CDM

Wake County, North Carolina

North Wake Subtitle D Landfill
Phase I Closure
Construction Quality Assurance

Volume 2 of 2
Appendix B
Appendix C
Appendix D

Received
MAR
Solid Waste Sect.

March 2005

WAKE COUNTY
NORTH CAROLINA

Report

Appendix B-1

LLDPE Liner QC Log (CQC-100)

FORM CQC - 100
PERSONNEL QC LOG
(one sheet per project)

PROJECT

NAME: NORTH WAKE SUBTITLE D LANDFILL PHASE I CLOSURE

NUMBER: 6172-42378

LOCATION: WAKE COUNTY DURANT ROAD

OWNER: WAKE COUNTY

ADDRESS:

CONTACT: PHONE:

ENGINEERING

ENGINEERING FIRM: CAMP DRESSER & McKEE

ADDRESS: 5400 GLENWOOD AVE. STE. 300, RALEIGH NC. 27612

CONTACT: TOM YANOSCHAK PHONE: 919-325-3537

CONTRACTOR

GENERAL CONTRACTOR: THALLE CONSTRUCTION CO. INC.

ADDRESS: 228 SOUTH CHURTON ST. HILLSBOROUGH, NC 27278

CONTACT: CHRIS HAVERSTROM PHONE: 919-245-1490

SUPPLIER OF LINER MATERIALS

NAME: HALLATON INC.

ADDRESS: 100E PENNSYLVANIA AVE. ST 203 TOWSEN MD 21286

CONTACT: SCOTT BRINKERHOFF PHONE:

CDM

FORM CQC - 100
PERSONNEL QC LOG
(one sheet per project)
(Continued)

QC INSPECTION

NAME: CAMP DRESSER & McKEE

ADDRESS: GLENWOOD AVE. STE. 300, RALEIGH NC. 27612

CONTACT: BION DALTON PHONE: 919-201-2903

TESTING LABORATORY

LINER TESTING LABORATORY: GEOTECHNICS

ADDRESS: 2200 WESTINGOUSE BLVD. ST. 105 RALEIGH NC 27604

CONTACT: MIKE SMITH PHONE: 919-876-0405

FABRICATOR OF MATERIAL

NAME : POLY-FLEX

ADDRESS: 2000 W. MARSHALL DR. GRAND PARAIRIE, TEXAS 75051

CONTACT: PHONE: 888-765-9359

INSTALLER OF MATERIALS

NAME: HALLATON INC.

ADDRESS: 100E PENNSYLVANIA AVE. ST 203 TOWSEN MD 21286

CONTACT: SCOTT BRINKERHOFF PHONE:

LINER MATRERIALS

SPECIFIED LINER MATERIALS: LLDPE THICKNESS & TYPE: 40 MIL LLDPE

MATERIAL CERTIFICATION

MATERIAL CERTIFICATION RECEIVED: YES

DATE: 05-03-04 ACCEPTED: YES

CDM

Appendix B-2

LLDPE Liner Personnel QC Log (CQC-102)

FORM CQC - 102
PERSONNEL QC LOG
(installation & field seaming personnel)
(complete for each mobilization or change of personnel)

PROJECT NAME: North Wake Landfill

DATE: 05-05-04 PROJECT NUMBER: 6172-42378

SAFETY MEETING CONDUCTED ON MATERIALS HANDLING: Yes

GIVEN BY: Matt Garland DATE: 05-05-04

SUPERINTENDENT OF INSTALLATION: Matthew Garland

SEAMING CREW PERSONNEL

#1 CREW LEADER: Matthew Garland HELPER: Gerardo Munoz

#2 CREW LEADER: _____ HELPER: Herminio Vasquez

#3 CREW LEADER: _____ HELPER: Juan Rivas

#4 CREW LEADER: _____ HELPER: Gabriel Perez

#5 CREW LEADER: _____ HELPER: Primo Gonzalez

#6 CREW LEADER: _____ HELPER: Ignatio Fernandez

#7 CREW LEADER: _____ HELPER: Jose Ordomez

#8 CREW LEADER: _____ HELPER: Roberto Ordomez

OTHER CREW MEMBERS

NAME: _____ NAME: Mario Anzueto

NAME: _____ NAME: Homero Telles

NAME: _____ NAME: _____

SIGNED: Bion Dalton

QC Inspector

Appendix B-3

Tensiometer Calibration Certificate

DEMTECH Services Inc.

Thermoplastic welding and testing equipment for the geosynthetics industry

CALIBRATION CERTIFICATE

110 Volt	X
220 Volt	
Lbs.	X
Kg.	

Customer Name: Hallaton, Inc.
Unit Make & Model Number: Wegner Ultitest
Tensiometer Serial Number: T-4

Device Calibrated: S-Type load cell
Range: 0 - 500 lbs. Tension
Model No: SM-500
Serial No: B95941

Calibration Apparatus:
Dead Weight system w/
Fluke Model 187 Multimeter

W1	2	R1	-43
W2	152	R2	1873
W3	302	R3	

Readout Model No: GT 434F-SC-469
Readout Serial No: 278 C456
Channel No: N/A

Indicator reading with no load: 0

Applied Force lbs.	Output (mv):	Display reading:	Deviation Error:
2	0.436	2	0.00
52	2.874	52	0.00
102	5.32	102	0.00
152	7.756	152	0.00
202	10.196	202	0.00
252	12.636	252	0.00
302	15.074	302	0.00

Total Deviation Error (%): 0.00%

Temperature at time of calibration: 73 degrees F
Exitation Voltage: 10 V DC

Scale Factor (1): N/A
Scale Factor (2): N/A
Brake point: N/A

Offset (1): N/A
Offset (2): N/A
Calibration Check # N/A

This calibration conforms to the standards set by ASTM E4 and is traceable to NIST standards

Note: Readout and load cell above have been systems calibrated and are considered a matched pair. In general, calibrated readouts and load cells are not interchangeable.

Calibrated by: Marty Schuler

Date: 09/16/03

Toll Free: (888) 324-9353 • Office: (530) 621-3200 • Fax: (530) 621-0150
P.O. Box 2165, Placerville, CA 95667 • 6414 Capitol Ave., Diamond Springs, CA 95619
www.demtech.net

Appendix B-4

Subgrade Surface Acceptance

FORM CQC - 103
SUBGRADE SURFACE ACCEPTANCE
(once sheet per Day of Liner Deployment)

1. Surface for liner placement accepted, covered by panel numbers: P1 through P-40

Approximate size of area: 159,292sqft (3.7acres)

CERTIFICATE OF ACCEPTANCE
OF SUBGRADE SOIL BY INSTALLER

I the undersigned, duly authorized representative of Hallaton, Inc. Do hereby accept the soil surface as being acceptable for the placement of a geomembrane liner.

Matthew Garland		Supervisor	05-13-04
Name	Signature	Title	Date

Certificate Accepted by Inspector - Company: Camp Dresser and Mckee

Bion Dalton		RPR	05-13-04
Name	Signature	Title	Date

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Rayn Coward

INSTALLING SUPERVISOR: Matt Garland

COMMENTS

CDM

FORM CQC - 103
SUBGRADE SURFACE ACCEPTANCE
(once sheet per Day of Liner Deployment)

1. Surface for liner placement accepted, covered by panel numbers: P41 through P-54

Approximate size of area: 61313sqft (1.4Acres)

CERTIFICATE OF ACCEPTANCE
OF SUBGRADE SOIL BY INSTALLER

I the undersigned, duly authorized representative of Hallaton, Inc. Do hereby accept the soil surface as being acceptable for the placement of a geomembrane liner.

Matthew Garland		Supervisor	05-18-04
Name	Signature	Title	Date

Certificate Accepted by Inspector - Company: Camp Dresser and Mckee

Bion Dalton		RPR	05-18-04
Name	Signature	Title	Date

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Rayn Coward

INSTALLING SUPERVISOR: Matt Garland

COMMENTS

CDM

FORM CQC - 103
SUBGRADE SURFACE ACCEPTANCE
(once sheet per Day of Liner Deployment)

1. Surface for liner placement accepted, covered by panel numbers: P55 through P-72

Approximate size of area: 96474sqft (2.2acres)

CERTIFICATE OF ACCEPTANCE
OF SUBGRADE SOIL BY INSTALLER

I the undersigned, duly authorized representative of Hallaton, Inc. Do hereby accept the soil surface as being acceptable for the placement of a geomembrane liner.

Matthew Garland		Supervisor	05-20-04
Name	Signature	Title	Date

Certificate Accepted by Inspector - Company: Camp Dresser and Mckee

Bion Dalton		RPR	05-20-04
Name	Signature	Title	Date

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Rayn Coward

INSTALLING SUPERVISOR: Matt Garland

COMMENTS

CDM

FORM CQC - 103
SUBGRADE SURFACE ACCEPTANCE
(once sheet per Day of Liner Deployment)

1. Surface for liner placement accepted, covered by panel numbers: P73 through P-131

Approximate size of area: 222555 sqft (5.1acres)

CERTIFICATE OF ACCEPTANCE
OF SUBGRADE SOIL BY INSTALLER

I the undersigned, duly authorized representative of Hallaton, Inc. Do hereby accept the soil surface as being acceptable for the placement of a geomembrane liner.

Matthew Garland		Supervisor	05-25-04
Name	Signature	Title	Date

Certificate Accepted by Inspector - Company: Camp Dresser and Mckee

Bion Dalton		RPR	05-25-04
Name	Signature	Title	Date

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Rayn Coward

INSTALLING SUPERVISOR: Matt Garland

COMMENTS

CDM

FORM CQC - 103
SUBGRADE SURFACE ACCEPTANCE
(once sheet per Day of Liner Deployment)

1. Surface for liner placement accepted, covered by panel numbers: P132 through P-156

Approximate size of area: 144676 sqft (3.3acres)

CERTIFICATE OF ACCEPTANCE
OF SUBGRADE SOIL BY INSTALLER

I the undersigned, duly authorized representative of Hallaton, Inc. Do hereby accept the soil surface as being acceptable for the placement of a geomembrane liner.

Name	Signature	Title	Date
Matthew Garland		Supervisor	06-02-04

Certificate Accepted by Inspector - Company: Camp Dresser and Mckee

Name	Signature	Title	Date
Bion Dalton		RPR	06-02-04

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Rayn Coward

INSTALLING SUPERVISOR: Matt Garland

COMMENTS

CDM

FORM CQC - 103
SUBGRADE SURFACE ACCEPTANCE
(once sheet per Day of Liner Deployment)

1. Surface for liner placement accepted, covered by panel numbers: P157 through P163

Approximate size of area: 57895 sq.ft (1.3acres)

CERTIFICATE OF ACCEPTANCE
OF SUBGRADE SOIL BY INSTALLER

I the undersigned, duly authorized representative of Hallaton, Inc. Do hereby accept the soil surface as being acceptable for the placement of a geomembrane liner.

Name	Signature	Title	Date
Matthew Garland		Supervisor	06-07-04

Certificate Accepted by Inspector - Company: Camp Dresser and Mckee

Name	Signature	Title	Date
Bion Dalton		RPR	06-07-04

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Ryan Coward

INSTALLING SUPERVISOR: Matt Garland

COMMENTS

CDM

FORM CQC - 103
SUBGRADE SURFACE ACCEPTANCE
(once sheet per Day of Liner Deployment)

1. Surface for liner placement accepted, covered by panel numbers: P164through P185

Approximate size of area: 128432sq.ft (3acres)

CERTIFICATE OF ACCEPTANCE
OF SUBGRADE SOIL BY INSTALLER

I the undersigned, duly authorized representative of Hallaton, Inc. Do hereby accept the soil surface as being acceptable for the placement of a geomembrane liner.

Name	Signature	Title	Date
Matthew Garland		Supervisor	06-14-04

Certificate Accepted by Inspector - Company: Camp Dresser and Mckee

Name	Signature	Title	Date
Bion Dalton		RPR	06-14-04

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Ryan Coward

INSTALLING SUPERVISOR: Matt Garland

COMMENTS

CDM

FORM CQC - 103
SUBGRADE SURFACE ACCEPTANCE
(once sheet per Day of Liner Deployment)

1. Surface for liner placement accepted, covered by panel numbers: P185through P209

Approximate size of area: 134,228sq.ft (3.1acres)

CERTIFICATE OF ACCEPTANCE
OF SUBGRADE SOIL BY INSTALLER

I the undersigned, duly authorized representative of Hallaton, Inc. Do hereby accept the soil surface as being acceptable for the placement of a geomembrane liner.

Matthew Garland		Supervisor	06-16-04
Name	Signature	Title	Date

Certificate Accepted by Inspector - Company: Camp Dresser and Mckee

Bion Dalton		RPR	06-16-04
Name	Signature	Title	Date

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Ryan Coward

INSTALLING SUPERVISOR: Matt Garland

COMMENTS

CDM

FORM CQC - 103
SUBGRADE SURFACE ACCEPTANCE
(once sheet per Day of Liner Deployment)

1. Surface for liner placement accepted, covered by panel numbers: P210through P234

Approximate size of area: 67,505sq.ft (1.5acres)

CERTIFICATE OF ACCEPTANCE
OF SUBGRADE SOIL BY INSTALLER

I the undersigned, duly authorized representative of Hallaton, Inc. Do hereby accept the soil surface as being acceptable for the placement of a geomembrane liner.

Matthew Garland		Supervisor	06-23-04
Name	Signature	Title	Date

Certificate Accepted by Inspector - Company: Camp Dresser and Mckee

Bion Dalton		RPR	06-23-04
Name	Signature	Title	Date

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Ryan Coward

INSTALLING SUPERVISOR: Matt Garland

COMMENTS

CDM

FORM CQC - 103
SUBGRADE SURFACE ACCEPTANCE
(once sheet per Day of Liner Deployment)

1. Surface for liner placement accepted, covered by panel numbers: P235through P254

Approximate size of area: 64,354sq.ft (1.5acres)

CERTIFICATE OF ACCEPTANCE
OF SUBGRADE SOIL BY INSTALLER

I the undersigned, duly authorized representative of Hallaton, Inc. Do hereby accept the soil surface as being acceptable for the placement of a geomembrane liner.

Matthew Garland		Supervisor	06-25-04
Name	Signature	Title	Date

Certificate Accepted by Inspector - Company: Camp Dresser and Mckee

Bion Dalton		RPR	06-25-04
Name	Signature	Title	Date

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Ryan Coward

INSTALLING SUPERVISOR: Matt Garland

COMMENTS

CDM

FORM CQC - 103
SUBGRADE SURFACE ACCEPTANCE
(once sheet per Day of Liner Deployment)

1. Surface for liner placement accepted, covered by panel numbers: P255through P268

Approximate size of area: 51,980sq.ft (1.2acres)

CERTIFICATE OF ACCEPTANCE
OF SUBGRADE SOIL BY INSTALLER

I the undersigned, duly authorized representative of Hallaton, Inc. Do hereby accept the soil surface as being acceptable for the placement of a geomembrane liner.

Matthew Garland		Supervisor	06-29-04
Name	Signature	Title	Date

Certificate Accepted by Inspector - Company: Camp Dresser and Mckee

Bion Dalton		RPR	06-29-04
Name	Signature	Title	Date

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Ryan Coward

INSTALLING SUPERVISOR: Matt Garland

COMMENTS

CDM

FORM CQC - 103
SUBGRADE SURFACE ACCEPTANCE
(once sheet per Day of Liner Deployment)

1. Surface for liner placement accepted, covered by panel numbers: P269through P285

Approximate size of area: 53,889sq.ft (1.2acres)

CERTIFICATE OF ACCEPTANCE
OF SUBGRADE SOIL BY INSTALLER

I the undersigned, duly authorized representative of Hallaton, Inc. Do hereby accept the soil surface as being acceptable for the placement of a geomembrane liner.

Matthew Garland		Supervisor	06-30-04
Name	Signature	Title	Date

Certificate Accepted by Inspector - Company: Camp Dresser and Mckee

Bion Dalton		RPR	06-30-04
Name	Signature	Title	Date

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Ryan Coward

INSTALLING SUPERVISOR: Matt Garland

COMMENTS

CDM

Appendix B-5

LLDPE Liner Receiving Log (CQC-101)

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-07-04 TIME: 11 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 587454

NO. OF PIECES ON BOARD: 11 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: PR-04-099-75, PR-04-132-75, PR-04-135-75, PR-04-137-75, PR-04-139-75, PR-04-141-75, Through PR-04-145-75

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad - All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

POLY-FLEX, INC.

raight Bill of Lading

Shipper's No. 587454

Consigned To:

NORTH WAKE LANDFILL
C/O THALLE CONST. CO./HALLATON
DEPONIE DRIVE
RALEIGH, NC 27614
919-427-6028

DELIVERY INSTRUCTIONS APPT: Date/Time:

Contact phone: 919-427-6028.
24hr delivery notice required.
PO: P9862

5-10-09
10AM APPT.

Project #: 240028

Quantity	U/M	Code	Description	Cust SKU	Weight	Frt Class
11	ROLL	015481	40LL SUPER TEXTURED		44,787	70

TOTAL ORDER WEIGHT: 44,787 LBS

ceived, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and the ipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available the shipper on request, the property described above, in apparent good order, except as noted (contents and conditions of ntents of packages unknown), marked, consigned, and destined as shown above which said carrier agrees to carry to stination, if on its route, otherwise to deliver to another carrier on the route to said destination. Every service to be performed reunder shall be subject to all the terms and conditions not prohibited by law. Driver, on behalf of himself and his Carrier, shall responsible for loading, placement and unloading of all shipments, regardless of whose personnel actually loads and unloads shipment. Driver, on behalf of himself and his Carrier, shall be responsible for any damages to freight after leaving the emises at which freight was loaded. Driver hereby warrants that he was able to fully inspect the safety of the load, and knowledges that failure to notify personnel at location of loading of driver's inability to inspect the load or driver's objection to manner of loading or securement constitutes a waiver by driver and his Carrier of any and all claims arising out of the manner which the freight is loaded and/or secured. Driver, on behalf of himself and his Carrier hereby affirms that: (1) driver has pected the freight after it was loaded; (2) there were no problems with either the load or the manner in which the freight was ded; and (3) he shall indemnify, defend, and hold Shipper and its affiliates, employees, and owners harmless from and against y damages relating to negligent loading and/or the failure to warn about any dangers that might be associated with nsporting, using, unloading and/or hauling the subject freight. Driver, on behalf of himself and his Carrier hereby certifies that is familiar with all the terms and conditions of the said bill of lading and that the said terms are hereby agreed to.

ject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following ement: The carrier should not make delivery of this shipment without payment of freight and all other lawful charges.
Poly-Flex, Inc. If freight charges are to be billed to shipper, print here: "Prepaid"; PRE-PAID
nature of Consignor)

nature certifies acceptance of quantities and sizes of material as indicated. Carrier hereby designates the broker (if any) as its agent for the collection of ght charges. When freight charges are paid to the broker, CARRIER AGREES NOT TO HOLD SHIPPER OR CONSIGNEE LIABLE FOR SAID CHARGES.
ds Pieces Shipped: 11 Pieces Received: Receiver Signature: Date:

per: Poly-Flex, Inc. WAREHOUSE: 01
manent post-office address of shipper: 2000 W. Marshall Dr., Grand Prairie TX 75051 (972) 647-4374
rier: 1171

per James B. Hodge Date/Time: 5-6-09 10AM
DRIVER

7454 P:CARLOSM/0718190505 C:007049 WH:00000000 TT:C LT:GO T:193988/1

SKID WEIGHT SHEET

Tractor # 1437 Trailer # 1272 Date: 5-5-04 TRIP # 193928

	Roll Number	Weight	Blend	Roll Description
1	RR-4-04-0099-75	3,854	8140120	
2	RR-4-04-0132-75	3,888	8131209	
3	133	3,862		
4	135	3,878		
5	137	3,844		
6	139	3,970		
7	141	3,900		
8	142	3,926		
9	143	3,900		
10	144	3,976		
11	145	3,978		
12				
13				
14				
15				
16				
17				
18				
19				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

TOTAL WEIGHT OF LOAD	49976	LOGGED BY	
TRACTOR WEIGHT		CHECKED BY	
EMPTY TRAILER WEIGHT		LOADED BY	
LIGHT WEIGHT TICKET	32700	PAPER WORK BY	
EST HEAVY WEGHT	75676	SECURITY	
TOTAL WEIGHT DIFFERENCE	+104		

75780

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-07-04 TIME: 11 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 587455

NO. OF PIECES ON BOARD: 11 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: PR-04-104-75, PR-04-112-75, PR-04-114-75, PR-04-115-75, PR-04-117-75, PR-04-120-75, PR-04-121-75, PR-04-123-75, PR-04-124-75, PR-04-127-75, PR-04-128-75

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad - All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

POLY-FLEX, INC.

Straight Bill of Lading

Shipper's No. 587455

Consigned To:

NORTH WAKE LANDFILL
C/O THALLE CONST. CO./HALLATON
DEPONIE DRIVE
RALEIGH, NC 27614
919-427-6028

DELIVERY INSTRUCTIONS APPT: Date/Time:

Contact phone: 919-427-6028.
24hr delivery notice required.
PO: P9862

Project #: 240028

CARRIER: CRST INTERNATIONAL

Quantity	U/M	Code	Description	Cust SKU	Weight	Frt Class
11	ROLL	015482	40LL SUPER TEXTURED		44,787	70

TOTAL ORDER WEIGHT: 44,787 LBS

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and the shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request, the property described above, in apparent good order, except as noted (contents and conditions of contents of packages unknown), marked, consigned, and destined as shown above which said carrier agrees to carry to destination, if on its route, otherwise to deliver to another carrier on the route to said destination. Every service to be performed hereunder shall be subject to all the terms and conditions not prohibited by law. Driver, on behalf of himself and his Carrier, shall be responsible for loading, placement and unloading of all shipments, regardless of whose personnel actually loads and unloads the shipment. Driver, on behalf of himself and his Carrier, shall be responsible for any damages to freight after leaving the premises at which freight was loaded. Driver hereby warrants that he was able to fully inspect the safety of the load, and acknowledges that failure to notify personnel at location of loading of driver's inability to inspect the load or driver's objection to the manner of loading or securement constitutes a waiver by driver and his Carrier of any and all claims arising out of the manner in which the freight is loaded and/or secured. Driver, on behalf of himself and his Carrier hereby affirms that: (1) driver has inspected the freight after it was loaded; (2) there were no problems with either the load or the manner in which the freight was loaded; and (3) he shall indemnify, defend, and hold Shipper and its affiliates, employees, and owners harmless from and against any damages relating to negligent loading and/or the failure to warn about any dangers that might be associated with transporting, using, unloading and/or hauling the subject freight. Driver, on behalf of himself and his Carrier hereby certifies that he is familiar with all the terms and conditions of the said bill of lading and that the said terms are hereby agreed to.

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier should not make delivery of this shipment without payment of freight and all other lawful charges.

Poly-Flex, Inc. If freight charges are to be billed to shipper, print here: "Prepaid"; PRE-PAID
(Signature of Consignor)

Signature certifies acceptance of quantities and sizes of material as indicated. Carrier hereby designates the broker (if any) as its agent for the collection of freight charges. When freight charges are paid to the broker, CARRIER AGREES NOT TO HOLD SHIPPER OR CONSIGNEE LIABLE FOR SAID CHARGES.

Skids Shipped: _____ Pieces Shipped: _____ Pieces Received: _____ Receiver Signature: _____ Date: _____

Shipper: Poly-Flex, Inc. WAREHOUSE: 01
Permanent post-office address of shipper: 2000 W. Marshall Dr., Grand Prairie TX 75051 (972) 647-4374
Carrier: _____

per _____ Date/Time: _____
DRIVER

D:587455 P:CARLOSM/14334505U6 C:007049 WH:00000000 TT:C LT:GO T:193989/1

ctor # M1415 Trailer # M2975T Date: 5-6-05 TRIP # 193989 587455

	Roll Number	Weight	Blend	Roll Description
1	PR-4-04-0104-75	3,892	8140120	
2	112	3,860		
3	114	3,876		
4	115	3,850		
5	117	3,850		
6	120	3,860		
7	121	3,852	8131209	
8	123	3,870		
9	124	3,920		
10	127	3,874		
11	128	3,892	8131209	
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

TOTAL WEIGHT OF LOAD	42596	LOGGED BY	
TRACTOR WEIGHT		CHECKED BY	
EMPTY TRAILER WEIGHT		LOADED BY	
LIGHT WEIGHT TICKET	30780	PAPER WORK BY	
EST HEAVY WEGHT	73376	SECURITY	
TOTAL WEIGHT DIFFERENCE	+426		

73,800

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-10-04 TIME: 10 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 587452

NO. OF PIECES ON BOARD: 11 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: PR-04-110-75, PR-04-111-75, PR-04-119-75, PR-04-118-75, PR-04-108-75, PR-04-113-75, PR-04-106-75, PR-04-109-75, PR-04-100-75, PR-04-095-75, PR-04-094-75

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad - All

OPERATOR: Matt Gorland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

POLY-FLEX, INC.

