golder Const. Services

4/C

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: FORD / CELL II / MI

PROJECT NUMBER: 917-1203

OWNER: FORD MOTOR CO.

LOCATION: ALLEN PARK MI

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

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Area Being Accepted: FROM 3880N to 3750N EAST Slope FROM ARTESIAN ANCHOR TRENCH to 10' WEST OF the EAST 2:1 SLOPE, FROM NORTH 4:1 ANCHOR TRENCH to N3880, EAST TOP OF Slope ANCHOR to 10' WEST OF TOE AT 2:1 Slope

NATIONAL SEAL REPRESENTATIVE:

Date: 8-4-92

Signature: James Scott Smith

Name: JAMES SCOTT SMITH

Title: SUPT.

OWNERS REPRESENTATIVE:

Date: ~~8-3-92~~ 8-4-92

Signature: James A. Loftus

Name: JAMES A. LOFTUS

Title: SR. ENG TECH

Company: GCS

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: FORD CELL II MI

PROJECT NUMBER: 917-1203

OWNER: FORD MOTOR CO.

LOCATION: ALLEN PARK, MI

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

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Area Being Accepted: N3750 to N3680 FROM ARTESIAN ANCHOR TRENCH TO 10' WEST OF EAST 2:1 TOE OF SLOPE

NATIONAL SEAL REPRESENTATIVE:

Date: 8-5-92

Signature: James Scott Smith

Name: JAMES SCOTT SMITH

Title: SUPT

OWNERS REPRESENTATIVE:

Date: 8-5-92

Signature: James A. Lyllow

Name: JAMES A. LOFTUS

Title: SR. ENGR. TECH

Company: GCS

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: FORD / CELL II / MI

PROJECT NUMBER: 917-1203

OWNER: FORD MOTOR CO

LOCATION: ALLEN PARK, MI

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

This certification is based on observations of the the surface of the subgrade only. No subterranean inspections or tests have been performed by National Seal Company, and NSC makes no representations or warranties regarding conditions which may exist below the surface of the subgrade. National Seal Company accepts no responsibility for conformance of the subgrade to this project's specifications.

Area Being Accepted: EAST SLOPE FROM N3750 to N3680, TOP OF SLOPE to ARTESIAN ANCHOR TRENCH

NATIONAL SEAL REPRESENTATIVE:

Date: 8-6-92

Signature: James Scott Smith

Name: James Scott Smith

Title: Supt.

OWNERS REPRESENTATIVE:

Date: 8-6-92

Signature: James Loftus

Name: JAMES LOFTUS

Title: SR ENGR TECH

Company: GCS

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: FORD / CELL II / MI

PROJECT NUMBER: 917-1203

OWNER: FORD MOTOR CO

LOCATION: ALLEN PARK, MI

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

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Area Being Accepted: FROM N3680 to N3600, FROM ARTESIAN ANCHOR TRENCH to 10' EAST OF TOE OF 2:1, FROM TOP ANCHOR TRENCH TO ARTESIAN ANCHOR TRENCH

NATIONAL SEAL REPRESENTATIVE:

Date: 8-7-92

Signature: Randy Brush

Name: RANDY BRUSH

Title: ACT. SUPT

OWNERS REPRESENTATIVE:

Date: 8-7-92

Signature:

Name: JAMES A. LOFTUS

Title: SR. ENGR. TECH

Company: G.C.S.

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: FORD CELL II MI

PROJECT NUMBER: 917-1203

OWNER: FORD MOTOR CO.

LOCATION: ALLEN PARK, MICHIGAN

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

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Area Being Accepted: FROM N3600 on the EAST SLOPE to E7310 on the SOUTH SLOPE, FROM ARTESIAN ANCHOR TRENCH to top of 2:1 Slope (SOUTH SLOPE). ~~EAST SLOPE FROM [illegible] SOUTH EAST CORNER, FROM [illegible] ANCHOR TRENCH~~

NATIONAL SEAL REPRESENTATIVE:

Date: 8-10-92

Signature: Randy Brush

Name: Randy BRUSH

Title: SUPT.

OWNERS REPRESENTATIVE:

Date: 8-10-92

Signature: James A. Loftus

Name: JAMES A. LOFTUS

Title: SR. ENGR. TECH

Company: GCS

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: FORD / CELL II / MI

PROJECT NUMBER: 917-1203

OWNER: FORD MOTOR CO.

LOCATION: ALLEN PARK, MICH

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

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Area Being Accepted: CELL FLOOR FROM the EAST 2:1 SLOPE to E 7200 COORDINATE LINE. SOUTH 70' Shelf FROM E 7300 to E 7200, TOP ANCHOR TRENCH to CELL FLOOR

NATIONAL SEAL REPRESENTATIVE:

Date: 8-15-92

Signature: James Scott Smith 630 AM

Name: James Scott Smith

Title: SUPT.

OWNERS REPRESENTATIVE:

Date: 8-15-92

Signature: James A. Loftus

Name: JAMES A. LOFTUS

Title: SR. ENGR. TECH

Company: G.C.S.

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: FORD / CELL II / MI

PROJECT NUMBER: 917-1203

OWNER: FORD motor Co.

LOCATION: ALLEN PARK, MI

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

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Area Being Accepted: SOUTH SLOPE FROM E7200 to E6950 63
FROM ANCHOR TRENCH to 10' NORTH OF SOUTH 2:1 SLOPE,
EAST 7200 to 7150 FROM SOUTH 2:1 SLOPE to TIE-IN 5'
- SOUTH OF the NORTH 2:1 SLOPE, SOUTH 2:1 SLOPE To N3730 Coordinate

NATIONAL SEAL REPRESENTATIVE:

Date: 8-16-92

Signature: James Scott Smith

Name: James Scott Smith

Title: Supt

OWNERS REPRESENTATIVE:

Date: 8-16-92

Signature: James A. Loftus

Name: JAMES A. LOFTUS

Title: SR. ENGR. TECH

Company: GCS

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: FORD / CELLII / mi

PROJECT NUMBER: 917-1203

OWNER: FORD motor Co.

LOCATION: ALLEN PARK, mi

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

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Area Being Accepted: From the N3730 Line to 5' SOUTH of the NORTH 2:1 SLOPE, E7150 to E6945 63

NATIONAL SEAL REPRESENTATIVE:

Date: 8-17-92

Signature: James Scott Smith

Name: James Scott Smith

Title:

OWNERS REPRESENTATIVE:

Date: 8-17-92

Signature: James A. Loftus

Name: JAMES A. LOFTUS

Title: SR. ENGR. TECH

Company: GCS

NSC

NATIONAL SEAL COMPANY
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: FORD / CELL II / M1

PROJECT NUMBER: 917-1203

OWNER: FORD MOTOR CO.

LOCATION: ALLEN

I, the undersigned, a duly appointed representative of National Seal Company (NSC), have visually observed the soil subgrade surface described below, and found it to be an acceptable surface on which to install geomembrane.

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Area Being Accepted: EAST Slope From the N3600 AROUND SOUTHEAST CORNER to the EAST 7300. From Top anchor trench to 10' WEST OF EAST 2:1 Slope. SOUTH Slope ARTESIAN ANCHOR TRENCH to 10' NORTH OF SOUTH 2:1 Slope

NATIONAL SEAL REPRESENTATIVE:

Date: 8-12-92 3:30 PM

Signature: James Scott Smith

Name: JAMES SCOTT SMITH

Title: SUPT.

OWNERS REPRESENTATIVE:

Date: 8-12-92

Signature: James A. Loftus

Name: JAMES A. LOFTUS

Title: SR ENGR. TECH

Company: GCS

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JUNE 1993 917-1203

SECONDARY GEOMEMBRANE PANEL DEPLOYMENT SUMMARY
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

PANEL NUMBER	ROLL NUMBER	BATCH NUMBER	DATE DEPLOYED	VISUAL PANEL INSPECTION	TYPICAL OVERLAP (in.)	APPROX. DEPLOYED LENGTH	AVERAGE PANEL THICKNESS	
							LEAD	TRAIL
S001	2F2114	5085	07/21/92	OK	6	164	81	82
S002	2F2114	5085	07/21/92	OK	6	161	82	81
S003	2F2114	5085	07/21/92	OK	6	161	81	82
S004	2F2114	5085	07/21/92	OK	6	162	82	81
S005	2F2114	5085	07/21/92	OK	6	161	81	82
S006	2F2209	5085	07/21/92	OK	6	160	83	83
S007	2F2209	5085	07/21/92	OK	6	160	83	83
S008	2F2209	5085	07/21/92	OK	6	159	83	83
S009	2F2209	5085	07/21/92	OK	6	159	83	82
S010	2F2209	5085	07/21/92	OK	6	160	82	81
S011	2F2211	5085	07/21/92	OK	6	159	81	81
S012	2F2211	5085	07/21/92	OK	6	159	81	81
S013	2F2211	5085	07/21/92	OK	6	149	81	81
S014	2F2211	5085	07/21/92	OK	6	123	81	82
S015	2F2211	5085	07/21/92	OK	6	108	82	81
S016	2F2211	5085	07/21/92	OK	6	94	81	82
S017	2F2205	5085	07/22/92	OK	6	69	82	82
S018	2F2205	5085	07/22/92	OK	6	69	82	82
S019	2F2205	5085	07/22/92	OK	6	55	82	81
S020	2F2211	5085	07/22/92	OK	6	45	81	82
S021	2F2205	5085	07/22/92	OK	6	28	81	82
S022	2F2205	5085	07/22/92	OK	6	17	82	82
S023	2F2205	5085	07/22/92	OK	6	38	82	81
S024	2F2205	5085	07/22/92	OK	6	59	81	82
S025	2F2205	5085	07/22/92	OK	6	59	82	81

SECONDARY GEOMEMBRANE PANEL DEPLOYMENT SUMMARY
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

PANEL NUMBER	ROLL NUMBER	BATCH NUMBER	DATE DEPLOYED	VISUAL PANEL INSPECTION	TYPICAL OVERLAP (in.)	APPROX. DEPLOYED LENGTH	AVERAGE PANEL THICKNESS	
							LEAD	TRAIL
S026	2F2205	5085	07/22/92	OK	6	70	81	81
S027	2F2205	5085	07/22/92	OK	6	110	81	82
S028	2F2205	5085	07/22/92	OK	6	133	82	81
S029	2F2205	5085	07/22/92	OK	6	68	82	82
S030	2F2205	5085	07/22/92	OK	6	79	82	80
S031	2F2305	5085	07/22/92	OK	6	164	80	82
S032	2F2305	5085	07/22/92	OK	6	175	82	80
S033	2F2305	5085	07/22/92	OK	6	321	82	80
S034	2F2305	5085	07/22/92	OK	6	75	82	80
S035	2F2206	5085	07/24/09	OK	6	247	81	81
S036	2F2206	5085	07/24/09	OK	6	320	81	81
S037	2F2206	5085	07/24/09	OK	6	240	81	81
S038	2F2611	5087	07/24/09	OK	6	81	81	81
S039	2F2611	5087	07/24/09	OK	6	320	81	82
S040	2F2611	5087	07/24/92	OK	6	320	82	81
S041	2F2611	5087	07/24/92	OK	6	89	81	81
S042	2F2113	5085	07/24/92	OK	6	231	82	81
S043	2F2113	5085	07/24/92	OK	6	320	81	80
S044	2F2113	5085	07/24/92	OK	6	272	80	82
S045	2F2115	5085	07/25/92	OK	6	50	81	81
S046	2F2115	5085	07/25/92	OK	6	214	81	82
S047	2F2115	5085	07/25/92	OK	6	214	82	82
S048	2F2115	5085	07/25/92	OK	6	185	82	82
S049	2F2115	5085	07/25/92	OK	6	110	82	82
S050	2F2706	5087	07/25/92	OK	6	74	81	82

SECONDARY GEOMEMBRANE PANEL DEPLOYMENT SUMMARY
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

PANEL NUMBER	ROLL NUMBER	BATCH NUMBER	DATE DEPLOYED	VISUAL PANEL INSPECTION	TYPICAL OVERLAP (in.)	APPROX. DEPLOYED LENGTH	AVERAGE PANEL THICKNESS	
							LEAD	TRAIL
S051	2F2706	5087	07/25/92	OK	6	185	82	82
S052	2F2706	5087	07/25/92	OK	6	185	82	81
S053	2F2706	5087	07/25/92	OK	6	185	81	82
S054	2F2706	5087	07/25/92	OK	6	185	82	81
S055	2F2212	5085	07/25/92	OK	6	178	82	82
S056	2F2212	5085	07/25/92	OK	6	169	82	81
S057	2F2212	5085	07/25/92	OK	6	157	81	81
S058	2F2212	5085	07/25/92	OK	6	135	81	81
S059	2F2212	5085	07/25/92	OK	6	47	81	81
S060	2F2212	5085	07/25/92	OK	6	28	81	82
S061	2F2212	5085	07/25/92	OK	6	34	81	82
S062	2F2212	5087	07/25/92	OK	6	164	82	82
S063	2F2212	5087	07/25/92	OK	6	164	82	81
S064	2F2212	5087	07/25/92	OK	6	164	81	80
S065	2F2212	5087	07/25/92	OK	6	82	80	81
S066	2F2212	5087	07/25/92	OK	6	78	81	81
S067	2F2307	5085	07/25/92	OK	6	35	81	81
S068	2F2307	5085	07/25/92	OK	6	49	81	81
S069	2F2307	5085	07/25/92	OK	6	22	81	81
S070	2F2307	5085	07/25/92	OK	6	44	81	80
S071	2F2307	5085	07/25/92	OK	6	46	80	81
S072	2F2307	5085	07/25/92	OK	6	61	81	81
S073	2F2307	5085	07/25/92	OK	6	76	81	82
S074	2F2307	5085	07/25/92	OK	6	76	82	81
S075	2F2307	5085	07/25/92	OK	6	76	81	81

JUNE 1993

917-1203

SECONDARY GEOMEMBRANE PANEL DEPLOYMENT SUMMARY
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

PANEL NUMBER	ROLL NUMBER	BATCH NUMBER	DATE DEPLOYED	VISUAL PANEL INSPECTION	TYPICAL OVERLAP (in.)	APPROX. DEPLOYED LENGTH	AVERAGE PANEL THICKNESS	
							LEAD	TRAIL
S101	2F2810	5087	07/28/92	OK	6	182	83	82
S102	2F2810	5087	07/28/92	OK	6	180	82	84
S103	2F2810	5087	07/28/92	OK	6	287	84	84
S104	2F2816	5087	07/29/92	OK	6	178	82	84
S105	2F2816	5087	07/29/92	OK	6	178	84	84
S106	2F2816	5087	07/29/92	OK	6	176	84	83
S107	2F2816	5087	07/29/92	OK	6	178	83	83
S108	2F2816	5087	07/29/92	OK	6	134	83	82
S109	2F2712	5087	07/29/92	OK	6	39	82	84
S110	2F2712	5087	07/29/92	OK	6	166	84	83
S111	2F2712	5087	07/29/92	OK	6	166	83	83
S112	2F2713	5087	08/04/92	OK	6	230	82	81
S113	2F2713	5087	08/04/92	OK	6	230	81	81
S114	2F2713	5087	08/04/92	OK	6	207	81	82
S115	2F2306	5085	08/04/92	OK	6	204	81	81
S116	2F2306	5085	08/04/92	OK	6	203	81	82
S117	2F2306	5085	08/04/92	OK	6	199	82	81
S118	2F2306	5085	08/04/92	OK	6	182	82	81
S119	2F2708	5087	08/04/92	OK	6	172	82	81
S120	2F2708	5087	08/04/92	OK	6	165	81	81
S121	2F2708	5087	08/04/92	OK	6	136	81	81
S122	2F2712	5087	08/04/92	OK	6	165	81	82
S123	2F2712	5087	08/04/92	OK	6	167	82	81
S124	2F2708	5087	08/04/92	OK	6	230	81	81
S125	2F2708	5087	08/05/92	OK	6	114	81	82

SECONDARY GEOMEMBRANE PANEL DEPLOYMENT SUMMARY
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

PANEL NUMBER	ROLL NUMBER	BATCH NUMBER	DATE DEPLOYED	VISUAL PANEL INSPECTION	TYPICAL OVERLAP (in.)	APPROX. DEPLOYED LENGTH	AVERAGE PANEL THICKNESS	
							LEAD	TRAIL
S126	2F2704	5087	08/05/92	OK	6	116	81	81
S127	2F2704	5087	08/05/92	OK	6	228	81	81
S128	2F2704	5087	08/05/92	OK	6	230	81	81
S129	2F2704	5087	08/05/92	OK	6	190	81	81
S130	2F2710	5087	08/05/92	OK	6	232	81	82
S131	2F2710	5087	08/05/92	OK	6	232	82	82
S132	2F2710	5087	08/05/92	OK	6	41	81	80
S133	2F2316	5085	08/06/92	OK	6	220	81	81
S134	2F2316	5085	08/06/92	OK	6	220	81	81
S135	2F2316	5085	08/06/92	OK	6	149	81	82
S136	2F2316	5085	08/06/92	OK	6	157	82	81
S137	2F2702	5087	08/06/92	OK	6	76	81	81
S138	2F2702	5087	08/06/92	OK	6	170	81	81
S139	2F2702	5087	08/06/92	OK	6	226	81	81
S140	2F2702	5087	08/06/92	OK	6	182	81	81
S141	2F2702	5087	08/06/92	OK	6	110	81	81
S142	2F2313	5085	08/06/92	OK	6	95	81	81
S143	2F2313	5085	08/06/92	OK	6	60	81	81
S144	2F2313	5085	08/06/92	OK	6	32	81	82
S145	2F2313	5085	08/06/92	OK	6	17	82	82
S146	2F2313	5085	08/06/92	OK	6	25	82	82
S147	2F2313	5085	08/06/92	OK	6	16	81	81
S148	2F2313	5085	08/06/92	OK	6	39	81	81
S149	2F2313	5085	08/06/92	OK	6	39	81	80
S150	2F2313	5085	08/06/92	OK	6	17	80	81

JUNE 1993

917-1203

SECONDARY GEOMEMBRANE PANEL DEPLOYMENT SUMMARY
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

PANEL NUMBER	ROLL NUMBER	BATCH NUMBER	DATE DEPLOYED	VISUAL PANEL INSPECTION	TYPICAL OVERLAP (in.)	APPROX. DEPLOYED LENGTH	AVERAGE PANEL THICKNESS	
							LEAD	TRAIL
S151	2F2313	5085	08/06/92	OK	6	25	81	81
S152	2F2313	5085	08/06/92	OK	6	16	81	81
S153	2F2313	5085	08/06/92	OK	6	39	81	82
S154	2F2313	5085	08/07/92	OK	6	225	81	81
S155	2F2313	5085	08/07/92	OK	6	184	81	81
S156	2F2309	5085	08/07/92	OK	6	41	82	81
S157	2F2309	5085	08/07/92	OK	6	225	81	81
S158	2F2309	5085	08/07/92	OK	6	219	81	80
S159	2F2309	5085	08/07/92	OK	6	215	80	80
S160	2F2311	5085	08/12/92	OK	6	136	81	81
S161	2F2311	5085	08/12/92	OK	6	105	81	81
S162	2F2311	5085	08/12/92	OK	6	80	81	81
S163	2F2311	5085	08/12/92	OK	6	61	81	81
S164	2F2311	5085	08/12/92	OK	6	36	81	81
S165	2F2311	5085	08/12/92	OK	6	27	81	81
S166	2F2311	5085	08/12/92	OK	6	147	81	81
S167	2F2311	5085	08/12/92	OK	6	166	81	81
S168	2F2311	5085	08/12/92	OK	6	55	81	81
S169	2F2415	5086	08/12/92	OK	6	127	81	82
S170	2F2415	5086	08/12/92	OK	6	211	82	81
S171	2F2415	5086	08/12/92	OK	6	211	81	81
S172	2F2415	5086	08/12/92	OK	6	211	81	81
S173	2F2415	5086	08/12/92	OK	6	211	81	81
S174	2F2715	5087	08/12/92	OK	6	166	81	82
S176	2F2715	5087	08/12/92	OK	6	66	82	82

SECONDARY GEOMEMBRANE PANEL DEPLOYMENT SUMMARY
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

PANEL NUMBER	ROLL NUMBER	BATCH NUMBER	DATE DEPLOYED	VISUAL PANEL INSPECTION	TYPICAL OVERLAP (in.)	APPROX. DEPLOYED LENGTH	AVERAGE PANEL THICKNESS	
							LEAD	TRAIL
S177	2F2715	5087	08/12/92	OK	6	66	82	81
S178	2F2715	5087	08/12/92	OK	6	65	81	81
S179	2F2715	5087	08/12/92	OK	6	65	81	81
S180	2F2715	5087	08/12/92	OK	6	166	81	81
S181	2F2715	5087	08/12/92	OK	6	114	81	82
S182	2F2416	5086	08/15/92	OK	6	137	81	82
S183	2F2416	5086	08/15/92	OK	6	201	82	82
S184	2F2416	5086	08/15/92	OK	6	212	82	82
S185	2F2416	5086	08/15/92	OK	6	235	82	82
S186	2F2510	5086	08/15/92	OK	6	269	82	82
S187	2F2510	5086	08/15/92	OK	6	281	82	82
S188	2F2510	5086	08/15/92	OK	6	297	82	82
S189	2F2501	5086	08/16/92	OK	6	320	82	82
S190	2F2501	5086	08/16/92	OK	6	343	82	82
S191	2F2501	5086	08/16/92	OK	6	162	82	82
S192	2F2617	5087	08/16/92	OK	6	182	82	82
S193	2F2617	5087	08/16/92	OK	6	350	82	82
S194	2F2617	5087	08/16/92	OK	6	308	82	82
S195	2F2515	5086	08/16/92	OK	6	40	82	82
S196	2F2515	5086	08/16/92	OK	6	202	82	82
S197	2F2515	5086	08/16/92	OK	6	207	82	82
S198	2F2515	5086	08/16/92	OK	6	201	82	82
S199	2F2515	5086	08/16/92	OK	6	161	82	82
S200	2F2512	5086	08/16/92	OK	6	48	82	82
S201	2F2512	5086	08/16/92	OK	6	202	82	82