Straight Bill of Lading

Shipper's No. 587452

onsigned To

NORTH WAKE LANDFILL
C/O THALLE CONST. CO./HALLATON
DEPONIE DRIVE
RALEIGH, NC 27614
919-427-6028

DELIVERY INSTRUCTIONS **APPT:** **Date/Time:**

Contact phone: 919-427-6028.
24hr delivery notice required.
PO: P9862

Project #: 240028

Quantity	U/M	Code	Description	Cust SKU	Weight	Frt Class
11	ROLL	015479	40LL SUPER TEXTURED		42,188	70

TOTAL ORDER WEIGHT: 42,188 LBS

ived, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and the ipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available the shipper on request, the property described above, in apparent good order, except as noted (contents and conditions of ontents of packages unknown), marked, consigned, and destined as shown above which said carrier agrees to carry to estination, if on its route, otherwise to deliver to another carrier on the route to said destination. Every service to be performed ereunder shall be subject to all the terms and conditions not prohibited by law. Driver, on behalf of himself and his Carrier, shall e responsible for loading, placement and unloading of all shipments, regardless of whose personnel actually loads and unloads e shipment. Driver, on behalf of himself and his Carrier, shall be responsible for any damages to freight after leaving the emises at which freight was loaded. Driver hereby warrants that he was able to fully inspect the safety of the load, and cknowledges that failure to notify personnel at location of loading of driver's inability to inspect the load or driver's objection to e manner of loading or securement constitutes a waiver by driver and his Carrier of any and all claims arising out of the manner which the freight is loaded and/or secured. Driver, on behalf of himself and his Carrier hereby affirms that: (1) driver has spected the freight after it was loaded; (2) there were no problems with either the load or the manner in which the freight was aded; and (3) he shall indemnify, defend, and hold Shipper and its affiliates, employees, and owners harmless from and against ıy damages relating to negligent loading and/or the failure to warn about any dangers that might be associated with ansporting, using, unloading and/or hauling the subject freight. Driver, on behalf of himself and his Carrier hereby certifies that is familiar with all the terms and conditions of the said bill of lading and that the said terms are hereby agreed to.

bject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following tement: The carrier should not make delivery of this shipment without payment of freight and all other lawful charges.
Poly-Flex, Inc. If freight charges are to be billed to shipper, print here: "Prepaid"; PRE-PAID
gnature of Consignor)

ınature certifies acceptance of quantities and sizes of material as indicated. Carrier hereby designates the broker (if any) as its agent for the collection of ght charges. When freight charges are paid to the broker, CARRIER AGREES NOT TO HOLD SHIPPER OR CONSIGNEE LIABLE FOR SAID CHARGES.
ds Pieces Pieces Receiver
pped: _____ Shipped: _____ Received: _____ Signature: _____ Date: _____

r: Poly-Flex, Inc. WAREHOUSE: 01
ıent post-office address of shipper: 2000 W. Marshall Dr., Grand Prairie TX 75051 (972) 647-4374
rier: Admiral Merchants per Rodney S. Date/Time:
DRIVER

87452 P:CARLOSM/0717330505 C:007049 WH:00000000 TT:C LT:GO T:193986/1

SKID WEIGHT SHEET

Tractor # _____ Trailer # _____ Date: 5-06-04 TRIP # 193986 587452

	Roll Number	Weight	Blend	Roll Description
1	PR-4-04-110-75	3912	8140120	/
2	111	3905		/
3	119	3900		/
4	118	3856		/
5	104	3892		/
6	113	3877		/
7	106	3884		/
8	109	3889		/
9	100	3848		/
10	95	3912		/
11	94	3905		/
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

TOTAL WEIGHT OF LOAD	43120	LOGGED BY	
TRACTOR WEIGHT	—	CHECKED BY	
EMPTY TRAILER WEIGHT	—	LOADED BY	
LIGHT WEIGHT TICKET	30660	PAPER WORK BY	
EST HEAVY WEGHT	73780	SECURITY	
TOTAL WEIGHT DIFFERENCE	-40		

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-10-04 TIME: 10 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 587453

NO. OF PIECES ON BOARD: 11 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: PR-04-105-75, PR-04-122-75, PR-04-125-75, PR-04-126-75, PR-04-129-75, PR-04-130-75, PR-04-131-75, PR-04-134-75, PR-04-135-75, PR-04-138-75, PR-04-140-75

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad-All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

POLY-FLEX, INC.

Straight Bill of Lading

Shipper's No. 587453

Consigned To:

NORTH WAKE LANDFILL
C/O THALLE CONST. CO./HALLATON
DEPONIE DRIVE
RALEIGH, NC 27614
919-427-6028

DELIVERY INSTRUCTIONS **APPT:** **Date/Time:**

Contact phone: 919-427-6028.
24hr delivery notice required.
PO: P9862

Project #: 240028

Quantity	U/M	Code	Description	Cust SKU	Weight	Frt Class
11	ROLL	015480	40LL SUPER TEXTURED		44,787	70

PRE CERT

TOTAL ORDER WEIGHT: 44,787 LBS

ceived, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and the ipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available the shipper on request, the property described above, in apparent good order, except as noted (contents and conditions of ntents of packages unknown), marked, consigned, and destined as shown above which said carrier agrees to carry to stination, if on its route, otherwise to deliver to another carrier on the route to said destination. Every service to be performed reunder shall be subject to all the terms and conditions not prohibited by law. Driver, on behalf of himself and his Carrier, shall responsible for loading, placement and unloading of all shipments, regardless of whose personnel actually loads and unloads shipment. Driver, on behalf of himself and his Carrier, shall be responsible for any damages to freight after leaving the emises at which freight was loaded. Driver hereby warrants that he was able to fully inspect the safety of the load, and knowledges that failure to notify personnel at location of loading of driver's inability to inspect the load or driver's objection to manner of loading or securement constitutes a waiver by driver and his Carrier of any and all claims arising out of the manner which the freight is loaded and/or secured. Driver, on behalf of himself and his Carrier hereby affirms that: (1) driver has pected the freight after it was loaded; (2) there were no problems with either the load or the manner in which the freight was ded; and (3) he shall indemnify, defend, and hold Shipper and its affiliates, employees, and owners harmless from and against y damages relating to negligent loading and/or the failure to warn about any dangers that might be associated with nsporting, using, unloading and/or hauling the subject freight. Driver, on behalf of himself and his Carrier hereby certifies that is familiar with all the terms and conditions of the said bill of lading and that the said terms are hereby agreed to.

ject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following ement: The carrier should not make delivery of this shipment without payment of freight and all other lawful charges.
Poly-Flex, Inc. If freight charges are to be billed to shipper, print here: "Prepaid"; PRE-PAID
nature of Consignor)

nature certifies acceptance of quantities and sizes of material as indicated. Carrier hereby designates the broker (if any) as its agent for the collection of ght charges. When freight charges are paid to the broker, CARRIER AGREES NOT TO HOLD SHIPPER OR CONSIGNEE LIABLE FOR SAID CHARGES.
ds Pieces Shipped: _____ Pieces Received: _____ Receiver Signature: _____ Date: _____

per: Poly-Flex, Inc. WAREHOUSE: 01
manent post-office address of shipper: 2000 W. Marshall Dr., Grand Prairie TX 75051 (972) 647-4374
rier: _____

per _____ DRIVER Date/Time: _____

7453 P:CARLOSM/0718080505 C:007049 WH:00000000 TT:C LT:GO T:193987/1

SKID WEIGHT SHEET

Tractor # _____ Trailer # _____ Date: 5-6-04 TRIP # 587453 193987

	Roll Number	Weight	Blend	Roll Description
1	PR-4-04-105-75	3876	8140120	/
2	122	3872		/
3	125	3936		/
4	126	3888		/
5	129	3896		/
6	130	3876		/
7	131	3876		/
8	134	3858		/
9	135	3872		/
10	138	3900		/
11	140	3892		/
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

TOTAL WEIGHT OF LOAD	43 561	LOGGED BY	
TRACTOR WEIGHT		CHECKED BY	
EMPTY TRAILER WEIGHT		LOADED BY	
LIGHT WEIGHT TICKET	33140	PAPER WORK BY	
EST HEAVY WEGHT	76701	SECURITY	
TOTAL WEIGHT DIFFERENCE	4300		

77,000

RD

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-12-04 TIME: 10 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 587456

NO. OF PIECES ON BOARD: 11 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: PR-04-087-75, PR-04-090-75 through PR-04-093-75, PR-04-096-75 through PR-04-098-75, PR-04-101-75 through PR-04-103-75

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad - All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

POLY-FLEX, INC.

Straight Bill of Lading

Shipper's No. 587456

Consigned To

NORTH WAKE LANDFILL
C/O THALLE CONST. CO./HALLATON
DEPONIE DRIVE
RALEIGH, NC 27614
919-427-6028

DELIVERY INSTRUCTIONS APPT: Date/Time:

Contact phone: 919-427-6028.
24hr delivery notice required.
PO: P9862

Project #: 240028

CARRIER: FIKES TRUCK LINE, IN

Quantity	U/M	Code	Description	Cust SKU	Weight	Frt Class
11	ROLL	015483	40LL SUPER TEXTURED		44,787	70

PRE-CERT

TOTAL ORDER WEIGHT 44,787 LBS

eceived, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and the ıipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available the shipper on request, the property described above, in apparent good order, except as noted (contents and conditions of ›ntents of packages unknown), marked, consigned, and destined as shown above which said carrier agrees to carry to estination, if on its route, otherwise to deliver to another carrier on the route to said destination. Every service to be performed ereunder shall be subject to all the terms and conditions not prohibited by law. Driver, on behalf of himself and his Carrier, shall e responsible for loading, placement and unloading of all shipments, regardless of whose personnel actually loads and unloads e shipment. Driver, on behalf of himself and his Carrier, shall be responsible for any damages to freight after leaving the emises at which freight was loaded. Driver hereby warrants that he was able to fully inspect the safety of the load, and cknowledges that failure to notify personnel at location of loading of driver's inability to inspect the load or driver's objection to e manner of loading or securement constitutes a waiver by driver and his Carrier of any and all claims arising out of the manner which the freight is loaded and/or secured. Driver, on behalf of himself and his Carrier hereby affirms that: (1) driver has spected the freight after it was loaded; (2) there were no problems with either the load or the manner in which the freight was aded; and (3) he shall indemnify, defend, and hold Shipper and its affiliates, employees, and owners harmless from and against ıy damages relating to negligent loading and/or the failure to warn about any dangers that might be associated with ansporting, using, unloading and/or hauling the subject freight. Driver, on behalf of himself and his Carrier hereby certifies that is familiar with all the terms and conditions of the said bill of lading and that the said terms are hereby agreed to.

bject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following ıtement: The carrier should not make delivery of this shipment without payment of freight and all other lawful charges.
Poly-Flex, Inc. If freight charges are to be billed to shipper, print here: "Prepaid"; PRE-PAID
gnature of Consignor)

ınature certifies acceptance of quantities and sizes of material as indicated. Carrier hereby designates the broker (if any) as its agent for the collection of ight charges. When freight charges are paid to the broker, CARRIER AGREES NOT TO HOLD SHIPPER OR CONSIGNEE LIABLE FOR SAID CHARGES.

ids Pieces Pieces Receiver
d: _____ Shipped: _____ Received: _____ Signature: _____ Date: _____

ipper: Poly-Flex, Inc. WAREHOUSE: 01
rmanent post-office address of shipper: 2000 W. Marshall Dr., Grand Prairie TX 75051 (972) 647-4374
rrier: _____

per _____ Date/Time: _____
DRIVER

SKID WEIGHT SHEET

Tractor # _____ Trailer # _____ Date: 5-7-04 TRIP # 193990

5874156

	Roll Number	Weight	Blend	Roll Description
1	PR-4-04-87-75	3752	8140120	✓
2	90	3858		✓
3	91	3876		✓
4	92	3826		✓
5	93	3866		✓
6	96	3908		✓
7	97	3874		✓
8	98	3860		✓
9	101	3900		✓
10	102	3856		✓
11	103	3874		✓
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

TOTAL WEIGHT OF LOAD	42520	LOGGED BY	CM
TRACTOR WEIGHT		CHECKED BY	
EMPTY TRAILER WEIGHT		LOADED BY	
LIGHT WEIGHT TICKET	33380	PAPER WORK BY	
EST HEAVY WEGHT	75900	SECURITY	
TOTAL WEIGHT DIFFERENCE	+380		

76,280

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-24-04 TIME: 11 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 587457

NO. OF PIECES ON BOARD: 10 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: PR-04-083-75, PR-04-089-75, PR-04-086-75, PR-04-080-75, PR-04-088-75, PR-04-085-75, PR-04-082-75, PR-04-084-75 PR-04-079-75, PR-04-081-75

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): Six cases of LL welding rod and four cases of HD welding rod

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad-All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

POLY-FLEX, INC.

Straight Bill of Lading

Shipper's No. 587457

Consigned To:

NORTH WAKE LANDFILL
C/O THALLE CONST. CO./HALLATON
DEPONIE DRIVE
RALEIGH, NC 27614
919-427-6028

DELIVERY INSTRUCTIONS **APPT:** **Date/Time:**

Contact phone: 919-427-6028.
24hr delivery notice required.
PO: P9862

Project #: 240028

Quantity	U/M	Code	Description	Cust SKU	Weight	Frt Class
10	ROLL	015484	40LL SUPER TEXTURED		40,716	70

TOTAL ORDER WEIGHT: 40,716 LBS

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and the shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request, the property described above, in apparent good order, except as noted (contents and conditions of contents of packages unknown), marked, consigned, and destined as shown above which said carrier agrees to carry to destination, if on its route, otherwise to deliver to another carrier on the route to said destination. Every service to be performed hereunder shall be subject to all the terms and conditions not prohibited by law. Driver, on behalf of himself and his Carrier, shall be responsible for loading, placement and unloading of all shipments, regardless of whose personnel actually loads and unloads the shipment. Driver, on behalf of himself and his Carrier, shall be responsible for any damages to freight after leaving the premises at which freight was loaded. Driver hereby warrants that he was able to fully inspect the safety of the load, and acknowledges that failure to notify personnel at location of loading of driver's inability to inspect the load or driver's objection to the manner of loading or securement constitutes a waiver by driver and his Carrier of any and all claims arising out of the manner in which the freight is loaded and/or secured. Driver, on behalf of himself and his Carrier hereby affirms that: (1) driver has inspected the freight after it was loaded; (2) there were no problems with either the load or the manner in which the freight was loaded; and (3) he shall indemnify, defend, and hold Shipper and its affiliates, employees, and owners harmless from and against any damages relating to negligent loading and/or the failure to warn about any dangers that might be associated with transporting, using, unloading and/or hauling the subject freight. Driver, on behalf of himself and his Carrier hereby certifies that he is familiar with all the terms and conditions of the said bill of lading and that the said terms are hereby agreed to.

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier should not make delivery of this shipment without payment of freight and all other lawful charges.
Poly-Flex, Inc. If freight charges are to be billed to shipper, print here: "Prepaid"; PRE-PAID
(Signature of Consignor)

Signature certifies acceptance of quantities and sizes of material as indicated. Carrier hereby designates the broker (if any) as its agent for the collection of freight charges. When freight charges are paid to the broker, CARRIER AGREES NOT TO HOLD SHIPPER OR CONSIGNEE LIABLE FOR SAID CHARGES.

Skids _____ Pieces Shipped: _____ Pieces Received: _____ Receiver Signature: _____ Date: _____

Shipper: Poly-Flex, Inc. WAREHOUSE: 01
Permanent post-office address of shipper: 2000 W. Marshall Dr., Grand Prairie TX 75051 (972) 647-4374
Carrier: _____ per _____ Date/Time: _____ _____
DRIVER

D:587457 P:CARLOSM/0848470510 C:007049 WH:00000000 TT:C LT:GO T:193991/1

SKID WEIGHT SHEET

Tractor # _____ Trailer # _____ Date: 5-21-04 TRIP # 193981

	Roll Number	Weight	Blend	Roll Description
1	P12-4-01-0083-75	3942	4140120 ✓	
2	89	3940	✓	
3	86	3856	✓	
4	80	3972	✓	
5	88	392		
6	85	3888		
7	82	3879		
8	84	3824		
9	79	3922		
10	81	3830		
11	6 CASES	US	140	
12	4 CASES	IND	120	
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

TOTAL WEIGHT OF LOAD	39 017	LOGGED BY	
TRACTOR WEIGHT		CHECKED BY	
EMPTY TRAILER WEIGHT		LOADED BY	
LIGHT WEIGHT TICKET	31 900	PAPER WORK BY	
EST HEAVY WEGHT	70 917	SECURITY	
TOTAL WEIGHT DIFFERENCE	7123		

71,040

TRAIGHT BILL OF LADING - SHORT FORM - ORIGINAL - NOT NEGOTIABLE

AME OF CARRIER

CARRIER'S NO. 5286

DATE 6-21-04

B/L NO. 010193

CEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below which said carrier (the word carrier f dere d throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliv ier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or a , that every service to be performed hereunder, shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classifications in effect on the s is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment. . hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and condi hereby agreed to by the shipper and accepted for himself and his assigns.

ROM:
HIPPER
ORIGIN)

AGRU/AMERICA, INC.
500 GARRISON ROAD
GEORGETOWN, SOUTH CAROLINA 29440
(843) 546-0600

EMERGENCY RESPONSE PHONE NO. Todd Harmon

TO:
CONSIGNEE Halfaton, Inc. c/o Thalle Construction Co.
STREET North Wake Land Fill - Deponia Dr
DESTINATION Wake Forest NC ZIP

LIVERING RRIER KC

ROUTE 410-583-7700

VEHICLE NUMBER

NO. PACKAGES	+ HM	KIND OF PACKAGE, DESCRIPTION OF ARTICLES SPECIAL MARKS AND EXCEPTIONS	*WEIGHT (SUBJECT TO CORR.)	CLASS OR RATE	✓	CHARGES (FOR CARRIER USE ON
		13 Rolls 40mil LLDPE Micro Spike 310465-04 310466-04 310469-04 310470-04 310472-04 310476-04 310577-04 310582-04 310583-04 310584-04 310585-04 310586-04 310589-04	35,045			

IT C.O.D. TO:

AGRU/AMERICA, INC.
500 GARRISON ROAD
GEORGETOWN, SOUTH CAROLINA 29440
(843) 546-0600

C.O.D. Amt $

C.O.D. FEE
☑ Prepaid
☐ Collect $

shipment moves between two ports by a carrier by the law requires that the bill of lading shall state r it rier's or shipper's weight".

NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding
$ per

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

TOTAL CHARGES $

Freight charges are PREPAID unless marked collect. ☐ Check box if charges are Colle

nprint in lieu of stamp; not a part of bill of lading by the Interstate Commerce Commission.

to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation, according to the applicable regulations of the Department of Transportatio

S. Jackson Shipper, Per Terry Stamper Agent, Per

nent post office address of shipper

+ MARK WITH "X" TO DESIGNATE HAZARDOUS MATERIAL AS DEFINED IN TITLE 49 OF FEDERAL REGULATIONS.

transporting hazardous materials include the technical or chemical name for n.o.s. (not otherwise specified) or generic description of material with appropriate UN or NA number as defined in US DOT

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 6-22-04 TIME: 9 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5286

NO. OF PIECES ON BOARD: 13 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 310465-04, 310466-04, 310469-04, 310470-04, 310472-04, 310476-04, 310577-04, 310582-04, 310583-04, 310584-04, 310585-04, 310586-04, 310589-04

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): NONE

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED:

OPERATOR:

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase V

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: PC TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

Date: 6-21-04 BOL #: 10193 Document #: 5256 Customer: Hallaton Destination: Wake Forest NC ~~Raleigh, NC~~

	ROLL #	EXTERNAL VISUAL OK ?	STRAPS OK ?	CORE OK ?	WELD ROD OK ? *	COMMENTS (TO ALL NO REMARKS)
1	310465-04	(Y) N	(Y) N	(Y) N	Y N	
2	310466-04	(Y) N	(Y) N	(Y) N	Y N	
3	310469-04	(Y) N	(Y) N	(Y) N	Y N	
4	310470-04	(Y) N	(Y) N	(Y) N	Y N	
5	310472-04	(Y) N	(Y) N	(Y) N	Y N	
6	310476-04	(Y) N	(Y) N	(Y) N	Y N	
7	310577-04	(Y) N	(Y) N	(Y) N	Y N	
8	310582-04	(Y) N	(Y) N	(Y) N	Y N	
9	310583-04	(Y) N	(Y) N	(Y) N	Y N	
10	310584-04	(Y) N	(Y) N	(Y) N	Y N	
11	310585-04	(Y) N	(Y) N	(Y) N	Y N	
12	310586-04	(Y) N	(Y) N	(Y) N	Y N	
13	310589-04	(Y) N	(Y) N	(Y) N	Y N	
14		Y N	Y N	Y N	Y N	
15		Y N	Y N	Y N	Y N	
16		Y N	Y N	Y N	Y N	
17		Y N	Y N	Y N	Y N	
18		Y N	Y N	Y N	Y N	
19		Y N	Y N	Y N	Y N	
20		Y N	Y N	Y N	Y N	

External Visual Check : Clean Roll; Damage (Holes, Tears); Telescoping; Liner Defects (Voids, Bug Marks, etc.); Legible markings on roll

Strap Check : 8 foot spacing; Check for wear, cuts

Core Check : Check for cracks, defects

Weld Rod Check (if necessary) : Secure Load; Lot # on BOL; Check type

Comments : Note comments for ANY & ALL "No" entries on form

CHECK OFF ON ALL FIELDS - INSPECTOR VERIFIES ALL COMMENTS

Digital photo taken of shipment ?
(yes) no

SHIPREL.FRM
REV 01
7/31/01

Inspector : ISAAC Loader : ISAAC

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 6-22-04 TIME: 9 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5286

NO. OF PIECES ON BOARD: 13 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 310594-04, 310587-04, 310580-04, 310475-04, 310468-04, 310592-04, 310471-04, 310591-04, 310590-04, 310588-04, 310593-04, 310473-04, 310578-04

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): NONE

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED:

OPERATOR:

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase V

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: PC TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

6/21/04 BOL #: 10198 Document #: 5286 Customer: Halliton Destination: Northwake Raleigh N.C.

	ROLL #	EXTERNAL VISUAL OK ?		STRAPS OK ?		CORE OK ?		WELD ROD OK ? *		COMMENTS (TO ALL NO REMARKS)
1	310594-04	Y	N	Y	N	Y	N	Y	N	
2	310587-04	Y	N	Y	N	Y	N	Y	N	
3	310580-04	Y	N	Y	N	Y	N	Y	N	
4	310475-04	Y	N	Y	N	Y	N	Y	N	
5	310468-04	Y	N	Y	N	Y	N	Y	N	
6	310592-04	Y	N	Y	N	Y	N	Y	N	
7	310471-04	Y	N	Y	N	Y	N	Y	N	
8	310591-04	Y	N	Y	N	Y	N	Y	N	
9	310590-04	Y	N	Y	N	Y	N	Y	N	
10	310588-04	Y	N	Y	N	Y	N	Y	N	
11	310593-04	Y	N	Y	N	Y	N	Y	N	
12	310473-04	Y	N	Y	N	Y	N	Y	N	
13	310578-04	Y	N	Y	N	Y	N	Y	N	
14		Y	N	Y	N	Y	N	Y	N	
15		Y	N	Y	N	Y	N	Y	N	
16		Y	N	Y	N	Y	N	Y	N	
17		Y	N	Y	N	Y	N	Y	N	
18		Y	N	Y	N	Y	N	Y	N	
19		Y	N	Y	N	Y	N	Y	N	
20		Y	N	Y	N	Y	N	Y	N	

External Visual Check : Clean Roll; Damage (Holes, Tears); Telescoping; Liner Defects (Voids, Bug Marks, etc.); Legible markings on roll

Strap Check : 8 foot spacing; Check for wear, cuts

Core Check : Check for cracks, defects

Weld Rod Check (*If necessary) : Secure Load; Lot # on BOL; Check type

Comments : Note comments for ANY & ALL "No" entries on form

CHECK OFF ON ALL FIELDS - INSPECTOR VERIFIES ALL COMMENTS

Digital photo taken of shipment ? yes no

SHIPREL_FRM
REV 01
7/31/01

Inspector : RG

Loader : IG/SJ

Appendix B-6

LLDPE Liner Manufacturer's Certification Reports

Poly-Flex
DATE 15-Apr-04

Material Pre-Certification List

Poly-Flex # **240028**

587455

Customer: **HALLATON / N. WAKE L/F**

	Blend	Roll Number	Weight	Roll Description
1	8140120	PR-4-04- 0079- 75	3,922	23' X 750' X .040LLT CUST.
2	8140120	PR-4-04- 0080- 75	3,856	23' X 750' X .040LLT CUST.
3	8140120	PR-4-04- 0081- 75	3,830	23' X 750' X .040LLT CUST.
4	8140120	PR-4-04- 0082- 75	3,839	23' X 750' X .040LLT CUST.
5	8140120	PR-4-04- 0083- 75	3,846	23' X 750' X .040LLT CUST.
6	8140120	PR-4-04- 0084- 75	3,824	23' X 750' X .040LLT CUST.
7	8140120	PR-4-04- 0085- 75	3,818	23' X 750' X .040LLT CUST.
8	8140120	PR-4-04- 0086- 75	3,818	23' X 750' X .040LLT CUST.
9	8140120	PR-4-04- 0087- 75	3,752	23' X 750' X .040LLT CUST.
10	8140120	PR-4-04- 0088- 75	3,912	23' X 750' X .040LLT CUST.
11	8140120	PR-4-04- 0089- 75	3,940	23' X 750' X .040LLT CUST.
12	8140120	PR-4-04- 0090- 75	3,888	23' X 750' X .040LLT CUST.
13	8140120	PR-4-04- 0091- 75	3,876	23' X 750' X .040LLT CUST.
14	8140120	PR-4-04- 0092- 75	3,866	23' X 750' X .040LLT CUST.
15	8140120	PR-4-04- 0093- 75	3,866	23' X 750' X .040LLT CUST.
16	8140120	PR-4-04- 0094- 75	3,912	23' X 750' X .040LLT CUST.
17	8140120	PR-4-04- 0095- 75	3,905	23' X 750' X .040LLT CUST.
18	8140120	PR-4-04- 0096- 75	3,908	23' X 750' X .040LLT CUST.
19	8140120	PR-4-04- 0097- 75	3,874	23' X 750' X .040LLT CUST.
20	8140120	PR-4-04- 0098- 75	3,860	23' X 750' X .040LLT CUST.
21	8140120	PR-4-04- 0099- 75	3,854	23' X 750' X .040LLT CUST.
22	8140120	PR-4-04- 0100- 75	3,848	23' X 750' X .040LLT CUST.
23	8140120	PR-4-04- 0101- 75	3,900	23' X 750' X .040LLT CUST.
24	8140120	PR-4-04- 0102- 75	3,856	23' X 750' X .040LLT CUST.
25	8140120	PR-4-04- 0103- 75	3,874	23' X 750' X .040LLT CUST.
26	8140120	PR-4-04- 0104- 75	3,892	23' X 750' X .040LLT CUST.
27	8140120	PR-4-04- 0105- 75	3,876	23' X 750' X .040LLT CUST.
28	8140120	PR-4-04- 0106- 75	3,884	23' X 750' X .040LLT CUST.
29	8140120	PR-4-04- 0108- 75	3,892	23' X 750' X .040LLT CUST.
30	8140120	PR-4-04- 0109- 75	3,954	23' X 750' X .040LLT CUST.
31	8140120	PR-4-04- 0110- 75	3,938	23' X 750' X .040LLT CUST.
32	8140120	PR-4-04- 0111- 75	3,872	23' X 750' X .040LLT CUST.
33	8140120	PR-4-04- 0112- 75	3,860	23' X 750' X .040LLT CUST.
34	8140120	PR-4-04- 0113- 75	3,877	23' X 750' X .040LLT CUST.
35	8140120	PR-4-04- 0114- 75	3,876	23' X 750' X .040LLT CUST.

Polv-Flex

Material Pre-Certification List

36	8140120	PR-4-04- 0115- 75	3,850	23' X 750' X .040LLT CUST.	✓
37	8140120	PR-4-04- 0117- 75	3,850	23' X 750' X .040LLT CUST.	✓
38	8140120	PR-4-04- 0118- 75	3,856	23' X 750' X .040LLT CUST.	✓
39	8140120	PR-4-04- 0119- 75	3,900	23' X 750' X .040LLT CUST.	✓
40	8140120	PR-4-04- 0120- 75	3,860	23' X 750' X .040LLT CUST.	✓
41	8140120	PR-4-04- 0121- 75	3,852	23' X 750' X .040LLT CUST.	✓
42	8140120	PR-4-04- 0122- 75	3,872	23' X 750' X .040LLT CUST.	✓
43	8140120	PR-4-04- 0123- 75	3,870	23' X 750' X .040LLT CUST.	✓
44	8140120	PR-4-04- 0124- 75	3,920	23' X 750' X .040LLT CUST.	✓
45	8140120	PR-4-04- 0125- 75	3,936	23' X 750' X .040LLT CUST.	✓
46	8140120	PR-4-04- 0126- 75	3,888	23' X 750' X .040LLT CUST.	✓
47	8140120	PR-4-04- 0127- 75	3,874	23' X 750' X .040LLT CUST.	✓
48	8140120	PR-4-04- 0128- 75	3,892	23' X 750' X .040LLT CUST.	✓
49	8140120	PR-4-04- 0129- 75	3,898	23' X 750' X .040LLT CUST.	✓
50	8140120	PR-4-04- 0130- 75	3,876	23' X 750' X .040LLT CUST.	✓
51	8140120	PR-4-04- 0131- 75	3,876	23' X 750' X .040LLT CUST.	✓
52	8140120	PR-4-04- 0132- 75	3,888	23' X 750' X .040LLT CUST.	✓
53	8140120	PR-4-04- 0133- 75	3,862	23' X 750' X .040LLT CUST.	✓
54	8131209	PR-4-04- 0134- 75	3,858	23' X 750' X .040LLT CUST.	✓
55	8131209	PR-4-04- 0135- 75	3,878	23' X 750' X .040LLT CUST.	✓
56	8131209	PR-4-04- 0136- 75	3,872	23' X 750' X .040LLT CUST.	✓
57	8131209	PR-4-04- 0137- 75	3,844	23' X 750' X .040LLT CUST.	✓
58	8131209	PR-4-04- 0138- 75	3,900	23' X 750' X .040LLT CUST.	✓
59	8131209	PR-4-04- 0139- 75	3,970	23' X 750' X .040LLT CUST.	✓
60	8131209	PR-4-04- 0140- 75	3,922	23' X 750' X .040LLT CUST.	✓
61	8131209	PR-4-04- 0141- 75	3,900	23' X 750' X .040LLT CUST.	✓
62	8131209	PR-4-04- 0142- 75	3,926	23' X 750' X .040LLT CUST.	✓
63	8131209	PR-4-04- 0143- 75	3,990	23' X 750' X .040LLT CUST.	✓
64	8131209	PR-4-04- 0144- 75	3,976	23' X 750' X .040LLT CUST.	✓
65	8131209	PR-4-04- 0145- 75	3,978	23' X 750' X .040LLT CUST.	✓
66					
67	shipped pieces		**252,399**		
68					

I certify that all roll conditions were inspected and approved.

C.E.M.

Truck Loader

TRI/ENVIRONMENTAL, INC.
A Texas Research International Company

GEOMEMBRANE TEST RESULTS

TRI Client: Hallaton Inc.
Project: North Wake Landfill

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 310468
TRI Log #: E2199-84-03

PARAMETER	TEST REPLICATE NUMBER 1	2	3	4	5	6	7	8	9	10	MEAN	STD. DEV.	PROJ. SPEC.
Thickness (ASTM D 5994)													
Thickness (mils)	49	41	46	48	42	48	44	49	41	51	46	3	40 avg
											41	<< min.	36 min
Density (ASTM D 1505)													
Density (g/cm3)	0.935	0.934	0.934								0.934	0.0005	0.92 min
Carbon Black Content (ASTM D 1603, mod.)													
% Carbon Black	2.41	2.47									2.44	0.03	2.0 - 3.0
Carbon Black Dispersion (ASTM D 5596)													
Rating - 1st field view	1	1	1	1	1								9 of 10 in Cat 1 or 2
Rating - 2nd field view	1	1	1	1	1								1 in Cat 3
Tensile Properties (ASTM D 638/GRI GM 13, 2 ipm strain rate, Type IV specimen - HDPE)													
MD Yield Strength (ppi)	85	97	89	73	74						84	9	60 min
TD Yield Strength (ppi)	107	102	82	84	101						95	10	60 min
MD Break Strength (ppi)	168	141	140	141	135						145	12	NA
TD Break Strength (ppi)	144	130	126	117	136						131	9	NA
MD Yield Elongation (%)	24	24	24	25	25						24	0	NA
TD Yield Elongation (%)	22	20	21	20	19						20	1	NA
MD Break Elongation (%)	491	464	493	495	540						497	25	250 min
TD Break Elongation (%)	511	476	574	519	535						523	32	250 min
Puncture Resistance (ASTM D 4833)													
Puncture Strength (lbs)	106	112	114	107	105	100	99	99	97	93	100	7	44 min
	92	92	93	91	95								
Tear Resistance (ASTM D 1004)													
MD Tear Strength (lbs)	31	36	40	39	41	38	30	31	31	38	36	4	22 min
TD Tear Strength (lbs)	30	39	38	34	26	31	34	36	35	39	34	4	22 min

MD Machine Direction TD Transverse Direction NA Not Available

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

TRI/ENVIRONMENTAL, INC.
A Texas Research International Company

GEOMEMBRANE TEST RESULTS

TRI Client: Hallaton Inc.
Project: North Wake Landfill

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 310475
TRI Log #: E2199-84-03

PARAMETER	TEST REPLICATE NUMBER 1	2	3	4	5	6	7	8	9	10	MEAN	STD. DEV.	PROJ. SPEC.
Thickness (ASTM D 5994)													
Thickness (mils)	41	47	42	50	42	49	40	49	48	48	46	4	40 avg
											40	<< min.	36 min
Density (ASTM D 1505)													
Density (g/cm3)	0.935	0.934	0.934								0.934	0.0005	0.92 min
Carbon Black Content (ASTM D 1603, mod.)													
% Carbon Black	2.51	2.53									2.52	0.01	2.0 - 3.0
Carbon Black Dispersion (ASTM D 5596)													
Rating - 1st field view	1	1	1	1	1								9 of 10 in Cat 1 or 2
Rating - 2nd field view	1	1	1	1	1								1 in Cat 3
Tensile Properties (ASTM D 638/GRI GM 13, 2 ipm strain rate, Type IV specimen - HDPE)													
MD Yield Strength (ppi)	86	91	92	73	72						83	9	60 min
TD Yield Strength (ppi)	82	86	85	85	74						82	4	60 min
MD Break Strength (ppi)	189	143	140	123	191						157	28	NA
TD Break Strength (ppi)	124	135	144	126	117						129	9	NA
MD Yield Elongation (%)	17	17	17	17	16						17	0	NA
TD Yield Elongation (%)	12	12	10	10	12						11	1	NA
MD Break Elongation (%)	469	543	484	496	448						488	32	250 min
TD Break Elongation (%)	590	528	560	534	546						552	22	250 min
Puncture Resistance (ASTM D 4833)													
Puncture Strength (lbs)	90	89	87	90	94	94	91	90	89	90	93	6	44 min
	88	98	102	102	105								
Tear Resistance (ASTM D 1004)													
MD Tear Strength (lbs)	35	40	42	39	43	31	35	40	39	38	38	3	22 min
TD Tear Strength (lbs)	39	30	31	32	34	39	39	38	38	37	36	3	22 min

MD Machine Direction TD Transverse Direction NA Not Available

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

9063 Bee Caves Road / Austin, Texas 78733 / 512 263 2101 / 512 263 2558

TRI/ENVIRONMENTAL, INC.
A Texas Research International Company

GEOMEMBRANE TEST RESULTS

TRI Client: Hallaton Inc.
Project: North Wake Landfill

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 310580
TRI Log #: E2199-84-03

PARAMETER	TEST REPLICATE NUMBER 1	2	3	4	5	6	7	8	9	10	MEAN	STD. DEV.	PROJ. SPEC.
Thickness (ASTM D 5994)													
Thickness (mils)	48	50	48	42	51	42	48	41	49	44	46	3	40 avg
											41	<< min.	36 min
Density (ASTM D 1505)													
Density (g/cm3)	0.934	0.934	0.934								0.934	0.0000	0.92 min
Carbon Black Content (ASTM D 1603, mod.)													
% Carbon Black	2.37	2.33									2.35	0.02	2.0 - 3.0
Carbon Black Dispersion (ASTM D 5596)													
Rating - 1st field view	1	1	1	1	1								9 of 10 in Cat 1 or 2
Rating - 2nd field view	1	1	1	1	1								1 in Cat 3
Tensile Properties (ASTM D 638/GRI GM 13, 2 ipm strain rate, Type IV specimen - HDPE)													
MD Yield Strength (ppi)	68	87	99	76	96						85	12	60 min
TD Yield Strength (ppi)	70	81	73	92	90						81	9	60 min
MD Break Strength (ppi)	146	136	121	130	128						132	8	NA
TD Break Strength (ppi)	139	166	121	124	143						139	16	NA
MD Yield Elongation (%)	17	17	17	15	15						16	1	NA
TD Yield Elongation (%)	14	14	14	17	17						15	1	NA
MD Break Elongation (%)	545	511	461	589	515						524	42	250 min
TD Break Elongation (%)	564	539	593	485	488						534	42	250 min
Puncture Resistance (ASTM D 4833)													
Puncture Strength (lbs)	105	103	102	102	104	107	102	104	103	90	99	6	44 min
	93	92	90	88	93								
Tear Resistance (ASTM D 1004)													
MD Tear Strength (lbs)	41	40	39	39	42	38	36	33	31	31	37	4	22 min
TD Tear Strength (lbs)	36	36	41	37	37	27	29	31	33	35	34	4	22 min

MD Machine Direction TD Transverse Direction NA Not Available

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

9063 Bee Caves Road / Austin, Texas 78733 / 512 263 2101 / 512 263 2558

TRI/ENVIRONMENTAL, INC.
A Texas Research International Company

GEOMEMBRANE TEST RESULTS

TRI Client: Hallaton Inc.
Project: North Wake Landfill

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 310587
TRI Log #: E2199-84-03

PARAMETER	TEST REPLICATE NUMBER 1	2	3	4	5	6	7	8	9	10	MEAN	STD. DEV.	PROJ. SPEC.
Thickness (ASTM D 5994)													
Thickness (mils)	50	46	52	51	47	53	48	46	47	47	49	2	40 avg
											46	<< min.	36 min
Density (ASTM D 1505)													
Density (g/cm3)	0.934	0.934	0.933								0.934	0.0005	0.92 min
Carbon Black Content (ASTM D 1603, mod.)													
% Carbon Black	2.48	2.52									2.50	0.02	2.0 - 3.0
Carbon Black Dispersion (ASTM D 5596)													
Rating - 1st field view	1	1	1	1	1								9 of 10 in Cat 1 or 2
Rating - 2nd field view	1	1	1	1	1								1 in Cat 3
Tensile Properties (ASTM D 638/GRI GM 13, 2 ipm strain rate, Type IV specimen - HDPE)													
MD Yield Strength (ppi)	105	75	95	86	76						87	11	60 min
TD Yield Strength (ppi)	89	91	100	76	83						88	8	60 min
MD Break Strength (ppi)	166	165	164	145	141						156	11	NA
TD Break Strength (ppi)	150	146	160	141	132						146	9	NA
MD Yield Elongation (%)	29	20	20	17	17						21	4	NA
TD Yield Elongation (%)	17	17	17	17	13						16	2	NA
MD Break Elongation (%)	498	493	535	549	591						533	36	250 min
TD Break Elongation (%)	594	598	605	638	643						615	21	250 min
Puncture Resistance (ASTM D 4833)													
Puncture Strength (lbs)	101	100	102	103	103	90	88	86	90	89	99	7	44 min
	106	106	103	107	105								
Tear Resistance (ASTM D 1004)													
MD Tear Strength (lbs)	34	39	31	37	32	33	40	36	37	42	36	3	22 min
TD Tear Strength (lbs)	36	34	29	31	35	33	44	34	37	32	35	4	22 min

MD Machine Direction TD Transverse Direction NA Not Available

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

9063 Bee Caves Road / Austin, Texas 78733 / 512 263 2101 / 512 263 2558

TRI/ENVIRONMENTAL, INC.
A Texas Research International Company

GEOMEMBRANE TEST RESULTS

TRI Client: Hallaton Inc.
Project: North Wake Landfill

Material: Poly-Flex 40 mil Textured LLDPE Geomembrane
Sample Identification: 0289
TRI Log #: E2199-84-01

PARAMETER	TEST REPLICATE NUMBER 1	2	3	4	5	6	7	8	9	10	MEAN	STD. DEV.	PROJ. SPEC.
Thickness (ASTM D 5994)													
Thickness (mils)	52	47	51	51	52	49	49	51	49	48	50	2	40 avg
											47	<< min.	36 min
Density (ASTM D 1505)													
Density (g/cm3)	0.934	0.934	0.934								0.934	0.0000	0.92 min
Carbon Black Content (ASTM D 1603, mod.)													
% Carbon Black	2.85	2.76									2.81	0.05	2.0 - 3.0
Carbon Black Dispersion (ASTM D 5596)													
Rating - 1st field view	1	1	1	1	1								9 of 10 in Cat 1 or 2
Rating - 2nd field view	1	1	1	1	1								1 in Cat 3
Tensile Properties (ASTM D 638/GRI GM 13, 2 ipm strain rate, Type IV specimen - HDPE)													
MD Yield Strength (ppi)	84	88	83	81	84						84	2	60 min
TD Yield Strength (ppi)	83	85	85	83	84						84	1	60 min
MD Break Strength (ppi)	153	151	109	130	110						131	19	NA
TD Break Strength (ppi)	124	72	104	91	92						97	17	NA
MD Yield Elongation (%)	25	25	18	22	20						22	3	NA
TD Yield Elongation (%)	18	17	17	19	20						18	1	NA
MD Break Elongation (%)	661	614	473	588	480						563	75	250 min
TD Break Elongation (%)	591	54	489	420	428						396	182	250 min
Puncture Resistance (ASTM D 4833)													
Puncture Strength (lbs)	88	87	86	88	86	83	85	86	90	87	86	2	44 min
	82	86	67	83	85								
Tear Resistance (ASTM D 1004)													
MD Tear Strength (lbs)	33	33	32	32	35	32	30	36	32	31	33	2	22 min
TD Tear Strength (lbs)	30	33	35	32	33	28	30	28	29	32	31	2	22 min

MD Machine Direction TD Transverse Direction NA Not Available

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

9063 Bee Caves Road / Austin, Texas 78733 / 512 263 2101 / 512 263 2558

POLYFLEX, INC.
2000 W. Marshall Drive Grand Prairie, Texas 75061 USA
888-765-9359 972-337-7113 FAX 972-337-7233

CERTIFICATION DOCUMENTS

To: Hallaton, Inc.
100 E. Pennsylvania Ave. #203
Towson, MD 21286

Attn: Scott Brinkerhoff
Fax No: 410-583-7720
Number of pages including cover: 3

Date: 6/15/2004
Poly-Flex Proj # : 240028
Customer PO:
Project Name: North Wake

Order:

Departure Date: Pre-Certification
Destination:
Carrier:

Trip No: Pre-Certification

Additional Notes:

Distribution of Documents:

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

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

Sincerely,

Russell Searcey

Russell Searcey

1-888-765-9359 ext 7269

CERTIFICATION SHEET

DATE: June 15, 2004

PROJECT NO: 240028

ORDER NO: PreCertification

TRIP NO: PreCertification

CERTIFIED BY:

POLY-FLEX, INC.
2000 W. Marshall Drive
Grand Prairie, Texas 75051

TEST DESCRIPTION		THICKNESS	CARBON BLACK	TEAR	PUNCTURE	TENSILE @ BREAK	ELONG @ BREAK	CAR. BLK. DISPERSION	DENSITY	OXIDATIVE INDUCTION TIME	ASPERITY HEIGHT
ASTM METHOD		D5994	D1603	D1004	D4833	D6693	D6693	D5596	D1505	D3895	GM 12
(modifications)		min/avg									
UNITS		mils	%	lb	lb	ppi	%	Cat 1 or 2	gm/cc	min.	MILS
SPECIFICATION		36/40	2.0-3.0	22	44	60	250		0.920	100	10
ROLL NUMBER	BLEND										
PT-4-04 282-75	8140466	36/ 42	2.7	28	86	135	619	Cat 1	0.936	154	21
PT-4-04 289-75	8140466	36/ 42	2.4	27	88	132	637	Cat 1	0.936	154	21
PT-4-04 295-75	8140466	36/ 43	2.5	29	88	137	623	Cat 1	0.936	154	20

CoA Date: 04/27/2004

Certificate of Analysis

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

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

CPC Delivery #: 86612118
PO #: 172305
Weight: 182700 LB
Ship Date: 04/27/2004
Package: BULK
Mode: Hopper Car
Car #: PSPX001291
Seal No: 301157

Product:
MARLEX POLYETHYLENE K203 BULK

Lot Number: 8140466

Property	Test Method	Value	Unit
Melt Index	ASTM D1238	0.150	g/10mi
HLMI Flow Rate	ASTM D1238	14.00	g/10mi
Density	ASTM D1505	0.9240	g/cm3
Production Date		4/7/04	

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

Jackie Edwards
Certification Systems Specialist

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

Appendix B-7

LLDPE Liner Installation Tracking Log (CQC-105)

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
5/13/2004	P-1	Phase I	PR-4-04-0097	224	23	5152
5/13/2004	P-2	Phase I	PR-4-04-0097	229	23	5267
5/13/2004	P-3	Phase I	PR-4-04-0097	201	23	4623
5/13/2004	P-4	Phase I	PR-4-04-0097	33	23	759
5/13/2004	P-5	Phase I	PR-4-04-0098	205	23	4715
5/13/2004	P-6	Phase I	PR-4-04-0098	238	23	5474
5/13/2004	P-7	Phase I	PR-4-04-0098	184	23	4232
5/13/2004	P-8	Phase I	PR-4-04-0098	57	23	1311
5/13/2004	P-9	Phase I	PR-4-04-0092	188	23	4324
5/13/2004	P-10	Phase I	PR-4-04-0092	247	23	5681
5/13/2004	P-11	Phase I	PR-4-04-0092	196	23	4508
5/13/2004	P-12	Phase I	PR-4-04-0092	54	23	1242
5/13/2004	P-13	Phase I	PR-4-04-0090	199	23	4577
5/13/2004	P-14	Phase I	PR-4-04-0090	255	23	5865
5/13/2004	P-15	Phase I	PR-4-04-0101	262	23	6026
5/13/2004	P-16	Phase I	PR-4-04-0101	262	23	6026
5/13/2004	P-17	Phase I	PR-4-04-0101	79	12	948
5/13/2004	P-18	Phase I	PR-4-04-0101	49	23	1127
5/13/2004	P-19	Phase I	PR-4-04-0101	19	19	361
5/13/2004	P-20	Phase I	PR-4-04-0101	278	23	6394
5/13/2004	P-21	Phase I	PR-4-04-0102	136	23	3128
5/13/2004	P-22	Phase I	PR-4-04-0101	142	23	3266
5/13/2004	P-23	Phase I	PR-4-04-0102	195	23	4485
5/13/2004	P-24	Phase I	PR-4-04-0102	84	23	1932
5/13/2004	P-25	Phase I	PR-4-04-0102	22	23	506
5/13/2004	P-26	Phase I	PR-4-04-0102	14	3	42
5/13/2004	P-27	Phase I	PR-4-04-0102	279	23	6417
5/13/2004	P-28	Phase I	PR-4-04-0102	95	23	2185
5/13/2004	P-29	Phase I	PR-4-04-0132	190	23	4370
5/13/2004	P-30	Phase I	PR-4-04-0132	292	23	6716
					Total Sq. Ft.	**111659**

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
5/13/2004	P-31	Phase I	PR-4-04-0132	253	23	5819
5/13/2004	P-32	Phase I	PR-4-04-0042	39	23	897
5/13/2004	P-33	Phase I	PR-4-04-0042	293	23	6739
5/13/2004	P-34	Phase I	PR-4-04-0042	296	23	6808
5/13/2004	P-35	Phase I	PR-4-04-0042	110	23	2530
5/13/2004	P-36	Phase I	PR-4-04-0103	186	23	4278
5/13/2004	P-37	Phase I	PR-4-04-0103	296	23	6808
5/13/2004	P-38	Phase I	PR-4-04-0103	270	23	6210
5/13/2004	P-39	Phase I	PR-4-04-0093	30	23	690
5/13/2004	P-40	Phase I	PR-4-04-0093	298	23	6854
					GRAND TOTAL	**159292**