SECONDARY GEOMEMBRANE PANEL DEPLOYMENT SUMMARY
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

PANEL NUMBER	ROLL NUMBER	BATCH NUMBER	DATE DEPLOYED	VISUAL PANEL INSPECTION	TYPICAL OVERLAP (in.)	APPROX. DEPLOYED LENGTH	AVERAGE PANEL THICKNESS	
							LEAD	TRAIL
S202	2F2512	5086	08/16/92	OK	6	185	82	82
S203	2F2512	5086	08/16/92	OK	6	138	82	82
S204	2F2512	5086	08/16/92	OK	6	138	83	82
S205	2F2512	5086	08/16/92	OK	6	32	82	81
S206	2F2512	5086	08/16/92	OK	6	40	81	81
S207	2F2607	5086	08/16/92	OK	6	47	83	82
S208	2F2607	5086	08/16/92	OK	6	54	82	81
S209	2F2607	5086	08/16/92	OK	6	65	81	81
S210	2F2607	5086	08/17/92	OK	6	67	81	82
S211	2F2607	5086	08/17/92	OK	6	66	82	82
S212	2F2607	5086	08/17/92	OK	6	69	82	82
S213	2F2607	5086	08/17/92	OK	6	61	82	81
S214	2F2607	5086	08/17/92	OK	6	50	81	82
S215	2F2607	5086	08/17/92	OK	6	35	82	82
S216	2F2607	5086	08/17/92	OK	6	22	82	83
S217	2F2607	5086	08/17/92	OK	6	12	83	83
S218	2F2607	5086	08/17/92	OK	6	30	83	81
S219	2F2607	5086	08/17/92	OK	6	45	81	82
S220	2F2607	5086	08/17/92	OK	6	65	82	82
S221	2F2607	5086	08/17/92	OK	6	73	82	82
S222	2F2506	5086	08/17/92	OK	6	315	82	81
S223	2F2506	5086	08/17/92	OK	6	219	81	82
S224	2F2506	5086	08/17/92	OK	6	207	82	82
S225	2F2506	5086	08/17/92	OK	6	43	82	82
S226	2F2506	5086	08/17/92	OK	6	34	82	83

JUNE 1993 917-1203

SECONDARY GEOMEMBRANE PANEL DEPLOYMENT SUMMARY
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

PANEL NUMBER	ROLL NUMBER	BATCH NUMBER	DATE DEPLOYED	VISUAL PANEL INSPECTION	TYPICAL OVERLAP (in.)	APPROX. DEPLOYED LENGTH	AVERAGE PANEL THICKNESS	
							LEAD	TRAIL
S227	2F2615	5087	08/17/92	OK	6	42	82	82
S228	2F2615	5087	08/17/92	OK	6	42	82	82
S229	2F2615	5087	08/17/92	OK	6	43	82	82
S230	2F2615	5087	08/17/92	OK	6	43	82	82
S231	2F2615	5087	08/17/92	OK	6	42	82	81
S232	2F2615	5087	08/17/92	OK	6	30	81	82
S233	2F2615	5087	08/17/92	OK	6	45	82	82
S234	2F2615	5087	08/17/92	OK	6	122	82	81
S235	2F2615	5087	08/17/92	OK	6	145	82	82
S236	2F2615	5087	08/17/92	OK	6	42	82	82
S237	2F2615	5087	08/17/92	OK	6	40	82	82
S238	2F2615	5087	08/17/92	OK	6	20	82	81
S239	2F2812	5087	08/17/92	OK	6	130	82	82
S240	2F2812	5087	08/17/92	OK	6	130	82	82
S241	2F2812	5087	08/17/92	OK	6	130	82	82
S242	2F2812	5087	08/17/92	OK	6	130	82	82
S243	2F2812	5087	08/17/92	OK	6	130	82	82
S244	2F2812	5087	08/17/92	OK	6	130	82	82
S245	2F2812	5087	08/17/92	OK	6	26	82	82
S246	2F2812	5087	08/17/92	OK	6	12	82	82
S247	2F2402	5085	08/17/92	OK	6	130	82	81
S248	2F2402	5085	08/17/92	OK	6	130	82	82
S249	2F2402	5085	08/17/92	OK	6	130	82	82
S250	2F2402	5085	08/17/92	OK	6	26	82	82
S251	2F2402	5085	08/17/92	OK	6	12	82	82

JUNE 1993 917–1203

SECONDARY GEOMEMBRANE PANEL DEPLOYMENT SUMMARY
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

PANEL NUMBER	ROLL NUMBER	BATCH NUMBER	DATE DEPLOYED	VISUAL PANEL INSPECTION	TYPICAL OVERLAP (in.)	APPROX. DEPLOYED LENGTH	AVERAGE PANEL THICKNESS	
							LEAD	TRAIL
S252	2F2402	5085	08/17/92	OK	6	130	82	81
S253	2F2402	5085	08/17/92	OK	6	170	81	82
S254	2F2402	5085	08/17/92	OK	6	60	82	82
S255	2F2813	5087	08/17/92	OK	6	125	82	82
S256	2F2813	5087	08/17/92	OK	6	200	82	82
S257	2F2813	5087	08/17/92	OK	6	205	82	82
S258	2F2813	5087	08/17/92	OK	6	223	82	82
S259	2F2813	5087	08/17/92	OK	6	68	82	82
S260	2F2813	5087	08/17/92	OK	6	68	82	82
S261	2F2615	5087	08/17/92	OK	6	160	81	82
S262	2F2810	5087	08/17/92	OK	6	165	82	82
S263	2F2810	5087	08/17/92	OK	6	165	82	82

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FUSION METHOD

JUNE 1993

917-1203

GEOMEMBRANE TRIAL SEAM SUMMARY
FUSION METHOD – SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER	DATE	TIME TESTED	WELDER ID. MACHINE NUMBER	WELDER ID. TECH	APPROX. AMBIENT TEMP.(F)	DIGITAL SET TEMP.	RESULTS PEEL INSIDE	RESULTS PEEL OUTSIDE	SHEAR	QA MON	REMARKS
TF-01	07/21/92	1300	1320	138	75	700	P1/P1/F1	P1/P1/--	--	LEL	FAIL, SEE RETEST TF-01R1
TF-01R1	07/21/92	1340	1320	138	75	700	P1/P1P/1	P1/P1P/1	P2	LEL	
TF-02	07/21/92	1310	1404	325	75	700	P1/P1P/1	P1/P1/P1	P2	LEL	
TF-03	07/21/92	1405	1319	45	75	700	P1/P1/P1	F1/--/--	--	CAW	FAIL,SEE RETEST TF-03R1
TF-03R1	07/21/92	1420	1319	45	75	700	P1/--/--	P1/P1/P1	P2	CAW	
TF-04	07/21/92	1625	1404	325	75	700	P1/P1/P1/	P1/P1/P1	P2	CAW	
TF-05	07/21/92	1645	1320	138	75	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-06	07/21/92	1910	1203	325	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-07	07/21/92	2010	1320	138	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-08	07/21/92	2020	1203	325	70	700	P1/P1/P1	P1/F1/P1	--	CAW	FAIL,TECH DID NOT WELD
TF-01	07/22/92	0845	1203	325	55	700	P1/P1/P1	P1/P1/--	--	CAW	FAIL,SEE RETEST TF-01R1
TF-01R1	07/22/92	0910	1203	325	55	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	07/22/92	1340	1320	138	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-03	07/22/92	1422	1203	325	75	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-04	07/22/92	1820	1320	138	67	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-05	07/22/92	1830	1203	325	67	700	F3/--/--	--/--/-	--	CAW	FAIL,TECH DID NOT WELD
TF-06	07/22/92	1830	1319	45	67	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-01	07/24/92	0800	1320	138	64	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-02	07/24/92	0800	1404	325	64	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-03	07/24/92	1000	1320	138	64	700	P1/F1/--	P1/--/--	--	LEL	FAIL,SEE RETEST TF-03R1
TF-03R1	07/24/92	1150	1320	138	67	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-04	07/24/92	1030	1203	138	64	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-05	07/24/92	1300	1404	325	70	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-06	07/24/92	1545	1320	138	72	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-07	07/24/92	1240	1404	325	72	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-01	07/25/92	0755	1240	325	65	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-02	07/25/92	0820	1320	138	67	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-03	07/25/92	1830	1404	45	68	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-04	07/25/92	1100	1240	325	75	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-05	07/25/92	1120	1320	138	75	700	P1/P1/P1	P1/P1/P1	P2	LEL	

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JUNE 1993

917-1203

GEOMEMBRANE TRIAL SEAM SUMMARY
FUSION METHOD – SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER	DATE	TIME TESTED	WELDER ID. MACHINE NUMBER	WELDER ID. TECH	APPROX. AMBIENT TEMP.(F)	DIGITAL SET TEMP.	RESULTS PEEL INSIDE	RESULTS PEEL OUTSIDE	SHEAR	QA MON	REMARKS
TF-06	07/25/92	1600	1240	325	80	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-07	07/25/92	1620	1320	138	80	700	P1/P1/P1	P1/P1/P1	--	LEL	FAIL; SEE RETEST TF-07R1
TF-07R1	07/25/92	1650	1320	138	80	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-08	07/25/92	1730	1404	138	80	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-09	07/25/92	1735	1319	45	80	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-10	07/25/92	1955	1404	138	75	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-11	07/25/92	2000	1240	325	75	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-12	07/25/92	2040	1319	45	75	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-01	07/27/92	1648	1404	138	78	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-02	07/27/92	1720	1240	325	78	700	P1/P1/P1	P1/P1/P1	P2	LEL	
TF-01	07/28/92	0800	1404	18	72	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	07/28/92	0810	1240	325	72	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-03	07/28/92	0945	1240	325	75	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-04	07/28/92	1320	1404	138	78	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-05	07/28/92	1330	1319	5	78	700	P1/P1/--	P1/--/--	--	CAW	FAIL; SEE RETEST TF-05R1
TF-05R1	07/28/92	1400	1319	5	78	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-06	07/28/92	1440	1240	325	78	700	P1/F1/--	P1/--/--	--	CAW	FAIL; SEE RETEST TF-06R1
TF-06R1	07/28/92	1500	1240	325	78	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-07	07/28/92	1500	1404	138	78	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-08	07/28/92	1630	1240	325	77	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-09	07/28/92	1700	1404	138	77	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-10	07/28/92	1900	1319	45	77	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-11	07/28/92	EOD	1319	45	--	700	P1/P1/P1	P1/P1/P1	P2	TAH	
TF-12	07/28/92	EOD	1404	138	--	700	P1/P1/P1	P1/P1/P1	P2	TAH	
TF-13	07/28/92	EOD	1240	325	--	700	P1/P1/P1	P1/P1/P1	P2	TAH	
TF-01	07/29/92	1330	1404	138	78	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	07/29/92	1335	1240	325	78	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-03	07/29/92	1500	1240	325	78	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-04	07/29/92	1720	1240	325	78	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-05	07/29/92	1810	1240	325	76	700	P1/P1/P1	P1/P1/P1	P2	CAW	

"S_TFSEAM.WK1" disk 1

JUNE 1993

917-1203

GEOMEMBRANE TRIAL SEAM SUMMARY
FUSION METHOD – SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER	DATE	TIME TESTED	WELDER ID. MACHINE NUMBER	WELDER ID. TECH	APPROX. AMBIENT TEMP.(F)	DIGITAL SET TEMP.	RESULTS PEEL INSIDE	RESULTS PEEL OUTSIDE	SHEAR	QA MON	REMARKS
TF-01	08/01/92	0900	1319	BJ	68	700	P1/--/--	--/--/--	--	TAH	FAIL; SEE RETEST TF-O1R1
TF-01R1	08/01/92	0930	1319	BJ	68	700	P1/P1/P1	P1/P1/P1	P2	TAH	
TF-02	08/01/92	1400	1319	BJ	68	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-01	08/04/92	1530	1404	BJ	69	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	08/04/92	1540	1240	325	69	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-03	08/04/92	1625	1203	PV	69	700	P1/P1/F1	P1/P1/--	--	CAW	FAIL,SEE RETEST TF-03R1
TF-03R1	08/04/92	1645	1203	PV	69	700	P1/P1/F1	P1/P1/--	--	CAW	FAIL,SEE RETEST TF-03R2
TF-03R2	08/04/92	1710	1203	PV	69	700	P1/P1/P1	P1/P1/P1	P2	CAW	PASS,SEE TF-03R3
TF-03R3	08/04/92	1715	1203	PV	69	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-04	08/04/92	1755	1404	BJ	69	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-05	08/04/92	1800	1240	325	69	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-06	08/04/92	1910	1319	45	69	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-07	08/04/92	EOD	1319	45	69	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-08	08/04/92	EOD	1240	325	69	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-09	08/04/92	EOD	1203	PV	69	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-10	08/04/92	EOD	1404	BJ	69	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-01	08/05/92	0800	1203	PV	65	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	08/05/92	0825	1404	BJ	65	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-03	08/05/92	1035	1404	BJ	70	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-04	08/05/92	1040	1203	PV	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-05	08/05/92	1130	1404	BJ	72	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-06	08/05/92	1155	1203	PV	75	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-07	08/05/92	1320	1404	BJ	78	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-01	08/06/92	0845	1404	BJ	67	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	08/06/92	1010	1240	325	71	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-03	08/06/92	1240	1404	BJ	75	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-04	08/06/92	1300	1240	325	75	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-05	08/06/92	1350	1404	BJ	75	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-06	08/06/92	1700	1404	BJ	75	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-07	08/06/92	1800	1404	BJ	70	700	P1/P1/P1	P1/P1/P1	P2	AWJ	

"S_TFSEAM.WK1" disk 1

JUNE 1993

917-1203

GEOMEMBRANE TRIAL SEAM SUMMARY
FUSION METHOD - SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER	DATE	TIME TESTED	WELDER ID. MACHINE NUMBER	WELDER ID. TECH	APPROX. AMBIENT TEMP.(F)	DIGITAL SET TEMP.	RESULTS PEEL INSIDE	RESULTS PEEL OUTSIDE	SHEAR	QA MON	REMARKS
TF-08	08/06/92	1800	1319	BJ	70	700	P1/P1/P1	P1/P1/P1	P2	AWJ	
TF-09	08/06/92	1830	1240	325	70	700	P1/P1/P1	P1/P1/P1	P2	AWJ	
TF-10	08/06/92	1920	1319	BJ	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-11	08/06/92	1950	1240	325	70	710	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-01	08/07/92	1610	1404	BJ	80	700	P1/P1/--	P1/F2/--	--	CAW	FAIL, SEE RETEST 01R1
TF-01R1	08/07/92	1630	1404	BJ	80	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	08/07/92	1700	1240	146	75	700	P1/P1/--	F1/--/--	--	CAW	FAIL, SEE RETEST 02R1
TF-02R1	08/07/92	1720	1240	146	75	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-03	08/07/92	2000	1240	146	73	700	P1/F2/--	P1/P1/--	--	CAW	FAIL, TECH DID NOT WELD
TF-01	08/10/92	1740	1240	146	90	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	08/10/92	1750	1404	BJ	90	700	P1/F2/--	P1/F2/--	--	CAW	FAIL, TECH DID NOT WELD
TF-01	08/11/92	1730	1404	BJ	95	710	F1/--/--	F1/--/--	--	CAW	FAIL, NO WELDING TODAY
TF-01	08/12/92	1430	1404	BJ	78	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	08/12/92	1440	1240	JS	78	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-03	08/12/92	2000	1240	JS	73	700	FAIL	FAIL	--	CAW	FAIL, NO RETEST - RAIN
TF-04	08/12/92	2003	1404	BJ	73	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-01	08/15/92	1345	1240	325	70	700	P1/P1/--	P1/F2/--	--	CAW	FAIL, SEE RETEST TF-01R1
TF-01R1	08/15/92	1420	1240	325	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	08/15/92	1400	1404	JS	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-03	08/15/92	1410	1319	BJ	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-04	08/15/92	1620	1404	JS	70	700	P1/P1/P1	P1/P1/P1	P2	SRS	
TF-05	08/15/92	1704	1240	325	70	700	F2/P1/P1	P1/P1/F2	--	SRS	END OF DAY - NO RETEST
TF-06	08/15/92	EOD	1319	BJ	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-01	08/16/92	1405	1240	325	70	700	P1/F2/--	F2/--/--	--	CAW	FAIL, SEE RETEST TF-01R1
TF-01R1	08/16/92	1440	1240	325	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	08/16/92	1400	1404	JS	70	700	P1/F2/--	F2/--/--	--	CAW	FAIL, SEE RETEST TF-02R1
TF-02R1	08/16/92	1445	1404	JS	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-03	08/16/92	1500	1205	208	74	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-04	08/16/92	1550	1203	JF	75	700	F2/--/--	--/--/--	--	CAW	
TF-05	08/16/92	1800	1319	BJ	73	700	P1/P1/P1	P1/P1/P1	P2	CAW	

"S_TFSEAM.WK1" disk 1

JUNE 1993

917-1203

GEOMEMBRANE TRIAL SEAM SUMMARY
FUSION METHOD - SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER	DATE	TIME TESTED	WELDER ID. MACHINE NUMBER	WELDER ID. TECH	APPROX. AMBIENT TEMP.(F)	DIGITAL SET TEMP.	RESULTS PEEL INSIDE	RESULTS PEEL OUTSIDE	SHEAR	QA MON	REMARKS
TF-06	08/16/92	1800	1240	325	73	700	P1/P1/P1	P1/P1/--	--	CAW	FAIL, SEE RETEST TF-06R1
TF-06R1	08/16/92	1900	1240	325	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-07	08/16/92	1845	1205	208	73	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-08	08/16/92	EOD	1404	JS	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-09	08/16/92	EOD	1205	208	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-10	08/16/92	EOD	1319	BJ	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-11	08/16/92	EOD	1240	325	70	700	P2/P2/--	P1/F2/--	--	CAW	FAIL, SEE RETEST TF-11R1
TF-11R1	08/16/92	EOD	1240	325	70	700	P1/P1/--	F2/F2/--	--	CAW	END OF DAY - NO RETEST
TF-01	08/17/92	1015	1319	BJ	68	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	08/17/92	1020	1404	JS	68	700	P1/P1/P1	P1/P1/P1	P2	CAW	RESET WELDER - RETEST
TF-02R1	08/17/92	1040	1404	JS	68	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-03	08/17/92	1025	1240	325	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-04	08/17/92	1330	1240	325	75	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-05	08/17/92	1340	1404	JS	75	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-06	08/17/92	1340	1319	BJ	75	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-07	08/17/92	1600	1203	325	75	700	P1/P1/F2	P1/P1/--	--	CAW	FAIL, SEE RETEST TF-07R1
TF-07R1	08/17/92	1620	1203	325	75	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-08	08/17/92	1900	1319	BJ	73	700	P1/P1/F2	P1/P1/F2	--	CAW	FAIL, SEE RETEST TF-08R1
TF-08R1	08/17/92	1930	1319	BJ	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-09	08/17/92	1900	1404	JS	73	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-10	08/17/92	1940	1240	325	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-11	08/17/92	2015	1203	317	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-01	08/18/92	810	1319	BJ	65	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-02	08/18/92	820	1404	JS	65	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-03	08/18/92	1320	1404	JS	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	
TF-04	08/18/92	1330	1319	BJ	70	700	P1/P1/P1	P1/P1/P1	P2	CAW	

"S_TFSEAM.WK1" disk 1

M.2

EXTRUSION METHOD

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S155/157	08/07/92	1855	73	CAW	BJ	1404	710	710	176	DS-54	08/07/92	CAW
S156/157	08/07/92	1918	73	CAW	BJ	1404	710	716	44		08/07/92	CAW
S156/183	08/15/92	1653	70	CAW	BJ	1319	700	696	15		08/19/92	SRS
S157/158	08/07/92	1915	73	CAW	PV	1240	700	699	216	DS-55	08/07/92	CAW
S157/183	08/15/92	1656	70	CAW	BJ	1319	700	697	15		08/19/92	SRS
S158/159	08/07/92	1930	73	CAW	BJ	1404	710	710	215	DS-56	08/07/92	CAW
S158/182	08/15/92	1627	70	CAW	BJ	1319	700	683	13		08/19/92	BIE
S159/181	08/12/92	1930	74	CAW	BJ	1404	700	700	45		08/14/92	CAW
S159/182	08/15/92	1625	70	CAW	BJ	1319	700	675	6		08/19/92	BIE
S160/161	08/12/92	1629	74	CAW	JS	1240	700	700	24		08/14/92	CAW
S160/162	08/12/92	1623	74	CAW	JS	1240	700	697	25		08/14/92	CAW
S160/163	08/12/92	1620	74	CAW	JS	1240	700	700	26		08/14/92	CAW
S160/164	08/12/92	1617	74	CAW	JS	1240	700	700	26		08/14/92	BIE
S160/165	08/12/92	1616	74	CAW	JS	1240	700	700	15		08/14/92	CAW
S160/166	08/12/92	1546	74	CAW	BJ	1404	700	689	133		08/12/92	CAW
S161/162	08/12/92	1527	74	CAW	BJ	1404	700	702	69		08/12/92	CAW
S162/163	08/12/92	1528	74	CAW	JS	1240	700	699	49		08/12/92	CAW
S163/164	08/12/92	1537	74	CAW	JS	1240	700	690	31		08/12/92	CAW
S164/165	08/12/92	1536	74	CAW	BJ	1404	700	699	11		08/12/92	CAW
S166/167	08/12/92	1606	74	CAW	BJ	1404	700	694	144	DS-57	08/12/92	CAW
S167/168	08/12/92	1658	74	CAW	BJ	1404	700	701	55		08/14/92	CAW
S167/169	08/12/92	1646	74	CAW	BJ	1404	700	690	127		08/14/92	CAW
S168/169	08/12/92	1639	74	CAW	BJ	1404	700	650	15		08/14/92	CAW
S168/170	08/12/92	1723	74	CAW	JS	1240	700	697	55		08/14/92	CAW
S169/170	08/12/92	1711	74	CAW	JS	1240	700	699	128		08/14/92	CAW
S170/171	08/12/92	1717	74	CAW	BJ	1404	700	698	211		08/12/92	CAW
S170/182	08/15/92	1615	70	CAW	BJ	1319	700	699	14		08/19/92	BIE
S171/172	08/12/92	1731	74	CAW	JS	1240	700	700	211	DS-58	08/12/92	CAW
S171/182	08/15/92	1618	70	CAW	BJ	1319	700	700	14		08/19/92	BIE
S172/173	08/12/92	1753	74	CAW	BJ	1404	700	701	211	DS-59	08/12/92	CAW

NOTES: filename"S_FUSWLD.WK1"

1) THE SEAM TEST DATE SHOWN REPRESENTS THE DATE WHEN THE SEAM NON-DESTRUCTIVE TESTING WAS COMPLETED, AND DOES NOT REPRESENT THE TESTING OF INDIVIDUAL SEAM SEGMENTS.

2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S172/182	08/15/92	1621	70	CAW	BJ	1319	700	700	14		08/19/92	BIE
S173/174	08/12/92	1850	74	CAW	BJ	1404	700	698	74		08/14/92	CAW
S173/180	08/12/92	1915	74	CAW	BJ	1404	700	700	43		08/14/92	CAW
S173/181	08/12/92	1942	74	CAW	BJ	1404	700	700	37		08/15/92	CAW
S173/182	08/15/92	1623	70	CAW	BJ	1319	700	696	15		08/19/92	BIE
S174/181	08/12/92	1936	74	CAW	BJ	1404	700	701	74		08/14/92	CAW
S176/177	08/12/92	1935	74	CAW	JS	1240	700	700	61		08/14/92	CAW
S176/182	08/15/92	1430	70	CAW	325	1240	700	700	56		08/15/92	CAW
S177/178	08/12/92	1923	74	CAW	JS	1240	700	698	63		08/14/92	CAW
S178/179	08/12/92	1915	74	CAW	JS	1240	700	697	41		08/12/92	CAW
S180/181	08/12/92	1950	74	CAW	BJ	1404	700	698	9		08/18/92	JAL
S182/183	08/15/92	1410	70	CAW	JS	1404	700	700	131	DS-60	08/15/92	CAW
S183/184	08/15/92	1450	70	CAW	JS	1404	700	700	56		08/15/92	CAW
S183/184	08/15/92	1435	70	CAW	JS	1404	700	700	138		08/15/92	CAW
S184/185	08/15/92	1455	70	CAW	325	1240	700	700	139	DS-61	08/15/92	CAW
S184/185	08/15/92	1505	70	CAW	JS	1404	700	699	66		08/15/92	CAW
S185/186	08/15/92	1521	70	CAW	JS	1404	700	699	90		08/15/92	CAW
S185/186	08/15/92	1520	70	CAW	325	1240	700	699	146		08/15/92	CAW
S186/187	08/15/92	1536	70	CAW	JS	1404	700	700	109	DS-62	08/15/92	CAW
S186/187	08/15/92	1535	70	CAW	325	1240	700	700	152		08/15/92	CAW
S187/188	08/15/92	1555	70	CAW	325	1240	700	700	153	DS-63	08/15/92	CAW
S187/188	08/15/92	1555	70	CAW	JS	1404	700	697	123		08/15/92	CAW
S188/189	08/16/92	1505	70	CAW	JS	1404	700	699	153		08/16/92	CAW
S188/189	08/16/92	1454	80	CAW	325	1240	700	700	142		08/16/92	CAW
S189/190	08/16/92	1510	74	CAW	208	1205	700	689	154	DS-66	08/16/92	BFM
S189/190	08/16/92	1520	80	CAW	325	1240	700	690	166		08/16/92	BFM
S190/191	08/16/92	1600	80	CAW	325	1240	700	698	163	DS-67	08/16/92	BFM
S190/192	08/16/92	1620	80	CAW	325	1240	700	699	30		08/16/92	BFM
S190/192	08/16/92	1525	70	CAW	JS	1404	700	700	153	DS-65	08/16/92	BFM
S191/192	08/16/92	1550	80	CAW	325	1240	700	700	15		08/16/92	BFM

NOTES: filename"S_FUSWLD.WK1"

1) THE SEAM TEST DATE SHOWN REPRESENTS THE DATE WHEN THE SEAM NON-DESTRUCTIVE TESTING WAS COMPLETED, AND DOES NOT REPRESENT THE TESTING OF INDIVIDUAL SEAM SEGMENTS.

2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S191/193	08/16/92	1630	78	CAW	325	1240	700	698	164		08/16/92	BFM
S192/193	08/16/92	1645	74	CAW	325	1240	700	698	30		08/19/92	SRS
S192/193	08/16/92	1535	74	CAW	208	1205	700	697	153		08/19/92	SRS
S193/194	08/16/92	1705	74	CAW	325	1240	700	699	150	DS-76P1	08/19/92	SRS
S193/194	08/16/92	1552	70	CAW	JS	1404	700	694	154	DS-70	08/19/92	SRS
S193/195	08/16/92	1700	74	CAW	325	1240	700	698	37		08/16/92	BFM
S194/195	08/16/92	1655	74	CAW	325	1240	700	690	15		08/16/92	BFM
S194/196	08/16/92	1618	74	CAW	208	1205	700	700	154		08/16/92	BFM
S194/239	08/17/92	2000	70	BIE	BJ	1319	700	690	100		08/21/92	CAW
S195/239	08/17/92	1745	74	BIE	BJ	1319	700	700	40		08/21/92	CAW
S196/197	08/16/92	1630	74	CAW	JS	1404	700	700	154		08/16/92	BFM
S196/197	08/16/92	1658	74	CAW	208	1205	700	687	54		08/16/92	BFM
S196/239	08/17/92	2010	70	BIE	BJ	1319	700	695	10	DS-82	08/21/92	CAW
S196/240	08/17/92	2012	74	BIE	BJ	1319	700	700	3		08/21/92	SRS
S197/198	08/16/92	1706	74	CAW	208	1205	700	697	54	DS-69	08/16/92	BFM
S197/198	08/16/92	1700	74	CAW	JS	1404	700	701	153	DS-68	08/16/92	BFM
S197/240	08/17/92	2013	74	BIE	BJ	1319	700	695	10		08/21/92	SRS
S197/241	08/17/92	2015	74	BIE	BJ	1319	700	690	3		08/21/92	SRS
S198/199	08/16/92	1730	74	CAW	JS	1404	700	698	153		08/16/92	BFM
S198/200	08/16/92	1717	74	CAW	208	1205	700	689	50		08/16/92	BFM
S198/241	08/17/92	2018	74	BIE	BJ	1319	700	700	10		08/21/92	SRS
S198/242	08/17/92	2019	74	BIE	BJ	1319	700	700	5		08/21/92	SRS
S199/200	08/16/92	1720	74	CAW	JS	1404	700	680	15		08/16/92	BFM
S199/201	08/16/92	1740	74	CAW	208	1205	700	696	153		08/16/92	BFM
S200/201	08/16/92	1805	73	CAW	208	1205	700	700	51		08/16/92	BFM
S200/242	08/17/92	2020	74	BIE	BJ	1319	700	695	5		08/21/92	SRS
S200/243	08/17/92	2022	74	BIE	BJ	1319	700	700	12		08/21/92	SRS
S201/202	08/16/92	1800	73	CAW	JS	1404	700	700	185		08/16/92	BFM
S201/207	08/16/92	1957	70	CAW	BJ	1319	700	690	10		08/17/92	CAW
S201/208	08/16/92	1953	70	CAW	BJ	1319	700	682	15		08/17/92	CAW

NOTES: filename"S_FUSWLD.WK1"

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2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S201/209	08/16/92	1950	70	CAW	BJ	1319	700	682	5		08/17/92	CAW
S201/243	08/17/92	2023	74	BIE	BJ	1319	700	700	4		08/21/92	SRS
S201/246	08/17/92	2025	70	BIE	BJ	1319	700	702	11		08/21/92	SRS
S202/203	08/16/92	1835	73	CAW	JS	1404	700	698	137	DS-71	08/16/92	BFM
S202/205	08/16/92	2002	70	CAW	BJ	1319	700	695	7		08/17/92	CAW
S202/206	08/16/92	2000	70	CAW	BJ	1319	700	692	15		08/17/92	CAW
S202/207	08/16/92	1957	70	CAW	BJ	1319	700	690	15		08/17/92	CAW
S202/246	08/17/92	2026	70	BIE	BJ	1319	700	704	4		08/21/92	SRS
S202/247	08/17/92	2028	70	BIE	BJ	1319	700	695	10		08/21/92	SRS
S203/204	08/16/92	1850	73	CAW	208	1205	700	699	137		08/16/92	BFM
S203/205	08/16/92	2004	70	CAW	BJ	1319	700	698	15		08/17/92	CAW
S203/247	08/17/92	2024	70	BIE	BJ	1319	700	695	4		08/21/92	SRS
S203/248	08/17/92	2030	70	BIE	BJ	1319	700	700	12		08/21/92	SRS
S204/205	08/16/92	2006	70	CAW	BJ	1319	700	701	15		08/17/92	CAW
S204/222	08/17/92	1930	70	CAW	JS	1404	700	699	134		08/18/92	CAW
S204/248	08/17/92	2031	70	BIE	BJ	1319	700	700	4		08/21/92	SRS
S204/251	08/17/92	2020	74	BIE	BJ	1319	700	699	10		08/21/92	SRS
S205/206	08/16/92	1900	70	CAW	JS	1404	700	700	30		08/16/92	BFM
S205/222	08/17/92	1455	74	CAW	BJ	1319	700	677	15		08/19/92	CAW
S206/207	08/16/92	1940	70	CAW	325	1240	700	700	33		08/19/92	SRS
S206/222	08/17/92	1457	74	CAW	BJ	1319	700	678	15		08/19/92	CAW
S207/208	08/16/92	1920	70	CAW	208	1205	700	700	35		08/16/92	BFM
S207/222	08/17/92	1459	74	CAW	BJ	1319	700	680	15		08/19/92	CAW
S208/209	08/16/92	1945	70	CAW	325	1240	700	700	36	DS-76	08/16/92	BFM
S208/222	08/17/92	1501	74	CAW	BJ	1319	700	680	15		08/19/92	CAW
S209/210	08/17/92	1100	70	CAW	325	1240	700	700	66	DS-76N1	08/17/92	CAW
S209/222	08/17/92	1504	74	CAW	BJ	1319	700	680	15		08/19/92	CAW
S210/211	08/17/92	1035	70	CAW	325	1240	700	682	66		08/17/92	CAW
S210/222	08/17/92	1507	74	CAW	BJ	1319	700	685	15		08/19/92	CAW
S211/212	08/17/92	1050	70	CAW	325	1240	700	697	65		08/17/92	CAW

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2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S211/222	08/17/92	1509	74	CAW	BJ	1319	700	697	15		08/19/92	CAW
S212/213	08/17/92	1100	70	CAW	JS	1404	700	700	66		08/17/92	CAW
S212/221	08/17/92	1538	74	CAW	BJ	1319	700	696	6		08/19/92	CAW
S212/222	08/17/92	1511	74	CAW	BJ	1319	700	690	15	DS-74	08/19/92	CAW
S213/214	08/17/92	1105	70	CAW	JS	1404	700	700	53		08/17/92	CAW
S213/220	08/17/92	1534	74	CAW	BJ	1319	700	686	13		08/19/92	CAW
S213/221	08/17/92	1536	74	CAW	BJ	1319	700	696	6		08/19/92	CAW
S214/215	08/17/92	1110	70	CAW	325	1240	700	698	38		08/17/92	CAW
S214/219	08/17/92	1532	74	CAW	BJ	1319	700	682	9		08/19/92	CAW
S214/220	08/17/92	1533	74	CAW	BJ	1319	700	682	10		08/19/92	CAW
S215/216	08/17/92	1115	70	CAW	JS	1404	700	700	25		08/17/92	CAW
S215/218	08/17/92	1529	74	CAW	BJ	1319	700	659	10		08/19/92	CAW
S215/219	08/17/92	1530	74	CAW	BJ	1319	700	676	10		08/19/92	CAW
S216/217	08/17/92	1117	70	CAW	JS	1404	700	700	14		08/17/92	CAW
S216/218	08/17/92	1526	74	CAW	BJ	1319	700	680	13		08/19/92	CAW
S217/218	08/17/92	1524	74	CAW	BJ	1319	700	680	5		08/19/92	CAW
S218/219	08/17/92	1122	70	CAW	JS	1404	700	700	29		08/17/92	CAW
S219/220	08/17/92	1128	70	CAW	JS	1404	700	693	44		08/17/92	CAW
S220/221	08/17/92	1135	74	CAW	JS	1404	700	701	61		08/17/92	CAW
S221/222	08/17/92	1440	74	CAW	JS	1404	700	696	70		08/18/92	CAW
S222/223	08/17/92	1350	74	CAW	325	1240	700	698	219	DS-72	08/18/92	CAW
S222/236	08/17/92	1718	74	BIE	BJ	1319	700	700	3		08/22/92	SRS
S222/237	08/17/92	1715	74	BIE	BJ	1319	700	700	25		08/22/92	SRS
S222/238	08/17/92	1710	74	BIE	BJ	1319	700	696	30		08/22/92	SRS
S222/251	08/17/92	2033	74	BIE	BJ	1319	700	700	3		08/21/92	SRS
S222/252	08/17/92	2034	70	BIE	BJ	1319	700	699	11		08/21/92	SRS
S223/224	08/17/92	1400	74	CAW	JS	1404	700	706	207	DS-73	08/17/92	CAW
S223/233	08/17/92	1725	74	BIE	BJ	1319	700	698	7		08/22/92	SRS
S223/236	08/17/92	1720	74	BIE	BJ	1319	700	695	12		08/22/92	SRS
S224/225	08/17/92	1735	74	BIE	BJ	1319	700	698	15		08/22/92	SRS

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2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S224/226	08/17/92	1737	74	BIE	BJ	1319	700	700	15		08/22/92	SRS
S224/227	08/17/92	1734	74	BIE	BJ	1319	700	700	15		08/22/92	SRS
S224/228	08/17/92	1733	74	BIE	BJ	1319	700	700	15		08/22/92	SRS
S224/229	08/17/92	1732	74	BIE	BJ	1319	700	695	15		08/22/92	SRS
S224/231	08/17/92	1730	74	BIE	BJ	1319	700	695	13		08/22/92	SRS
S224/233	08/17/92	1727	74	BIE	BJ	1319	700	698	5		08/22/92	SRS
S224/234	08/17/92	1455	74	CAW	JS	1404	700	700	121		08/18/92	CAW
S225/226	08/17/92	1430	74	CAW	325	1240	700	698	30		08/17/92	CAW
S225/227	08/17/92	1437	74	CAW	325	1240	700	700	35		08/17/92	CAW
S225/235	08/18/92	1014	70	CAW	BJ	1319	700	691	6		08/20/92	SRS
S225/261	08/18/92	1015	70	CAW	BJ	1319	700	700	12		08/20/92	SRS
S226/234	08/18/92	1008	70	CAW	BJ	1319	700	700	15		08/20/92	SRS
S226/235	08/18/92	1011	70	CAW	BJ	1319	700	700	17		08/20/92	SRS
S227/228	08/17/92	1445	74	CAW	325	1240	700	682	42		08/17/92	CAW
S227/261	08/18/92	1018	70	CAW	BJ	1319	700	697	5		08/20/92	SRS
S227/263	08/18/92	1021	70	CAW	BJ	1319	700	662	10	DS-84N1	08/20/92	SRS
S228/229	08/17/92	1500	74	CAW	325	1240	700	696	42		08/17/92	CAW
S228/263	08/18/92	1023	70	CAW	BJ	1319	700	670	15		08/22/92	SRS
S229/230	08/17/92	1630	74	BIE	BJ	1319	700	695	25		08/24/92	BIE
S229/232	08/17/92	1635	74	BIE	BJ	1319	700	695	20		08/24/92	BIE
S229/263	08/18/92	1025	70	CAW	BJ	1319	700	700	15		08/22/92	SRS
S230/231	08/17/92	1515	74	CAW	325	1240	700	696	42		08/17/92	CAW
S230/232	08/17/92	1522	74	CAW	325	1240	700	--	31		08/17/92	CAW
S230/258	08/17/92	2103	70	BIE	BJ	1319	700	698	15		08/22/92	SRS
S231/233	08/17/92	1530	74	CAW	325	1240	700	700	42		08/17/92	CAW
S231/257	08/17/92	2101	70	BIE	BJ	1319	700	700	10		08/22/92	SRS
S231/258	08/17/92	2102	70	BIE	BJ	1319	700	699	2		08/22/92	SRS
S232/258	08/17/92	2104	70	BIE	BJ	1319	700	699	2		08/22/92	SRS
S232/263	08/18/92	1027	70	CAW	BJ	1319	700	699	15		08/22/92	SRS
S233/236	08/17/92	1540	74	CAW	325	1240	700	700	41		08/17/92	CAW

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2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S233/256	08/17/92	2059	70	BIE	BJ	1319	700	699	7		08/22/92	SRS
S233/257	08/17/92	2100	70	BIE	BJ	1319	700	702	7		08/22/92	SRS
S234/235	08/17/92	1525	74	CAW	JS	1404	700	702	122	DS-75	08/18/92	CAW
S235/261	08/17/92	2020	70	CAW	325	1240	700	--	140		08/17/92	CAW
S236/237	08/17/92	1555	74	CAW	325	1240	700	700	41		08/17/92	BIE
S236/254	08/17/92	2054	70	BIE	BJ	1319	700	700	3		08/22/92	SRS
S236/256	08/17/92	2057	70	BIE	BJ	1319	700	700	10		08/22/92	SRS
S237/238	08/17/92	1610	74	CAW	325	1240	700	696	24		08/17/92	CAW
S237/254	08/17/92	2053	70	BIE	BJ	1319	700	695	10		08/22/92	SRS
S238/253	08/17/92	2050	70	BIE	BJ	1319	700	700	14		08/22/92	SRS
S239/240	08/17/92	1620	74	CAW	JS	1404	700	699	131		08/17/92	CAW
S240/241	08/17/92	1630	74	CAW	325	1240	700	--	131	DS-77	08/17/92	CAW
S241/242	08/17/92	1710	74	CAW	JS	1404	700	694	132		08/17/92	CAW
S242/243	08/17/92	1705	74	CAW	325	1240	700	700	132		08/17/92	CAW
S243/244	08/17/92	1715	74	CAW	317	1203	700	689	86		08/17/92	CAW
S243/245	08/17/92	1635	74	CAW	317	1203	700	699	29		08/17/92	CAW
S243/246	08/17/92	1702	74	CAW	317	1203	700	696	13		08/17/92	CAW
S244/245	08/17/92	1647	74	CAW	317	1203	700	699	17		08/17/92	CAW
S244/247	08/17/92	1730	74	CAW	325	1240	700	--	100		08/17/92	CAW
S245/246	08/17/92	1657	74	CAW	317	1203	700	700	17		08/17/92	CAW
S246/247	08/17/92	1740	74	CAW	325	1240	700	696	32		08/17/92	CAW
S247/248	08/17/92	1745	74	CAW	JS	1404	700	700	129		08/17/92	CAW
S248/249	08/17/92	1806	74	CAW	325	1240	700	695	20		08/18/92	CAW
S248/249	08/17/92	1730	74	CAW	317	1203	700	698	75		08/18/92	CAW
S248/250	08/17/92	1805	74	CAW	325	1240	700	695	3		08/20/92	SRS
S248/251	08/17/92	1804	74	CAW	325	1240	700	689	29		08/17/92	CAW
S249/250	08/17/92	1748	74	CAW	325	1240	700	700	17		08/17/92	CAW
S249/252	08/17/92	1826	73	CAW	325	1240	700	703	81	DS-79	08/18/92	CAW
S250/251	08/17/92	1758	74	CAW	325	1240	700	700	18		08/17/92	CAW
S250/252	08/17/92	1823	73	CAW	325	1240	700	703	27		08/18/92	CAW

NOTES: filename"S_FUSWLD.WK1"

1) THE SEAM TEST DATE SHOWN REPRESENTS THE DATE WHEN THE SEAM NON-DESTRUCTIVE TESTING WAS COMPLETED, AND DOES NOT REPRESENT THE TESTING OF INDIVIDUAL SEAM SEGMENTS.

2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S251/252	08/17/92	1820	74	CAW	325	1240	700	700	15		08/17/92	CAW
S252/253	08/17/92	1745	74	CAW	317	1203	700	698	124		08/18/92	CAW
S253/254	08/17/92	1825	74	CAW	317	1203	700	701	47	DS-80	08/18/92	CAW
S253/255	08/17/92	1830	74	CAW	317	1203	700	694	124		08/18/92	CAW
S254/255	08/17/92	1815	74	CAW	317	1203	700	700	15		08/17/92	CAW
S254/256	08/17/92	1855	74	CAW	317	1203	700	696	61		08/17/92	CAW
S255/256	08/17/92	1900	74	CAW	317	1203	700	699	125		08/18/92	CAW
S256/257	08/17/92	1925	70	CAW	317	1203	700	691	195	DS-81	08/18/92	CAW
S257/258	08/17/92	1950	70	CAW	JS	1404	700	697	195	DS-83P1	08/18/92	CAW
S258/259	08/18/92	0920	65	CAW	JS	1404	700	700	66		08/18/92	CAW
S258/260	08/18/92	0930	65	CAW	JS	1404	700	700	65		08/18/92	CAW
S258/263	08/18/92	0910	65	CAW	JS	1404	700	697	85		08/18/92	CAW
S259/260	08/17/92	1901	73	CAW	325	1240	700	700	7		08/18/92	CAW
S259/263	08/18/92	0855	65	CAW	JS	1404	700	700	5		08/18/92	CAW
S261/262	08/17/92	1929	70	CAW	JS	1404	700	700	160	DS-83,N1	08/18/92	CAW
S261/263	08/18/92	0957	70	CAW	BJ	1319	700	700	6		08/20/92	SRS
S262/263	08/18/92	0959	70	CAW	BJ	1319	700	697	5		08/20/92	SRS

NOTES: filename"S_FUSWLD.WK1"

1) THE SEAM TEST DATE SHOWN REPRESENTS THE DATE WHEN THE SEAM NON-DESTRUCTIVE TESTING WAS COMPLETED, AND DOES NOT REPRESENT THE TESTING OF INDIVIDUAL SEAM SEGMENTS.