Total Sq. Ft. **206925**

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
5/18/2004	P-41	Phase I	PR-4-04-093	298	23	6854
5/18/2004	P-42	Phase I	PR-4-04-093	105	23	2415
5/18/2004	P-43	Phase I	PR-4-04-0096	196	23	4508
5/18/2004	P-44	Phase I	PR-4-04-0096	301	23	6923
5/18/2004	P-45	Phase I	PR-4-04-0096	247	20	4940
5/18/2004	P-46	Phase I	PR-4-04-0131	54	23	1242
5/18/2004	P-47	Phase I	PR-4-04-0131	302	23	6946
5/18/2004	P-48	Phase I	PR-4-04-0131	303	23	6969
5/18/2004	P-49	Phase I	PR-4-04-0131	125	23	2875
5/18/2004	P-50	Phase I	PR-4-04-0145	80	23	1840
5/18/2004	P-51	Phase I	PR-4-04-0145	214	23	4922
5/18/2004	P-52	Phase I	PR-4-04-0145	229	23	5267
5/18/2004	P-53	Phase I	PR-4-04-0087	183	23	4209
5/18/2004	P-54	Phase I	PR-4-04-0087	61	23	1403

Total Sq. Ft. **61313**

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
5/20/2004	P-55	Phase 2	PR-4-04-0087	197	23	4531
5/20/2004	P-56	Phase 2	PR-4-04-0136	114	23	2622
5/20/2004	P-57	Phase 2	PR-4-04-0136	312	23	7176
5/20/2004	P-58	Phase 2	PR-4-04-0136	311	23	7153
5/20/2004	P-59	Phase 2	PR-4-04-0091	312	23	7176
5/20/2004	P-60	Phase 2	PR-4-04-0091	312	23	7176
5/20/2004	P-61	Phase 2	PR-4-04-0134	313	23	7199
5/20/2004	P-62	Phase 2	PR-4-04-0091	88	7	616
5/20/2004	P-63	Phase 2	PR-4-04-0134	104	11	1144
5/20/2004	P-64	Phase 2	PR-4-04-0134	315	23	7245
5/20/2004	P-65	Phase 2	PR-4-04-0134	105	23	2415
5/20/2004	P-66	Phase 2	PR-4-04-0144	210	23	4830
5/20/2004	P-67	Phase 2	PR-4-04-0144	318	23	7314
5/20/2004	P-68	Phase 2	PR-4-04-0144	219	23	5037
5/20/2004	P-69	Phase 2	PR-4-04-0141	102	23	2346
5/20/2004	P-70	Phase 2	PR-4-04-0141	323	23	7429
5/20/2004	P-71	Phase 2	PR-4-04-0141	325	23	7475
5/20/2004	P-72	Phase 2	PR-4-04-0099	330	23	7590
					Total Sq. Ft.	96474

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
5/25/2004	P-73	Phase 2	PR-4-04-0122	327	23	7521
5/25/2004	P-74	Phase 2	PR-4-04-0122	238	23	5474
5/25/2004	P-75	Phase 2	PR-4-04-0125	92	23	2116
5/25/2004	P-76	Phase 2	PR-4-04-0125	334	23	7682
5/25/2004	P-77	Phase 2	PR-4-04-0125	318	23	7314
5/25/2004	P-78	Phase 2	PR-4-04-0113	14	23	322
5/25/2004	P-79	Phase 2	PR-4-04-0113	309	23	7107
5/25/2004	P-80	Phase 2	PR-4-04-0113	295	23	6785
5/25/2004	P-81	Phase 2	PR-4-04-0113	103	23	2369
5/25/2004	P-82	Phase 2	PR-4-04-0109	178	23	4094
5/25/2004	P-83	Phase 2	PR-4-04-0109	266	23	6118
5/25/2004	P-84	Phase 2	PR-4-04-0109	253	23	5819
5/25/2004	P-85	Phase 2	PR-4-04-0117	239	23	5497
5/25/2004	P-86	Phase 2	PR-4-04-0117	228	23	5244
5/25/2004	P-87	Phase 2	PR-4-04-0117	215	23	4945
5/25/2004	P-88	Phase 2	PR-4-04-0094	205	23	4715
5/25/2004	P-89	Phase 2	PR-4-04-0094	198	23	4554
5/25/2004	P-90	Phase 2	PR-4-04-0094	185	23	4255
5/25/2004	P-91	Phase 2	PR-4-04-0094	122	23	2806
5/25/2004	P-92	Phase 2	PR-4-04-0108	93	23	2139
5/25/2004	P-93	Phase 2	PR-4-04-0108	161	23	3703
5/25/2004	P-94	Phase 2	PR-4-04-0108	151	23	3473
5/25/2004	P-95	Phase 2	PR-4-04-0108	138	23	3174
5/25/2004	P-96	Phase 2	PR-4-04-0108	127	23	2921
5/25/2004	P-97	Phase 2	PR-4-04-0108	69	23	1587
5/25/2004	P-98	Phase 2	PR-4-04-0118	45	23	1035
5/25/2004	P-99	Phase 2	PR-4-04-0118	97	23	2231
5/25/2004	P-100	Phase 2	PR-4-04-0118	83	23	1909
5/25/2004	P-101	Phase 2	PR-4-04-0118	62	23	1426
5/25/2004	P-102	Phase 2	PR-4-04-0118	40	23	920
					Total Sq. Ft.	**119255**

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
5/25/2004	P-103	Phase 3	PR-4-04-0118	135	23	3105
5/25/2004	P-104	Phase 3	PR-4-04-0118	121	23	2783
5/25/2004	P-105	Phase 3	PR-4-04-0118	105	23	2415
5/25/2004	P-106	Phase 3	PR-4-04-0110	70	23	1610
5/25/2004	P-107	Phase 3	PR-4-04-0110	18	20	360
5/25/2004	P-108	Phase 3	PR-4-04-0110	157	23	3611
5/25/2004	P-109	Phase 3	PR-4-04-0110	170	23	3910
5/25/2004	P-110	Phase 3	PR-4-04-0110	183	23	4209
5/25/2004	P-111	Phase 3	PR-4-04-0110	125	23	2875
5/25/2004	P-112	Phase 3	PR-4-04-0129	80	23	1840
5/25/2004	P-113	Phase 3	PR-4-04-0129	214	23	4922
5/25/2004	P-114	Phase 3	PR-4-04-0129	229	23	5267
5/25/2004	P-115	Phase 3	PR-4-04-0129	183	23	4209
5/25/2004	P-116	Phase 3	PR-4-04-0011	61	23	1403
5/25/2004	P-117	Phase 3	PR-4-04-0011	264	23	6072
5/25/2004	P-118	Phase 3	PR-4-04-0011	275	23	6325
5/25/2004	P-119	Phase 3	PR-4-04-0011	108	23	2484
5/25/2004	P-120	Phase 3	PR-4-04-0119	181	23	4163
5/25/2004	P-121	Phase 3	PR-4-04-0100	79	23	1817
5/25/2004	P-122	Phase 3	PR-4-04-0119	243	23	5589
5/25/2004	P-123	Phase 3	PR-4-04-0100	79	23	1817
5/25/2004	P-124	Phase 3	PR-4-04-0100	324	23	7452
5/25/2004	P-125	Phase 3	PR-4-04-0100	336	23	7728
5/25/2004	P-126	Phase 3	PR-4-04-0100	12	23	276
5/25/2004	P-127	Phase 3	PR-4-04-0106	350	23	8050
5/25/2004	P-128	Phase 3	PR-4-04-0106	365	23	8395
5/25/2004	P-129	Phase 3	PR-4-04-0118	12	14	168
5/25/2004	P-130	Phase 2	PR-4-04-0110	15	20	300
5/25/2004	P-131	Phase 3	PR-4-04-0110	9	10	90
					Total Sq. Ft.	**103245**

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
6/2/2004	P-132	Phase 3	PR-4-04-0080	385	23	8855
6/2/2004	P-133	Phase 3	PR-4-04-0080	149	6	894
6/2/2004	P-134	Phase 3	PR-4-04-0080	350	23	8050
6/2/2004	P-135	Phase 3	PR-4-04-0082	26	23	598
6/2/2004	P-136	Phase 3	PR-4-04-0082	375	20	7500
6/2/2004	P-137	Phase 3	PR-4-04-0082	332	23	7636
6/2/2004	P-138	Phase 3	PR-4-04-0089	42	23	966
6/2/2004	P-139	Phase 3	PR-4-04-0089	372	23	8556
6/2/2004	P-140	Phase 3	PR-4-04-0089	321	23	7383
6/2/2004	P-141	Phase 3	PR-4-04-0086	52	23	1196
6/2/2004	P-142	Phase 3	PR-4-04-0086	375	23	8625
6/2/2004	P-143	Phase 3	PR-4-04-0086	318	23	7314
6/2/2004	P-144	Phase 3	PR-4-04-0081	50	23	1150
6/2/2004	P-145	Phase 3	PR-4-04-0081	358	23	8234
6/2/2004	P-146	Phase 3	PR-4-04-0081	141	10	1410
6/2/2004	P-147	Phase 3	PR-4-04-0081	330	23	7590
6/2/2004	P-148	Phase 3	PR-4-04-0088	30	23	690
6/2/2004	P-149	Phase 3	PR-4-04-0088	361	23	8303
6/2/2004	P-150	Phase 3	PR-4-04-0088	349	23	8027
6/2/2004	P-151	Phase 3	PR-4-04-0083	10	23	230
6/2/2004	P-152	Phase 3	PR-4-04-0083	361	23	8303
6/2/2004	P-153	Phase 3	PR-4-04-0083	360	23	8280
6/2/2004	P-154	Phase 3	PR-4-04-0085	362	23	8326
6/2/2004	P-155	Phase 3	PR-4-04-0085	359	23	8257
6/2/2004	P-156	Phase 3	PR-4-04-0079	361	23	8303
					Total Sq. Ft.	**144676**

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
6/7/2004	P-157	Phase 3	PR-4-04-0079	360	23	8280
6/7/2004	P-158	Phase 3	PR-4-04-0027	363	23	8349
6/7/2004	P-159	Phase 3	PR-4-04-0027	361	23	8303
6/7/2004	P-160	Phase 3	PR-4-04-0023	363	23	8349
6/7/2004	P-161	Phase 3	PR-4-04-0023	359	23	8257
6/7/2004	P-162	Phase 3	PR-4-04-0095	359	23	8257
6/7/2004	P-163	Phase 3	PR-4-04-0095	356	23	8188
					Total sq. ft.	**57983**

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
6/14/2004	P-164	Phase 4	PR-4-04-0120	354	23	8142
6/14/2004	P-165	Phase 4	PR-4-04-0120	352	23	8096
6/14/2004	P-166	Phase 4	PR-4-04-0126	351	23	8073
6/14/2004	P-167	Phase 4	PR-4-04-0126	352	23	8096
6/14/2004	P-168	Phase 4	PR-4-04-0126	41	23	943
6/14/2004	P-169	Phase 4	PR-4-04-0115	309	23	7107
6/14/2004	P-170	Phase 4	PR-4-04-0115	350	23	8050
6/14/2004	P-171	Phase 4	PR-4-04-0115	82	23	1886
6/14/2004	P-172	Phase 4	PR-4-04-0133	268	23	6164
6/14/2004	P-173	Phase 4	PR-4-04-0133	352	23	8096
6/14/2004	P-174	Phase 4	PR-4-04-0133	130	23	2990
6/14/2004	P-175	Phase 4	PR-4-04-0128	220	23	5060
6/14/2004	P-176	Phase 4	PR-4-04-0128	346	23	7958
6/14/2004	P-177	Phase 4	PR-4-04-0128	181	23	4163
6/14/2004	P-178	Phase 4	PR-4-04-0124	169	23	3887
6/14/2004	P-179	Phase 4	PR-4-04-0124	342	23	7866
6/14/2004	P-180	Phase 4	PR-4-04-0124	230	23	5290
6/14/2004	P-181	Phase 4	PR-4-04-0121	113	23	2599
6/14/2004	P-182	Phase 4	PR-4-04-0121	347	23	7981
6/14/2004	P-183	Phase 4	PR-4-04-0121	285	23	6555
6/14/2004	P-184	Phase 4	PR-4-04-0114	62	23	1426
6/14/2004	P-185	Phase 4	PR-4-04-0114	348	23	8004
					TOTAL sq. ft.	**128432**

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
6/16/2004	P-186	Phase 4	PR-4-04-0114	343	23	7889
6/16/2004	P-187	Phase 4	PR-4-04-0140	342	23	7866
6/16/2004	P-188	Phase 4	PR-4-04-0140	340	23	7820
6/16/2004	P-189	Phase 4	PR-4-04-0140	59	23	1357
6/16/2004	P-190	Phase 4	PR-4-04-0104	282	23	6486
6/16/2004	P-191	Phase 4	PR-4-04-0104	335	23	7705
6/16/2004	P-192	Phase 4	PR-4-04-0104	127	23	2921
6/16/2004	P-193	Phase 4	PR-4-04-0135	207	23	4761
6/16/2004	P-194	Phase 4	PR-4-04-0135	332	23	7636
6/16/2004	P-195	Phase 4	PR-4-04-0135	207	23	4761
6/16/2004	P-196	Phase 4	PR-4-04-0130	123	23	2829
6/16/2004	P-197	Phase 4	PR-4-04-0130	325	23	7475
6/16/2004	P-198	Phase 4	PR-4-04-0130	300	23	6900
6/16/2004	P-199	Phase 4	PR-4-04-0105	19	23	437
6/16/2004	P-200	Phase 4	PR-4-04-0105	320	23	7360
6/16/2004	P-201	Phase 4	PR-4-04-0105	317	23	7291
6/16/2004	P-202	Phase 4	PR-4-04-0105	71	23	1633
6/16/2004	P-203	Phase 4	PR-4-04-0282	247	23	5681
6/16/2004	P-204	Phase 4	PR-4-04-0282	314	23	7222
6/16/2004	P-205	Phase 4	PR-4-04-0282	177	23	4071
6/16/2004	P-206	Phase 4	PR-4-04-0295	133	23	3059
6/16/2004	P-207	Phase 4	PR-4-04-0295	308	23	7084
6/16/2004	P-208	Phase 4	PR-4-04-0295	306	23	7038
6/16/2004	P-209	Phase 4	PR-4-04-0289	302	23	6946
					Total Sq. Ft.	**134228**

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
6/23/2004	P-210	Phase 5	310591	145	23	3335
6/23/2004	P-211	Phase 5	310591	145	23	3335
6/23/2004	P-212	Phase 5	310591	150	23	3450
6/23/2004	P-213	Phase 5	310591	50	23	1150
6/23/2004	P-214	Phase 5	310471	100	23	2300
6/23/2004	P-215	Phase 5	310471	153	23	3519
6/23/2004	P-216	Phase 5	310471	153	23	3519
6/23/2004	P-217	Phase 5	310471	80	23	1840
6/23/2004	P-218	Phase 5	310465	74	23	1702
6/23/2004	P-219	Phase 5	310465	156	23	3588
6/23/2004	P-220	Phase 5	310465	159	23	3657
6/23/2004	P-221	Phase 5	310465	98	23	2254
6/23/2004	P-222	Phase 5	310475	64	23	1472
6/23/2004	P-223	Phase 5	310475	165	23	3795
6/23/2004	P-224	Phase 5	310475	166	23	3818
6/23/2004	P-225	Phase 5	310475	93	23	2139
6/23/2004	P-226	Phase 5	310590	75	23	1725
6/23/2004	P-227	Phase 5	310590	169	23	3887
6/23/2004	P-228	Phase 5	310590	170	23	3910
6/23/2004	P-229	Phase 5	310590	79	23	1817
6/23/2004	P-230	Phase 5	310594	92	23	2116
6/23/2004	P-231	Phase 5	310594	173	23	3979
6/23/2004	P-232	Phase 5	310594	175	23	4025
6/23/2004	P-233	Phase 5	310594	51	23	1173
6/23/2004	P-234	Phase 5	310588	126	23	2898
					Total Sq. Ft.	**67505**

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
6/25/2004	P-235	Phase 5	310588	177	23	4071
6/25/2004	P-236	Phase 5	310588	178	23	4094
6/25/2004	P-237	Phase 5	310578	179	23	4117
6/25/2004	P-238	Phase 5	310578	179	23	4117
6/25/2004	P-239	Phase 5	310578	126	23	2898
6/25/2004	P-240	Phase 5	310598	54	23	1242
6/25/2004	P-241	Phase 5	310598	182	23	4186
6/25/2004	P-242	Phase 5	310598	185	23	4255
6/25/2004	P-243	Phase 5	310598	65	23	1495
6/25/2004	P-244	Phase 5	310592	120	23	2760
6/25/2004	P-245	Phase 5	310592	186	23	4278
6/25/2004	P-246	Phase 5	310592	175	23	4025
6/25/2004	P-247	Phase 5	310580	16	23	368
6/25/2004	P-248	Phase 5	310580	190	23	4370
6/25/2004	P-249	Phase 5	310580	191	23	4393
6/25/2004	P-250	Phase 5	310580	86	23	1978
6/25/2004	P-251	Phase 5	310587	107	23	2461
6/25/2004	P-252	Phase 5	310587	202	23	4646
6/25/2004	P-253	Phase 5	310587	181	23	4163
6/25/2004	P-254	Phase 5	310468	19	23	437
					Total Sq. Ft.	**64354**

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
6/29/2004	P-255	Phase 5	310468	204	23	4692
6/29/2004	P-256	Phase 5	310468	208	23	4784
6/29/2004	P-257	Phase 5	310468	31	23	713
6/29/2004	P-258	Phase 5	310472	183	23	4209
6/29/2004	P-259	Phase 5	310472	221	23	5083
6/29/2004	P-260	Phase 5	310472	82	23	1886
6/29/2004	P-261	Phase 5	310583	144	23	3312
6/29/2004	P-262	Phase 5	310583	229	23	5267
6/29/2004	P-263	Phase 5	310583	106	23	2438
6/29/2004	P-264	Phase 5	310476	126	23	2898
6/29/2004	P-265	Phase 5	310476	234	23	5382
6/29/2004	P-266	Phase 5	310476	105	23	2415
6/29/2004	P-267	Phase 5	310586	138	23	3174
6/29/2004	P-268	Phase 5	310586	249	23	5727
					TOTAL Sq.Ft.	**51980**

CDM

FORM CQC - 105
LLDPE LINER INSTALLATION TRACKING LOG

DATE	PANEL NO.	CELL NO.	ROLL NO.	LENGTH	WIDTH	SQUARE FT.
6/30/2004	P-269	Phase 5	310586	95	23	2185
6/30/2004	P-270	Phase 5	310584	157	23	3611
6/30/2004	P-271	Phase 5	310584	261	23	6003
6/30/2004	P-272	Phase 5	310584	62	23	1426
6/30/2004	P-273	Phase 5	310470	231	23	5313
6/30/2004	P-274	Phase 5	310470	250	23	5750
6/30/2004	P-275	Phase 5	310469	20	23	460
6/30/2004	P-276	Phase 5	310469	219	23	5037
6/30/2004	P-277	Phase 5	310469	209	23	4807
6/30/2004	P-278	Phase 5	310577	190	23	4370
6/30/2004	P-279	Phase 5	310577	163	23	3749
6/30/2004	P-280	Phase 5	310589	142	23	3266
6/30/2004	P-281	Phase 5	310589	120	23	2760
6/30/2004	P-282	Phase 5	310589	100	23	2300
6/30/2004	P-283	Phase 5	310589	69	23	1587
6/30/2004	P-284	Phase 5	310589	42	23	966
6/30/2004	P-285	Phase 5	310589	13	23	299
					TOTAL Sq.Ft.	**53889**

CDM

Appendix B-8

LLDPE Liner Daily QC Report
Pre-Weld Testing (CQC-104)

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/13/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0730	60	PC	0	JM	#1	700	70	86/85	83/93	90/82	93	91	93	PASS	BD
0740	60	PC	0	GP	#4	700	70	86/82	85/88	90/87	94	91	92	PASS	BD
0750	60	PC	0	AS	#2	700	70	86/80	81/81	84/82	82	100	88	PASS	BD
0800	60	PC	0	PG	#1	450	350	76	74	78	88	88	81	PASS	BD
1342	85	CLEAR	MILD	JM	#1	700	70	67/60	62/62	65/66	69	68	72	PASS	BD
1350	85	CLEAR	MILD	AS	#2	700	70	67/65	67/71	64/69	73	72	66	PASS	BD
1400	85	CLEAR	MILD	GP	#4	700	70	62/64	75/73	73/72	72	72	69	PASS	BD
1410	85	CLEAR	MILD	PG	#1	450	350	66	66	62	67	64	61	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/14/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0740	70	PC	0	PG	x#1	450	350	71	70	74	81	80	82	PASS	BD
1302	85	PC	0	PG	x#1	450	350	68	68	67	82	82	81	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/17/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0740	70	PC	0	PG	#1	450	350	72	71	76	80	78	81	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/18/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0744	70	CLEAR	0	GP	#4	700	70	91/81	86/81	79/87	86	73	90	PASS	BD
0753	70	CLEAR	0	JM	#1	700	70	79/82	84/83	76/85	86	87	85	PASS	BD
0800	70	CLEAR	0	PG	#1	450	350	80	80	76	84	83	77	PASS	BD
0810	70	CLEAR	0	AS	#2	700	70	76/80	76/83	81/77	77	85	81	PASS	BD
1250	85	CLEAR	0	PG	#1	450	350	70	74	70	72	74	75	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/19/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0740	80	CLEAR	0	PG	X#1	450	350	66	68	69	70	71	68	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/20/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0830	70	CLEAR	0	GP	#4	700	70	74/81	74/81	77/76	83	79	77	PASS	BD
0840	75	CLEAR	0	AS	#2	700	70	74/78	75/80	76/80	80	76	82	PASS	BD
0852	75	CLEAR	0	JM	#1	700	70	79/74	72/74	72/69	77	70	74	PASS	BD
0900	75	CLEAR	0	PG	#1	700	70	71	69	70	66	67	66	PASS	BD
1320	85	CLEAR	0	GP	#4	700	70	67/71	71/73	75/72	72	75	76	PASS	BD
1330	85	CLEAR	0	PG	#1	700	70	66	66	62	64	63	65	PASS	BD
1335	85	CLEAR	0	JM	#2	700	70	69/70	73/73	71/66	73	65	65	PASS	BD
1340	85	CLEAR	0	PG	#1	700	70	65/67	68/69	64/67	66	68	69	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/21/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0730	70	CLEAR	0	PG	#1	700	70	76	71	69	77	73	70	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/22/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0740	70	CLEAR	0	PG	X#1	450	350	71	68	66	76	77	77	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/24/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0732	75	CLEAR	0	PG	X#1	450	350	63	66	63	72	70	71	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/25/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0740	70	CLEAR	0	GP	#4	700	70	79/84	83/78	84/79	84	80	81	PASS	BD
0750	70	CLEAR	0	PG	#X1	450	250	66	73	69	70	78	76	PASS	BD
0755	70	CLEAR	0	JM	#1	700	70	76/78	80/81	77/80	80	79	83	PASS	BD
0815	70	CLEAR	0	AS	#2	700	70	70/77	70/76	73/79	80	76	81	PASS	BD
1325	95	CLEAR	0	PG	#X1	450	350	70	66	73	78	71	73	PASS	BD
1310	95	CLEAR	0	JM	#1	700	70	65/65	64/61	60/60	62	63	60	PASS	BD
1315	95	CLEAR	0	GP	#4	700	70	65/66	69/66	68/63	64	67	69	PASS	BD
1320	95	CLEAR	0	AS	#2	700	70	61/62	61/60	60/59	63	62	60	PASS	BD
1335	95	CLEAR	0	PG	X#1	450	250	60	57	52	55	57	58	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/26/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0720	75	CLEAR	0	PG	#1	450	350	60	66	64	70	71	77	PASS	BD
0735	75	CLEAR	0	AS	#3	450	350	67	59	63	79	77	71	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/27/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0740	70	CLEAR	0	PG	x#1	450	350	69	64	63	72	75	79	PASS	BD
0750	70	CLEAR	0	GP	x#3	450	350	70	68	63	71	70	69	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 06/02/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0755	65	CLEAR	0	AS	#2	700	70	79/81	80/82	83/83	91	92	90	PASS	BD
0800	65	CLEAR	0	IF	#1	700	70	77/75	76/73	77/77	89	84	89	PASS	BD
0805	65	CLEAR	0	PG	#1	250/450	70	65	77	76	79	77	83	PASS	BD
0812	65	CLEAR	0	GP	#4	700	70	80/75	75/82	83/82	88	89	85	PASS	BD
1320	85	CLEAR	MILD	AS	#2	700	70	65/67	65/67	65/65	70	69	72	PASS	BD
1325	85	CLEAR	MILD	IF	#1	700	70	62/64	61/61	61/61	63	69	67	PASS	BD
1345	85	CLEAR	MILD	GP	#4	700	70	64/61	60/61	66/64	67	62	60	PASS	BD
1605	90	CLEAR	MILD	IF	EXTR.	500		65	67	69	69	70	68	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 05/28/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0720	75	CLEAR	0	PG	#1	450	350	64	67	70	77	80	77	PASS	BD
0735	75	CLEAR	0	IF	#3	450	350	62	60	66	77	70	73	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 06/03/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0735	75	CLEAR	0	PG	X#1	450	350							PASS	BD
0745	75	CLEAR	0	KM	X#3	450	350							PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 06/14/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
1220	80	CLEAR	MILD	AS	#2	700	70	75/70	67/70	67/70	73	70	72	PASS	BD
1230	80	CLEAR	MILD	KM	#2	700	70	67/63	64/61	69/65	74	69	62	PASS	BD
1245	80	CLEAR	MILD	GP	#4	700	70	69/67	70/66	67/67	71	69	65	PASS	BD
1400	80	CLEAR	MILD	PG	X#1	450	350	66	66	66	68	65	87	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 06/16/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0720	75	CLEAR	NO	PG	#X1	450	350	66	68	67	73	73	79	PASS	BD
0730	75	CLEAR	NO	KM	#X1	380	200	67	70	68	73	70	71	PASS	BD
1210	85	CLEAR	NO	GP	#4	700	70	66/68	70/71	73/70	72	70	77	PASS	BD
1220	85	CLEAR	NO	KM	#1	700	70	67/70	71/69	68/69	76	75	78	PASS	BD
1250	85	CLEAR	NO	PG	#X1	450	350	66	69	67	69	70	70	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 06/17/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0725	75	PC	NO	PG	#X1	450	350	63	66	70	74	69	70	PASS	BD
0750	75	PC	NO	KM	#X3	380	200	67	60	66	65	70	72	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 06/18/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0740	80	PC	NO	PG	#X1	450	350	67	68	64	70	74	69	PASS	BD
0755	80	PC	NO	KM	#X3	400	300	59	62	60	68	66	70	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 06/21/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0800	75	PC	NO	KM	#X3	400	300	66	70	67	69	72	72	PASS	BD
00815	75	PC	NO	PG	#X1	450	350	68	67	67	74	72	75	PASS	BD
1200	85	PC	NO	KM	#X3	400	350	67	68	66	72	74	72	PASS	BD
1205	85	PC	NO	PG	#X1	450	300	69	67	69	71	75	76	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 06/23/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0730	75	PC	NO	KM	#2	700	70	80/75	78/77	75/77	76	78	75	PASS	BD
0740	75	PC	NO	AS	#1	700	70	74/80	79/71	76/74	83	83	86	PASS	BD
0820	75	PC	NO	PG	#X1	500	350	61	64	63	64	65	66	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 06/24/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0750	75	PC	NO	PG	#X1	450	300	61	66	64	66	70	69	PASS	BD
0805	75	PC	NO	GP	#X3	450	300	63	63	64	72	66	68	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 06/25/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
1020	80	PC	NO	KM	#1	700	70	66/63	67/68	69/72	66	60	66	PASS	BD
1030	80	PC	NO	AS	#2	700	70	63/66	64/68	68/72	72	66	76	PASS	BD
1035	80	PC	NO	PG	#X1	500	300	62	63	64	66	67	67	PASS	BD
1140	80	PC	NO	GP	#4	700	70	65/67	67/66	62/64	63	62	61	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 06/29/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
1254	85	PC	NO	GP	#4	700	70	69/66	63/62	62/61	60	61	59	PASS	BD
1305	85	PC	NO	AS	#1	700	70	71/75	71/71	69/69	69	75	73	PASS	BD
1315	85	PC	NO	PG	#X4	450	350	71	72	68	72	80	79	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 06/30/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0800	75	PC	NO	PG	#X1	450	300	66	63	62	60	61	63	PASS	BD
0815	75	PC	NO	AS	#X3	450	300	68	64	65	67	62	64	PASS	BD
1215	85	PC	NO	AS	#2	700	70	79/80	74/78	75/76	76	78	72	PASS	BD
1230	85	PC	NO	GP	#4	700	70	65/67	63/60	69/66	66	70	70	PASS	BD
1240	85	PC	NO	PG	#X1	450	350	71	69	68	72	66	71	PASS	BD