2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

N.2

EXTRUSION METHOD

JUNE 1993

917-1203

GEOMEMBRANE SEAMING SUMMARY
EXTRUSION SEAMING METHOD
SECONDARY GEOMEMBRANE - CELL 2
ALLEN PARK CLAY MINE
FORD MOTOR COMPANY

SEAM NUMBER	DATE	AMBIENT TEMP.	WELDER ID		MACHINE TEMP.		APPROX SEAM LENGTH	DEST. TEST NUMBER	QA MON	SEAM TESTING		
			TECH	MACHINE	DIGITAL SET	INDICATOR				DATE	QA MON	COMPLETE
S 35 / 35(1)	08/03/92	78	LEM	MX109	220	220	8		CAW	08/04/92	BJ	YES
S 36 / 36(1)	08/03/92	78	LEM	MX109	220	220	14		BJ	08/04/92	BJ	YES
S 37 / 37(1)	08/03/92	78	LEM	MX109	220	227	14		BJ	08/04/92	BJ	YES
S 39 / 39(1)	08/03/92	78	398	MX109	220	224	14		BJ	08/04/92	BJ	YES
S 40 / 40(1)	08/03/92	78	398	MX109	220	223	14		BJ	08/04/92	BJ	YES
S 42 / 42(1)	08/03/92	78	398	MX109	220	224	14		BJ	08/04/92	BJ	YES
S 43 / 43(1)	08/03/92	75	LEM	MX109	220	225	14		BJ	08/04/92	BJ	YES
S 44 / 44(1)	08/03/92	72	LEM	MX109	220	223	14		BJ	08/04/92	BJ	YES
S 46 / 46(1)	08/03/92	72	LEM	MX109	220	224	14		BJ	08/04/92	BJ	YES
S 47 / 47(1)	08/03/92	70	LEM	MX109	220	223	14		BJ	08/04/92	BJ	YES
S 48 / 48(1)	08/03/92	70	LEM	MX109	220	224	14		BJ	08/04/92	BJ	YES
S 91 / 260	08/17/92	75	398	MX111	225	225	7		BIE	08/24/92	BIE	YES
S 146 / 148	08/07/92	70	145	MX42	225	225	5		CAW	WELD REMOVED		
S 147 / 148	08/07/92	70	145	MX42	225	225	3		CAW	WELD REMOVED		
S 159 / 180	08/14/92	62	145	MX42	225	225	37	DSE-07	CAW	08/18/92	JAL	YES
S 159 / 181	08/14/92	65	398	MX111	225	225	66		SRS	08/18/92	JAL	YES

Filename"S_EXTWLD.WK1"

NOTE:

1) Seaming occurred during wrinkle repair

GEOMEMBRANE TRIAL SEAM SUMMARY
EXTRUSION METHOD – SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER	DATE	TIME TESTED	AMBIENT TEMP. (F)	WELDER ID. MACH. NUMBER	WELDER ID. TECH.	MACHINE TEMP.(C) BAR.	MACHINE TEMP.(C) NOZ.	RESULTS PEEL	RESULTS SHEAR	QA MONITOR	REMARKS
TX-01	07/21/92	1615	75	042	145	6	230	F1/--/--	--	CAW	FAIL, SEE RETEST TX-01R1
TX-01R1	07/21/92	1655	75	042	145	5	225	P1/P1/P1	P2	CAW	
TX-01	07/22/92	855	55	042	145	6	230	P1/P1/P1	P2	CAW	
TX-02	07/22/92	1350	75	042	145	5.5	225	P1/P1/P1	P2	CAW	
TX-03	07/22/92	1430	75	070	LEM	5	225	P1/P1/P1	P2	CAW	
TX-04	07/22/92	1440	75	070	398	5	225	P1/P1/P1	P2	CAW	
TX-01	07/24/92	820	64	042	145	5.5	225	P1/P1/P1	FAIL	LEL	FAIL, SEE RETEST TX-01R1
TX-01R1	07/24/92	845	64	042	145	5	225	P1/P1/P1	P2	LEL	
TX-02	07/24/92	830	64	070	LEM	6	227	P1/P1/P1	P2	LEL	
TX-03	07/24/92	850	64	070	398	6	227	F1/--/--	--	LEL	FAIL, SEE RETEST TX-03R1
TX-03R1	07/24/92	910	64	070	398	6	227	P1/P1/P1	P2	LEL	
TX-04	07/24/92	1315	70	042	145	6	225	F1/--/--	--	LEL	FAIL, SEE RETEST TX-04R1
TX-04R1	07/24/92	1330	70	042	145	6	225	P1/P1/P1	P2	LEL	
TX-05	07/24/92	1315	70	070	398	5.5	225	P1/P1/P1	P2	LEL	
TX-06	07/24/92	1320	70	070	LEM	5.5	225	P1/P1/P1	P2	LEL	
TX-07	07/24/92	1650	72	042	145	5	225	P1/P1/P1	P2	LEL	
TX-08	07/24/92	1720	72	070	398	5.5	225	P1/P1/P1	P2	LEL	
TX-09	07/24/92	1725	72	070	LEM	5.5	225	P1/P1/P1	P2	JAL	
TX-10	07/24/92	1900	68	111	138	5.5		P1/P1/P1	P2	LEL	
TX-01	07/25/92	750	65	070	398	5	225	P1/F1/--	--	CAW	FAIL, SEE RETEST TX-01R1
TX-01R1	07/25/92	810	65	070	398	5	225	P1/P1/P1	P2	CAW	
TX-02	07/25/92	805	65	042	145	4.5	220	P1/P1/P1	P2	CAW	
TX-03	07/25/92	820	67	070	LEM	6	227	P1/P1/P1	P2	CAW	
TX-04	07/25/92	1320	78	070	LEM	4.5	220	P1/P1/P1	FAIL	CAW	FAIL, SEE RETEST TX-04R1
TX-04R1	07/25/92	1345	78	070	LEM	4.5	220	P1/P1/P1	P2	CAW	
TX-05	07/25/92	1325	78	070	398	4.5	220	P1/P1/P1	P2	CAW	
TX-06	07/25/92	1330	78	042	145	4	220	P1/P1/P1	P2	CAW	
TX-07	07/25/92	1700	80	070	398	4.5	220	P1/P1/P1	P2	CAW	
TX-08	07/25/92	1710	80	042	145	4.5	220	P1/P1/P1	P2	CAW	
TX-09	07/25/92	1725	80	070	LEM	4.5	220	P1/P1/P1	P2	CAW	
TX-01	07/27/92	800	67	070	398	5.5	225	P1/P1/P1	P2	CAW	
TX-02	07/27/92	810	69	070	LEM	5.5	225	P1/P1/P1	P2	LEL	
TX-03	07/27/92	815	69	042	145	4.5	220	P1/P1/P1	P2	LEL	
TX-04	07/27/92	1315	78	070	398	5.5	225	P1/P1/P1	P2	LEL	
TX-05	07/27/92	1320	78	070	LEM	5.5	225	P1/P1/P1	P2	LEL	
TX-06	07/27/92	1330	78	042	145	4	220	P1/P1/P1	P2	LEL	

JUNE 1993

917–1203

GEOMEMBRANE TRIAL SEAM SUMMARY
EXTRUSION METHOD – SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER	DATE	TIME TESTED	AMBIENT TEMP. (F)	WELDER ID. MACH. NUMBER	WELDER ID. TECH.	MACHINE TEMP.(C) BAR.	MACHINE TEMP.(C) NOZ.	RESULTS PEEL	RESULTS SHEAR	QA MONITOR	REMARKS
TX–07	07/27/92	1710	84	042	145	4	220	P1/P1/P1	P2	LEL	
TX–08	07/27/92	1930	78	042	145	4	220	P1/P1/P1	P2	LEL	
TX–09	07/27/92	1930	78	070	LEM	5.5	225	P1/P1/P1	P2	LEL	
TX–10	07/27/92	1940	78	070	398	5.5	225	P1/P1/P1	P2	AWJ	
TX–01	07/28/92	820	72	042	145	4.5	220	P1/P1/P1	P2	CAW	
TX–02	07/28/92	920	72	070	398	5.5	225	P1/P1/P1	P2	CAW	
TX–03	07/28/92	930	72	070	LEM	5.5	225	P1/P1/P1	P2	CAW	
TX–04	07/28/92	1530	78	042	145	4.5	225	P1/P1/P1	P2	CAW	
TX–05	07/28/92	1445	78	070	LEM	5	220	P1/P1/P1	P2	CAW	
TX–06	07/28/92	1710	78	042	145	4.5	225	P1/P1/P1	P2	CAW	
TX–07	07/28/92	1730	76	070	398	4	220	P1/P1/P1	P2	CAW	
TX–08	07/28/92	2040	70	042	145	4.5	225	P1/P1/P1	P2	TAH	
TX–09	07/28/92	2045	70	070	398	4	220	P1/P1/P1	P2	TAH	
TX–10	07/28/92	EOD	70	042	145	4.5	225	P1/P1/P1	P2	TAH	
TX–01	07/29/92	830	55	032	LEM	5.5	227	P1/P1/P1	P2	AWJ	
TX–02	07/29/92	830	55	032	398	5	227	P1/P1/P1	P2	AWJ	
TX–03	07/29/92	830	55	042	145	5	220	P1/P1/P1	P2	AWJ	
TX–04	07/29/92	1325	78	032	398	5	225	P1/P1/P1	P2	CAW	
TX–05	07/29/92	1328	78	042	145	4.5	220	P1/P1/P1	P2	CAW	
TX–06	07/29/92	1335	78	032	LEM	4.5	225	P1/P1/P1	P2	CAW	
TX–07	07/29/92	1800	76	032	LEM	4.5	225	P1/P1/P1	P2	CAW	
TX–08	07/29/92	1805	76	032	398	4.5	225	P1/P1/P1	P2	CAW	
TX–09	07/29/92	1820	76	042	145	4	220	P1/P1/P1	P2	CAW	
TX–01	07/30/92	750	68	042	145	4	220	P1/P1/P1	P2	CAW	
TX–01	08/01/92	1740	73	032	JF	5	220	P1/P1/P1	P2	CAW	
TX–01	08/03/92	900	55	042	145	4	220	P1/P1/P1	P2	AWJ	
TX–02	08/03/92	1030	60	109	398	4.5	225	P1/P1/P1	P2	AWJ	
TX–03	08/03/92	1110	60	109	LEM	4	225	P1/P1/P1	P2	AWJ	
TX–04	08/03/92	1330	78	109	398	4	220	P1/P1/P1	P2	CAW	
TX–05	08/03/92	1340	78	042	145	3.5	218	P1/P1/P1	P2	CAW	
TX–06	08/03/92	1345	78	109	LEM	4	220	P1/P1/P1	P2	CAW	
TX–01	08/04/92	800	61	042	145	4.5	220	P1/P1/P1	P2	CAW	
TX–02	08/04/92	820	61	109	398	4	220	FAIL	FAIL	CAW	FAIL, TECH DID NOT WELD
TX–03	08/04/92	830	61	109	LEM	4	225	P1/P1/P1	P2	CAW	
TX–04	08/04/92	1610	69	042	145	4	220	P1/P1/P1	P2	CAW	
TX–05	08/04/92	1615	69	111	398	4.5	225	P1/P1/P1	P2	CAW	

GEOMEMBRANE TRIAL SEAM SUMMARY
EXTRUSION METHOD – SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER	DATE	TIME TESTED	AMBIENT TEMP. (F)	WELDER ID.		MACHINE TEMP.(C)		RESULTS		QA MONITOR	REMARKS
				MACH. NUMBER	TECH.	BAR.	NOZ.	PEEL	SHEAR		
TX-06	08/04/92	1630	69	111	LEM	4	225	P1/P1/P1	P2	CAW	
TX-07	08/04/92	EOD	69	042	145	4	220	P1/P1/P1	P2	CAW	
TX-08	08/04/92	EOD	69	111	LEM	4	225	P1/P1/P1	P2	CAW	
TX-01	08/05/92	815	65	111	LEM	5	225	P1/P1/P1	P2	CAW	
TX-02	08/05/92	830	65	111	398	5	225	P1/P1/P1	P2	CAW	
TX-03	08/05/92	915	65	042	145	4	220	P1/P1/P1	P2	CAW	
TX-04	08/05/92	1330	78	111	398	4	220	P1/P1/P1	P2	CAW	
TX-05	08/05/92	1340	78	111	LEM	4	220	P1/P1/P1	P2	CAW	
TX-06	08/05/92	1345	78	042	145	3.5	218	P1/P1/P1	P2	CAW	
TX-07	08/05/92	1720	78	042	145	3.5	218	P1/P1/P1	P2	CAW	
TX-08	08/05/92	1730	78	111	398	4	220	P1/P1/P1	P2	CAW	
TX-01	08/06/92	810	67	042	145	4	225	P1/P1/P1	P2	CAW	
TX-02	08/06/92	812	67	111	398	5	225	F1/--/--	--	CAW	FAIL. SEE RETEST TX-02R1
TX-02R1	08/06/92	842	67	111	398	6	225	FAIL	FAIL	CAW	FAIL. SEE RETEST TX-02R2
TX-02R2	08/06/92	906	68	111	398	6	225	P1/P1/P1	P2	CAW	
TX-03	08/06/92	912	68	042	LEM	4	225	P1/P1/P1	P2	CAW	
TX-04	08/06/92	1022	71	042	LEM	4.5	225	P1/P1/P1	P2	CAW	
TX-05	08/06/92	1230	75	042	145	4	220	P1/P1/P1	P2	CAW	
TX-06	08/06/92	1235	75	111	398	6	225	P1/P1/P1	P2	CAW	
TX-07	08/06/92	1800	70	042	LEM	4	220	P1/P1/P1	P2	CAW	
TX-08	08/06/92	1800	70	042	145	4	220	P1/P1/P1	P2	CAW	
TX-09	08/06/92	1800	70	111	398	5	225	P1/P1/P1	P2	CAW	
TX-10	08/06/92	1940	70	111	398	5	225	P1/P1/P1	P2	CAW	
TX-01	08/07/92	805	70	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-02	08/07/92	815	68	042	145	4.5	225	P1/P1/P1	P2	CAW	
TX-03	08/07/92	1334	70	111	398	4	225	P1/P1/P1	P2	CAW	
TX-04	08/07/92	1335	70	042	145	4	220	P1/P1/P1	P2	CAW	
TX-05	08/07/92	1820	73	111	398	4	225	P1/P1/F1	--	CAW	FAIL, TECH DIN NOT WELD
TX-06	08/07/92	1830	73	111	LEM	4	225	P1/P1/P1	P2	CAW	
TX-07	08/07/92	1840	73	042	145	4	220	P1/P1/P1	P2	CAW	
TX-08	08/07/92	1850	73	111	398	4	225	P1/P1/P1	P2	CAW	
TX-01	08/10/92	800	76	111	398	5	225	P1/P1/P1	P2	CAW	
TX-02	08/10/92	845	76	042	145	4.5	225	P1/P1/P1	P2	CAW	
TX-03	08/10/92	955	80	042	145	4.5	225	P1/P1/P1	P2	CAW	
TX-04	08/10/92	1340	92	111	398	4	220	P1/P1/P1	P2	CAW	
TX-05	08/10/92	1345	92	042	145	4	220	P1/P1/P1	P2	CAW	

GEOMEMBRANE TRIAL SEAM SUMMARY
EXTRUSION METHOD – SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER	DATE	TIME TESTED	AMBIENT TEMP. (F)	WELDER ID. MACH. NUMBER	WELDER ID. TECH.	MACHINE TEMP.(C) BAR.	MACHINE TEMP.(C) NOZ.	RESULTS PEEL	RESULTS SHEAR	QA MONITOR	REMARKS
TX-06	08/10/92	EOD	92	042	145	4	220	P1/P1/P1	P2	CAW	
TX-01	08/11/92	1335	78	042	145	4	220	P1/P1/P1	P2	CAW	
TX-02	08/11/92	1340	78	042	398	4	220	P1/P1/P1	P2	CAW	
TX-03	08/11/92	EOD	78	042	145	4	220	P1/P1/P1	P2	CAW	
TX-01	08/12/92	1530	75	042	145	4	220	P1/P1/P1	P2	CAW	
TX-01	08/14/92	800	61	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-02	08/14/92	810	61	042	145	5	225	P1/P1/P1	P2	CAW	
TX-03	08/14/92	1320	62	111	398	5.5	225	P1/P1/F1	--	CAW	FAIL, SEE RETSET TX-03R1
TX-03R1	08/14/92	1330	62	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-04	08/14/92	1330	62	042	145	5	225	P1/P1/P1	P2	CAW	
TX-05	08/14/92	EOD	65	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-06	08/14/92	EOD	65	042	145	5	225	P1/P1/P1	P2	CAW	
TX-01	08/15/92	820	60	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-02	08/15/92	840	60	042	145	5	225	P1/P1/P1	P2	CAW	
TX-03	08/15/92	1330	70	042	145	5	225	P1/F2/--	--	CAW	FAIL, SEE RETSET TX-03R1
TX-03R1	08/15/92	1350	70	042	145	5	225	P1/P1/P1	P2	CAW	
TX-04	08/15/92	1500	70	111	398	5	225	P1/P1/P1	P2	CAW	
TX-06	08/15/92	EOD	70	042	145	5	225	P1/P1/P1	P2	CAW	TEST NUMBER TX-05 SKIPPED
TX-07	08/15/92	EOD	70	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-01	08/16/92	740	65	042	145	5	225	P1/P1/P1	P2	CAW	
TX-02	08/16/92	800	65	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-03	08/16/92	1315	70	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-04	08/16/92	1330	70	042	145	5	225	P1/P1/P1	P2	CAW	
TX-05	08/16/92	1730	75	042	145	5	225	P1/P1/P1	P2	CAW	
TX-06	08/16/92	1830	73	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-07	08/16/92	EOD		042	145	5	225	P1/P1/P1	P2	CAW	
TX-08	08/16/92	EOD		111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-01	08/17/92	800	62	042	145	5	225	P1/P1/P1	--	CAW	FAIL, SEE RETEST TX-01R1
TX-01R1	08/17/92	820	62	042	145	5	225	P1/P1/P1	P2	CAW	
TX-02	08/17/92	830	62	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-03	08/17/92	1400	75	042	145	5	225	P1/P1/P1	P2	CAW	
TX-04	08/17/92	1625	75	111	398	5	225	P1/P1/P1	P2	CAW	
TX-01	08/18/92	800	65	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-02	08/18/92	810	65	042	145	5	225	P1/P1/P1	P2	CAW	
TX-03	08/18/92	1000	70	085	145	5	225	P1/P1/P1	P2	CAW	
TX-04	08/18/92	1500	70	111	398	5.5	225	P1/P1/P1	P2	CAW	

JUNE 1993

917-1203

GEOMEMBRANE TRIAL SEAM SUMMARY
EXTRUSION METHOD – SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE – CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER	DATE	TIME TESTED	AMBIENT TEMP. (F)	WELDER ID. MACH. NUMBER	WELDER ID. TECH.	MACHINE TEMP.(C) BAR.	MACHINE TEMP.(C) NOZ.	RESULTS PEEL	RESULTS SHEAR	QA MONITOR	REMARKS
TX-05	08/18/92	1515	68	109	145	5.5	225	P1/P1/P1	P2	CAW	
TX-01	08/19/92	1800	60	109	145	6	225	P1/P1/P1	P2	CAW	
TX-02	08/19/92	1815	60	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-03	08/19/92	1330	75	111	398	5	225	P1/P1/P1	P2	CAW	
TX-04	08/19/92	1340	75	109	145	6	225	P1/P1/P1	--	CAW	FAIL, SEE RETEST TX-04R1
TX-04R1	08/19/92	1400	75	109	145	5	225	P1/P1/P1	P2	CAW	
TX-05	08/19/92	EOD		109	145	6	225	P1/P1/P1	P2	CAW	
TX-06	08/19/92	EOD		111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-01	08/20/92	800	65	082	145	5	225	P1/P1/P1	--	CAW	FAIL, SEE RETEST TX-01R1
TX-01R1	08/20/92	835	65	082	145	5	225	P1/P1/P1	P2	CAW	
TX-02	08/20/92	840	65	111	398	5.5	225	P1/P1/P1	P2	CAW	
TX-03	08/20/92	1330	75	082	145	5	225	P1/P1/P1	P2	CAW	
TX-04	08/20/92	EOD		028	JAD	7	240	P1/P1/P1	P2	CAW	
TX-05	08/20/92	EOD		082	145	5	225	P1/P1/P1	P2	CAW	
TX-01	08/21/92	810	70	082	145	6	225	P1/P1/P1	P2	CAW	
TX-02	08/21/92	1400	78	028	145	5	220	P1/P1/P1	P2	CAW	
TX-03	08/21/92	1400	78	398	398	4.5	220	P1/P1/P1	P2	CAW	
TX-04	08/21/92	EOD		111	398	4.5	220	P1/P1/P1	P2	CAW	
TX-05	08/21/92	EOD		028	145	5	220	P1/P1/P1	P2	CAW	
TX-01	08/22/92	800	69	028	145	6	225	P1/P1/P1	P2	CAW	
TX-02	08/22/92	805	69	111	LEM	6.5	225	P1/P1/P1	P2	CAW	
TX-03	08/22/92	915	73	111	LEM	6.5	225	P1/P1/P1	P2	CAW	
TX-04	08/22/92	1540	70	111	398	4	220	P1/P1/P1	P2	CAW	
TX-05	08/22/92	1550	70	111	LEM	5	220	P1/P1/P1	P2	CAW	
TX-06	08/22/92	1650	70	028	145	6	225	P1/P1/P1	P2	CAW	
TX-01	08/24/92	830	69	111	LEM	6	225	P1/P1/P1	P2	BIE	
TX-02	08/24/92	1530	75	111	398	5.5	220	P1/P1/P1	P2	BIE	
TX-03	08/24/92	1530	75	111	LEM	5.5	220	P1/P1/P1	P2	BIE	
TX-04	08/24/92	1510	75	047	145	6	225	P1/P1/P1	P2	BIE	
TX-05	08/24/92	1830	70	047	145	6	225	P1/P1/P1	P2	BIE	

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N.1

FUSION METHOD

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S001/002	07/21/92	1450	74	CAW	325	1404	700	699	161	DS-01	07/21/92	LEL
S001/033A	07/22/92	1945	62	LEL	45	1319	700	680	15		07/25/92	LEL
S001/262	08/18/92	1056	70	CAW	JS	1404	700	700	145	DS-85	08/18/92	CAW
S002/003	07/24/92	1050	67	LEL	138	1203	700	696	91		07/25/92	LEL
S002/003	07/22/92	1740	74	CAW	325	1203	700	700	155	DS-08	07/25/92	LEL
S002/003	07/21/92	1457	74	CAW	138	1320	700	701	161	DS-02,N1,P1	07/25/92	LEL
S002/003	07/24/92	0900	70	LEL	138	1320	700	699	64		07/25/92	LEL
S002/033	07/22/92	1946	62	LEL	45	1319	700	682	7		07/25/92	LEL
S002/033A	07/22/92	1946	62	LEL	45	1319	700	682	7		07/25/92	LEL
S003/004	07/21/92	1510	74	CAW	325	1404	700	699	162		07/21/92	LEL
S003/033	07/22/92	1947	62	LEL	45	1319	700	699	12		07/25/92	LEL
S004/005	07/22/92	1435	74	CAW	325	1203	700	700	160	DS-02N2	07/22/92	LEL
S004/005	07/21/92	1520	74	CAW	138	1320	700	700	161		07/22/92	LEL
S004/033	07/22/92	1948	62	LEL	45	1319	700	696	14		07/25/92	LEL
S005/006	07/21/92	1540	74	CAW	325	1404	700	699	161		07/21/92	LEL
S005/033	07/22/92	1952	62	LEL	45	1319	700	699	14	DS-10	07/25/92	LEL
S006/007	07/21/92	1550	74	CAW	138	1320	700	700	160	DS-03	07/21/92	LEL
S006/033	07/22/92	1954	62	LEL	45	1319	700	699	13		07/25/92	LEL
S007/008	07/21/92	1630	74	CAW	325	1404	700	700	159	DS-04	07/21/92	LEL
S007/033	07/22/92	1957	61	LEL	45	1319	700	698	14		07/25/92	LEL
S008/009	07/21/92	1640	74	CAW	138	1320	700	700	159		07/21/92	AWJ
S008/033	07/22/92	1959	61	LEL	45	1319	700	697	14	DS-O3N1	07/25/92	LEL
S009/010	07/21/92	1710	74	CAW	325	1404	700	696	160		07/21/92	AWJ
S009/033	07/22/92	2001	60	LEL	45	1319	700	697	14		07/25/92	LEL
S010/011	07/21/92	1730	74	CAW	138	1320	700	700	159		07/21/92	AWJ
S010/033	07/22/92	1943	67	CAW	138	1320	700	700	15		07/25/92	LEL
S011/012	07/21/92	1810	70	CAW	325	1404	700	694	149		07/21/92	AWJ
S011/032	07/22/92	1941	62	LEL	45	1319	700	701	15		07/25/92	LEL
S011/033	07/22/92	1940	67	CAW	138	1320	700	700	2		07/25/92	AWJ
S012/013	07/21/92	1930	70	CAW	138	1320	700	686	137	DS-05	07/21/92	AWJ

NOTES: filename"S_FUSWLD.WK1"

1) THE SEAM TEST DATE SHOWN REPRESENTS THE DATE WHEN THE SEAM NON-DESTRUCTIVE TESTING WAS COMPLETED, AND DOES NOT REPRESENT THE TESTING OF INDIVIDUAL SEAM SEGMENTS.

2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S012/031	07/22/92	1940	62	LEL	45	1319	700	701	22		07/25/92	LEL
S012/032	07/22/92	1941	62	LEL	45	1319	700	701	2		07/25/92	LEL
S013/014	07/21/92	1930	70	CAW	325	1203	700	689	120		07/21/92	AWJ
S013/029	07/22/92	1934	62	LEL	45	1319	700	700	19		07/25/92	LEL
S013/031	07/22/92	1935	62	LEL	45	1319	700	700	1		07/25/92	LEL
S014/015	07/21/92	1930	70	CAW	325	1203	700	696	108		07/21/92	AWJ
S014/028	07/22/92	1931	62	LEL	45	1319	700	699	14		07/25/92	LEL
S014/029	07/22/92	1933	62	LEL	45	1319	700	700	4		07/25/92	LEL
S015/016	07/21/92	1950	70	CAW	138	1320	700	686	94		07/21/92	AWJ
S015/027	07/22/92	1929	64	LEL	45	1319	700	699	7		07/25/92	LEL
S015/028	07/22/92	1930	63	LEL	45	1319	700	701	9		07/25/92	LEL
S016/017	07/22/92	1435	74	CAW	138	1320	700	675	83		07/22/92	LEL
S016/027	07/22/92	1928	64	LEL	45	1319	700	699	19		07/25/92	LEL
S017/018	07/22/92	1450	74	CAW	325	1203	700	700	69	DS-06P1	07/22/92	LEL
S017/026	07/22/92	1927	65	LEL	45	1319	700	699	21		07/25/92	LEL
S017/027	07/22/92	1928	64	LEL	45	1319	700	699	1		07/25/92	LEL
S018/019	07/22/92	1500	74	CAW	325	1203	700	699	55	DS-06,N1	07/22/92	LEL
S018/024	07/22/92	1926	67	LEL	45	1319	700	697	2		07/25/92	AWJ
S018/025	07/22/92	1926	67	LEL	45	1319	700	701	20		07/25/92	AWJ
S018/026	07/22/92	1927	67	LEL	45	1319	700	701	1		07/25/92	AWJ
S019/020	07/22/92	1450	74	CAW	138	1320	700	700	45		07/22/92	LEL
S019/024	07/22/92	1924	67	LEL	45	1319	700	697	19		07/22/92	AWJ
S020/021	07/22/92	1505	74	CAW	138	1320	700	696	28		07/22/92	LEL
S020/023	07/22/92	1918	67	LEL	45	1319	700	698	18		07/25/92	AWJ
S020/024	07/22/92	1923	67	LEL	45	1319	700	698	3		07/25/92	AWJ
S021/022	07/22/92	1515	74	CAW	325	1203	700	699	17		07/22/92	LEL
S021/023	07/22/92	1916	67	LEL	45	1319	700	692	17		07/25/92	AWJ
S022/023	07/22/92	1915	67	LEL	45	1319	700	692	11		07/25/92	AWJ
S023/024	07/22/92	1525	74	CAW	138	1320	700	690	38		07/22/92	LEL
S024/025	07/22/92	1525	74	CAW	325	1203	700	686	59		07/22/92	LEL

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2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S025/026	07/22/92	1535	76	CAW	138	1320	700	693	70	DS-07	07/22/92	LEL
S026/027	07/22/92	1545	74	CAW	325	1203	700	693	87		07/22/92	LEL
S027/028	07/22/92	1606	76	CAW	138	1320	700	695	110		07/22/92	AWJ
S028/029	07/22/92	1645	74	CAW	325	1203	700	691	68	DS-08P1	07/22/92	AWJ
S028/030	07/22/92	1640	74	CAW	325	1203	700	698	79		07/22/92	AWJ
S029/030	07/22/92	1635	76	CAW	138	1320	700	696	14		07/22/92	AWJ
S029/031	07/22/92	1700	74	CAW	138	1320	700	696	65		07/22/92	AWJ
S030/031	07/22/92	1650	74	CAW	138	1320	700	699	79		07/22/92	AWJ
S031/032	07/22/92	1745	74	CAW	138	1320	700	695	160		07/22/92	AWJ
S032/033	07/22/92	1830	67	CAW	138	1320	700	691	172	DS-09	07/22/92	AWJ
S033A/034	07/24/92	1150	67	LEL	138	1320	700	700	34		07/24/92	AWJ
S033A/262	08/18/92	1122	70	CAW	BJ	1319	700	700	5		08/22/92	SRS
S033A/263	08/18/92	1120	70	CAW	BJ	1319	700	700	11		08/22/92	SRS
S033/033A	07/24/92	1100	67	LEL	138	1203	700	696	14		07/25/92	AWJ
S033/034	07/24/92	1215	67	LEL	138	1320	700	700	35		07/24/92	CAW
S033/035	07/24/92	1100	64	LEL	325	1404	700	692	247	DS-13	07/24/92	CAW
S034/035	07/24/92	1045	64	LEL	325	1404	700	692	14		07/24/92	CAW
S034/036	07/24/92	1315	70	LEL	138	1320	700	699	70		07/24/92	CAW
S034/263	08/18/92	1124	70	CAW	BJ	1319	700	653	15		08/22/92	SRS
S035/036	07/24/92	1330	70	LEL	138	1320	700	699	67		07/24/92	AWJ
S035/036	07/24/92	1125	80	LEL	325	1404	700	692	253	DS-14	07/24/92	AWJ
S036/037	07/24/92	1325	70	LEL	325	1404	700	700	175		07/24/92	AWJ
S036/037	07/24/92	1350	70	LEL	138	1320	700	699	145	DS-11	07/24/92	AWJ
S036/038	07/24/92	1315	70	LEL	325	1404	700	698	81		07/24/92	AWJ
S036/263	08/18/92	1127	70	CAW	BJ	1319	700	656	15		08/22/92	SRS
S037/038	07/24/92	1150	67	LEL	325	1404	700	698	14		07/24/92	AWJ
S037/039	07/24/92	1420	70	LEL	138	1320	700	699	148		07/24/92	AWJ
S037/039	07/24/92	1400	67	LEL	325	1404	700	697	117	DS-15	07/24/92	AWJ
S037/263	08/18/92	1130	70	CAW	BJ	1319	700	700	15		08/22/92	SRS
S038/039	07/24/92	1350	70	LEL	325	1404	700	695	81		07/24/92	AWJ

NOTES: filename"S_FUSWLD.WK1"

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2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S039/040	07/24/92	1410	70	LEL	325	1404	700	699	172		07/24/92	AWJ
S039/040	07/24/92	1440	70	LEL	138	1320	700	699	148		07/24/92	AWJ
S039/263	08/18/92	1132	70	CAW	BJ	1319	700	700	15	DS-86P1	08/22/92	SRS
S040/041	07/24/92	1510	72	LEL	138	1320	700	700	87	DS-12	07/24/92	AWJ
S040/042	07/24/92	1520	72	LEL	138	1320	700	700	58		07/24/92	AWJ
S040/042	07/24/92	1440	70	LEL	325	1404	700	692	173		07/24/92	AWJ
S040/263	08/18/92	1134	70	CAW	BJ	1319	700	--	15		CAPPED BY 36C	
S041/042	07/24/92	1500	70	LEL	138	1320	700	700	14		07/25/92	TAH
S041/043	07/24/92	1605	72	LEL	138	1320	700	697	87		07/25/92	TAH
S041/263	08/18/92	1137	70	CAW	BJ	1319	700	--	15		CAPPED BY 36C	
S042/043	07/24/92	1515	72	LEL	325	1404	700	698	175	DS-16	07/24/92	CAW
S042/043	07/24/92	1650	72	LEL	138	1320	700	697	56		07/24/92	CAW
S043/044	07/24/92	1650	72	LEL	138	1320	700	700	94		07/24/92	AWJ
S043/044	07/24/92	1540	72	LEL	325	1404	700	690	178		07/24/92	AWJ
S043/045	07/25/92	0845	72	CAW	325	1240	700	697	50		07/25/92	CAW
S043/263	08/18/92	1140	70	CAW	BJ	1319	700	--	15		CAPPED BY 36C	
S044/045	07/25/92	0840	72	CAW	325	1240	700	697	14		07/25/92	CAW
S044/046	07/25/92	0910	73	CAW	138	1320	700	702	52		07/25/92	CAW
S044/046	07/25/92	0850	73	CAW	138	1320	700	698	178	DS-17	07/25/92	CAW
S044/083	07/28/92	1929	76	CAW	45	1319	700	699	15		07/30/92	CAW
S044/084	07/28/92	1929	76	CAW	45	1319	700	700	15		07/30/92	CAW
S044/085	07/28/92	1928	76	CAW	45	1319	700	700	15		07/30/92	CAW
S044/086	07/28/92	1926	76	CAW	45	1319	700	700	8		07/30/92	CAW
S045/086	07/28/92	1925	76	CAW	45	1319	700	700	7		07/30/92	CAW
S045/088	07/28/92	1923	76	CAW	45	1319	700	696	14		07/30/92	CAW
S045/089	07/28/92	1920	76	CAW	45	1319	700	698	14		07/30/92	CAW
S045/090	07/28/92	1918	76	CAW	45	1319	700	700	15		07/30/92	CAW
S045/263	08/18/92	1142	70	CAW	BJ	1319	700	--	15		CAPPED BY 36C	
S046/047	07/25/92	0915	73	CAW	45	1404	700	701	51	DS-18	07/25/92	CAW
S046/047	07/25/92	0855	73	CAW	45	1404	700	699	178		07/25/92	CAW

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GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S046/084	07/28/92	1930	76	CAW	45	1319	700	696	15		07/30/92	CAW
S047/048	07/25/92	0905	73	CAW	325	1240	700	700	181		07/25/92	CAW
S047/080	07/28/92	1952	76	CAW	45	1319	700	698	14		07/30/92	CAW
S047/081	07/28/92	1949	76	CAW	45	1319	700	696	14		07/30/92	CAW
S047/084	07/28/92	1931	76	CAW	45	1319	700	696	15		07/30/92	CAW
S047/103	07/28/92	1953	76	CAW	45	1319	700	700	3		07/30/92	CAW
S048/049	07/25/92	0920	74	CAW	138	1320	700	700	110		07/25/92	CAW
S048/050	07/25/92	0935	74	CAW	138	1320	700	698	72		07/25/92	CAW
S048/103	07/28/92	2004	76	CAW	45	1319	700	696	15		07/30/92	CAW
S049/050	07/25/92	0930	74	CAW	325	1240	700	698	14		07/25/92	CAW
S049/051	07/25/92	0940	74	CAW	325	1240	700	698	110		07/25/92	TAH
S050/051	07/25/92	0950	74	CAW	325	1240	700	699	74	DS-19P1	07/25/92	CAW
S050/103	07/28/92	2006	76	CAW	45	1319	700	700	15	DS-36	07/30/92	CAW
S051/052	07/25/92	0955	74	CAW	138	1320	700	700	181		07/25/92	CAW
S051/103	07/28/92	2008	74	CAW	45	1319	700	701	15		07/30/92	CAW
S052/053	07/25/92	1135	78	CAW	325	1240	700	700	177	DS-19,N1	07/25/92	CAW
S052/103	07/28/92	2009	74	CAW	45	1319	700	701	15		07/30/92	CAW
S053/054	07/25/92	1140	78	CAW	138	1320	700	698	176	DS-20,P1	07/25/92	CAW
S053/103	07/28/92	2012	74	CAW	45	1319	700	700	15		07/30/92	CAW
S054/055	07/25/92	1420	78	CAW	325	1240	700	701	176		07/27/92	CAW
S054/103	07/28/92	2014	74	CAW	45	1319	700	700	15		07/30/92	CAW
S055/056	07/25/92	1440	78	CAW	138	1320	700	699	176	DS-20N1	07/27/92	CAW
S055/103	07/28/92	2016	74	CAW	45	1319	700	696	15		07/30/92	CAW
S056/057	07/25/92	1510	78	CAW	325	1240	700	698	155	DS-21	07/27/92	CAW
S056/059	07/25/92	1835	76	CAW	45	1319	700	698	43		07/29/92	BIE
S056/103	07/28/92	2018	74	CAW	45	1319	700	697	15		07/30/92	CAW
S057/058	07/25/92	1530	80	CAW	325	1240	700	687	161		07/27/92	CAW
S057/059	07/25/92	1828	76	CAW	45	1319	700	696	10		07/29/92	CAW
S058/059	07/25/92	1808	78	CAW	45	1319	700	700	15		07/29/92	CAW
S058/060	07/25/92	1812	78	CAW	45	1319	700	700	15		07/29/92	CAW

NOTES: filename"S_FUSWLD.WK1"

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2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S058/061	07/25/92	1720	80	CAW	325	1240	700	699	167		07/27/92	CAW
S058/103	07/28/92	2045	74	TAH	45	1319	700	647	14		07/30/92	CAW
S059/060	07/25/92	1755	78	CAW	45	1319	700	698	28		07/29/92	CAW
S059/103	07/28/92	2040	74	TAH	45	1319	700	647	22		07/30/92	CAW
S060/103	07/28/92	2043	74	TAH	45	1319	700	647	9		07/30/92	CAW
S061/062	07/25/92	1740	80	CAW	45	1404	700	700	164		07/27/92	CAW
S061/103	07/28/92	2048	74	TAH	45	1319	700	647	14		07/30/92	CAW
S062/063	07/25/92	1800	78	CAW	325	1240	700	701	165	DS-22	07/27/92	CAW
S062/103	07/28/92	2050	74	TAH	45	1319	700	647	14		07/30/92	CAW
S063/064	07/25/92	1805	78	CAW	45	1404	700	700	165		07/27/92	CAW
S063/103	07/28/92	2053	74	TAH	45	1319	700	647	14		07/30/92	CAW
S064/065	07/25/92	1825	78	CAW	325	1240	700	701	81		07/25/92	CAW
S064/074	07/25/92	2017	74	CAW	45	1319	700	700	15		07/29/92	CAW
S064/075	07/25/92	2020	74	CAW	45	1319	700	703	15		07/29/92	CAW
S064/076	07/25/92	2022	74	CAW	45	1319	700	699	15		07/29/92	CAW
S064/077	07/25/92	2028	74	CAW	45	1319	700	698	15		07/29/92	CAW
S064/078	07/25/92	2031	74	CAW	45	1319	700	698	15		07/29/92	CAW
S064/079	07/25/92	2033	74	CAW	45	1319	700	701	15	DS-24	07/29/92	CAW
S064/103	07/28/92	2055	74	TAH	45	1319	700	647	14		07/30/92	CAW
S065/066	07/25/92	1840	78	CAW	45	1404	700	698	59		07/25/92	CAW
S065/073	07/25/92	2015	74	CAW	45	1319	700	691	22		07/29/92	AWJ
S066/067	07/25/92	1835	78	CAW	325	1240	700	701	48		07/25/92	CAW
S066/072	07/25/92	2013	74	CAW	45	1319	700	690	20		07/29/92	AWJ
S067/068	07/25/92	1845	78	CAW	45	1404	700	699	28	DS-23	07/25/92	CAW
S067/070	07/25/92	2010	74	CAW	45	1319	700	693	5		07/29/92	AWJ
S067/071	07/25/92	2012	74	CAW	45	1319	700	691	18		07/29/92	AWJ
S068/069	07/25/92	1855	78	CAW	45	1404	700	700	15		07/25/92	CAW
S068/070	07/25/92	2008	75	CAW	45	1319	700	693	19		07/29/92	AWJ
S069/070	07/25/92	2005	74	CAW	45	1319	700	691	7		07/29/92	AWJ
S070/071	07/25/92	1900	78	CAW	325	1240	700	700	24		07/25/92	CAW

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2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S071/072	07/25/92	1900	78	CAW	45	1404	700	705	39		07/25/92	CAW
S072/073	07/25/92	1905	74	CAW	45	1404	700	698	54		07/29/92	CAW
S073/074	07/25/92	1905	78	CAW	325	1240	700	699	70		07/25/92	CAW
S074/075	07/25/92	1920	74	CAW	45	1404	700	701	73		07/25/92	CAW
S075/076	07/25/92	1928	74	CAW	325	1240	700	700	73		07/25/92	CAW
S076/077	07/25/92	1930	74	CAW	45	1404	700	700	73		07/25/92	CAW
S077/078	07/25/92	1933	74	CAW	325	1240	700	700	73	DS-26P1	07/25/92	CAW
S078/079	07/25/92	1935	74	CAW	45	1404	700	700	73		07/25/92	CAW
S079/103	07/28/92	2058	74	TAH	45	1319	700	650	73		07/29/92	AWJ
S080/081	07/28/92	0905	72	CAW	325	1240	700	699	109	DS-26,N1	07/28/92	AWJ
S080/081	07/28/92	0820	72	CAW	138	1404	700	710	170	DS-25	07/28/92	AWJ
S080/103	07/28/92	1645	76	CAW	138	1404	700	700	107		07/29/92	AWJ
S080/103	07/28/92	1630	76	CAW	138	1404	700	699	280	DS-35	07/29/92	AWJ
S081/082	07/28/92	1000	72	CAW	325	1240	700	700	81		07/28/92	AWJ
S081/082	07/28/92	0855	72	CAW	138	1404	700	708	176		07/28/92	AWJ
S081/084	07/28/92	0920	72	CAW	325	1240	700	699	26		07/29/92	AWJ
S082/083	07/28/92	1030	74	CAW	325	1240	700	699	82		07/28/92	AWJ
S082/083	07/28/92	0930	72	CAW	138	1404	700	710	176		07/28/92	AWJ
S082/084	07/28/92	0850	72	CAW	325	1404	700	700	15		07/28/92	AWJ
S083/084	07/28/92	1020	74	CAW	325	1240	700	699	57		07/29/92	AWJ
S083/085	07/28/92	0940	72	CAW	138	1404	700	708	176	DS-27	07/28/92	AWJ
S083/085	07/28/92	1040	74	CAW	325	1240	700	700	139	DS-28	07/28/92	AWJ
S085/086	07/28/92	1115	76	CAW	325	1240	700	699	133		07/28/92	AWJ
S085/087	07/28/92	1020	72	CAW	138	1404	700	709	184		07/28/92	AWJ
S086/087	07/28/92	1110	76	CAW	325	1240	700	700	14		07/28/92	AWJ
S086/088	07/28/92	1130	76	CAW	325	1240	700	699	133		07/28/92	AWJ
S087/088	07/28/92	1050	74	CAW	138	1404	700	710	184	DS-29	07/28/92	AWJ
S088/089	07/28/92	1310	76	CAW	325	1240	700	692	139	DS-30	07/28/92	AWJ
S088/089	07/28/92	1115	76	CAW	138	1404	700	709	184		07/28/92	AWJ
S089/090	07/28/92	1130	76	CAW	138	1404	700	708	180		07/28/92	AWJ

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2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S089/090	07/28/92	1330	78	CAW	325	1240	700	699	144		07/28/92	AWJ
S090/091	07/28/92	1330	78	CAW	138	1404	700	709	178	DS-31	07/28/92	AWJ
S090/259	08/18/92	1147	70	CAW	BJ	1319	700	660	68	DS-86	08/20/92	CAW
S090/260	08/18/92	1200	70	CAW	BJ	1319	700	684	48	DS-86N1	08/20/92	CAW
S090/263	08/18/92	1144	70	CAW	BJ	1319	700	650	12		CAPPED BY 36C	
S091/092	07/28/92	1350	78	CAW	138	1404	700	710	178		07/28/92	AWJ
S091/258	08/18/92	0850	65	CAW	BJ	1319	700	660	7		CAPPED BY 34E	
S092/093	07/28/92	1540	78	CAW	138	1404	700	698	104	DS-32	07/28/92	AWJ
S092/094	07/28/92	1520	78	CAW	138	1404	700	699	70		07/28/92	AWJ
S092/257	08/18/92	0854	65	CAW	BJ	1319	700	661	5		CAPPED BY 34E	
S092/258	08/18/92	0851	65	CAW	BJ	1319	700	650	5		CAPPED BY 34E	
S093/094	07/28/92	1530	78	CAW	138	1404	700	700	14		07/28/92	AWJ
S093/095	07/28/92	1530	78	CAW	325	1240	700	699	104		07/28/92	AWJ
S093/256	08/18/92	0857	65	CAW	BJ	1319	700	665	8		CAPPED BY 34E	
S093/257	08/18/92	0855	65	CAW	BJ	1319	700	665	8		CAPPED BY 34E	
S094/095	07/28/92	1522	78	CAW	325	1240	700	700	70		07/28/92	AWJ
S095/096	07/28/92	1600	78	CAW	138	1404	700	700	182		07/28/92	CAW
S095/255	08/18/92	0859	65	CAW	BJ	1319	700	670	8		CAPPED BY 34E	
S095/256	08/18/92	0858	65	CAW	BJ	1319	700	670	7	DS-84P2	CAPPED BY 34E	
S096/097	07/28/92	1540	78	CAW	325	1240	700	700	182	DS-33	07/28/92	AWJ
S096/253	08/18/92	0901	65	CAW	BJ	1319	700	680	8		CAPPED BY 34E	
S096/255	08/18/92	0900	65	CAW	BJ	1319	700	680	7		CAPPED BY 34E	
S097/098	07/28/92	1600	78	CAW	325	1240	700	700	182		07/28/92	AWJ
S097/252	08/18/92	0904	65	CAW	BJ	1319	700	685	7		CAPPED BY 34E	
S097/253	08/18/92	0902	65	CAW	BJ	1319	700	686	8		CAPPED BY 34E	
S098/099	07/28/92	1715	78	CAW	325	1240	700	700	49		07/28/92	AWJ
S098/100	07/28/92	1700	78	CAW	325	1240	700	698	134		07/28/92	AWJ
S098/249	08/18/92	0906	65	CAW	BJ	1319	700	690	8		CAPPED BY 34E	
S098/252	08/18/92	0905	65	CAW	BJ	1319	700	685	7		CAPPED BY 34E	
S099/100	07/28/92	1650	78	CAW	325	1240	700	700	14		07/28/92	AWJ