FORM CQC - 104
DAILY QC REPORT
PRE-WELD TESTING

DATE: 07/01/04 JOB NAME: North Wake LF JOB NO.: 6172-42378 MATERIAL: 40 mil LLDPE - TX

TIME	AMBIENT TEMP.	WEATHER	WIND	TECH.	MACHINE			DESTRUCTIVE TEST						PASS FAIL	EFR INITIALS
					ID NO.	TEMP.	SPEED	PEEL			SHEAR				
0610	70	PC	NO	AS	#2	700	70	66/63	71/74	69/69	73	76	75	PASS	BD
0620	70	PC	NO	PG	#X1	450	350	72	68	70	77	80	81	PASS	BD

Appendix B-9

LLPDE Liner Seaming Log (CQC-106)

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-13-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0945	P1/P2	10	PG	#1	350	400	X	X	YES	PASS	
0945	P1/P2	25	GP	#4	700	70	28	27		PASS	
0945	P1/P2	22	GP	#4	700	70	31	30		PASS	
0945	P1/P2	129	GP	#4	700	70	30	28		PASS	
0945	P1/P2	25	GP	#4	700	70	33	31		PASS	
1025	P1/P2	12	PG	#1	350	400	X	X	YES	PASS	
0830	P2/P3	4	AS	#2	700	70	32	31		PASS	
0830	P2/P3	30	AS	#2	700	70	32	30		PASS	
0830	P2/P3	57	AS	#2	700	70	32	30		PASS	
0830	P2/P3	82	AS	#2	700	70	32	31		PASS	
0830	P2/P3	56	AS	#2	700	70	32	32		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 452 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-13-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1150	P3/P4	4	PG	#1	350	400	X	X	YES	PASS	
0850	P3/P4	195	JM	#1	700	70	31	30		PASS	
0845	P3/P4	33	JM	#1	700	70	32	30		PASS	
0840	P4/P5	23	JM	#1	700	70	32	30		PASS	
0900	P5/P6	205	AS	#2	700	70	32	30		PASS	
0900	P4/P6	33	AS	#2	700	70	31	30		PASS	
0915	P6/P7	238	GP	#4	700	70	31	30		PASS	
0915	P7/P9	184	JM	#1	700	70	32	29		PASS	
0915	P7/P8	57	JM	#1	700	70	32	30		PASS	
0930	P8/P9	23	AS	#2	700	70	32	31		PASS	
0940	P9/P10	185	AS	#2	700	70	32	30		PASS	

COMMENTS: see next page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 1180 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-13-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0919	P8/P10	43	AS	#2	700	70	32	31		PASS	
0919	P8/P10	14	AS	#2	700	70	32	30		PASS	
0950	P10/P11	247	GP	#4	700	70	30	30		PASS	
1000	P11/P12	199	JM	#1	700	70	32	30		PASS	
1000	P11/P12	55	JM	#1	700	70	31	30		PASS	
1000	P12/P13	23	JM	#1	700	70	31	30		PASS	
1010	P13/P14	199	AS	#2	700	70	34	33		PASS	
1010	P12/P14	54	AS	#2	700	70	30	29		PASS	
1030	P14/P15	255	GP	#4	700	70	30	28		PASS	
1115	P15/P16	131	JM	#1	700	70	34	31		PASS	
1115	P15/P17	81	JM	#1	700	70	31	28		PASS	

COMMENTS: see next page for totals

DAILY TOTALS: LINER 1301 sq. ft., Length Seamed _____ ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-13-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1101	P15/P18	16	JM	#1	700	70	30	28		PASS	
1101	P15/P18	15	JM	#1	700	70	31	29		PASS	
1120	P15/P19	19	GP	#4	700	70	30	29		PASS	
1120	P18/P19	18	GP	#4	700	70	30	30		PASS	
1100	P17/P16	79	AS	#2	700	70	32	30		PASS	
1052	P17/P18	16	JM	#1	700	70	30	29		PASS	
1052	P16/P18	49	AS	#2	700	70	31	30		PASS	
1125	P16/P20	278	AS	#2	700	70	32	29		PASS	
1213	P20/P21	84	JM	#1	700	70	31	30		PASS	
1213	P20/P23	87	JM	#1	700	70	31	30		PASS	
1205	P20/P24	43	GP	#4	700	70	34	31		PASS	

COMMENTS: see next page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 704 ft., No. Destructs marked _____

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-13-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1205	P20/P24	3	GP	#4	700	70	30	30		PASS	
1205	P20/P24	35	GP	#4	700	70	31	30		PASS	
1205	P20/P26	14	GP	#4	700	70	30	30		PASS	
1205	P25/P26	14	GP	#4	700	70	30	29		PASS	
1205	P24/P25	23	GP	#4	700	70	31	30		PASS	
1146	P21/P23	54	GP	#4	700	70	30	28		PASS	
1140	P21/P22	23	GP	#4	700	70	30	28		PASS	
1152	P22/P23	127	GP	#4	700	70	30	30		PASS	
1152	P22/P23	17	GP	#4	700	70	30	28		PASS	
1404	P21/P27	138	JM	#1	700	70	32	29		PASS	
1404	P22/P27	142	JM	#1	700	70	31	29		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 590 ft., No. Destructs marked _____

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-13-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1420	P27/P29	190	AS	#2	700	70	30	29		PASS	
1405	P28/P29	23	AS	#2	700	70	32	30		PASS	
1405	P27/P28	97	AS	#2	700	70	30	29		PASS	
1420	P29/P30	190	GP	#4	700	70	31	30		PASS	
1420	P28/P30	95	GP	#4	700	70	31	30		PASS	
1453	P30/P32	53	JM	#1	700	70	31	30		PASS	
1448	P31/P32	23	JM	#1	700	70	31	30		PASS	
1440	P32/P33	39	AS	#2	700	70	30	30		PASS	
1520	P30/P31	119	JM	#1	700	70	35	32		PASS	
1525	P30/P31	138	AS	#2	700	70	30	29		PASS	
										PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 1067 ft., No. Destructs marked _____

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-13-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1630	P39/P40	190	GP	#4	700	70	31	30		PASS	
1630	P38/P40	23	GP	#4	700	70	31	30		PASS	

COMMENTS: TOTAL SEAMED 5055 ft.

DAILY TOTALS: LINER 159292 sq. ft., Length Seamed 213 ft., No. Destructs marked 15

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-17-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 85 WIND: CALM WEATHER: AM 63 PM 85

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0800	BOTTOM FLAP	350	PG	MX1	450	350	X	X	YES	PASS	

COMMENTS:

DAILY TOTALS: LINER sq. ft., Length Seamed 350 ft., No. Destructs marked 0

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-18-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0855	40/41	121	GP	#4	700	70	31	29		PASS	
0855	40/41	174	GP	#4	700	70	31	30		PASS	
0912	41/43	196	JM	#1	750	450	30	30		PASS	
0912	41/42	105	JM	#1	700	70	30	30		PASS	
0904	43/42	23	JM	#1	700	70	33	33		PASS	
0915	43/44	196	AS	#2	700	70	30	29		PASS	
0915	42/44	105	AS	#2	700	70	32	31		PASS	
0958	44/46	54	GP	#4	700	70	30	30		PASS	
0958	45/44	247	GP	#4	700	70	30	29		PASS	
0950	45/46	20	GP	#4	700	70	30	29		PASS	
1008	46/47	54	JM	#1	700	70	31	29		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 1295 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-18-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1025	45/47	247	JM	#1	700	70	31	30		PASS	
1010	47/48	8	AS	#2	700	70	33	33		PASS	
1010	47/48	294	AS	#2	750	450	31	29		PASS	
1040	48/50	235	GP	#4	700	70	30	28		PASS	
1040	49/48	68	GP	#4	700	70	31	30		PASS	
1047	49/50	23	JM	#1	700	70	31	30		PASS	
1047	50/51	30	JM	#1	700	70	30	29		PASS	
1047	50/51	205	JM	#1	700	70	31	30		PASS	
1107	49/51	14	JM	#1	700	70	30	30		PASS	
1107	49/51	51	JM	#1	700	70	31	30		PASS	
1108	51/53	112	AS	#2	700	70	30	29		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 1287 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-18-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1025	51/52	41	AS	#2	700	70	30	28		PASS	
1108	51/52	151	AS	#2	700	70	32	30		PASS	
1135	52/53	23	AS	#2	750	450	30	29		PASS	
1136	53/54	13	GP	#4	700	70	31	30		PASS	
1136	52/54	54	GP	#4	700	70	30	29		PASS	
1136	52/54	138	GP	#4	700	70	32	30		PASS	
5/18	BF	518	PG	X#1	450	350			YES	PASS	

COMMENTS: TOTAL SEAMED 3002

DAILY TOTALS: LINER 61313 sq. ft., Length Seamed 420 ft., No. Destructs marked 5

CDM

3002

6.004

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-19-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
5-19	BF	450	PG	X#1	450	350			YES	PASS	BF- BOTTOM FLAP

COMMENTS: TOTAL SEAMED 5049

DAILY TOTALS: LINER 156944 sq. ft., Length Seamed 310 ft., No. Destructs marked 9

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-20-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1200	P67/P69	102	GP	#2	700	70	30	29		PASS	
1137	P67/P68	219	GP	#4	700	70	31	30		PASS	
1200	P68/P69	23	AS	#1	700	70	31	31		PASS	
1343	P69/P70	102	GP	#1	700	70	32	31		PASS	
1350	P70/P71	46	AS	#2	700	70	31	30		PASS	
1350	P70/P71	37	AS	#4	700	70	30	29		PASS	
1350	P70/P71	27	AS	#2	700	70	30	28		PASS	
1350	P70/P71	218	AS	#2	700	70	30	29		PASS	
1411	P71/P72	15	JM	#2	700	70	31	31		PASS	
1411	P71/P72	310	JM	#1	700	70	30	29		PASS	
1400	P68/P70	161	GP	#4	700	70	30	28		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 1260 ft., No. Destructs marked _____

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-20-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1400	P68/P70	14	GP	#4	700	70	32	32		PASS	
1400	P68/P70	8	GP	#4	700	70	31	30		PASS	
1400	P68/P70	34	GP	#4	700	70	30	30		PASS	
5/20	MF	250	PG	X#1	450	350			YES	PASS	MF-MIDDLE FLAP

COMMENTS: TOTAL SEAMED 4371 ft.

DAILY TOTALS: LINER 96474 sq. ft., Length Seamed 56 ft., No. Destructs marked 7

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-20-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0911	P54/P56	114	GP	#4	700	70	32	30		PASS	
0900	P55/P56	23	AS	#2	700	70	30	29		PASS	
0900	P54/P55	105	GP	#4	700	70	30	30		PASS	
0900	P54/P55	92	GP	#4	700	70	30	30		PASS	
0915	P56/P57	114	AS	#2	700	70	31	30		PASS	
0915	P55/P57	197	AS	#2	700	70	30	30		PASS	
0910	P57/P58	312	JM	#1	700	70	30	29		PASS	
0955	P58/P59	311	AS	#2	700	70	31	31		PASS	
1000	P59/P60	312	GP	#4	700	70	31	30		PASS	
1010	P60/P61	120	JM	#1	700	70	30	30		PASS	
1050	P60/P62	88	JM	#1	700	70	30	28		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 1788 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-20-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1052	P61/P62	88	AS	#2	700	70	30	30		PASS	
1040	P62/P63	7	GP	#4	700	70	32	32		PASS	
1040	P60/P63	65	JM	#1	700	70	31	30		PASS	
1040	P60/P63	37	JM	#1	700	70	33	32		PASS	
1040	P61/P63	104	AS	#2	700	70	32	30		PASS	
1053	P64/P61	313	GP	#4	700	70	30	30		PASS	
1120	P64/P66	210	AS	#2	700	70	30	29		PASS	
1120	P64/P65	105	AS	#2	700	70	31	29		PASS	
1110	P65/P66	23	AS	#2	700	70	31	31		PASS	
1140	P66/P67	210	JM	#1	700	70	30	28		PASS	
1140	P65/P67	105	JM	#1	700	70	31	30		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 1267 ft., No. Destructs marked _____

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-02-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0850	128/132	197	GP	#4	700	70	30	29		PASS	
0850	128/133	145	GP	#4	700	70	31	29		PASS	
0850	128/133	16	PG	X#1	750	450	X	X		PASS	
0850	132/137	149	GP	#4	700	70	30	29		PASS	
1330	132/134	182	AS	#2	700	70	30	30		PASS	
1330	132/134	50	AS	#2	700	70	30	30		PASS	
1330	132/134	117	IF	#1	700	70	31	29		PASS	
0857	135/132	26	IF	#1	700	70	30	29		PASS	
0850	134/135	23	IF	#1	700	70	30	30		PASS	
0905	135/136	27	AS	#2	700	70	30	29		PASS	
0913	134/136	350	AS	#2	700	70	30	30		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 1282 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-02-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0952	136/138	42	GP	#4	700	70	30	28		PASS	
0935	137/138	23	GP	#4	700	70	30	30		PASS	
0958	136/137	332	GP	#4	750	70	30	30		PASS	
0953	138/139	44	IF	#1	700	70	30	28		PASS	
0955	137/139	332	IF	#1	700	70	30	28		PASS	
1000	139/141	92	AS	#2	700	70	31	29		PASS	
0950	140/141	23	AS	#2	700	70	32	29		PASS	
1010	139/140	321	AS	#2	700	70	30	30		PASS	
1051	141/142	52	IF	#1	700	70	31	30		PASS	
1059	140/142	65	IF	#1	700	70	30	30		PASS	
1059	140/142	255	IF	#1	700	70	31	30		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 1581 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-02-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1056	142/144	50	GP	#4	700	70	31	30		PASS	
1045	143/144	23	GP	#4	700	70	30	29		PASS	
1102	142/143	318	GP	#4	750	70	30	28		PASS	
1135	144/145	50	AS	#2	700	70	30	28		PASS	
1135	143/145	156	AS	#2	700	70	30	30		PASS	
1135	146/143	149	AS	#2	700	70	31	28		PASS	
1100	146/145	150	AS	#2	700	70	32	30		PASS	
1150	145/148	51	IF	#1	700	70	30	29		PASS	
1137	147/148	23	IF	#1	700	70	31	30		PASS	
1154	145/147	330	IF	#1	700	70	30	29		PASS	
1148	148/149	70	GP	#4	700	70	31	30		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 1370 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-02-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1150	147/149	330	GP	#4	700	70	30	29		PASS	
1405	149/151	10	AS	#2	700	70	30	30		PASS	
1410	149/150	349	AS	#2	750	70	30	29		PASS	
1359	150/151	23	AS	#2	700	70	30	29		PASS	
1359	151/152	10	IF	#1	700	70	30	30		PASS	
1405	150/152	244	IF	#1	700	70	31	30		PASS	
1405	150/152	103	IF	#1	700	70	30	28		PASS	
1401	152/153	361	GP	#1	700	70	30	28		PASS	
1452	153/154	360	IF	#1	700	70	30	28		PASS	
1450	154/155	362	AS	#2	700	70	30	28		PASS	
1502	155/156	50	GP	#4	700	70	30	28		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 2202 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-02-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1502	155/156	225	GP	#4	700	70	30	28		PASS	
1502	155/156	85	GP	#4	700	70	30	28		PASS	

COMMENTS: TOTAL SEAMED 5049

DAILY TOTALS: LINER 156944 sq. ft., Length Seamed 310 ft., No. Destructs marked 9

(-)4

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-21-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
5/21	BF	300	PG	X#1	450	350			YES	PASS	BF-BOTTOM FLAP

COMMENTS: TOTAL SEAMED 4371 ft.

DAILY TOTALS: LINER 96474 sq. ft., Length Seamed 56 ft., No. Destructs marked 7

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-22-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
5/22	BF/MF	640	PG	X#1	450	350			YES	PASS	BF-BOTTOM FLAP/MF-MIDDLE FLAP

COMMENTS: TOTAL SEAMED 4371 ft.

DAILY TOTALS: LINER 96474 sq. ft., Length Seamed 56 ft., No. Destructs marked 7

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-24-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
5/24	TF	386	PG	X#1	450	350			YES	PASS	TF-TOP FLAP

COMMENTS: TOTAL SEAMED 4371 ft.

DAILY TOTALS: LINER 96474 sq. ft., Length Seamed 56 ft., No. Destructs marked 7

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 93 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1510	107/131	12	GP	#4	700	70	32	30		PASS	
1500	106/105	60	AS	#2	700	70	30	28		PASS	
1500	106/105	11	PG	#X1	350	450	X	X	YES	PASS	
1510	105/104	82	JM	#1	700	70	32	30		PASS	
1510	105/104	11	JM	#1	700	70	30	28		PASS	
1459	129/105	14	JM	#1	700	70	36	34		PASS	
1504	129/104	12	JM	#1	700	70	30	28		PASS	
1450	104/103	121	AS	#2	700	70	30	29		PASS	
1520	103/108	135	JM	#1	700	70	30	30		PASS	
1520	108/109	140	AS	#2	700	70	30	30		PASS	
1520	108/109	16	AS	#2	700	70	30	29		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 614 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 93 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
	109/110	170			700	70	30	30		PASS	
1528	110/112	80	JM	#1	700	70	31	29		PASS	
1528	110/111	125	JM	#1	350	70	30	30		PASS	
1528	111/112	23	JM	#1	700	70	30	29		PASS	
1600	112/113	80	AS	#2	700	70	30	28		PASS	
1600	111/113	125	AS	#2	700	70	32	30		PASS	
1610	113/114	214	GP	#4	700	70	30	30		PASS	
1635	114/116	61	JM	#1	700	70	30	29		PASS	
1635	114/115	183	JM	#1	700	70	31	28		PASS	
1635	115/116	23	JM	#1	700	70	31	30		PASS	
1650	116/117	61	JM	#1	700	70	30	28		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 1145 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0858	72/73	110	GP	#4	700	70	30	29		PASS	
0911	72/73	217	GP	#4	700	70	31	30		PASS	
0910	73/74	92	AS	#2	750	70	32	30		PASS	
0910	74/75	238	AS	#2	700	70	30	29		PASS	
0900	75/76	23	AS	#2	700	70	30	28		PASS	
0916	76/74	92	JM	#1	700	70	30	28		PASS	
0916	76/74	192	JM	#1	700	70	30	30		PASS	
0916	76/74	45	JM	#1	700	70	30	30		PASS	
0953	76/78	14	GP	#4	700	70	30	28		PASS	
0953	76/77	318	GP	#4	700	70	30	28		PASS	
0946	77/78	23	GP	#4	700	70	30	29		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 1364 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 93 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1000	77/79	306	AS	#2	700	70	30	28		PASS	
1000	77/79	10	AS	#2	700	70	30	30		PASS	
1010	79/80	309	JM	#1	750	70	32	30		PASS	
1040	80/82	295	GP	#4	700	70	30	30		PASS	
1040	80/81	103	GP	#4	700	70	30	28		PASS	
1030	81/82	23	GP	#4	700	70	30	29		PASS	
1040	82/83	178	AS	#2	700	70	31	30		PASS	
1040	83/81	103	AS	#2	700	70	32	32		PASS	
1100	87/84	266	JM	#1	700	70	30	28		PASS	
1122	84/85	253	AS	#2	700	70	30	30		PASS	
1125	85/86	239	GP	#4	700	70	31	29		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 2085 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 93 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1142	86/87	219	JM	#1	700	70	32	30		PASS	
1142	86/87	8	JM	#1	700	70	30	28		PASS	
1140	87/88	215	AS	#2	750	70	31	30		PASS	
1155	88/89	56	GP	#4	700	70	31	30		PASS	
1155	88/89	18	GP	#4	700	70	30	29		PASS	
1155	88/89	10	GP	#4	700	70	34	31		PASS	
1328	89/90	25	JM	#1	700	70	30	30		PASS	
1328	89/90	173	JM	#1	700	70	30	30		PASS	
1342	90/92	54	GP	#4	700	70	31	30		PASS	
1342	90/91	117	GP	#4	700	70	30	30		PASS	
1342	90/91	4	PG	#X1	350	450	X	X	YES	PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 899 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 93 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1334	91/92	23	GP	#4	700	70	31	29		PASS	
1335	92/93	53	AS	#2	700	70	34	33		PASS	
1335	93/91	90	AS	#2	700	70	33	30		PASS	
1335	93/91	10	PC	#X1	350	450	X	X	YES	PASS	
1335	93/91	20	AS	#2	700	70	30	29		PASS	
1400	93/94	151	JM	#1	700	70	31	30		PASS	
1406	94/95	138	GP	#4	700	70	30	29		PASS	
1410	95/96	127	AS	#2	700	70	30	30		PASS	
1431	96/98	45	JM	#1	700	70	31	30		PASS	
1431	96/97	69	JM	#1	700	70	30	30		PASS	
1425	97/98	23	AS	#2	700	70	33	30		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 749 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 93 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1430	98/99	40	AS	#2	700	70	31	30		PASS	
1430	97/99	30	AS	#2	700	70	30	30		PASS	
1430	97/99	38	AS	#2	700	70	30	29		PASS	
1430	99/100	80	GP	#4	700	70	31	29		PASS	
1430	99/100	2	GP	#4	700	70	X	X		PASS	
1443	100/101	62	GP	#4	700	70	32	30		PASS	
1452	101/102	40	GP	#4	700	70	33	33		PASS	
1513	102/130	9	GP	#4	700	70	33	33		PASS	
1513	102/130	5	GP	#4	700	70	32	31		PASS	
1506	102/106	20	GP	#4	700	70	30	30		PASS	
1506	106/131	10	GP	#4	700	70	30	28		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed 336 ft., No. Destructs marked _____

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-27-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
5/27	MF	493	PG	X#1	450	350			YES	PASS	MF-MIDDLE FLAP
5/27	MF	300	GP	X#3	450	350			YES	PASS	MF-MIDDLE FLAP

COMMENTS: TOTAL SEAMED 4371 ft.