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GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S099/101	07/28/92	1725	78	CAW	138	1404	700	698	49		07/28/92	AWJ
S099/248	08/18/92	0909	65	CAW	BJ	1319	700	700	12		CAPPED BY 34E	
S099/249	08/18/92	0907	65	CAW	BJ	1319	700	690	4		CAPPED BY 34E	
S100/101	07/28/92	1720	78	CAW	138	1404	700	703	132		07/28/92	AWJ
S101/102	07/28/92	1730	78	CAW	325	1240	700	699	182	DS-34	07/29/92	CAW
S101/247	08/18/92	0911	65	CAW	BJ	1319	700	700	12		CAPPED BY 34E	
S101/248	08/18/92	0910	65	CAW	BJ	1319	700	700	3		CAPPED BY 34E	
S102/104	07/29/92	1615	78	CAW	325	1240	700	700	178	DS-38	07/29/92	CAW
S102/244	08/18/92	0913	65	CAW	BJ	1319	700	690	11		CAPPED BY 34C	
S102/247	08/18/92	0912	65	CAW	BJ	1319	700	685	3		CAPPED BY 34C	
S104/105	07/29/92	1415	78	CAW	138	1404	700	710	178		07/29/92	CAW
S104/243	08/18/92	0915	65	CAW	BJ	1319	700	690	12		CAPPED BY 34C	
S104/244	08/18/92	0914	65	CAW	BJ	1319	700	690	4		CAPPED BY 34C	
S105/106	07/29/92	1430	78	CAW	325	1240	700	700	176		07/29/92	CAW
S105/242	08/18/92	0919	65	CAW	BJ	1319	700	698	12	DS-84P1	CAPPED BY 34C	
S105/243	08/18/92	0917	65	CAW	BJ	1319	700	690	3		CAPPED BY 34C	
S106/107	07/29/92	1505	78	CAW	325	1240	700	700	176	DS-37	07/29/92	CAW
S106/241	08/18/92	0920	65	CAW	BJ	1319	700	695	14	DS-84	CAPPED BY 37D	
S106/242	08/18/92	0920	65	CAW	BJ	1319	700	698	1		CAPPED BY 37D	
S107/108	07/29/92	1630	78	CAW	138	1404	700	710	134		07/29/92	CAW
S107/109	07/29/92	1702	78	CAW	138	1404	700	710	37		07/29/92	CAW
S107/240	08/18/92	0922	65	CAW	BJ	1319	700	697	14		CAPPED BY 37D	
S107/241	08/18/92	0922	65	CAW	BJ	1319	700	695	1		CAPPED BY 37D	
S108/109	07/29/92	1700	78	CAW	138	1404	700	710	14		07/29/92	CAW
S108/110	07/29/92	1711	78	CAW	138	1404	700	710	134	DS-39	07/29/92	CAW
S109/110	07/29/92	1722	78	CAW	138	1404	700	710	37		07/29/92	CAW
S109/239	08/18/92	0923	65	CAW	BJ	1319	700	700	15		CAPPED BY 37D	
S109/240	08/18/92	0923	65	CAW	BJ	1319	700	697	1		CAPPED BY 37D	
S110/111	07/29/92	1725	78	CAW	325	1240	700	700	176		07/29/92	CAW
S110/195	08/16/92	1815	70	BFM	BJ	1319	700	700	13		08/21/92	SRS

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GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S111/123	08/04/92	1929	68	CAW	BJ	1404	710	711	167	DS-43	08/04/92	CAW
S111/193	08/16/92	1820	70	BFM	BJ	1319	700	700	13		08/20/92	SRS
S112/113	08/04/92	1710	68	CAW	BJ	1404	710	698	231		08/04/92	CAW
S112/190	08/16/92	1825	70	BFM	BJ	1319	700	680	14		08/20/92	SRS
S113/114	08/04/92	1720	68	CAW	325	1240	700	700	211	DS-40	08/04/92	CAW
S113/122	08/04/92	2020	68	CAW	45	1319	700	696	24		08/07/92	AWJ
S113/190	08/16/92	1830	70	BFM	BJ	1319	700	700	3		08/21/92	SRS
S114/115	08/04/92	1735	68	CAW	PV	1203	700	699	204		08/04/92	CAW
S114/122	08/04/92	2018	68	CAW	45	1319	700	699	15		08/07/92	AWJ
S115/116	08/04/92	1800	68	CAW	BJ	1404	710	709	192	DS-41	08/04/92	CAW
S115/122	08/04/92	2015	68	CAW	45	1319	700	693	15		08/07/92	AWJ
S116/117	08/04/92	1805	68	CAW	PV	1203	700	695	187	DS-42	08/04/92	CAW
S116/122	08/04/92	2012	68	CAW	45	1319	700	698	15		08/07/92	AWJ
S117/118	08/04/92	1815	68	CAW	325	1240	700	695	182		08/04/92	CAW
S117/122	08/04/92	2009	68	CAW	45	1319	700	697	15		08/07/92	AWJ
S118/119	08/04/92	1833	68	CAW	BJ	1404	710	711	172	DS-43P1	08/04/92	CAW
S118/122	08/04/92	2007	68	CAW	45	1319	700	696	15		08/07/92	AWJ
S119/120	08/04/92	1840	68	CAW	325	1240	700	699	172		08/04/92	CAW
S119/122	08/04/92	2005	68	CAW	45	1319	700	690	15		08/07/92	AWJ
S120/121	08/04/92	1846	68	CAW	PV	1203	700	689	136		08/04/92	CAW
S120/122	08/04/92	2002	68	CAW	45	1319	700	680	15		08/07/92	AWJ
S121/122	08/04/92	2000	68	CAW	45	1319	700	680	21		08/07/92	AWJ
S122/123	08/04/92	1940	68	CAW	325	1240	700	700	167	DS-44	08/04/92	CAW
S123/191	08/16/92	1830	70	BFM	BJ	1319	700	700	13		08/20/92	SRS
S124/125	08/05/92	0926	65	CAW	BJ	1404	710	710	114		08/05/92	AWJ
S124/126	08/05/92	0915	65	CAW	BJ	1404	710	711	116	DS-43N1	08/05/92	AWJ
S124/189	08/16/92	1845	70	BFM	BJ	1319	700	673	4		08/20/92	CAW
S124/190	08/16/92	1840	70	BFM	BJ	1319	700	665	11		08/20/92	CAW
S125/126	08/05/92	0940	68	CAW	BJ	1404	710	710	14		08/05/92	AWJ
S125/127	08/05/92	0932	67	CAW	PV	1203	700	700	114	DS-45	08/05/92	AWJ

NOTES: filename"S_FUSWLD.WK1"

1) THE SEAM TEST DATE SHOWN REPRESENTS THE DATE WHEN THE SEAM NON-DESTRUCTIVE TESTING WAS COMPLETED, AND DOES NOT REPRESENT THE TESTING OF INDIVIDUAL SEAM SEGMENTS.

2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S125/189	08/16/92	1850	70	BFM	BJ	1319	700	692	15		08/20/92	CAW
S126/127	08/05/92	0918	67	CAW	PV	1203	700	698	116		08/05/92	AWJ
S127/128	08/05/92	0957	68	CAW	BJ	1404	710	708	230	DS-46	08/05/92	AWJ
S127/188	08/15/92	1734	70	CAW	BJ	1319	700	693	6		08/19/92	SRS
S127/189	08/16/92	1855	70	BFM	BJ	1319	700	697	8		08/20/92	CAW
S128/129	08/05/92	1000	68	CAW	PV	1203	700	699	190		08/05/92	AWJ
S128/132	08/05/92	1020	70	CAW	PV	1203	700	698	41		08/05/92	AWJ
S128/188	08/15/92	1736	70	CAW	BJ	1319	700	680	15		08/19/92	SRS
S129/130	08/05/92	1050	70	CAW	BJ	1404	710	710	190		08/05/92	AWJ
S129/132	08/05/92	1018	70	CAW	PV	1203	700	693	15		08/05/92	AWJ
S130/131	08/05/92	1105	71	CAW	PV	1203	700	700	233	DS-47	08/05/92	AWJ
S130/132	08/05/92	1105	70	CAW	BJ	1404	710	710	38		08/05/92	AWJ
S130/186	08/15/92	1743	70	CAW	BJ	1319	700	697	2		08/19/92	SRS
S130/187	08/15/92	1740	70	CAW	BJ	1319	700	693	12		08/19/92	SRS
S131/133	08/06/92	1900	74	CAW	325	1240	700	699	201		08/07/92	CAW
S131/186	08/15/92	1745	70	CAW	BJ	1319	700	700	15		08/19/92	SRS
S132/187	08/15/92	1738	70	CAW	BJ	1319	700	680	11		08/19/92	SRS
S132/188	08/15/92	1737	70	CAW	BJ	1319	700	680	5		08/19/92	SRS
S133/134	08/06/92	1310	74	CAW	325	1240	700	700	220		08/06/92	CAW
S133/185	08/15/92	1705	70	CAW	BJ	1319	700	697	7		08/19/92	SRS
S133/186	08/15/92	1745	70	CAW	BJ	1319	700	695	6		08/19/92	SRS
S134/135	08/06/92	1355	74	CAW	BJ	1404	710	709	221	DS-48	08/06/92	CAW
S134/185	08/15/92	1655	70	CAW	BJ	1319	700	690	7		08/19/92	SRS
S135/136	08/06/92	1400	74	CAW	325	1240	700	698	149	DS-49	08/06/92	CAW
S135/137	08/06/92	1420	74	CAW	325	1240	700	680	76		08/06/92	CAW
S135/184	08/15/92	1704	70	CAW	BJ	1319	700	662	9		08/19/92	SRS
S135/185	08/15/92	1702	70	CAW	BJ	1319	700	697	7		08/19/92	SRS
S136/137	08/06/92	1415	74	CAW	BJ	1404	710	710	15		08/06/92	CAW
S136/138	08/06/92	1430	74	CAW	BJ	1404	710	711	149		08/06/92	CAW
S137/138	08/06/92	1455	74	CAW	BJ	1404	710	710	76		08/06/92	CAW

NOTES: filename"S_FUSWLD.WK1"

1) THE SEAM TEST DATE SHOWN REPRESENTS THE DATE WHEN THE SEAM NON-DESTRUCTIVE TESTING WAS COMPLETED, AND DOES NOT REPRESENT THE TESTING OF INDIVIDUAL SEAM SEGMENTS.

2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

GEOMEMBRANE SEAM SUMMARY
FUSION SEAMING METHOD
SECONDARY GEOMEMBRANE
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SEAM NUMBER	DATE	START TIME	AMBIENT TEMP.(F)	QA MONITOR	WELDER ID.		WELDING APPARATUS TEMPERATURES		APPROX. WELDED LENGTH	DESTR. TEST NUMBER	TEST COMPLETE	
					TECH	MACH	DIGITAL SET	INDICATOR			DATE (1)	QA MON
S137/183	08/15/92	1713	70	CAW	BJ	1319	700	675	5		08/19/92	SRS
S137/184	08/15/92	1710	70	CAW	BJ	1319	700	670	10	DS-64	08/19/92	SRS
S138/139	08/06/92	1840	74	CAW	BJ	1319	700	699	43		08/14/92	BIE
S138/140	08/06/92	1445	74	CAW	325	1240	700	685	175		08/06/92	CAW
S138/183	08/15/92	1714	70	CAW	BJ	1319	700	675	2		08/19/92	SRS
S139/140	08/06/92	1830	74	CAW	BJ	1319	700	699	32		08/14/92	BIE
S139/141	08/06/92	1600	74	CAW	BJ	1404	710	710	120		08/06/92	CAW
S139/154	08/07/92	1820	73	CAW	BJ	1404	710	710	217		08/07/92	CAW
S139/183	08/15/92	1650	70	CAW	BJ	1319	700	690	10		08/19/92	SRS
S140/141	08/06/92	1820	74	CAW	BJ	1319	700	700	36	DS-51	08/14/92	BIE
S140/142	08/06/92	1814	74	CAW	BJ	1319	700	699	37		08/14/92	CAW
S140/143	08/06/92	1808	74	CAW	BJ	1319	700	698	38		08/14/92	CAW
S140/144	08/06/92	1804	74	CAW	BJ	1319	700	698	31		08/14/92	CAW
S141/142	08/06/92	1532	74	CAW	BJ	1404	710	710	106	DS-50	08/06/92	CAW
S142/143	08/06/92	1530	74	CAW	325	1240	700	699	75	DS-52	08/06/92	CAW
S143/144	08/06/92	1515	74	CAW	BJ	1404	710	705	28		08/06/92	CAW
S145/146	PANELS 145 THROUGH 153 WERE REMOVED											
S145/148	PANELS 145 THROUGH 153 WERE REMOVED											
S146/147	PANELS 145 THROUGH 153 WERE REMOVED											
S147/148	PANELS 145 THROUGH 153 WERE REMOVED											
S148/149	PANELS 145 THROUGH 153 WERE REMOVED											
S149/153	PANELS 145 THROUGH 153 WERE REMOVED											
S150/151	PANELS 145 THROUGH 153 WERE REMOVED											
S150/153	PANELS 145 THROUGH 153 WERE REMOVED											
S151/152	PANELS 145 THROUGH 153 WERE REMOVED											
S152/153	PANELS 145 THROUGH 153 WERE REMOVED											
S154/155	08/07/92	1838	73	CAW	PV	1240	700	689	179	DS-53	08/07/92	CAW
S154/156	08/07/92	1855	73	CAW	PV	1240	700	695	38		08/07/92	CAW
S154/183	08/15/92	1651	70	CAW	BJ	1319	700	690	15		08/19/92	SRS
S155/156	08/07/92	1845	73	CAW	BJ	1404	710	711	15		08/07/92	CAW

NOTES: filename"S_FUSWLD.WK1"

1) THE SEAM TEST DATE SHOWN REPRESENTS THE DATE WHEN THE SEAM NON-DESTRUCTIVE TESTING WAS COMPLETED, AND DOES NOT REPRESENT THE TESTING OF INDIVIDUAL SEAM SEGMENTS.

2) SEAMS S112/124 AND S208/209 WERE FAST LIESTERED AND SUBSEQUENTLY CAPPED DUE TO WEATHER. NO TRIAL SEAM WAS REQUIRED PRIOR TO LIESTERING THE PANELS.

N.2

EXTRUSION METHOD

JUNE 1993

917-1203

GEOMEMBRANE SEAMING SUMMARY
EXTRUSION SEAMING METHOD
SECONDARY GEOMEMBRANE – CELL 2
ALLEN PARK CLAY MINE
FORD MOTOR COMPANY

SEAM NUMBER	DATE	AMBIENT TEMP.	WELDER ID		MACHINE TEMP.		APPROX SEAM LENGTH	DEST. TEST NUMBER	QA MON	SEAM TESTING		
			TECH	MACHINE	DIGITAL SET	INDICATOR				DATE	QA MON	COMPLETE
S 35 / 35(1)	08/03/92	78	LEM	MX109	220	220	8		CAW	08/04/92	BJ	YES
S 36 / 36(1)	08/03/92	78	LEM	MX109	220	220	14		BJ	08/04/92	BJ	YES
S 37 / 37(1)	08/03/92	78	LEM	MX109	220	227	14		BJ	08/04/92	BJ	YES
S 39 / 39(1)	08/03/92	78	398	MX109	220	224	14		BJ	08/04/92	BJ	YES
S 40 / 40(1)	08/03/92	78	398	MX109	220	223	14		BJ	08/04/92	BJ	YES
S 42 / 42(1)	08/03/92	78	398	MX109	220	224	14		BJ	08/04/92	BJ	YES
S 43 / 43(1)	08/03/92	75	LEM	MX109	220	225	14		BJ	08/04/92	BJ	YES
S 44 / 44(1)	08/03/92	72	LEM	MX109	220	223	14		BJ	08/04/92	BJ	YES
S 46 / 46(1)	08/03/92	72	LEM	MX109	220	224	14		BJ	08/04/92	BJ	YES
S 47 / 47(1)	08/03/92	70	LEM	MX109	220	223	14		BJ	08/04/92	BJ	YES
S 48 / 48(1)	08/03/92	70	LEM	MX109	220	224	14		BJ	08/04/92	BJ	YES
S 91 / 260	08/17/92	75	398	MX111	225	225	7		BIE	08/24/92	BIE	YES
S 146 / 148	08/07/92	70	145	MX42	225	225	5		CAW	WELD REMOVED		
S 147 / 148	08/07/92	70	145	MX42	225	225	3		CAW	WELD REMOVED		
S 159 / 180	08/14/92	62	145	MX42	225	225	37	DSE-07	CAW	08/18/92	JAL	YES
S 159 / 181	08/14/92	65	398	MX111	225	225	66		SRS	08/18/92	JAL	YES

Filename"S_EXTWLD.WK1"

NOTE:

1) Seaming occurred during wrinkle repair

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0.1
FUSION METHOD

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-01 (1)	S 1/2	81.6	213.1	B	82.0	171.0	B	0.0	147.8	B	0.0	PASS
		81.7	210.0	T	82.0	168.5	B	0.0	175.0	T	0.0	
		81.9	213.1	T	81.8	165.9	T	0.0	157.6	T	0.0	
		81.7	213.3	T	81.5	154.2	B	0.0	150.6	B	0.0	
		81.9	219.9	T	81.6	151.9	B	0.0	134.1	B	0.0	
DS-02	S2/3	-	-	-	-	-	-	-	-	-	-	FAIL - SEE DS-02N1 NO SEAM IN "PREVIOUS" DIRECTION
DS-02N1	S2/3	-	-	-	-	-	-	-	-	-	-	RETEST OF DS-02 - FAIL SEE DS-02N2 PATH OF MX1320
DS-02N2	S4/5	-	-	-	-	-	-	-	-	-	-	RETEST OF DS-02N1 - FAIL SEAM CUT OUT AND RECONSTRUCTED PATH OF MX1320
DS-03	S6/7	-	-	-	-	-	-	-	-	-	-	FAIL - SEE DS-03N1 SEAM IN "PREVIOUS" DIRECTION TRACKED AND RECONSTRUCTED TO DS-02

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00. The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-03N1 (DS#3A)	S8/9	82.9	207	G	82.6	164	T	0.0	160	T	0.0	RETEST OF DS-03 - PASS PATH OF MX1320
		82.4	209	G	82.6	169	T	0.0	167	T	0.0	
		83.1	206	G	82.9	146	B	0.0	173	T	0.0	
		83.0	209	G	82.4	160	T	0.0	160	B	0.0	
		81.5	207	G	83.8	159	B	0.0	167	B	0.0	
DS-04 (DS#4)	S7/8	81.6	206	G	81.5	155	B	0.0	161	T	0.0	PASS
		81.6	205	G	81.5	137	B	0.0	149	T	0.0	
		81.6	207	G	81.5	146	B	0.0	139	T	0.0	
		81.4	204	G	81.8	154	B	0.0	165	T	0.0	
		81.8	206	G	81.3	140	B	0.0	154	T	0.0	
DS-05 (DS#5)	S12/13	81.9	207	G	81.9	157	B	0.0	164	T	0.0	PASS
		83.6	210	G	83.6	171	B	0.0	167	T	0.0	
		83.8	209	G	83.8	168	B	0.0	162	T	0.0	
		83.5	209	G	83.5	161	B	0.0	173	T	0.0	
		82.5	207	G	82.5	164	B	0.0	164	T	0.0	
DS-06 (DS#6)	S18/19	81.5	205	G	83.8	163	T	50	135	B	20	FAIL - SEE DS-06P1 AND DS-06N1
		81.4	207	G	81.9	134	PT	50	120	PT	0.0	
		81.8	205	G	81.6	157	B	0.0	138	B	20	
		82.9	205	G	81.6	146	T	0.0	163	B	20	
		82.1	205	G	82.1	157	B	0.0	157	B	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-06P1 (DS#6B)	S17/18	82.1	210	G	82.0	174	B	0.0	133	B	0.0	RETEST OF DS-06 - PASS PATH OF MX1203
		82.1	210	G	82.1	167	T	0.0	130	B	0.0	
		82.3	210	G	82.2	158	T	0.0	133	B	0.0	
		82.4	210	G	82.4	160	T	0.0	130	B	0.0	
		82.7	209	G	82.4	161	B	0.0	139	B	0.0	
DS-06N1 (DS#6A)	S18/19	–	206	G	81.9	162	B	0.0	133	T	0.0	RETEST OF DS-06 - PASS PATH OF MX1203
		–	211	G	82.0	148	B	0.0	153	T	0.0	
		–	211	G	82.2	141	T	0.0	161	T	0.0	
		–	209	G	82.0	150	B	0.0	143	T	0.0	
		–	211	G	81.6	154	T	0.0	164	T	0.0	
DS-07 (DS#7)	S25/26	81.5	205	G	81.8	121	T	0.0	126	B	0.0	PASS
		81.4	209	G	82.1	136	B	0.0	146	B	0.0	
		81.8	207	G	82.2	140	T	0.0	133	B	0.0	
		82.9	207	G	82.2	150	T	0.0	143	T	0.0	
		82.1	204	G	82.1	130	B	0.0	174	T	0.0	
DS-08	S2/3	–	–	–	–	–	–	–	–	–	–	FAIL - SEE DS-08P1
DS-08P1 (DS#8B)	S28/29	82.2	211	G	82.3	144	B	0.0	160	B	0.0	RETEST OF DS-08 - PASS NO SEAMING PERFORMED IN "NEXT" DIRECTION PATH OF MX1203
		82.1	214	G	82.1	134	T	0.0	155	B	0.0	
		81.4	208	G	82.3	166	T	0.0	159	B	0.0	
		81.0	212	G	82.3	162	B	0.0	150	B	0.0	
		81.1	213	G	82.2	160	B	0.0	143	B	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-09	S32/33	83.5	205	G	83.2	160	B	0.0	160	T	0.0	PASS
(DS#9)		83.2	208	G	83.1	161	B	0.0	156	T	0.0	
		82.5	210	G	82.8	160	B	0.0	167	T	0.0	
		83.3	209	G	82.8	163	T	0.0	165	B	0.0	
		83.4	214	G	83.5	167	B	0.0	154	T	0.0	
DS-10	S5/33	83.8	214	G	84.6	164	T	0.0	166	T	0.0	PASS
(DS#10)		84.9	215	G	84.5	151	B	0.0	174	T	0.0	
		84.6	214	G	84.5	170	T	0.0	173	T	0.0	
		84.5	211	G	84.5	164	T	0.0	173	T	0.0	
		84.1	210	G	84.4	171	B	0.0	158	T	0.0	
DS-11	S36/37	81.4	224.9	T	81.3	169.1	B	0.0	149.4	T	0.0	PASS
(1)		81.1	217.5	T	81.2	167.3	B	0.0	144.3	B	0.0	
		81.0	219.1	T	81.1	168.9	B	0.0	156.2	T	0.0	
		81.1	221.6	T	81.2	162.3	B	0.0	135.0	B	0.0	
		80.8	223.2	T	81.2	156.2	B	0.0	164.0	T	0.0	
DS-12	S40/41	81.4	211	G	81.9	160	B	0.0	172	T	0.0	PASS
(DS#12)		81.4	214	G	81.8	169	B	0.0	136	T	0.0	
		81.2	212	G	81.3	168	T	0.0	152	T	0.0	
		81.4	214	G	81.7	170	T	0.0	141	T	0.0	
		81.3	212	G	82.2	177	B	0.0	155	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-13	S33/35	82.1	209	G	81.8	154	T	0.0	148	B	0.0	PASS
(DS#13)		82.1	213	G	82.1	172	B	0.0	155	B	0.0	
		82.1	213	G	82.3	147	T	0.0	169	B	0.0	
		82.4	215	G	82.3	173	B	0.0	164	B	0.0	
		82.5	212	G	82.5	144	T	0.0	167	B	0.0	
DS-14	S35/36	81.4	211	G	82.5	171	B	0.0	154	B	0.0	PASS
(DS#14)		81.6	210	G	82.6	131	B	0.0	156	B	0.0	
		82.1	211	G	82.1	180	B	0.0	149	B	0.0	
		81.9	211	G	81.9	161	B	0.0	180	B	0.0	
		81.9	210	G	82.1	158	T	0.0	157	B	0.0	
DS-15	S37/39	81.5	207	G	81.7	154	B	0.0	148	B	0.0	PASS
(DS#15)		81.9	210	G	82.5	172	B	0.0	146	B	0.0	
		81.9	213	G	82.4	169	B	0.0	162	B	0.0	
		81.5	213	G	82.1	147	T	0.0	152	B	0.0	
		81.6	211	G	82.1	163	T	0.0	173	B	0.0	
DS-16	S42/43	81.1	208	G	81.7	172	T	0.0	138	B	0.0	PASS
(DS#16)		81.1	207	G	82.4	177	B	0.0	159	B	0.0	
		80.7	209	G	80.8	178	T	0.0	132	B	0.0	
		80.5	207	G	80.3	174	T	0.0	138	B	0.0	
		80.7	203	G	80.9	135	B	0.0	144	B	0.0	
DS-17	S44/46	-	-	-	-	-	-	-	-	-	-	FAIL - SEE DS-17P1 AND DS-17N1

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

		SHEAR TEST			PEEL TEST							
						INSIDE TRACK			OUTSIDE TRACK			
SAMPLE NUMBER (2)	SEAM NUMBER	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	REMARKS
DS-17P1	S44/46	82.7	208	G	79.7	152	B	0.0	155	PB	10	RETEST OF DS-17 - PASS
(DS#17B)		82.4	213	G	79.9	147	B	0.0	163	B	0.0	PATH OF MX1320
		82.6	207	G	80.1	153	B	0.0	149	B	0.0	
		82.4	209	G	79.8	156	T	0.0	165	B	0.0	
		82.6	208	G	79.7	155	B	0.0	162	B	0.0	
DS-17N1	S44/46	81.7	207	G	81.9	148	T	0.0	167	B	0.0	RETEST OF DS-17 - PASS
(DS#17A)		81.7	209	G	81.9	168	T	0.0	159	B	0.0	PATH OF MX1320
		82.0	208	G	81.7	159	B	0.0	161	B	0.0	
		81.8	207	G	81.7	155	B	0.0	164	B	0.0	
		81.8	211	G	81.9	162	T	0.0	162	B	0.0	
DS-18	S46/47	81.5	213	G	82.3	159	B	0.0	184	B	0.0	PASS
(DS#18)		81.2	213	G	82.1	152	T	0.0	185	B	0.0	
		81.9	213	G	82.1	162	T	0.0	181	B	0.0	
		82.0	211	G	82.2	149	T	0.0	184	B	0.0	
		81.8	213	G	82.0	153	T	0.0	186	T	0.0	
DS-19	S52/53	-	-	-	-	-	-	-	-	-	-	FAIL - SEE DS-19P1 AND DS-19N1
DS-19P1	S50/51	81.9	212	G	81.9	169	T	0.0	142	B	0.0	RETEST OF DS-19 - PASS
(DS#19B)		81.1	209	G	82.3	166	B	0.0	175	T	0.0	PATH OF MX1240
		80.8	208	G	81.9	159	B	0.0	165	B	0.0	
		80.9	208	G	80.9	171	B	0.0	171	T	0.0	
		80.8	208	G	81.9	170	T	0.0	160	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-19N1	S52/53	81.3	211	G	81.8	151	T	0.0	146	B	0.0	RETEST OF DS-19 - PASS
(DS#19A)		82.2	211	G	81.5	142	B	0.0	171	B	0.0	PATH OF MX1240
		81.1	210	G	81.5	135	B	0.0	162	T	0.0	
		81.3	212	G	81.5	156	T	0.0	150	T	0.0	
		81.7	214	G	82.0	144	B	0.0	143	PB	10	
DS-20	S53/54	-	-	-	-	-	-	-	-	-	-	FAIL - SEE DS-20P1 AND DS-20N1
DS-20P1	S53/54	81.5	210	G	81.9	150	B	0.0	144	B	0.0	RETEST OF DS-20 - PASS
(DS#20B)		80.6	206	G	81.9	152	B	0.0	121	B	0.0	PATH OF MX1320
		80.5	207	G	82.0	154	B	0.0	144	B	0.0	
		82.4	210	G	82.2	164	B	0.0	163	T	0.0	
		80.6	208	G	82.1	153	B	0.0	171	T	0.0	
DS-20N1	S55/56	81.1	206	G	81.8	167	T	0.0	138	B	0.0	RETEST OF DS-20 - PASS
(DS#20A)		80.6	205	G	81.6	166	T	0.0	138	B	0.0	PATH OF MX1320
		81.0	207	G	81.2	166	B	0.0	135	B	0.0	
		80.4	206	G	81.3	158	B	0.0	166	T	0.0	
		80.4	207	G	81.4	155	B	0.0	172	T	0.0	
DS-21	S56/57	81.1	215.2	T	80.9	164.2	B	0.0	154.8	T	0.0	PASS
(1)		82.2	217.2	T	81.2	150.8	B	0.0	154.5	T	0.0	
		82.5	219.1	T	80.9	164.3	B	0.0	146.7	T	0.0	
		82.5	217.7	T	81.1	173.2	B	0.0	166.1	T	0.0	
		81.7	220.8	T	81.7	151.7	B	0.0	151.5	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-22	S62/63	80.9	206	G	81.5	142	T	0.0	166	B	0.0	PASS
(DS#22)		80.9	204	G	81.1	153	T	0.0	160	B	0.0	
		81.0	207	G	81.0	163	B	0.0	152	B	0.0	
		80.8	205	G	80.9	136	T	0.0	166	B	0.0	
		80.9	205	G	81.0	167	B	0.0	160	B	0.0	
DS-23	S67/68	81.6	211	G	80.6	176	T	0.0	180	B	0.0	PASS
(DS#23)		82.0	212	G	79.9	169	B	0.0	173	T	0.0	
		81.9	211	G	80.1	179	T	0.0	173	T	0.0	
		81.7	211	G	79.8	180	T	0.0	170	T	0.0	
		81.6	208	G	79.7	172	T	0.0	163	T	0.0	
DS-24	S64/79	82.1	212	G	82.4	161	T	0.0	143	B	0.0	PASS
(DS#24)		81.4	211	G	82.4	159	T	0.0	149	B	0.0	
		81.4	212	G	82.0	166	B	0.0	144	B	0.0	
		81.6	212	G	82.4	165	T	0.0	150	B	0.0	
		82.2	214	G	82.1	168	T	0.0	165	B	0.0	
DS-25	S80/81	81.6	211	G	81.9	165	T	0.0	152	B	0.0	PASS
(DS#25)		81.6	212	G	81.6	160	B	0.0	166	B	0.0	
		81.5	212	G	81.7	152	T	0.0	168	T	0.0	
		81.9	209	G	81.5	146	B	0.0	154	B	0.0	
		81.8	210	G	81.5	155	B	0.0	173	B	0.0	
DS-26	S80/81	-	-	-	-	-	-	-	-	-	-	FAIL - SEE DS- 26P1 AND DS-26N1

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-26P1	S77/78	82.0	209	G	82.0	161	T	0.0	135	T	0.0	RETEST OF DS-26 - PASS
(DS#26B)		81.9	209	G	82.1	140	T	0.0	146	T	0.0	PATH OF MX1240
		82.0	210	G	81.9	166	T	0.0	146	T	0.0	
		82.1	211	G	82.1	162	B	0.0	167	B	0.0	
		81.9	211	G	81.9	158	B	0.0	171	T	0.0	
DS-26N1	S80/81	81.6	208	G	79.4	134	T	0.0	147	B	0.0	RETEST OF DS-26 - PASS
(DS#26A)		81.4	210	G	79.7	140	T	0.0	146	B	0.0	PATH OF MX1240
		81.7	208	G	79.9	155	T	0.0	150	B	0.0	
		81.7	208	G	79.8	140	T	0.0	165	B	0.0	
		81.9	207	G	79.9	154	T	0.0	156	B	0.0	
DS-27	S83/85	81.4	206	G	80.7	141	T	0.0	167	T	0.0	PASS
(DS#27)		80.6	203	G	80.2	178	T	0.0	176	T	0.0	
		80.6	207	G	80.5	175	T	0.0	163	T	0.0	
		80.8	208	G	80.9	168	T	0.0	170	B	0.0	
		80.3	193	G	80.1	181	B	0.0	164	B	0.0	
DS-28	S83/85	81.1	204	G	82.6	172	B	0.0	145	T	0.0	PASS
(DS#28)		81.0	207	G	82.5	160	T	0.0	148	B	0.0	
		81.2	202	G	82.2	150	B	0.0	152	T	0.0	
		80.9	201	G	81.9	171	B	0.0	150	T	0.0	
		81.1	204	G	81.9	172	B	0.0	145	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-29	S87/88	82.5	204	G	80.3	181	B	0.0	147	B	0.0	PASS
(DS#29)		82.5	205	G	80.6	166	B	0.0	134	B	0.0	
		82.4	204	G	81.1	177	T	0.0	140	B	0.0	
		82.3	206	G	80.8	178	B	0.0	164	T	0.0	
		82.1	204	G	81.3	177	T	0.0	165	T	0.0	
DS-30	S88/89	81.3	204	G	81.8	164	T	0.0	140	T	0.0	PASS
(DS#30)		81.5	204	G	81.8	166	T	0.0	149	B	0.0	
		81.1	203	G	81.7	174	B	0.0	158	B	0.0	
		81.3	202	G	81.9	152	T	0.0	156	T	0.0	
		80.5	204	G	81.7	153	B	0.0	141	B	0.0	
DS-31	S90/91	81.2	217.1	B	81.78	146.2	B	0.0	132.3	B	0.0	PASS
(1)		82.2	217.1	B	81.9	161.6	B	0.0	135.2	B	0.0	
		82.5	218.7	B	82.2	156.7	B	0.0	138.3	B	0.0	
		82.5	218.1	B	81.6	168.5	B	0.0	139.1	B	0.0	
		81.7	219.2	B	81.9	158.4	T	0.0	143.1	B	0.0	
DS-32	S92/93	81.1	203	G	81.4	172	T	0.0	171	B	0.0	PASS
(DS#32)		81.0	203	G	81.3	150	B	0.0	168	T	0.0	
		81.0	202	G	81.4	172	T	0.0	165	B	0.0	
		81.1	204	G	81.4	159	T	0.0	164	B	0.0	
		81.0	200	G	81.5	160	T	0.0	160	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-33	S96/97	81.9	208	G	81.9	154	T	0.0	143	B	0.0	PASS
(DS#33)		81.7	209	G	82.1	159	T	0.0	152	B	0.0	
		81.8	207	G	81.7	276	T	0.0	142	B	0.0	
		81.6	208	G	82.0	138	T	0.0	156	B	0.0	
		81.7	205	G	81.8	156	T	0.0	147	B	0.0	
DS-34	S101/102	81.7	207	G	81.9	171	T	0.0	147	B	0.0	PASS
(DS#34)		81.8	209	G	81.7	157	T	0.0	168	B	0.0	
		81.6	208	G	82.1	169	T	0.0	150	B	0.0	
		81.2	209	G	82.0	165	B	0.0	163	B	0.0	
		81.1	206	G	82.2	148	B	0.0	167	B	0.0	
DS-35	S80/103	81.1	199	G	81.8	155	T	0.0	148	B	0.0	PASS
(DS#35)		81.6	205	G	81.4	155	T	0.0	152	B	0.0	
		81.3	205	G	81.2	133	T	0.0	147	B	0.0	
		81.3	206	G	81.4	162	T	0.0	153	B	0.0	
		81.3	201	G	81.3	161	T	0.0	152	B	0.0	
DS-36	S50/103	84.8	206	G	81.7	142	T	0.0	153	B	0.0	PASS
(DS#36)		84.7	211	G	81.9	142	T	0.0	140	B	0.0	
		84.4	210	G	82.1	169	B	0.0	136	B	0.0	
		84.2	209	G	82.4	168	B	0.0	154	B	0.0	
		83.5	213	G	82.2	152	T	0.0	141	B	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-37	S106/107	82.2	208	G	82.3	169	B	0.0	171	T	0.0	PASS
(DS#37)		82.4	207	G	82.0	149	T	0.0	151	B	0.0	
		82.6	204	G	82.3	151	B	0.0	172	B	0.0	
		82.5	207	G	82.2	163	T	0.0	158	B	0.0	
		82.5	208	G	82.2	171	B	0.0	162	B	0.0	
DS-38	S102/104	82.1	210	G	82.1	163	T	0.0	133	T	0.0	PASS
(DS#38)		82.3	217	G	81.7	160	T	0.0	134	T	0.0	
		82.1	212	G	81.3	156	T	5	136	T	0.0	
		82.2	207	G	81.4	171	T	0.0	130	T	0.0	
		82.7	206	G	81.2	150	T	0.0	135	T	0.0	
DS-39	S108/110	82.4	211	G	82.5	175	T	0.0	168	T	0.0	PASS
(DS#39)		82.5	210	G	82.1	175	T	0.0	151	B	0.0	
		82.2	211	G	81.9	175	B	0.0	170	B	0.0	
		82.2	208	G	81.7	175	B	0.0	152	B	0.0	
		82.1	210	G	81.7	176	B	0.0	168	B	0.0	
DS-40	S113/114	82.4	213	G	82.2	158	B	0.0	143	T	0.0	PASS
(DS#40)		81.9	213	G	82.6	162	B	0.0	149	B	0.0	
		82.3	213	G	82.2	165	B	0.0	140	B	0.0	
		82.3	213	G	82.3	167	T	0.0	143	T	0.0	
		82.3	214	G	82.3	171	B	0.0	174	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-41	S115/116	83.2	215.5	B	82.4	172.4	B	0.0	140.5	B	0.0	PASS
(1)		83.1	216.5	B	82.9	173.1	B	0.0	144.8	B	0.0	
		83.2	217.0	B	82.7	177.1	B	0.0	151.2	T	0.0	
		82.9	217.0	B	83.0	156.5	T	0.0	163.1	B	0.0	
		83.0	217.0	B	82.6	166.0	T	0.0	155.2	T	0.0	
DS-42	S116/117	80.6	211	G	82.6	162	B	0.0	164	T	0.0	PASS
(DS#42)		80.4	211	G	82.5	167	B	0.0	167	B	0.0	
		80.4	211	G	82.5	143	B	0.0	168	T	0.0	
		80.4	208	G	82.2	143	B	0.0	149	T	0.0	
		80.4	208	G	82.4	154	B	0.0	136	T	0.0	
DS-43	S111/123	-	-	-	-	-	-	-	-	-	-	FAIL - SEE DS-43P1 AND DS-43N1
DS-43P1	S118/119	81.7	213	G	81.6	142	T	90	140	B	0.0	RETEST OF DS43 - PASS
(DS#43B)		81.3	213	G	81.5	163	B	0.0	172	B	0.0	PATH OF MX1404
		81.5	212	G	81.6	171	T	0.0	170	B	0.0	
		81.9	212	G	81.5	163	T	0.0	178	B	0.0	
		81.3	208	G	81.4	153	T	0.0	152	B	0.0	
DS-43N1	S124/126	81.7	215	G	82.7	177	T	0.0	163	T	0.0	RETEST OF DS43 - PASS
(DS#43A)		82.3	216	G	82.9	170	B	0.0	170	T	0.0	PATH OF MX1404
		81.2	217	G	82.8	168	B	0.0	138	B	0.0	
		83.0	219	G	82.6	134	T	0.0	135	T	40	
		81.3	216	G	82.9	160	B	0.0	136	B	0.0	

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(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-44	S122/123	81.9	213	G	81.4	176	T	0.0	169	T	0.0	PASS
(DS#44)		82.0	211	G	80.9	170	T	0.0	143	B	0.0	
		82.0	212	G	80.9	169	T	0.0	169	T	0.0	
		81.9	204	G	80.9	172	T	0.0	162	B	0.0	
		82.1	212	G	81.0	164	T	0.0	158	T	0.0	
DS-45	S125/127	81.9	212	G	81.6	130	B	0.0	157	B	0.0	PASS
(DS#45)		81.9	211	G	81.7	162	T	0.0	159	T	0.0	
		82.3	211	G	82.2	133	T	0.0	154	B	0.0	
		82.5	211	G	82.7	140	B	0.0	159	T	0.0	
		81.8	212	G	82.6	162	B	0.0	147	B	0.0	
DS-46	S127/128	82.1	212	G	81.6	152	T	0.0	165	T	0.0	PASS
(DS#46)		81.6	210	G	81.8	157	T	0.0	138	T	0.0	
		82.1	211	G	81.6	146	T	0.0	145	T	0.0	
		81.5	210	G	81.7	157	T	0.0	152	B	0.0	
		82.3	212	G	82.1	160	B	0.0	144	T	0.0	
DS-47	S130/131	81.4	211	G	82.6	148	T	0.0	150	T	0.0	PASS
(DS#47)		81.6	210	G	82.7	174	B	0.0	164	T	0.0	
		82.3	210	G	82.5	143	B	0.0	151	P	100	
		82.5	214	G	82.9	170	B	0.0	159	T	10	
		82.3	210	G	82.5	170	B	0.0	151	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-48	S134/135	82.1	210	G	80.7	138	T	0.0	162	T	0.0	PASS
(DS#48)		82.3	212	G	80.2	170	T	0.0	165	T	0.0	
		82.2	212	G	80.3	167	B	0.0	177	T	0.0	
		82.2	212	G	80.3	167	B	0.0	167	T	0.0	
		82.1	211	G	80.5	130	B	50	168	T	0.0	
DS-49	S135/136	81.9	211	G	81.1	141	T	0.0	168	B	0.0	PASS
(DS#49)		81.7	212	G	81.3	153	T	0.0	169	T	0.0	
		82.3	212	G	81.3	147	B	0.0	166	T	0.0	
		81.7	212	G	81.7	137	T	0.0	158	B	0.0	
		81.5	211	G	81.3	144	T	0.0	158	B	0.0	
DS-50	S141/142	83.1	213	G	81.5	173	T	0.0	175	T	0.0	PASS
(DS#50)		83.2	213	G	81.9	146	B	0.0	166	T	0.0	
		83.2	214	G	81.7	156	B	0.0	161	T	0.0	
		82.9	213	G	82.6	153	B	0.0	155	B	0.0	
		82.9	213	G	82.5	156	B	0.0	161	B	0.0	
DS-51	S140/141	82.0	216.0	B	82.7	141.7	B	0.0	149.4	B	0.0	PASS
(1)		82.3	215.8	B	82.7	132.5	B	0.0	153.5	B	0.0	
		82.5	216.6	B	82.4	136.1	B	0.0	150.9	B	0.0	
		82.9	216.5	B	82.5	124.4	T	0.0	167.5	B	0.0	
		82.8	216.1	B	82.4	134.3	T	0.0	160.3	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

		SHEAR TEST			PEEL TEST							
						INSIDE TRACK			OUTSIDE TRACK			
SAMPLE NUMBER (2)	SEAM NUMBER	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	REMARKS
DS-52	S142/143	81.7	213	G	81.3	148	T	0.0	169	B	0.0	PASS
(DS#52)		81.6	215	G	81.2	144	T	0.0	157	T	0.0	
		81.7	211	G	81.2	148	T	0.0	160	T	0.0	
		81.2	210	G	81.1	142	B	0.0	148	T	0.0	
		81.3	208		81.2	165	B	0.0	165	T	0.0	
				G								
DS-53	S154/155	81.8	216	G	82.3	158	T	0.0	157	B	0.0	PASS
(DS#53)		81.8	216	G	81.6	154	T	0.0	167	B	0.0	
		81.5	213	G	81.9	168	T	0.0	168	B	0.0	
		81.5	214	G	81.4	152	T	0.0	166	T	0.0	
		81.3	214	G	81.4	168	T	0.0	150	B	0.0	
DS-54	S155/157	81.4	209	G	81.4	162	T	0.0	175	T	0.0	PASS
(DS#54)		81.5	208	G	81.2	163	T	0.0	181	T	0.0	
		81.3	211	G	81.3	172	T	0.0	159	T	0.0	
		80.9	211	G	80.9	160	T	0.0	161	B	0.0	
		80.8	211	G	80.9	151	T	0.0	150	T	0.0	
DS-55	S157/158	81.4	211	G	80.8	161	B	0.0	157	B	0.0	PASS
(DS#55)		81.3	212	G	80.8	170	T	0.0	156	T	0.0	
		81.4	212	G	81.2	167	T	0.0	153	T	0.0	
		81.3	213	G	81.3	162	B	0.0	172	T	0.0	
		81.6	213	G	81.7	166	T	0.0	163	B	0.0	
								0.0				

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-56	S158/159	81.5	214	G	81.3	148	T	0.0	167	B	0.0	PASS
(DS#56)		81.3	213	G	81.6	148	T	0.0	165	T	0.0	
		81.7	216	G	81.3	163	T	0.0	137	T	0.0	
		81.4	216	G	81.8	153	T	0.0	182	B	0.0	
		81.4	215	G	81.3	142	T	10	178	T	0.0	
DS-57	S166/167	82.0	226	G	81.8	159	T	0.0	144	T	0.0	PASS
(DS#58)		82.7	224	G	81.8	148	T	0.0	158	B	0.0	
		81.7	224	G	82.1	135	T	0.0	166	T	0.0	
		82.3	223	G	81.6	156	T	0.0	172	T	0.0	
		82.5	221	G	82.1	136	T	0.0	167	B	0.0	
DS-58	S171/172	81.6	210	G	81.8	144	B	0.0	154	T	0.0	PASS
(DS#58)		82.7	210	G	81.7	144	B	0.0	171	T	0.0	
		81.9	211	G	81.5	146	B	0.0	167	T	0.0	
		81.6	210	G	83.1	135	B	0.0	174	B	0.0	
		81.6	211	G	81.5	160	B	0.0	152	B	0.0	
DS-59	S172/173	82.5	211	G	82.7	171	B	0.0	184	B	0.0	PASS
(DS#59)		8.23	209	G	82.7	173	T	0.0	184	T	0.0	
		82.3	210	G	82.6	166	B	0.0	156	B	0.0	
		82.7	211	G	82.5	175	B	0.0	173	B	0.0	
		82.2	212	G	82.8	175	T	0.0	152	B	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

		SHEAR TEST			PEEL TEST							
						INSIDE TRACK			OUTSIDE TRACK			
SAMPLE NUMBER (2)	SEAM NUMBER	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	REMARKS
DS-60	S182/183	82.3	210	G	82.0	166	T	0.0	142	T	0.0	PASS
(DS#60)		82.1	211	G	82.3	141	B	0.0	133	T	0.0	
		82.5	212	G	82.3	150	B	0.0	156	T	0.0	
		82.4	214	G	82.7	146	B	0.0	143	T	0.0	
		82.6	216	G	82.4	137	B	0.0	140	T	0.0	
DS-61	S184/85	80.6	212.6	T	80.4	148.7	B	0.0	166.6	B	0.0	PASS
(1)		80.2	211.8	T	80.2	166.9	T	0.0	169.3	B	0.0	
		80.4	209.3	T	80.1	144.2	B	0.0	179.2	T	0.0	
		80.3	212.3	T	80.2	147.8	B	0.0	164.9	B	0.0	
		80.1	211.8	T	80.0	148.0	T	0.0	174.1	T	0.0	
DS-62	S186/187	83.1	212	G	83.1	154	T	0.0	166	T	0.0	PASS
(DS#62)		83.4	212	G	83.1	153	T	0.0	182	T	0.0	
		83.1	213	G	83.2	151	T	0.0	180	T	0.0	
		83.1	214	G	83.1	147	T	0.0	152	T	0.0	
		83.1	213	G	83.0	158	T	0.0	171	T	0.0	
DS-63	S187/188	83.0	211	G	83.0	150	PB	100	148	T	0.0	PASS
(DS#63)		83.0	212	G	82.8	167	T	0.0	155	T	0.0	
		82.8	209	G	83.2	167	B	0.0	149	T	0.0	
		81.7	212	G	83.8	160	T	0.0	267	T	0.0	
		82.0	211	G	83.9	170	B	0.0	161	B	0.0	