DAILY TOTALS: LINER 96474 sq. ft., Length Seamed 56 ft., No. Destructs marked 7

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 05-28-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
5/28	BF	250	IF	X#3	450	350			YES	PASS	BF-BOTTOM FLAP
5/28	BF	350	PG	X#1	450	350			YES	PASS	BF-BOTTOM FLAP

COMMENTS: TOTAL SEAMED 4371 ft.

DAILY TOTALS: LINER 96474 sq. ft., Length Seamed 56 ft., No. Destructs marked 7

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-07-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1313	156/157	358	GP	#4	700	70	30	30		PASS	
1313	156/157	2	PG	#X1	450	350	X	X	YES		
1320	157/158	360	AS	X#2	750	450	30	29		PASS	
1410	158/159	363	AS	X#2	700	70	31	30		PASS	
1400	159/160	361	KM	#1	700	70	31	30		PASS	
1404	160/161	363	GP	#4	700	70	30	29		PASS	
1424	161/162	359	KM	#1	700	70	31	29		PASS	
1453	162/163	352	GP	#4	700	70	30	28		PASS	
1453	162/163	4	PG	#X1	450	350	X	X	YES		
		2522									

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed 2552 ft., No. Destructs marked 5

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-14-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1235	163/164	345	AS	#2	700	70	30	28		PASS	
1600	163/164	9	PG	#X1	450	350	X	X	YES		
1245	164/165	293	KM	X#2	700	450	30	28		PASS	
1245	164/165	45	KM	X#2	700	70	31	29		PASS	
1615	164/165	15	PG	#X1	450	350	X	X	YES		
1302	165/166	95	GP	#4	700	70	30	30		PASS	
1302	165/166	80	GP	#4	700	70	32	29		PASS	
1302	165/166	150	GP	#4	700	70	32	30		PASS	
1302	165/166	12	GP	#4	700	70	30	30		PASS	
1302	165/166	10	PG	#X1	450	350	X	X	YES		
1320	167/168	351	AS	#2	700	70		29		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 1405 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-14-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1425	167/169	40	AS	#2	700	70	30	29		PASS	
1425	167/169	268	AS	#2	700	70	30	30			
1425	167/168	40	AS	#2	700	70	30	29		PASS	
1410	169/168	23	AS	#2	700	70	32	30		PASS	
1257	169/170	310	KM	#1	700	70	30	29			
1257	168/170	41	KM	#1	700	70	30	29		PASS	
1403	170/172	269	GP	#4	700	70	31	30		PASS	
1429	171/170	82	GP	#4	700	70	32	30		PASS	
1415	171/172	23	AS	#2	700	70	32	29		PASS	
1448	173/172	265	GP	#4	700	70	30	28			
1530	173/171	82	GP	#4	700	70	31	28		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 1443 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-14-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1450	173/175	220	KM	#1	700	70	30	30		PASS	
1450	173/174	125	KM	#1	700	70	31	30		PASS	
1630	173/174	5	PG	#X1	450	350	X	X	YES	PASS	
1630	175/174	23	AS	#2	700	70	32	30		PASS	
1545	176/175	140	AS	#2	700	70	31	30		PASS	
1545	176/174	130	AS	#2	700	70	30	28		PASS	
1635	175/R274	23	AS	#2	700	70	31	30		PASS	
1635	175/R275	23	AS	#2	700	70	31	30		PASS	
1635	175/R276	23	AS	#2	700	70	30	28		PASS	
1620	176/R274	23	AS	#2	700	70	30	29		PASS	
1620	176/R275	23	AS	#2	700	70	30	28		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 758 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-14-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1630	176/R276	23	AS	#2	700	70	30	30		PASS	
1600	176/178	169	KM	#1	700	70	32	30		PASS	
1600	176/177	180	KM	#1	700	70	31	29		PASS	
1555	177/178	23	GP	#4	700	70	31	30		PASS	
1608	178/179	169	GP	#4	700	70	31	31		PASS	
1625	177/179	181	GP	#4	700	70	31	30		PASS	
1655	179/181	113	AS	#2	700	70	31	30		PASS	
1710	179/180	230	AS	#2	700	70	30	30		PASS	
1703	180/181	23	AS	#2	700	70	30	30		PASS	
1656	181/182	115	KM	#1	700	70	31	30		PASS	
1725	180/182	230	KM	#1	700	70	30	30		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 1456 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-14-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1716	182/184	62	GP	#4	700	70	33	31		PASS	
1730	182/183	285	GP	#4	700	70	31	30		PASS	
1708	183/184	23	GP	#4	700	70	30	30		PASS	
1730	184/185	63	AS	#2	700	70	32	32		PASS	
1745	183/185	100	AS	#2	700	70	32	30		PASS	
1803	183/185	184	AS	#2	700	70	31	30		PASS	
		717									

COMMENTS:

DAILY TOTALS: LINER sq. ft., Length Seamed 5479 ft., No. Destructs marked 10

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-16-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 95 WIND: CALM WEATHER: AM 72 PM 95

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1330	192/193	23	KM	#1	700	70	31	29		PASS	
1403	193/194	207	GP	#4	700	70	30	30		PASS	
1403	192/194	127	GP	#4	700	70	30	30		PASS	
1410	194/196	123	AS	#2	700	70	30	30		PASS	
1410	194/195	207	AS	#2	700	70	32	30		PASS	
1352	195/196	23	KM	#1	700	70	31	31		PASS	
1428	196/197	123	KM	#1	700	70	31	30		PASS	
1500	197/195	207	KM	#1	700	70	30	30		PASS	
1454	197/199	19	GP	#4	700	70	31	31		PASS	
1500	197/198	300	GP	#4	700	70	30	30		PASS	
1448	198/199	231	GP	#4	700	70	30	29		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 1590 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-16-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 95 WIND: CALM WEATHER: AM 72 PM 95

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1222	185/186	343	GP	#2	700	70	30	29		PASS	
1230	186/187	339	KM	#1	700	70	31	29		PASS	
1230	186/187	3	PG	x#2	450	350	x	x	YES	PASS	
1230	187/188	342	AS	#2	700	70	30	30		PASS	
1315	188/190	282	GP	#4	700	70	30	28		PASS	
1315	188/189	59	GP	#4	700	70	30	30		PASS	
1303	189/190	23	GP	#4	700	70	32	30		PASS	
1315	190/191	282	AS	#2	700	70	31	30		PASS	
1315	189/191	60	AS	#2	700	70	32	29		PASS	
1320	191/193	205	KM	#1	700	70	32	32		PASS	
1320	191/192	127	KM	#1	700	70	30	30		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 2065 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-16-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 95 WIND: CALM WEATHER: AM 72 PM 95

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1505	199/200	20	AS	#2	700	70	30	30		PASS	
1512	198/200	301	AS	#2	700	70	31	31		PASS	
1520	200/201	320	KM	#1	700	70	32	32		PASS	
1546	201/203	247	GP	#4	700	70	30	28		PASS	
1615	201/202	71	GP	#4	700	70	31	30		PASS	
1330	201/203	23	GP	#4	700	70	30	30		PASS	
1600	203/204	247	AS	#2	700	70	31	30		PASS	
1630	202/204	71	AS	#2	700	70	31	29		PASS	
1610	204/206	133	KM	#1	700	70	31	30		PASS	

COMMENTS: Total seamed today 5088

DAILY TOTALS: LINER sq. ft., Length Seamed 1433 ft., No. Destructs marked 10

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-18-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 96 WIND: CALM WEATHER: AM 74 PM 96

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0800	Mid Flap	350	PG	MX1	450	350	X	X	YES	PASS	
0820	Top Flap	70	KM	MX3	400	300	X	X	YES	PASS	
		420									

COMMENTS:

DAILY TOTALS: LINER sq. ft., Length Seamed 420 ft., No. Destructs marked 0

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-21-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 80 WIND: CALM WEATHER: AM 61 PM 80

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0700	Mid Flap	210	PG	MX1	450	350	X	X	YES	PASS	
0710	Bottom Flap	190	KM	MX3	400	300	X	X	YES	PASS	
1210	Mid Flap	420	PG	MX1	450	350	X	X	YES	PASS	
1215	Bottom Flap	444	KM	MX3	400	300	X	X	YES	PASS	
		1264									

COMMENTS:

DAILY TOTALS: LINER sq. ft., Length Seamed 1264 ft., No. Destructs marked 0

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-23-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 95 WIND: CALM WEATHER: AM 72 PM 95

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0805	210/211	135	KM	#2	700	70	32	30		PASS	
0816	210/211	10	KM	#2	700	70	30	29		PASS	
0820	211/212	140	KM	#2	700	70	32	30		PASS	
0820	211/212	9	KM	#2	700	70	30	30		PASS	
0830	212/214	100	AS	#3	700	70	31	30		PASS	
0839	212/213	50	AS	#3	700	70	35	33		PASS	
0820	213/214	23	AS	#3	700	70	32	30		PASS	
0845	215/214	100	AS	#3	700	70	31	28		PASS	
0850	215/213	50	AS	#3	700	70	31	29		PASS	
0835	215/216	153	KM	#2	700	70	31	28		PASS	
0900	216/218	74	KM	#2	700	70	31	28		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 844 ft.; No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-23-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 95 WIND: CALM WEATHER: AM 72 PM 95

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0852	216/217	80	KM	#2	700	70	31	30		PASS	
0852	217/218	23	KM	#2	700	70	31	30		PASS	
0905	218/219	74	AS	#3	700	70	32	30		PASS	
0915	219/217	80	AS	#3	700	70	32	29		PASS	
0920	219/220	159	KM	#2	700	70	31	29		PASS	
0930	220/222	64	AS	#3	700	70	30	28		PASS	
0930	220/221	98	AS	#3	700	70	31	30		PASS	
0920	221/222	23	AS	#3	700	70	31	29		PASS	
1010	222/223	64	KM	#2	700	70	32	30		PASS	
1020	221/223	98	KM	#2	700	70	32	29		PASS	
1015	223/224	166	AS	#3	700	70	32	29		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 929 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-23-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 95 WIND: CALM WEATHER: AM 72 PM 95

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1032	224/226	75	KM	#2	700	70	32	30		PASS	
1032	224/225	93	KM	#2	700	70	32	31		PASS	
1111	227/225	83	AS	#3	700	70	31	30		PASS	
1111	227/225	9	AS	#3	700	70	30	30		PASS	
1025	226/225	23	KM	#2	700	70	32	30		PASS	
1100	226/227	75	AS	#3	700	70	32	30		PASS	
1100	227/228	170	KM	#2	700	70	32	30		PASS	
1129	228/230	92	AS	#3	700	70	31	29		PASS	
1129	228/229	79	AS	#3	700	70	32	30		PASS	
1115	229/230	23	AS	#3	700	70	31	28		PASS	
1125	230/231	92	KM	#2	700	70	32	30		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 814 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-23-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 95 WIND: CALM WEATHER: AM 72 PM 95

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1136	229/231	50	KM	#2	700	70	32	30		PASS	
1141	229/231	28	KM	#2	700	70	30	28		PASS	
1145	231/232	175	AS	#3	700	70	30	30		PASS	
1155	232/234	126	KM	#2	700	70	30	30		PASS	
1203	232/233	51	KM	#2	700	70	30	30		PASS	
1150	233/234	23	KM	#2	700	70	31	29		PASS	
		453									

COMMENTS:

DAILY TOTALS: LINER sq. ft., Length Seamed 3040 ft., No. Destructs marked 5

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-24-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 80 WIND: CALM WEATHER: AM 61 PM 80

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0700	Bottom Flap	381	PG	MX1	450	350	X	X	YES	PASS	
0710	Bottom Flap	332	GP	MX3	400	300	X	X	YES	PASS	
		713									

COMMENTS:

DAILY TOTALS: LINER sq. ft., Length Seamed 713 ft., No. Destructs marked 0

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 88 WIND: CALM WEATHER: AM 72 PM 88

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1315	246/248	172	AS	#2	700	70	30	29		PASS	
1340	248/249	191	AS	#2	700	70	30	29		PASS	
1345	249/251	107	KM	#1	700	70	31	29		PASS	
1358	250/249	74	KM	#1	700	70	32	30		PASS	
1358	250/249	11	KM	#1	700	70	32	30		PASS	
1300	250/251	23	KM	#1	700	70	30	30		PASS	
1405	251/252	107	AS	#2	700	70	34	31		PASS	
1418	250/252	86	AS	#2	700	70	30	29		PASS	
1430	252/254	19	KM	#1	700	70	30	30		PASS	
1433	252/253	181	KM	#1	700	70	31	29		PASS	
1425	253/254	23	KM	#1	700	70	30	30		PASS	

COMMENTS: 994

DAILY TOTALS: LINER sq. ft., Length Seamed 2892 ft., No. Destructs marked 5

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 88 WIND: CALM WEATHER: AM 72 PM 88

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1030	234/235	126	KM	#1	700	70	31	28		PASS	
1030	233/235	51	KM	#1	700	70	30	30		PASS	
1035	236/235	178	AS	#2	700	70	32	30		PASS	
1040	236/237	179	KM	#1	700	70	32	30		PASS	
1100	237/238	179	AS	#2	700	70	33	30		PASS	
1122	238/240	54	KM	#1	700	70	30	28		PASS	
1122	238/239	126	KM	#1	700	70	30	30		PASS	
1118	239/240	23	KM	#1	700	70	31	28		PASS	
1125	240/241	54	AS	#2	700	70	31	30		PASS	
1130	239/241	125	AS	#2	700	70	32	30		PASS	
1130	241/242	154	GP	#4	700	70	31	29		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 1249 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 88 WIND: CALM WEATHER: AM 72 PM 88

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1140	241/242	27	GP	#4	700	70	30	30		PASS	
1148	242/244	120	KM	#1	700	70	31	30		PASS	
1148	243/243	65	KM	#1	700	70	33	30		PASS	
1135	243/244	23	KM	#1	700	70	28	27		PASS	
1150	244/245	120	AS	#2	700	70	31	28		PASS	
1201	245/243	65	AS	#2	700	70	30	28		PASS	
1318	247/245	16	KM	#1	700	70	30	28		PASS	
1322	245/246	165	KM	#1	700	70	31	30		PASS	
1322	245/246	9	KM	#1	700	70	30	30		PASS	
1300	247/246	23	KM	#1	700	70	31	30		PASS	
1310	247/248	16	AS	#2	700	70	31	28		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 649 ft., No. Destructs marked

CDM

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-73 PM 88 WIND: CALM WEATHER: AM 63 PM 88

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1445	R-351	246/247/248 2*1	PG	M#x3	550/300	YES	PASS	AIR TEST
1440	R-352	246/248 3' BOS 3*2	PG	M#x3	550/300	YES	PASS	DESTRUCT-96
1500	R-353	250/249 12' EOS 2*1	PG	M#x3	550/300	YES	PASS	BURN OUT
1515	R-354	250/249 5' BOS 3*2	PG	M#x3	550/300	YES	PASS	DESTRUCT-97
1520	R-355	249/250/251 2*1	PG	M#x3	550/300	YES	PASS	AIR TEST
1525	R-356	250/251/252 2*1	PG	M#x3	550/300	YES	PASS	AIR TEST
1545	R-357	252/253/254 2*1	PG	M#x3	550/300	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-29-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 88 WIND: CALM WEATHER: AM 72 PM 88

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1300	254/255	15	PG	#1	500	200	X	X	YES	PASS	
1303	254/255	4	GP	#4	700	70	32	32		PASS	
1305	253/255	170	GP	#4	700	70	31	30		PASS	
1305	253/255	5	PG	#1	500	250	X	X	YES	PASS	
1305	253/255	6	GP	#4	700	70	30	29		PASS	
1315	256/255	179	AS	#2	700	70	31	29		PASS	
1315	256/255	24	AS	#2	700	70	31	29		PASS	
1344	256/258	183	GP	#4	700	70	31	30		PASS	
1344	257/256	31	GP	#4	700	70	31	30		PASS	
1335	257/258	23	GP	#4	700	70	30	29		PASS	
1345	258/259	183	AS	#2	700	70	32	30		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 823 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-29-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 88 WIND: CALM WEATHER: AM 72 PM 88

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1400	259/257	19	AS	#2	700	70	30	29		PASS	
1407	259/257	10	AS	#2	700	70	30	30		PASS	
1419	261/259	144	GP	#4	700	70	30	28		PASS	
1419	259/260	82	GP	#4	700	70	30	30		PASS	
1415	260/261	12	AS	#2	700	70	31	30		PASS	
1417	260/261	11	AS	#2	700	70	31	31		PASS	
1425	261/262	144	AS	#2	700	70	30	30		PASS	
1441	260/262	82	AS	#2	700	70	30	30		PASS	
1530	262/264	50	AS	#2	700	70	31	30		PASS	
1530	262/264	20	AS	#2	700	70	30	28		PASS	
1452	263/264	23	GP	#4	700	70	32	31		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 597 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-29-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 88 WIND: CALM WEATHER: AM 72 PM 88

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1505	262/263	30	AS	#2	700	70	31	30		PASS	
1505	262/263	76	AS	#2	700	70	32	32		PASS	
1505	264/265	126	GP	#4	700	70	30	28		PASS	
1520	263/265	100	GP	#4	700	70	31	31		PASS	
1520	263/265	7	GP	#4	700	70	31	31		PASS	
1515	262/R-413	23	AS	#2	700	70	31	29		PASS	
1520	262/R-414	23	AS	#2	700	70	30	29		PASS	
1525	262/R-415	23	AS	#2	700	70	30	30		PASS	
1455	264/R-413	23	AS	#2	700	70	30	29		PASS	
1500	264/R-414	23	AS	#2	700	70	31	30		PASS	
1510	264/R-415	23	AS	#2	700	70	30	29		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 477 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-29-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 88 WIND: CALM WEATHER: AM 72 PM 88

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1600	265/267	41	AS	#2	700	70	31	29		PASS	
1610	265/267	98	AS	#2	700	70	31	30		PASS	
1619	265/266	40	AS	#2	700	70	31	30		PASS	
1625	265/266	62	AS	#2	700	70	30	30		PASS	
1540	266/267	23	GP	#4	700	70	30	30		PASS	
1550	267/268	138	GP	#4	700	70	30	29		PASS	
1605	267/268	98	GP	#4	700	70	31	30		PASS	
1616	267/268	7	GP	#4	700	70	30	30		PASS	
		507									

COMMENTS:

DAILY TOTALS: LINER sq. ft., Length Seamed 2404 ft., No. Destructs marked 4

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-30-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 86 WIND: CALM WEATHER: AM 72 PM 86

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1245	268/270	157	AS	#2	700	70	30	30		PASS	
1245	268/269	95	AS	#2	700	70	31	29		PASS	
1240	269/270	23	AS	#2	700	70	30	30		PASS	
1244	270/271	157	GP	#4	700	70	31	29		PASS	
1244	269/271	95	GP	#4	700	70	30	28		PASS	
1440	276/271	219	AS	#2	700	70	31	28		PASS	
1447	276/277	209	GP	#4	700	70	31	29		PASS	
1500	277/278	190	AS	#2	700	70	31	30		PASS	
1515	279/274	163	GP	#4	700	70	31	30		PASS	
1530	278/280	142	AS	#2	700	70	31	29		PASS	
1546	280/281	120	GP	#4	700	70	31	30		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 1570 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-30-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 86 WIND: CALM WEATHER: AM 72 PM 86

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1545	281/282	100	AS	#2	700	70	30	28		PASS	
1605	282/283	69	GP	#4	700	70	30	28		PASS	
1640	283/284	42	AS	#2	700	70	32	32		PASS	
1655	284/285	16	AS	#2	700	70	30	28		PASS	
1425	273/275	20	GP	#4	700	70	32	30		PASS	
1330	209/273	231	GP	#4	700	70	30	28		PASS	
1340	209/272	50	GP	#4	700	70	31	29		PASS	
1330	209/272	10	PG	#X3	550	350	X	X		PASS	
1325	273/272	23	GP	#4	700	70	30	30		PASS	
1330	273/274	211	AS	#2	700	70	30	30		PASS	
1330	272/274	62	AS	#2	700	70	30	30		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 834 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 06-30-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 86 WIND: CALM WEATHER: AM 72 PM 86

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
1420	274/275	23	AS	#2	700	70	32	30		PASS	

COMMENTS:

DAILY TOTALS: LINER sq. ft., Length Seamed 2427 ft., No. Destructs marked 4

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 07-01-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 86 WIND: CALM WEATHER: AM 72 PM 86

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0625	278/255	7	AS	#2	700	70	30	29		PASS	
0627	278/254	30	AS	#2	700	70	31	31		PASS	
0634	278/283	27	AS	#2	700	70	31	31		PASS	
0640	278/282	28	AS	#2	700	70	30	29		PASS	
0646	278/281	28	AS	#2	700	70	30	28		PASS	
0652	278/280	27	AS	#2	700	70	31	30		PASS	
0659	278/279	28	AS	#2	700	70	32	30		PASS	
0710	275/276	8	AS	#2	700	70	30	28		PASS	
0713	276/274	18	AS	#2	700	70	32	31		PASS	
0718	277/274	25	AS	#2	700	70	30	28		PASS	
0724	278/274	25	AS	#2	700	70	31	29		PASS	

COMMENTS: see last page for totals

DAILY TOTALS: LINER sq. ft., Length Seamed 251 ft., No. Destructs marked

CDM

FORM CQC - 106
SEAMING LOG
(one sheet per day)

DATE: 07-01-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-80 PM 86 WIND: CALM WEATHER: AM 72 PM 86

			INSTALLATION				WEDGE WELD		EXTRUSION WELD		
TIME	SEAM NO.	LENGTH	TECH.	MACH ID. NO.	MACH. TEMP.	SPEED	START PSI	FINISH PSI	VAC TEST YES/NO	PASS/ FAIL	COMMENTS
0750	275/271	27	PG	#X1	550	350	X	X		PASS	
0630	275/271	27	PG	#X1	550	350	X	X		PASS	
		54									

COMMENTS:

DAILY TOTALS: LINER sq. ft., Length Seamed 305 ft., No. Destructs marked 0

CDM

Appendix B-10

LLDPE Liner Destructive Testing Log (CQC-108)

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
5-13-04	DS-01	P2/P3	#2	AS	72	71	68				PASS	5-13-04	PASS	P2/P3 150"BOS
5-13-04	DS-02	P6/P7	#4	GP	69	67	71				PASS	5-13-04	PASS	P6/P7 50' BOS
5-13-04	DS-03	P7/P9	#1	JM	74	74	73				PASS	5-13-04	PASS	P7/P9 60' BOS
5-13-04	DS-04	P8/P9	#2	AS	68/64	71	69				PASS	5-13-04	PASS	P8/P9 12' BOS
5-13-04	DS-05	P8/P10	#2	AS	79/80	82	78				PASS	5-13-04	PASS	P8/P10 25' BOS
5-13-04	DS-06	P11/P13	#1	JM	73/69	73	71				PASS	5-13-04	PASS	P11/P13 35' EOS
5-13-04	DS-07	P14/P15	#4	GP	71/73	74	76				PASS	5-13-04	PASS	P14/P15 150' BOS
5-13-04	DS-08	P16/P18	#2	AS	71/73	79	73				PASS	5-13-04	PASS	P16/P17 25' BOS
5-13-04	DS-09	P20/P23	#1	JM	72/69	70	70				PASS	5-13-04	PASS	P20/P23 90' BOS
5-13-04	DS-10	P21/P27	#1	JM	77/68	74	74				PASS	5-13-04	PASS	P21/P27 88' BOS
5-13-04	DS-11	P29/P30	#4	GP	66/64	67	64				PASS	5-13-04	PASS	P29/P30 70' BOS
5-13-04	DS-12	P31/P33	#2	AS	71/71	76	79				PASS	5-13-04	PASS	P31/P33 30' BOS
5-13-04	DS-13	P33/P35	#4	GP	74	76	76				PASS	5-13-04	PASS	P33/P35 140' BOS
5-13-04	DS-14	P36/P37	#2	AS	69/69	71	73				PASS	5-13-04	FAILED	P36/P37 197' BOS
5-13-04	DS-15	P38/P40	#4	GP	77/69	74	71				PASS	5-13-04	PASS	P38/P40 20' BOS

CDM

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
5-18-04	DS-16	P41/P45	#1	JM	68/71	71	71				PASS	5-18-04	PASS	50' BOS
5-18-04	DS-17	P44/P45	#4	GP	73/73	74	77				PASS	5-18-04	PASS	40' BOS
5-18-04	DS-18	P48/P50	#2	AS	69/74	73	70				PASS	5-18-04	PASS	103' BOS
5-18-04	DS-19	P50/P51	#1	JM	80/78	81	80				PASS	5-18-04	PASS	85' BOS
5-18-04	DS-20	P53/P54	#4	GP	73/71	74	74				PASS	5-18-04	PASS	53' BOS

CDM

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
5-20-04	DS-21	P54/P56	#4	GP	70/75	75	76				PASS	5-20-04	PASS	P54/P56 307' EOS
5-20-04	DS-22	P57/P58	#1	JM	71/70	77	71				PASS	5-20-04	PASS	P57/P58 507' BOS
5-20-04	DS-23	P59/P60	#4	GP	80/76	78	73				PASS	5-20-04	PASS	P59/P60 157' BOS
5-20-04	DS-24	P61/P64	#4	GP	75/75	74	75				PASS	5-20-04	PASS	P60/P61,P62 210' BOS
5-20-04	DS-25	P66/P67	#1	JM	73/75	75	80				PASS	5-20-04	PASS	P66/P67 110' BOS
5-20-04	DS-26	P9/P70	#4	GP	75/75	71	74				PASS	5-20-04	PASS	P69/P70 67' BOS
5-20-04	DS-27	P71/P72	#1	JM	74/77	76	75				PASS	5-20-04	PASS	P71/P72 120' BOS

CDM

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
5-25-04	DS-28	P72/P73	#4	GP	70/70	72	69				PASS	5-25-04	PASS	20' BOS
5-25-04	DS-29	P75/P76	#2	JM	72/82	71	74				PASS	5-25-04	PASS	8' BOS
5-25-04	DS-30	P77/P79	#2	AS	71/64	73	73				PASS	5-25-04	PASS	112' BOS
5-25-04	DS-31	P80/P82	#4	GP	71/76	71	76				PASS	5-25-04	PASS	153' BOS
5-25-04	DS-32	P83/P84	#1	JM	71/79	77	69				PASS	5-25-04	PASS	150' BOS
5-25-04	DS-33	P85/P86	#4	GP	71/69	72	68				PASS	5-25-04	PASS	199' BOS
5-25-04	DS-34	P86/P87	#1	JM	66/69	65	71				PASS	5-25-04	PASS	70' BOS
5-25-04	DS-35	P88/P89	#4	GP	69/66	68	70				PASS	5-25-04	PASS	91' BOS
5-25-04	DS-36	P90/P92	#4	GP	80/83	81	76				PASS	5-25-04	PASS	47' BOS
5-25-04	DS-37	P93/P94	#1	JM	79/71	78	76				PASS	5-25-04	PASS	20' BOS
5-25-04	DS-38	P95/P96	#2	AS	77/79	73	80				PASS	5-25-04	PASS	25' BOS
5-25-04	DS-39	P99/P100	#4	GP	70/79	70	71				PASS	5-25-04	PASS	10' BOS
5-25-04	DS-40	P103/P104	#2	AS	72/71	69	72				PASS	5-25-04	PASS	20' BOS
5-25-04	DS-41	P109/P110	#2	AS	76/74	79	72				PASS	5-25-04	PASS	59' BOS
5-25-04	DS-42	P111/P113	#2	AS	70/69	70	68				PASS	5-25-04	PASS	100' EOS
5-25-04	DS-43	P114/P115	#1	JM	62/72	68	71				PASS	5-25-04	PASS	60' BOS

CDM

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
5-25-04	DS-44	P117/P118	#4	GP	70/73	74	77				PASS	5-25-04	PASS	55' BOS
5-25-04	DS-45	P120/P121	#1	JM	72/73	71	75				PASS	5-25-04	PASS	80' BOS
5-25-04	DS-46	P122/P123	#1	JM	70/73	73	75				PASS	5-25-04	PASS	ANCHOR TRENCH
5-25-04	DS-47	P125/127	#4	GP	74/73	72	75				PASS	5-25-04	PASS	25' EOS

CDM

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
06-02-04	DS-48	128/135	#4	GP	66/68	74	71				PASS	6-03-04	PASS	
06-02-04	DS-49	134/136	#2	AS	71/69	66	74				PASS	6-03-04	PASS	
06-02-04	DS-50	137/139	#1	IF	60/72	72	73				PASS	6-03-04	PASS	
06-02-04	DS-52	140/142	#1	IF	75/72	67	77				PASS	6-03-04	PASS	
06-02-04	DS-53	143/145	#2	AS	70/67	67	69				PASS	6-03-04	PASS	
06-02-04	DS-54	P147/P149	#4	GP	74/75	72	71				PASS	6-03-04	PASS	
06-02-04	DS-55	P150/P152	#1	IF	73/71	66	74				PASS	6-03-04	PASS	
06-02-04	DS-56	P153/P154	#1	IF	73/71	75	69				PASS	6-03-04	PASS	
06-02-04	DS-57	149/150	#2	AS	71/69	74	72				PASS	6-03-04	PASS	
06-02-04	DS-58	152/154	#1	IF	74/73	77	76				PASS	6-03-04	PASS	
06-02-04	DS-59	155/156	#4	GP	70/74	74	73				PASS	6-03-04	PASS	

CDM

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
06-07-04	DS-60	P156/P157	#4	GP	68/75	72	72				PASS	6-07-04	PASS	
06-07-04	DS-61	P157/P158	#2	AS	74/75	76	77				PASS	6-07-04	PASS	
06-07-04	DS-62	P158/P159	#2	AS	67/75	73	74				PASS	6-07-04	PASS	
06-07-04	DS-63	P159/P160	#1	KM	72/78	78	77				PASS	6-07-04	PASS	
06-07-04	DS-64	P160/P161	#4	GP	76/71	72	71				PASS	6-07-04	PASS	
06-07-04	DS-65	P161/P162	#1	KM	71/72	74	73				PASS	6-07-04	PASS	

CDM

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
6-15-04	DS-66	163/164	#2	AS	81/81	82	76				PASS	6-15-04	PASS	
6-15-04	DS-67	164/165	#1	KM	90/75	81	84				PASS	6-15-04	PASS	
6-15-04	DS-68	166/167	#2	AS	81/87	87	85				PASS	6-15-04	PASS	
6-15-04	DS-69	169/170	#1	KM	90/85	85	88				PASS	6-15-04	PASS	
6-15-04	DS-70	170/172	#4	GP	81/81	75	83				PASS	6-15-04	PASS	
6-15-04	DS-71	172/173	#4	GP	80/81	76	80				PASS	6-15-04	PASS	
6-15-04	DS-72	173/175	#1	KM	89/89	90	87				PASS	6-15-04	PASS	
6-15-04	DS-73	176/178	#1	KM	87/82	84	88				PASS	6-15-04	PASS	
6-15-04	DS-74	168/169	#4	GP	82/81	84	86				PASS	6-15-04	PASS	
6-15-04	DS-75	181/182	#1	KM	77/79	80	78				PASS	6-15-04	PASS	

CDM

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
6-17-04	DS-76	182/183	#4	GP	82/77	81	78				PASS	6-17-04	PASS	
6-17-04	DS-77	185/186	#4	GP	72/73	80	71				PASS	6-17-04	PASS	
6-17-04	DS-78	186/187	#1	KM	81/75	73	81				PASS	6-17-04	PASS	
6-17-04	DS-79	188/190	#4	GP	76/78	75	72				PASS	6-17-04	PASS	
6-17-04	DS-80	190/191	#2	AS	76/76	88	83				PASS	6-17-04	PASS	
6-17-04	DS-81	194/196	#2	AS	77/75	75	77				PASS	6-17-04	PASS	
6-17-04	DS-82	193/194	#4	GP	86/86	83	82				PASS	6-17-04	PASS	
6-17-04	DS-83	197/194	#4	GP	76/76	76	77				PASS	6-17-04	PASS	
6-17-04	DS-84	200/201	#1	KM	79/80	81	80				PASS	6-17-04	PASS	
6-17-04	DS-85	201/203	#4	GP	88/87	87	87				PASS	6-17-04	PASS	
6-17-04	DS-86	204/206	#1	KM	90/89	83	80				PASS	6-17-04	PASS	
6-17-04	DS-87	207/208	#4	GP	91/89	91	91				PASS	6-17-04	PASS	

CDM

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
6-23-04	DS-88	214/215	#2	KM	60/59	66	63				PASS	6-17-04	PASS	
6-23-04	DS-89	217/218	#3	AS	63/65	61	66				PASS	6-17-04	PASS	
6-23-04	DS-90	222/223	#2	KM	64/63	66	69				PASS	6-17-04	PASS	
6-23-04	DS-91	226/227	#3	AS	64/68	66	67				PASS	6-17-04	PASS	
6-23-04	DS-92	230/231	#2	KM	57/69	65	55				PASS	6-17-04	PASS	

CDM

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
6-25-04	DS-93	234/236	#1	KM	94/84	79	90				PASS	6-17-04	PASS	
6-25-04	DS-94	239/241	#2	AS	72/83	89	88				PASS	6-17-04	PASS	
6-25-04	DS-95	242/243	#1	KM	80/70	82	61				PASS	6-17-04	PASS	
6-25-04	DS-96	244/248	#2	AS	84/74	89	84				PASS	6-17-04	PASS	
6-25-04	DS-97	249/250	#1	KM	84/88	88	88				PASS	6-17-04	PASS	

CDM

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
6-29-04	DS-98	253/255	#4	GP	94/84	79	90				PASS	6-17-04	PASS	
6-29-04	DS-99	256/258	#4	GP	72/83	89	88				PASS	6-17-04	PASS	
6-29-04	DS-100	259/261	#4	GP	80/70	82	61				PASS	6-17-04	PASS	
6-29-04	DS-101	265/264	#4	GP	84/74	89	84				PASS	6-17-04	PASS	
6-29-04	DS-102	267/268	#4	GP	84/88	88	88				PASS	6-17-04	PASS	

CDM

FORM CQC - 108
DESTRUCTIVE TEST LOG

JOB NAME: North Wake Subtitle D Land Fill Phase I closure JOB NO.: 6172-42378 MATERIAL: LLDPE

DATE CUT	SAMPLE I.D.	SEAM NO.	MACH. ID NO.	SEAMER INITIALS	PEEL TEST LBS./INCH			SHEAR TEST LBS./INCH			PASS/ FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS/FAIL	LOCATION/ COMMENT
7-01-04	DS-103	268/269	#2	AS	62/71	67	69				PASS	7-01-04	PASS	
7-01-04	DS-104	269/273	#4	GP	71/77	69	73				PASS	7-01-04	PASS	
7-01-04	DS-105	279/278	#2	AS	70/69	72	73				PASS	7-01-04	PASS	
7-01-04	DS-106	280/281	#4	GP	66/69	66	69				PASS	7-01-04	PASS	

CDM

Appendix B-11

LLDPE Liner Destructive Laboratory Testing

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-01
LAB ID NO.: 2004-S006-01-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-1

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	96.1	FTB-SE1	<10
2	94.3	FTB-SE1	<10
3	93.0	FTB-SE1	<10
4	95.2	FTB-SE1	<10
5	92.7	FTB-SE1	<10
AVERAGE	94.3		
STD. DEV.	1.44		
INSIDE TRACK (WELD "B")			
1	92.8	FTB-SE1	<10
2	92.2	FTB-SE1	<10
3	90.8	FTB-SE1	<10
4	90.4	FTB-SE1	<10
5	90.2	FTB-SE1	<10
AVERAGE	91.3		
STD. DEV.	1.15		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	96.5	FTB-SE1
2	97.9	FTB-SE1
3	96.9	FTB-SE1
4	96.7	FTB-SE1
5	98.6	FTB-SE1
AVERAGE	97.3	
STD. DEV.	0.90	

CHECKED BY: MMS DATE: 5-14-04

C:\My Documents\EXOIL\Translations\HDP&S-DFusion.xls]Shear1
C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-01-01

5/14/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-01
LAB ID NO.: 2004-S006-01-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-2

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	92.0	FTB-SE1	<10
2	89.4	FTB-SE1	<10
3	87.8	FTB-SE1	<10
4	87.4	FTB-SE1	<10
5	88.6	FTB-SE1	<10
AVERAGE	89.0		
STD. DEV.	1.82		
INSIDE TRACK (WELD "B")			
1	88.0	FTB-SE1	<10
2	87.1	FTB-SE1	<10
3	90.5	FTB-SE1	<10
4	87.9	FTB-SE1	<10
5	90.2	FTB-SE1	<10
AVERAGE	88.7		
STD. DEV.	1.51		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	96.4	FTB-SE1
2	100.8	FTB-SE1
3	98.1	FTB-SE1
4	96.0	FTB-SE1
5	96.1	FTB-SE1
AVERAGE	97.5	
STD. DEV.	2.04	

CHECKED BY: MPS DATE: 5-14-04

C:\My Documents\EXCEL\Templates\[HDPE3-DFusion.xls]Shear1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-01-02 5/14/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0480

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-01
LAB ID NO.: 2004-S006-01-03
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-3

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	85.0	FTB-SE1	<10
2	83.2	FTB-SE1	<10
3	88.5	FTB-SE1	<10
4	67.8	FTB-AD BRK	75%
5	88.8	FTB-SE1	<10
AVERAGE	**82.7**		
STD. DEV.	8.64		
INSIDE TRACK (WELD "B")			
1	82.3	FTB-SE1	<10
2	88.3	FTB-SE1	<10
3	84.7	FTB-SE1	<10
4	86.4	FTB-SE1	<10
5	84.2	FTB-SE1	<10
AVERAGE	**85.2**		
STD. DEV.	2.28		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	95.0	FTB-SE1
2	93.3	FTB-SE1
3	97.5	FTB-SE1
4	94.6	FTB-SE1
5	94.8	FTB-SE1
AVERAGE	**95.0**	
STD. DEV.	1.53	

CHECKED BY: MBS DATE: 5-14-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-01-03

5/14/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-01
LAB ID NO.: 2004-S006-01-04
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-4

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	84.2	FTB-SE1	<10
2	80.2	FTB-SE1	<10
3	85.2	FTB-SE1	<10
4	86.0	FTB-SE1	<10
5	83.5	FTB-SE1	<10
AVERAGE	83.8		
STD. DEV.	2.24		
INSIDE TRACK (WELD "B")			
1	84.0	FTB-SE1	<10
2	79.9	FTB-SE1	<10
3	85.7	FTB-SE1	<10
4	85.2	FTB-SE1	<10
5	82.0	FTB-SE1	<10
AVERAGE	83.4		
STD. DEV.	2.40		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	82.2	FTB-SE1
2	88.5	FTB-SE1
3	87.5	FTB-SE1
4	83.9	FTB-SE1
5	84.3	FTB-SE1
AVERAGE	85.3	
STD. DEV.	2.63	

CHECKED BY: MPS DATE: 5-14-04

C:\My Documents\EXCEL\Templates\HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-01-04 5/14/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-01
LAB ID NO.: 2004-S006-01-05
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-5

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	88.9	FTB-SE1	<10
2	90.5	FTB-SE1	<10
3	90.6	FTB-SE1	<10
4	90.7	FTB-SE1	<10
5	88.7	FTB-SE1	<10
AVERAGE	**89.9**		
STD. DEV.	0.99		
INSIDE TRACK (WELD "B")			
1	85.2	FTB-SE1	<10
2	80.9	FTB-SE1	<10
3	82.4	FTB-SE1	<10
4	83.6	FTB-SE1	<10
5	80.5	FTB-SE1	<10
AVERAGE	**82.5**		
STD. DEV.	1.94		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	94.6	FTB-SE1
2	98.1	FTB-SE1
3	97.1	FTB-SE1
4	95.1	FTB-SE1
5	93.7	FTB-SE1
AVERAGE	**95.7**	
STD. DEV.	1.82	

CHECKED BY: MMS DATE: 5-14-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S005-01-05 5/14/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-02
LAB ID NO.: 2004-S006-02-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-6

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	99.9	FTB-SE1	<10
2	98.4	FTB-SE1	<10
3	99.6	FTB-SE1	<10
4	98.9	FTB-SE1	<10
5	98.4	FTB-SE1	<10
AVERAGE	**99.0**		
STD. DEV.	0.69		
INSIDE TRACK (WELD "B")			
1	91.9	FTB-SE1	<10
2	87.9	FTB-SE1	<10
3	91.5	FTB-SE1	<10
4	90.8	FTB-SE1	<10
5	91.7	FTB-SE1	<10
AVERAGE	**90.8**		
STD. DEV.	1.65		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	102.5	FTB-SE1
2	102.3	FTB-SE1
3	102.8	FTB-SE1
4	100.3	FTB-SE1
5	102.1	FTB-SE1
AVERAGE	**102.0**	
STD. DEV.	0.98	

CHECKED BY: MMS DATE: 6-17-04

C:\My Documents\EXCEL\Templates\[NDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\GEORGE MOYER\Desktop\Geosynthetic testing Hallaton\2 2004-S006-02-01

6/17/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-02
LAB ID NO.: 2004-S006-02-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-7

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	93.5	FTB-SE1	<10
2	89.6	FTB-SE1	<10
3	91.9	FTB-SE1	<10
4	91.1	FTB-SE1	<10
5	89.3	FTB-SE1	<10
AVERAGE	**91.1**		
STD. DEV.	1.72		
INSIDE TRACK (WELD "B")			
1	87.0	FTB-SE1	<10
2	90.0	FTB-SE1	<10
3	82.5	FTB-SE1	<10
4	86.7	FTB-SE1	<10
5	90.9	FTB-SE1	<10
AVERAGE	**87.4**		
STD. DEV.	3.30		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	99.1	FTB-SE1
2	100.1	FTB-SE1
3	100.6	FTB-SE1
4	101.7	FTB-SE1
5	97.9	FTB-SE1
AVERAGE	**99.9**	
STD. DEV.	1.45	

CHECKED BY: MMS DATE: 5-17-04

C:\My Documents\EXCEL\Templates\HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\GEORGE MOYER\Desktop\Geosynthetic testing Hallaton\2 2004-S006-02-02

5/17/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-02
LAB ID NO.: 2004-S006-02-03
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-8

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	93.8	FTB-SE1	<10
2	93.4	FTB-SE1	<10
3	95.9	FTB-SE1	<10
4	95.8	FTB-SE1	<10
5	95.5	FTB-SE1	<10
AVERAGE	94.9		
STD. DEV.	1.19		
INSIDE TRACK (WELD "B")			
1	78.4	FTB-SE1	<10
2	76.0	FTB-SE1	<10
3	76.5	FTB-SE1	<10
4	77.8	FTB-SE1	<10
5	75.5	FTB-SE1	<10
AVERAGE	76.8		
STD. DEV.	1.22		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	102.5	FTB-SE1
2	98.0	FTB-SE1
3	100.1	FTB-SE1
4	100.5	FTB-SE1
5	102.8	FTB-SE1
AVERAGE	100.8	
STD. DEV.	1.96	

CHECKED BY: MM DATE: 5-17-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\GEORGE MOYER\Desktop\Geosynthetic Testing Hallaton\2 2004-S006-02-03

5/17/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-02
LAB ID NO.: 2004-S006-02-04
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-9

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.3	FTB-SE1	<10
2	85.7	FTB-SE1	<10
3	88.5	FTB-SE1	<10
4	88.6	FTB-SE1	<10
5	87.1	FTB-SE1	<10
AVERAGE	87.2		
STD. DEV.	1.27		
INSIDE TRACK (WELD "B")			
1	83.7	FTB-SE1	<10
2	84.8	FTB-SE1	<10
3	83.5	FTB-SE1	<10
4	84.2	FTB-SE1	<10
5	85.5	FTB-SE1	<10
AVERAGE	84.3		
STD. DEV.	0.82		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	84.1	FTB-SE1
2	87.0	FTB-SE1
3	85.9	FTB-SE1
4	87.8	FTB-SE1
5	89.5	FTB-SE1
AVERAGE	86.9	
STD. DEV.	2.03	

CHECKED BY: MPS DATE: 5-12-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\GEORGE MOYER\Desktop\Geosynthetic testing Hallaton\2 2004-S006-02-04

9/17/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-02
LAB ID NO.: 2004-S006-02-05
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-10

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	95.6	FTB-SE1	<10
2	94.8	FTB-SE1	<10
3	85.7	FTB-SE1	<10
4	88.6	FTB-SE1	<10
5	92.0	FTB-SE1	<10
AVERAGE	**91.3**		
STD. DEV.	4.18		
INSIDE TRACK (WELD "B")			
1	82.7	FTB-SE1	<10
2	82.1	FTB-SE1	<10
3	84.2	FTB-SE1	<10
4	79.0	FTB-SE1	<10
5	82.5	FTB-SE1	<10
AVERAGE	**82.1**		
STD. DEV.	1.91		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	87.9	FTB-SE1
2	86.4	FTB-SE1
3	88.3	FTB-SE1
4	97.8	FTB-SE1
5	90.6	FTB-SE1
AVERAGE	**90.2**	
STD. DEV.	4.51	

CHECKED BY: MMS DATE: 5-17-04

C:\My Documents\EXCEL\Templates\[HDPE-DFusion.xls]Sheet1

C:\Documents and Settings\GEORGE MOYER\Desktop\Geosynthetic testing Hallaton\[2 2004-S006-02-05

5/17/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-02
LAB ID NO.: 2004-S006-02-06
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-11

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	87.7	FTB-SE1	<10
2	92.4	FTB-SE1	<10
3	90.8	FTB-SE1	<10
4	88.8	FTB-SE1	<10
5	89.0	FTB-SE1	<10
AVERAGE	**89.7**		
STD. DEV.	1.86		
INSIDE TRACK (WELD "B")			
1	85.5	FTB-SE1	<10
2	87.6	FTB-SE1	<10
3	86.9	FTB-SE1	<10
4	79.2	FTB-SE1	<10
5	89.4	FTB-SE1	<10
AVERAGE	**85.7**		
STD. DEV.	3.91		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	92.9	FTB-SE1
2	92.6	FTB-SE1
3	93.1	FTB-SE1
4	90.4	FTB-SE1
5	93.5	FTB-SE1
AVERAGE	**92.5**	
STD. DEV.	1.22	

CHECKED BY: RMS DATE: 5-19-04

C:\My Documents\EXCEL\Templates\[HDPE&S-DFusion.xls]Sheet1

C:\Documents and Settings\GEORGE MOYER\Desktop\Geosynthetic testing Hallaton\2 2004-S006-02-06

5/17/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-02
LAB ID NO.: 2004-S006-02-07
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-12

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	90.1	FTB-SE1	<10
2	90.0	FTB-SE1	<10
3	87.7	FTB-SE1	<10
4	87.4	FTB-SE1	<10
5	89.2	FTB-SE1	<10
AVERAGE	**88.9**		
STD. DEV.	1.27		
INSIDE TRACK (WELD "B")			
1	86.5	FTB-SE1	<10
2	88.8	FTB-SE1	<10
3	88.0	FTB-SE1	<10
4	89.4	FTB-SE1	<10
5	86.5	FTB-SE1	<10
AVERAGE	**87.8**		
STD. DEV.	1.32		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	93.9	FTB-SE1
2	91.4	FTB-SE1
3	91.2	FTB-SE1
4	88.2	FTB-SE1
5	92.2	FTB-SE1
AVERAGE	**91.4**	
STD. DEV.	2.07	

CHECKED BY: MMS DATE: 5-17-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\GEORGE MOYER\Desktop\Geosynthetic testing Hallaton\2 2004-S006-02-07

5/17/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-02
LAB ID NO.: 2004-S006-02-08
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-13

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	87.1	FTB-SE1	<10
2	87.7	FTB-SE1	<10
3	86.9	FTB-SE1	<10
4	86.7	FTB-SE1	<10
5	88.6	FTB-SE1	<10
AVERAGE	87.4		
STD. DEV.	0.77		
INSIDE TRACK (WELD "B")			
1	80.0	FTB-SE1	<10
2	84.8	FTB-SE1	<10
3	80.1	FTB-SE1	<10
4	81.3	FTB-SE1	<10
5	80.5	FTB-SE1	<10
AVERAGE	81.3		
STD. DEV.	2.00		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	92.1	FTB-SE1
2	95.8	FTB-SE1
3	94.6	FTB-SE1
4	94.7	FTB-SE1
5	95.4	FTB-SE1
AVERAGE	94.5	
STD. DEV.	1.44	

CHECKED BY: MOS DATE: 5-17-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\GEORGE MOYER\Desktop\Geosynthetic testing Hallaton\2 2004-S006-02-08

6/17/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-02
LAB ID NO.: 2004-S006-02-09
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-14