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The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-64	S137/184	83.3	215	G	82.7	135	T	0.0	165	B	0.0	PASS
(DS#64)		83.3	217	G	83.4	157	T	0.0	162	T	0.0	
		81.2	218	G	83.3	162	T	0.0	158	B	0.0	
		82.8	213	G	82.9	169	T	0.0	159	B	0.0	
		82.3	214	G	83.1	140	T	0.0	145	B	0.0	
DS-65	S190/192	82.4	214	G	82.5	169	T	0.0	134	B	0.0	PASS
(DS#65)		82.3	215	G	82.4	174	B	0.0	170	T	0.0	
		82.3	213	G	82.1	173	B	0.0	118	B	0.0	
		82.3	214	G	82.1	168	T	0.0	163	B	0.0	
		82.2	210	G	82.3	163	T	0.0	144	B	0.0	
DS-66	S189/190	82.2	209	G	82.3	157	T	0.0	160	B	0.0	PASS
(DS#66)		82.4	208	G	81.9	125	T	0.0	259	B	0.0	
		82.0	208	G	82.1	165	T	0.0	159	B	0.0	
		83.0	211	G	82.0	158	T	0.0	165	B	0.0	
		82.3	212	G	82.2	168	B	0.0	152	B	0.0	
DS-67	S190/191	82.0	208	G	82.3	129	T	0.0	126	PB	100	PASS
(DS#67)		82.2	208	G	83.1	142	T	0.0	157	T	0.0	
		82.4	207	G	82.3	147	T	0.0	163	B	0.0	
		82.8	209	G	83.0	162	T	0.0	173	B	0.0	
		82.2	208	G	81.7	163	T	0.0	150	T	0.0	

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The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-68	S197/198	81.3	210	G	82.3	112	PB	100	138	B	0.0	PASS
(DS#68)		81.7	208	G	83.3	148	T	10	169	B	0.0	
		81.9	209	G	82.6	163	T	0.0	171	B	0.0	
		82.1	209	G	82.8	168	T	0.0	162	T	0.0	
		81.9	209	G	82.2	151	B	0.0	174	T	0.0	
DS-69	S197/198	82.2	210	G	82.0	135	T	0.0	164	B	0.0	PASS
(DS#69)		82.7	211	G	82.4	127	T	0.0	162	B	0.0	
		82.1	211	G	82.0	136	T	0.0	136	B	0.0	
		82.0	212	G	82.9	128	T	0.0	159	T	0.0	
		82.7	210	G	83.0	135	T	0.0	156	B	0.0	
DS-70	S193/194	82.8	206	G	81.6	165	B	0.0	157	B	0.0	PASS
(DS#70)		81.5	207	G	81.3	140	T	0.0	177	B	0.0	
		83.0	208	G	81.7	158	T	0.0	164	B	0.0	
		81.6	205	G	82.0	146	T	0.0	151	B	0.0	
		83.4	208	G	81.5	154	T	0.0	151	B	0.0	
DS-71	S202/203	82.0	210	G	82.4	146	B	0.0	143	B	0.0	PASS
(1)		82.1	210	G	82.2	170	T	0.0	158	T	0.0	
		82.1	210	G	81.6	150	B	0.0	172	B	0.0	
		82.1	211	G	81.8	143	B	0.0	141	B	0.0	
		82.5	209	G	81.6	170	B	0.0	142	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-72	S222/223	81.4	209	G	81.3	158	T	0.0	146	B	0.0	PASS
(DS#72)		81.7	208	G	81.6	140	T	0.0	156	B	0.0	
		81.6	206	G	81.6	161	T	0.0	144	B	0.0	
		82.0	206	G	81.8	167	T	0.0	162	B	0.0	
		82.0	205	G	82.0	135	T	0.0	164	B	0.0	
DS-73	S223/224	82.6	207	G	82.1	145	T	0.0	165	B	0.0	FAIL - SEE DS-73P1 AND DS-73N1
(DS#73)		82.2	206	G	82.1	118	T	0.0	165	B	0.0	
		82.2	207	G	82.7	122	T	0.0	152	B	0.0	
		82.2	205	G	82.3	133	T	0.0	149	B	0.0	
		82.1	204	G	82.1	132	T	0.0	148	B	0.0	
DS-73P1	S223/224	81.9	212	G	81.1	160	B	0.0	160	T	0.0	RETEST OF DS-73 - PASS
(DS#73P1)		81.7	211	G	81.4	164	T	0.0	158	T	0.0	PATH OF MX1404
		82.0	208	G	81.6	151	T	0.0	156	T	0.0	
		82.2	208	G	81.7	162	T	0.0	142	T	0.0	
		81.9	208	G	81.8	164	T	0.0	145	T	0.0	
DS-73N1	S223/224	82.0	210	G	81.1	173	B	0.0	170	T	0.0	RETEST OF DS-73 - PASS
(DS#73N)		81.8	211	G	81.0	175	T	0.0	173	B	0.0	PATH OF MX1404
		81.6	210	G	81.3	170	T	0.0	170	T	0.0	
		81.7	209	G	81.5	125	B	0.0	172	T	0.0	
		81.8	210	G	81.5	159	T	0.0	176	B	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-74	S212/222	81.1	213.3	B	81.1	169.7	B	0.0	176.2	T	0.0	PASS
		81.0	215.0	T	80.7	159.9	B	0.0	170.2	T	0.0	
		80.8	214.6	T	80.5	165.3	B	0.0	171.3	B	0.0	
		81.1	213.4	T	80.1	147.3	B	0.0	175.9	T	0.0	
		80.8	212.6	T	80.2	176.3	T	0.0	182.3	B	0.0	
DS-75 (DS#75)	S234/235	82.6	209	G	82.8	167	B	0.0	159	B	0.0	PASS
		82.9	208	G	82.7	169	T	0.0	143	PB	50	
		82.3	209	G	82.3	166	B	0.0	164	B	0.0	
		82.1	208	G	82.2	166	T	0.0	161	B	0.0	
		82.2	208	G	82.5	179	B	0.0	166	B	0.0	
DS-76	S208/209	-	-	-	-	-	-	-	-	-	-	FAIL - SEE DS-76P1 AND DS-76N1
DS-76P1 (DS#76P1)	S193/194	82.2	208	G	82.9	134	T	0.0	149	B	0.0	RETEST OF DS-76 - PASS PATH OF MX1240
		82.9	209	G	83.5	148	T	0.0	152	B	0.0	
		82.8	207	G	83.0	166	T	0.0	148	B	0.0	
		82.9	208	G	82.8	155	T	0.0	147	B	0.0	
		82.8	208	G	82.8	158	T	0.0	156	B	0.0	
DS-76N1 (DS#76N1)	S209/210	83.1	206	G	83.0	154	B	0.0	141	B	0.0	RETEST OF DS-76 - PASS PATH OF MX1240
		83.4	206	G	83.1	139	B	0.0	143	B	0.0	
		83.2	205	G	83.3	141	T	0.0	142	B	0.0	
		83.0	207	G	83.1	159	B	0.0	138	B	0.0	
		83.1	206	G	83.3	135	T	0.0	142	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-77	S240/241	81.8	209	G	81.7	149	B	0.0	147	B	0.0	PASS
(DS#77)		82.0	212	G	82.0	159	T	0.0	154	B	0.0	
		81.9	211	G	82.0	159	B	0.0	156	B	0.0	
		81.5	212	G	81.9	150	B	0.0	152	B	0.0	
		81.8	210	G	81.5	144	T	0.0	137	B	0.0	
DS-78	S222/30G	82.8	211	G	82.6	163	T	0.0	164	T	0.0	PASS
(DS#78)		83.1	212	G	82.9	163	T	0.0	154	B	0.0	
		83.0	211	G	83.0	130	T	0.0	134	B	0.0	
		83.0	210	G	83.0	140	T	0.0	163	B	0.0	
		82.7	211	G	83.2	133	T	0.0	167	B	0.0	
DS-79	S249/252	81.8	211	G	81.3	167	B	0.0	156	B	0.0	PASS
(DS#79)		83.2	211	G	82.1	167	B	0.0	162	B	0.0	
		81.4	209	G	82.0	167	T	0.0	164	B	0.0	
		81.3	210	G	82.2	163	T	0.0	151	B	0.0	
		81.5	208	G	82.5	139	B	0.0	154	B	0.0	
DS-80	S253/254	81.2	211	G	83.4	163	B	0.0	165	T	0.0	PASS
(DS#80)		82.2	209	G	81.5	165	B	0.0	172	T	0.0	
		81.1	208	G	81.1	139	T	0.0	169	T	0.0	
		82.0	208	G	81.2	157	B	0.0	169	T	0.0	
		81.4	207	G	81.1	172	B	0.0	174	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

		SHEAR TEST			PEEL TEST							
						INSIDE TRACK			OUTSIDE TRACK			
SAMPLE NUMBER (2)	SEAM NUMBER	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	REMARKS
DS-81	S256/257	81.7	212.5	T	81.3	182.8	B	0.0	169.1	T	0.0	PASS
(1)		80.8	216.5	T	81.3	172.2	B	0.0	167.3	T	0.0	
		80.7	217.2	T	80.9	175.9	B	0.0	166.1	T	0.0	
		81.8	217.0	T	81.5	155.7	B	0.0	162.6	T	0.0	
		80.5	216.8	T	81.3	175.5	B	0.0	162.6	T	0.0	
DS-82	S196/239	81.5	205	G	82.5	166	B	0.0	168	B	0.0	PASS
(DS#82)		80.7	202	G	82.5	173	B	0.0	170	T	0.0	
		82.0	212	G	82.0	174	T	0.0	168	T	0.0	
		82.4	209	G	82.9	168	B	0.0	167	B	0.0	
		82.6	207	G	82.1	165	T	0.0	173	T	0.0	
DS-83	S261/262	82.5	209	G	82.1	162	B	0.0	164	B	0.0	FAIL - SEE DS-83P1 AND DS-83N1
(DS#83)		83.0	210	G	82.7	159	T	0.0	132	P	100	
		82.7	209	G	83.2	158	T	0.0	115	P	100	
		83.1	211	G	82.5	155	T	0.0	119	P	100	
		82.5	213	G	82.6	166	T	0.0	155	P	100	
DS-83P1	S257/258	83.2	205	G	83.6	156	T	0.0	147	B	0.0	RETEST OF DS-83 - PASS
(DS#83B)		83.3	204	G	83.2	149	T	0.0	158	B	0.0	PATH OF MX1404
		83.7	207	G	83.4	167	B	0.0	145	B	0.0	
		84.1	205	G	83.3	146	T	0.0	142	B	0.0	
		83.1	206	G	83.4	168	B	0.0	165	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-83N1	S261/262	81.9	207	G	82.2	156	B	0.0	168	T	0.0	RETEST OF DS-83 - PASS
(DS#83N1)		82.0	207	G	82.2	164	B	0.0	164	T	0.0	PATH OF MX1404
		82.0	208	G	82.3	150	B	0.0	162	T	0.0	
		82.5	209	G	83.8	141	T	0.0	153	PB	100	
		82.8	210	G	83.2	142	T	0.0	159	T	0.0	
DS-84	S106/241	83.0	212	G	81.0	110	P	100	149	B	0.0	FAIL - SEE DS-84P1 AND DS-84N1
(DS#84)		83.5	210	G	80.3	89	P	100	152	B	0.0	
		83.3	209	G	83.0	164	T	0.0	145	B	0.0	
		83.1	210	G	83.9	155	P	100	142	B	0.0	
		83.4	206	G	82.7	83	P	100	128	PB	50	
DS-84P1	S242/105	83.5	209	G	81.9	136	B	0.0	157	PB	30	RETEST OF DS-84
(DS#84P1)		83.7	210	G	81.8	137	B	0.0	120	PB	30	FAIL - SEE DS-84P2
		82.1	204	G	81.3	120	P	100	134	PB	90	PATH OF MX1319
		82.0	206	G	81.4	51	P	100	164	PB	90	
		80.9	205	G	81.5	153	T	0.0	153	PT	10	
DS-84P2	S95/256	81.7	215	G	81.9	134	PB	80	154	B	0.0	RETEST OF DS-84P1
(DS#84P2)		82.1	215	G	81.8	142	PB	20	164	T	0.0	FAIL - SEE DS-84P3
		81.4	213	G	81.2	161	T	0.0	162	T	0.0	PATH OF MX1319
		81.2	215	G	81.3	162	T	0.0	139	B	0.0	
		81.3	216	G	81.1	155	T	0.0	162	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-84P3	TF01	84.3	235.0	G	83.8	147.0	PT	5.0	174.0	T	0.0	RETEST OF DS-84P2-PASS
	8/18/92	84.6	231.0	G	84.7	168.0	B	0.0	168.0	B	0.0	PATH OF MX1319, ALL
		84.5	231.0	G	84.0	166.0	B	0.0	167.0	B	0.0	SEAMS IN PREVIOUS DIRECTION
		84.2	240.0	G	84.6	143.0	PB	25.0	113.0	PB	5.0	UP TO TF-01 ON 8/18/92
		84.1	236.0	G	84.8	165.0	B	0.0	145.0	B	0.0	WERE RECONSTRUCTED
DS-84N1	S228/263	82.6	212	G	82.4	150	T	0.0	150	T	0.0	RETEST OF DS-84 – PASS
(DS#84N1)		82.7	212	G	82.5	158	T	0.0	153	T	0.0	PATH OF MX1319
		82.8	212	G	82.5	144	B	0.0	143	T	0.0	
		82.4	213	G	83.0	159	B	0.0	144	PB	10	
		82.2	214	G	82.9	101	P	100	147	PB	10	
DS-85	S1/262	–	–	–	–	–	–	–	–	–	–	FAIL – SEE DS-85P1
												SEAM IN "NEXT" DIRECTION
												TRACKED AND CAPPED – PASS
												PATH OF MX1404
DS-85P1	S1/262	81.8	210	G	80.5	155	T	0.0	34	P	100	RETEST OF DS-85
(DS#85P1)		81.3	210	G	80.9	150	T	0.0	154	PT	30	FAIL – SEE DS-85P2
		81.4	209	G	80.8	151	T	0.0	150	T	0.0	PATH OF MX1404
		81.0	210	G	81.0	163	T	0.0	134	PB	40	
		80.6	209	G	81.1	143	T	0.0	150	T	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMBRANE DESTRUCTIVE TEST RESULTS
FUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEAR TEST			PEEL TEST							REMARKS
						INSIDE TRACK			OUTSIDE TRACK			
		SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	SHEET THICKNESS (mils)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	STRENGTH (lbs/inch)	FAILURE CODE	PERCENT PEEL (3) (%)	
DS-85P2	S1/262	81.8	208	G	81.4	143	T	10	147	T	0.0	RETEST OF DS-85P1 - PASS
(DS#85P2)		81.9	209	G	81.5	134	T	0.0	154	T	0.0	PATH OF MX1404
		82.2	211	G	82.5	149	T	0.0	156	T	0.0	
		81.7	210	G	81.7	136	T	30	150	T	0.0	
		81.7	210	G	81.9	149	T	0.0	154	B	0.0	
DS-86	S90/259	-	-	-	-	-	-	-	-	-	-	FAIL - SEE DS-86P1 AND DS-86N1
DS-86P1	S39/263	81.9	210	G	82.5	158	B	0.0	150	B	0.0	RETEST OF DS-86 - PASS
(DS#86P1)		82.4	209	G	81.9	140	B	0.0	155	B	0.0	PATH OF MX1319
		81.1	207	G	81.4	152	B	0.0	157	B	0.0	
		81.3	207	G	81.3	147	B	0.0	147	B	0.0	
		81.8	204	G	81.3	138	T	0.0	146	B	0.0	
DS-86N1	S90/260	81.7	207	G	81.0	151	T	0.0	156	B	0.0	RETEST OF DS-86 - PASS
(DS#86N1)		81.4	209	G	81.0	154	B	0.0	156	B	0.0	PATH OF MX1319
		81.1	210	G	81.1	142	B	0.0	148	B	0.0	
		81.2	210	G	80.9	150	B	0.0	157	B	0.0	
		81.7	206	G	81.3	155	T	0.0	153	B	0.0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.

(2) DP-00P1 denotes the sample was in the weld path "PREVIOUS" to location DP-00. DP-00N1 denotes the sample was in the weld track "NEXT" from DP-00.
The sample number in parentheses is NSC's sample number.

(3) Percent peel indicates the amount of the peel adhesion failure in the weld.

FILE=SF_DESTR.WK1

0.2

EXTRUSION METHOD

SUMMARY OF SECONDARY GEOMEMRANE DESTRUCTIVE TEST RESULTS
EXTRUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEET THICKNESS (mils)	SHEAR TEST STRENGTH (lbs/inch)	LOCATION CODE	PEEL TEST STRENGTH (lbs/inch)	LOCATION CODE	PERCENT PEEL (3) (%)	REMARKS
DSE-01	S7/5B	81.6	200.0	G	68.0	P	100	FAIL - SEE DSE-01P1 AND DSE-01N1
(DS#E1)		82.1	186.0	G	92.0	P	100	
		81.5	213.0	G	82.0	P	100	
		82.6	225.0	G	82.0	P	100	
		82.9	224.0	G	91.0	T	0	
DSE-01P1	S7/5B	81.3	234.0	G	152.0	B	0	RETEST OF DSE-01 - PASS
(DS#E1-B)		81.6	216.0	G	116.0	B	0	PATH OF MX42
		81.8	218.0	G	136.0	B	0	
		81.7	217.0	G	152.0	B	0	
		81.9	218.0	G	155.0	B	0	
DSE-01N1	S7/5B	80.7	218.0	G	139.0	B	0	RETEST OF DSE-01 - PASS
(DS#E1-A1)		81.7	217.0	G	152.0	B	0	PATH OF MX42
		82.0	218.0	G	140.0	B	0	
		81.9	219.0	G	176.0	B	0	
		82.2	215.0	G	142.0	B	0	
DSE-02	S2/3	83.5	214.0	G	152.0	B	0	PASS
(DS#E-02)		83.5	217.0	G	134.0	B	0	
		83.4	217.0	G	135.0	B	0	
		83.5	218.0	G	188.0	B	0	
		83.6	217.0	G	143.0	B	0	
DSE-03	S44/4R	82.6	218.0	G	137.0	B	0	PASS
(DS#E-03)		83.5	219.0	G	126.0	B	0	
		83.2	219.0	G	133.0	B	0	
		83.1	218.0	G	119.0	B	0	
		83.2	218.0	G	131.0	B	0	
DSE-04	S111/16D	-	-	-	-	-	-	FAIL - SEE DSE-04P1 AND DSE-04N1
(1)								

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.
(2) DSE-00P1 denotes the sample was in the weld path "PREVIOUS" to location DSE-00. DSE-00N1 denotes the sample was in the weld track "NEXT" from DSE-00.
The sample number in parentheses is NSC's sample number.
(3) Percent peel indicates the amount of peel adhesion failure in the weld.
FILE= SX_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMRANE DESTRUCTIVE TEST RESULTS
EXTRUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEET THICKNESS (mils)	SHEAR TEST STRENGTH (lbs/inch)	LOCATION CODE	PEEL TEST STRENGTH (lbs/inch)	LOCATION CODE	PERCENT PEEL (3) (%)	REMARKS
DSE-04P1	S52/16D	81.5	212.0	G	146.0	B	0	RETEST OF DS-04 - PASS
(DS#4B)		82.5	213.0	G	165.0	B	0	PATH OF MX111
		82.8	213.0	G	167.0	T	0	
		81.3	209.0	G	154.0	T	0	
		80.8	138.0	G	146.0	T	0	
DSE-04N1	S123/10F	82.1	208.0	G	137.0	B	0	RETEST OF DS-04 - PASS
(DS#4A)		81.6	210.0	G	124.0	B	0	PATH OF MX111
		81.6	207.0	G	130.0	T	0	
		81.2	208.0	G	113.0	B	0	
		81.1	208.0	G	142.0	B	0	
DSE-05	S112/21C	82.4	214.6	G	151.8	B	0	PASS
(1)		82.9	214.6	G	112.6	B	0	
		82.5	213.3	G	123.8	B	0	
		81.2	214.5	G	121.8	B	0	
		82.8	213.7	G	149.8	B	0	
DSE-06	S53/10A	80.8	212.0	G	165.0	T	0	PASS
(DS#E-06)		80.9	215.0	G	157.0	T	0	
		82.7	215.0	G	165.0	T	0	
		81.0	213.0	G	168.0	T	0	
		81.0	214.0	G	166.0	T	0	
DSE-07	S159/180	82.1	210.0	G	140.0	B	0	PASS
(DS#E07)		82.7	208.0	G	121.0	B	0	
		82.8	210.0	G	124.0	B	0	
		82.8	208.0	G	122.0	B	0	
		83.1	202.0	G	136.0	B	0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.
(2) DSE-00P1 denotes the sample was in the weld path "PREVIOUS" to location DSE-00. DSE-00N1 denotes the sample was in the weld track "NEXT" from DSE-00.
The sample number in parentheses is NSC's sample number.
(3) Percent peel indicates the amount of peel adhesion failure in the weld.
FILE= SX_DESTR.WK1

SUMMARY OF SECONDARY GEOMEMRANE DESTRUCTIVE TEST RESULTS
EXTRUSION METHOD
ALLEN PARK CLAY MINE - CELL 2
FORD MOTOR COMPANY

SAMPLE NUMBER (2)	SEAM NUMBER	SHEET THICKNESS (mils)	SHEAR TEST STRENGTH (lbs/inch)	LOCATION CODE	PEEL TEST STRENGTH (lbs/inch)	LOCATION CODE	PERCENT PEEL (3) (%)	REMARKS
DSE-13	S261/35K	82.3	206.0	G	130.0	B	0	PASS
(DS#E13)		82.2	205.0	G	138.0	B	0	
		82.9	205.0	G	131.0	B	0	
		82.7	206.0	G	137.0	B	0	
		83.0	206.0	G	134.0	B	0	
DSE-14	S256/34C	82.9	209.0	G	145.0	B	0	PASS
(DS#E14)		82.5	201.0	G	162.0	B	0	
		81.0	207.0	G	155.0	B	0	
		81.7	213.0	G	143.0	B	0	
		82.2	207.0	G	147.0	B	0	

(1) Seam destructive sample was tested by GCS. All unmarked tests were performed by NSC.
(2) DSE-00P1 denotes the sample was in the weld path "PREVIOUS" to location DSE-00. DSE-00N1 denotes the sample was in the weld track "NEXT" from DSE-00.
The sample number in parentheses is NSC's sample number.
(3) Percent peel indicates the amount of peel adhesion failure in the weld.
FILE= SX_DESTR.WK1