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	58.3	NON-FTB	100
2	62.9	NON-FTB	100
3	68.2	FTB AD BRK	75
4	65.9	FTB AD BRK	75
5	66.2	NON-FTB	100
AVERAGE	64.3		
STD. DEV.	3.85		
INSIDE TRACK (WELD "B")			
1	84.4	FTB-SE1	<10
2	85.4	FTB-SE1	<10
3	83.8	FTB-SE1	<10
4	83.1	FTB-SE1	<10
5	85.4	FTB-SE1	<10
AVERAGE	84.4		
STD. DEV.	1.01		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	89.4	FTB-SE1
2	88.2	FTB-SE1
3	89.6	FTB-SE1
4	90.1	FTB-SE1
5	93.4	FTB-SE1
AVERAGE	90.1	
STD. DEV.	1.95	

CHECKED BY: MPS DATE: 5-12-04

C:\My Documents\EXCEL\Templates\[HDPE&R-DFusion.xls]Sheet1
C:\DOCUME~1\GEORGE~1\Desktop\GEOSYN~1\2004-S006-02-09 HALLATON.xls]Sh 2004-S006-02-09

6/17/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-03
LAB ID NO.: 2004-S006-03-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-14-A

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.0	FTB-SE1	<10
2	79.8	FTB-SE1	<10
3	86.2	FTB-SE1	<10
4	88.8	FTB-SE1	<10
5	87.7	FTB-SE1	<10
AVERAGE	85.7		
STD. DEV.	3.49		
INSIDE TRACK (WELD "B")			
1	81.6	FTB-SE1	<10
2	81.7	FTB-SE1	<10
3	81.9	FTB-SE1	<10
4	85.1	FTB-SE1	<10
5	82.2	FTB-SE1	<10
AVERAGE	82.5		
STD. DEV.	1.47		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	89.5	FTB-SE1
2	90.7	FTB-SE1
3	85.0	FTB-SE1
4	92.1	FTB-SE1
5	86.8	FTB-SE1
AVERAGE	88.8	
STD. DEV.	2.89	

CHECKED BY: MHS DATE: 5-17-04

C:\My Documents\EXCEL\Templated\[HDP&S-DFusion.xls]Sheet1

C:\DOCUME~1\GEORGE~1\Desktop\GEOSYN~1\[2004-S006-03-01 HALLATON.xls]Sh 2004-S006-03-01

5/17/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-03
LAB ID NO.: 2004-S006-03-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-14-B

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	89.9	FTB-SE1	<10
2	89.3	FTB-SE1	<10
3	90.1	FTB-SE1	<10
4	89.8	FTB-SE1	<10
5	85.7	FTB-SE1	<10
AVERAGE	89.0		
STD. DEV.	1.85		
INSIDE TRACK (WELD "B")			
1	85.3	FTB-SE1	<10
2	86.1	FTB-SE1	<10
3	86.6	FTB-SE1	<10
4	83.9	FTB-SE1	<10
5	83.2	FTB-SE1	<10
AVERAGE	85.0		
STD. DEV.	1.44		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	92.8	FTB-SE1
2	94.7	FTB-SE1
3	95.5	FTB-SE1
4	95.7	FTB-SE1
5	92.8	FTB-SE1
AVERAGE	94.3	
STD. DEV.	1.42	

CHECKED BY: MPS DATE: 5-17-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
C:\DOCUME~1\GEORGE~1\Desktop\GEOSYN~1\[2004-S006-03-02 HALLATON.xls]Sh 2004-S006-03-02

5/17/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-02
LAB ID NO.: 2004-S006-02-10
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-15

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	95.2	FTB-SE1	<10
2	92.2	FTB-SE1	<10
3	90.7	FTB-SE1	<10
4	90.6	FTB-SE1	<10
5	92.8	FTB-SE1	<10
AVERAGE	92.3		
STD. DEV.	1.88		
INSIDE TRACK (WELD "B")			
1	83.4	FTB-SE1	<10
2	86.9	FTB-SE1	<10
3	84.8	FTB-SE1	<10
4	84.5	FTB-SE1	<10
5	83.2	FTB-SE1	<10
AVERAGE	84.6		
STD. DEV.	1.48		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	94.9	FTB-SE1
2	89.9	FTB-SE1
3	97.0	FTB-SE1
4	95.0	FTB-SE1
5	94.8	FTB-SE1
AVERAGE	94.3	
STD. DEV.	2.63	

CHECKED BY: MDS DATE: 5-17-04

C:\My Documents\EXCEL\Templates\[HDPE&S-DFusion.xls]Sheet1

C:\Documents and Settings\GEORGE MDYER\Desktop\Geosynthetic testing Hallaton\2 2004-S006-02-10

5/17/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-03
LAB ID NO.: 2004-S006-03-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-16

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	94.7	FTB-SE1	<10
2	94.8	FTB-SE1	<10
3	94.1	FTB-SE1	<10
4	94.9	FTB-SE1	<10
5	93.3	FTB-SE1	<10
AVERAGE	94.4		
STD. DEV.	0.67		
INSIDE TRACK (WELD "B")			
1	91.5	FTB-SE1	<10
2	90.1	FTB-SE1	<10
3	89.1	FTB-SE1	<10
4	91.1	FTB-SE1	<10
5	90.1	FTB-SE1	<10
AVERAGE	90.4		
STD. DEV.	0.94		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	97.8	FTB-SE1
2	95.5	FTB-SE1
3	93.6	FTB-SE1
4	97.9	FTB-SE1
5	99.9	FTB-SE1
AVERAGE	96.9	
STD. DEV.	2.43	

CHECKED BY: MMS DATE: 5-19-04

D:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-03-01 5/19/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-03
LAB ID NO.: 2004-S006-03-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-17

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	93.8	FTB-SE1	<10
2	95.4	FTB-SE1	<10
3	93.1	FTB-SE1	<10
4	94.8	FTB-SE1	<10
5	93.6	FTB-SE1	<10
AVERAGE	**94.1**		
STD. DEV.	0.94		
INSIDE TRACK (WELD "B")			
1	87.3	FTB-SE1	<10
2	85.2	FTB-SE1	<10
3	82.7	FTB-SE1	<10
4	81.0	FTB-SE1	<10
5	83.7	FTB-SE1	<10
AVERAGE	**84.0**		
STD. DEV.	2.40		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	96.0	FTB-SE1
2	95.8	FTB-SE1
3	96.9	FTB-SE1
4	95.9	FTB-SE1
5	94.1	FTB-SE1
AVERAGE	**95.7**	
STD. DEV.	1.02	

CHECKED BY: MPS DATE: 5-19-04

C:\My Documents\EXCEL\Templates\(HDP&S-DFusion.xls)Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-SC 2004-S006-03-02 5/19/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-03
LAB ID NO.: 2004-S006-03-03
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-18

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	90.5	FTB-SE1	<10
2	85.1	FTB-SE1	<10
3	89.9	FTB-SE1	<10
4	91.5	FTB-SE1	<10
5	88.9	FTB-SE1	<10
AVERAGE	**89.2**		
STD. DEV.	2.47		
INSIDE TRACK (WELD "B")			
1	87.3	FTB-SE1	<10
2	90.3	FTB-SE1	<10
3	87.6	FTB-SE1	<10
4	85.7	FTB-SE1	<10
5	86.8	FTB-SE1	<10
AVERAGE	**87.5**		
STD. DEV.	1.70		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	92.2	FTB-SE1
2	92.5	FTB-SE1
3	91.7	FTB-SE1
4	94.6	FTB-SE1
5	92.9	FTB-SE1
AVERAGE	**92.8**	
STD. DEV.	1.11	

CHECKED BY: MPS DATE: 5-19-04

C:\My Documents\EXCEL\Templates\[HOPSS-DFusion.xls]Sheet1
C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-03-03 5/19/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-03
LAB ID NO.: 2004-S006-03-04
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-19

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	96.3	FTB-SE1	<10
2	95.8	FTB-SE1	<10
3	96.8	FTB-SE1	<10
4	96.8	FTB-SE1	<10
5	96.0	FTB-SE1	<10
AVERAGE	**96.3**		
STD. DEV.	0.46		
INSIDE TRACK (WELD "B")			
1	88.3	FTB-SE1	<10
2	86.5	FTB-SE1	<10
3	85.1	FTB-SE1	<10
4	87.6	FTB-SE1	<10
5	86.7	FTB-SE1	<10
AVERAGE	**86.8**		
STD. DEV.	1.21		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	96.9	FTB-SE1
2	101.4	FTB-SE1
3	101.9	FTB-SE1
4	100.9	FTB-SE1
5	103.1	FTB-SE1
AVERAGE	100.8	
STD. DEV.	2.35	

CHECKED BY: MPS DATE: 5-19-04

C:\My Documents\EXCEL\Templates\[HDPE&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-SC 2004-S006-03-04 5/19/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-03
LAB ID NO.: 2004-S006-03-05
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-20

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	88.3	FTB-SE1	<10
2	89.5	FTB-SE1	<10
3	91.0	FTB-SE1	<10
4	90.0	FTB-SE1	<10
5	89.7	FTB-SE1	<10
AVERAGE	**89.7**		
STD. DEV.	0.97		
INSIDE TRACK (WELD "B")			
1	85.0	FTB-SE1	<10
2	82.9	FTB-SE1	<10
3	83.4	FTB-SE1	<10
4	84.8	FTB-SE1	<10
5	84.2	FTB-SE1	<10
AVERAGE	**84.1**		
STD. DEV.	0.90		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	91.5	FTB-SE1
2	90.7	FTB-SE1
3	92.3	FTB-SE1
4	90.9	FTB-SE1
5	91.2	FTB-SE1
AVERAGE	**91.3**	
STD. DEV.	0.63	

CHECKED BY: MMS DATE: 5-19-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-03-05

8/19/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-04
LAB ID NO.: 2004-S006-04-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-21

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	85.1	FTB-SE1	<10
2	89.9	FTB-SE1	<10
3	91.0	FTB-SE1	<10
4	88.3	FTB-SE1	<10
5	87.6	FTB-SE1	<10
AVERAGE	**88.4**		
STD. DEV.	2.27		
INSIDE TRACK (WELD "B")			
1	87.2	FTB-SE1	<10
2	85.7	FTB-SE1	<10
3	82.6	FTB-SE1	<10
4	80.9	FTB-SE1	<10
5	81.4	FTB-SE1	<10
AVERAGE	**83.6**		
STD. DEV.	2.76		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	96.1	FTB-SE1
2	96.3	FTB-SE1
3	96.5	FTB-SE1
4	95.6	FTB-SE1
5	95.9	FTB-SE1
AVERAGE	**96.1**	
STD. DEV.	0.35	

CHECKED BY: MPS DATE: 5-25-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-04-01 5/25/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-04
LAB ID NO.: 2004-S006-04-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-22

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	88.5	FTB-SE1	<10
2	89.8	FTB-SE1	<10
3	89.6	FTB-SE1	<10
4	88.8	FTB-SE1	<10
5	90.0	FTB-SE1	<10
AVERAGE	**89.3**		
STD. DEV.	0.65		
INSIDE TRACK (WELD "B")			
1	86.2	FTB-SE1	<10
2	84.2	FTB-SE1	<10
3	86.3	FTB-SE1	<10
4	85.3	FTB-SE1	<10
5	85.6	FTB-SE1	<10
AVERAGE	**85.5**		
STD. DEV.	0.85		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	91.8	FTB-SE1
2	91.7	FTB-SE1
3	93.2	FTB-SE1
4	94.2	FTB-SE1
5	93.8	FTB-SE1
AVERAGE	**92.9**	
STD. DEV.	1.14	

CHECKED BY: MPS DATE: 5-25-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-04-02 5/25/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-04
LAB ID NO.: 2004-S006-04-03
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-23

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.4	FTB-SE1	<10
2	89.1	FTB-SE1	<10
3	90.9	FTB-SE1	<10
4	86.8	FTB-SE1	<10
5	89.9	FTB-SE1	<10
AVERAGE	**88.6**		
STD. DEV.	1.96		
INSIDE TRACK (WELD "B")			
1	86.1	FTB-SE1	<10
2	83.8	FTB-SE1	<10
3	86.8	FTB-SE1	<10
4	86.7	FTB-SE1	<10
5	81.9	FTB-SE1	<10
AVERAGE	**85.1**		
STD. DEV.	2.14		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	98.3	FTB-SE1
2	98.2	FTB-SE1
3	97.3	FTB-SE1
4	97.6	FTB-SE1
5	97.5	FTB-SE1
AVERAGE	**97.8**	
STD. DEV.	0.44	

CHECKED BY: MAS DATE: 5-25-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-04-03 5/25/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-04
LAB ID NO.: 2004-S006-04-04
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-24

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.4	FTB-SE1	<10
2	86.7	FTB-SE1	<10
3	85.7	FTB-SE1	<10
4	87.9	FTB-SE1	<10
5	87.4	FTB-SE1	<10
AVERAGE	**86.8**		
STD. DEV.	0.86		
INSIDE TRACK (WELD "B")			
1	84.5	FTB-SE1	<10
2	84.7	FTB-SE1	<10
3	86.4	FTB-SE1	<10
4	88.0	FTB-SE1	<10
5	88.6	FTB-SE1	<10
AVERAGE	**86.4**		
STD. DEV.	1.86		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	93.2	FTB-SE1
2	93.2	FTB-SE1
3	92.5	FTB-SE1
4	93.2	FTB-SE1
5	94.1	FTB-SE1
AVERAGE	**93.2**	
STD. DEV.	0.57	

CHECKED BY: MAK DATE: 5-25-04

C:\My Documents\EXCEL\Templates\[HDPE&S-DFusion.xls]Sheet1
C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-04-04 5/25/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-04
LAB ID NO.: 2004-S006-04-05
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-25

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	90.0	FTB-SE1	<10
2	91.2	FTB-SE1	<10
3	92.4	FTB-SE1	<10
4	90.8	FTB-SE1	<10
5	91.0	FTB-SE1	<10
AVERAGE	**91.1**		
STD. DEV.	0.87		
INSIDE TRACK (WELD "B")			
1	87.8	FTB-SE1	<10
2	87.3	FTB-SE1	<10
3	89.7	FTB-SE1	<10
4	86.9	FTB-SE1	<10
5	88.5	FTB-SE1	<10
AVERAGE	**88.0**		
STD. DEV.	1.10		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	94.5	FTB-SE1
2	94.7	FTB-SE1
3	95.7	FTB-SE1
4	96.3	FTB-SE1
5	95.0	FTB-SE1
AVERAGE	**95.2**	
STD. DEV.	0.75	

CHECKED BY: MAH DATE: 5-25-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-04-05 5/25/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 64

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-04
LAB ID NO.: 2004-S006-04-06
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-26

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	85.5	FTB-SE1	<10
2	88.2	FTB-SE1	<10
3	87.2	FTB-SE1	<10
4	89.5	FTB-SE1	<10
5	89.5	FTB-SE1	<10
AVERAGE	**88.0**		
STD. DEV.	1.69		
INSIDE TRACK (WELD "B")			
1	83.5	FTB-SE1	<10
2	85.6	FTB-SE1	<10
3	84.3	FTB-SE1	<10
4	84.9	FTB-SE1	<10
5	85.1	FTB-SE1	<10
AVERAGE	**84.7**		
STD. DEV.	0.81		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	90.3	FTB-SE1
2	90.4	FTB-SE1
3	91.9	FTB-SE1
4	90.1	FTB-SE1
5	92.0	FTB-SE1
AVERAGE	**90.9**	
STD. DEV.	0.93	

CHECKED BY: MMS DATE: 5-25-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-80 2004-S006-04-06 6/25/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-04
LAB ID NO.: 2004-S006-04-07
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-27

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	87.4	FTB-SE1	<10
2	86.7	FTB-SE1	<10
3	87.3	FTB-SE1	<10
4	87.5	FTB-SE1	<10
5	88.2	FTB-SE1	<10
AVERAGE	**87.4**		
STD. DEV.	0.54		
INSIDE TRACK (WELD "B")			
1	84.5	FTB-SE1	<10
2	85.0	FTB-SE1	<10
3	85.8	FTB-SE1	<10
4	85.7	FTB-SE1	<10
5	84.3	FTB-SE1	<10
AVERAGE	**85.1**		
STD. DEV.	0.68		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	95.2	FTB-SE1
2	93.8	FTB-SE1
3	95.0	FTB-SE1
4	94.6	FTB-SE1
5	94.2	FTB-SE1
AVERAGE	**94.6**	
STD. DEV.	0.57	

CHECKED BY: MMS DATE: 5-25-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-04-07 5/25/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTI

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-05
LAB ID NO.: 2004-S006-05-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-28

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	91.7	FTB-SE1	<10
2	86.0	FTB-SE1	<10
3	87.9	FTB-SE1	<10
4	88.6	FTB-SE1	<10
5	88.5	FTB-SE1	<10
AVERAGE	**88.5**		
STD. DEV.	2.05		
INSIDE TRACK (WELD "B")			
1	87.3	FTB-SE1	<10
2	80.0	FTB-SE1	<10
3	83.7	FTB-SE1	<10
4	85.1	FTB-SE1	<10
5	89.1	FTB-SE1	<10
AVERAGE	**85.0**		
STD. DEV.	3.49		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	95.9	FTB-SE1
2	95.1	FTB-SE1
3	92.8	FTB-SE1
4	92.7	FTB-SE1
5	91.4	FTB-SE1
AVERAGE	**93.6**	
STD. DEV.	1.86	

CHECKED BY: MPS DATE: 5-28-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-05
LAB ID NO.: 2004-S006-05-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-29

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	89.7	FTB-SE1	<10
2	86.9	FTB-SE1	<10
3	89.9	FTB-SE1	<10
4	90.5	FTB-SE1	<10
5	90.9	FTB-SE1	<10
AVERAGE	**89.6**		
STD. DEV.	1.57		
INSIDE TRACK (WELD "B")			
1	80.8	FTB-SE1	<10
2	89.7	FTB-SE1	<10
3	90.4	FTB-SE1	<10
4	91.6	FTB-SE1	<10
5	85.2	FTB-SE1	<10
AVERAGE	**87.5**		
STD. DEV.	4.48		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	95.4	FTB-SE1
2	93.7	FTB-SE1
3	92.7	FTB-SE1
4	94.5	FTB-SE1
5	95.8	FTB-SE1
AVERAGE	**94.4**	
STD. DEV.	1.26	

CHECKED BY: MWS DATE: 5-28-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTI

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-05
LAB ID NO.: 2004-S006-05-03
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-30

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	75.6	FTB-AD BRK	75
2	80.4	FTB-AD BRK	75
3	75.9	FTB-AD BRK	75
4	88.2	FTB-SE1	<10
5	69.2	FTB-AD BRK	75
AVERAGE	**77.9**		
STD. DEV.	7.02		
INSIDE TRACK (WELD "B")			
1	86.6	FTB-SE1	<10
2	84.3	FTB-SE1	<10
3	88.0	FTB-SE1	<10
4	85.1	FTB-SE1	<10
5	90.0	FTB-SE1	<10
AVERAGE	**86.8**		
STD. DEV.	2.28		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	94.5	FTB-SE1
2	90.0	FTB-SE1
3	91.7	FTB-SE1
4	92.7	FTB-SE1
5	91.9	FTB-SE1
AVERAGE	**92.2**	
STD. DEV.	1.64	

CHECKED BY: MPS DATE: 5-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-SC 2004-S006-05-03

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-05
LAB ID NO.: 2004-S006-05-04
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-31

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	94.8	FTB-SE1	<10
2	94.9	FTB-SE1	<10
3	94.8	FTB-SE1	<10
4	91.3	FTB-SE1	<10
5	94.7	FTB-SE1	<10
AVERAGE	**94.1**		
STD. DEV.	1.57		
INSIDE TRACK (WELD "B")			
1	90.8	FTB-SE1	<10
2	91.3	FTB-SE1	<10
3	91.4	FTB-SE1	<10
4	90.2	FTB-SE1	<10
5	90.1	FTB-SE1	<10
AVERAGE	**90.8**		
STD. DEV.	0.60		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	96.8	FTB-SE1
2	98.1	FTB-SE1
3	97.8	FTB-SE1
4	96.8	FTB-SE1
5	97.5	FTB-SE1
AVERAGE	**97.4**	
STD. DEV.	0.59	

CHECKED BY: MPS DATE: 5-28-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTI

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-05
LAB ID NO.: 2004-S006-05-05
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-32

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	95.0	FTB-SE1	<10
2	90.9	FTB-SE1	<10
3	93.6	FTB-SE1	<10
4	92.7	FTB-SE1	<10
5	93.1	FTB-SE1	<10
AVERAGE	**93.1**		
STD. DEV.	1.49		
INSIDE TRACK (WELD "B")			
1	87.5	FTB-SE1	<10
2	86.3	FTB-SE1	<10
3	86.0	FTB-SE1	<10
4	86.8	FTB-SE1	<10
5	86.9	FTB-SE1	<10
AVERAGE	**86.7**		
STD. DEV.	0.58		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	98.7	FTB-SE1
2	99.5	FTB-SE1
3	100.3	FTB-SE1
4	100.0	FTB-SE1
5	99.2	FTB-SE1
AVERAGE	**99.5**	
STD. DEV.	0.63	

CHECKED BY: MPS DATE: 5-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-05-05

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-05
LAB ID NO.: 2004-S006-05-06
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-33

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	87.4	FTB-SE1	<10
2	88.1	FTB-SE1	<10
3	87.8	FTB-SE1	<10
4	88.3	FTB-SE1	<10
5	89.6	FTB-SE1	<10
AVERAGE	**88.2**		
STD. DEV.	0.83		
INSIDE TRACK (WELD "B")			
1	83.9	FTB-SE1	<10
2	84.5	FTB-SE1	<10
3	84.1	FTB-SE1	<10
4	84.1	FTB-SE1	<10
5	85.1	FTB-SE1	<10
AVERAGE	**84.3**		
STD. DEV.	0.48		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	90.9	FTB-SE1
2	93.8	FTB-SE1
3	94.2	FTB-SE1
4	91.3	FTB-SE1
5	89.7	FTB-SE1
AVERAGE	**92.0**	
STD. DEV.	1.94	

CHECKED BY: MPS DATE: 5-28-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTI

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-05
LAB ID NO.: 2004-S006-05-07
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-34

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	96.0	FTB-SE1	<10
2	91.3	FTB-SE1	<10
3	93.0	FTB-SE1	<10
4	88.3	FTB-SE1	<10
5	89.0	FTB-SE1	<10
AVERAGE	**91.5**		
STD. DEV.	3.12		
INSIDE TRACK (WELD "B")			
1	78.5	FTB-SE1	<10
2	85.0	FTB-SE1	<10
3	82.6	FTB-SE1	<10
4	81.1	FTB-SE1	<10
5	79.7	FTB-SE1	<10
AVERAGE	**81.4**		
STD. DEV.	2.54		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	89.9	FTB-SE1
2	92.9	FTB-SE1
3	91.2	FTB-SE1
4	94.1	FTB-SE1
5	93.9	FTB-SE1
AVERAGE	**92.4**	
STD. DEV.	1.81	

CHECKED BY: MPS DATE: 5-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-05-07

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-05
LAB ID NO.: 2004-S006-05-08
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-35

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	94.6	FTB-SE1	<10
2	88.5	FTB-SE1	<10
3	82.0	FTB-SE1	<10
4	93.2	FTB-SE1	<10
5	91.3	FTB-SE1	<10
AVERAGE	**89.9**		
STD. DEV.	4.98		
INSIDE TRACK (WELD "B")			
1	88.1	FTB-SE1	<10
2	84.8	FTB-SE1	<10
3	86.6	FTB-SE1	<10
4	89.0	FTB-SE1	<10
5	86.9	FTB-SE1	<10
AVERAGE	**87.1**		
STD. DEV.	1.60		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	95.6	FTB-SE1
2	96.1	FTB-SE1
3	95.9	FTB-SE1
4	98.2	FTB-SE1
5	97.2	FTB-SE1
AVERAGE	**96.6**	
STD. DEV.	1.08	

CHECKED BY: MMS DATE: 5-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-05-08

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTIN

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-06
LAB ID NO.: 2004-S006-06-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-36

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	90.3	FTB-SE1	<10
2	89.7	FTB-SE1	<10
3	90.8	FTB-SE1	<10
4	89.2	FTB-SE1	<10
5	89.8	FTB-SE1	<10
AVERAGE	**90.0**		
STD. DEV.	0.61		
INSIDE TRACK (WELD "B")			
1	92.3	FTB-SE1	<10
2	90.7	FTB-SE1	<10
3	89.0	FTB-SE1	<10
4	90.4	FTB-SE1	<10
5	91.1	FTB-SE1	<10
AVERAGE	**90.7**		
STD. DEV.	1.19		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	93.5	FTB-SE1
2	97.3	FTB-SE1
3	98.8	FTB-SE1
4	96.7	FTB-SE1
5	96.0	FTB-SE1
AVERAGE	**96.5**	
STD. DEV.	1.95	

CHECKED BY: MPS DATE: 5-24-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-06
LAB ID NO.: 2004-S006-06-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-37

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	94.4	FTB-SE1	<10
2	94.7	FTB-SE1	<10
3	94.4	FTB-SE1	<10
4	92.7	FTB-SE1	<10
5	92.9	FTB-SE1	<10
AVERAGE	**93.8**		
STD. DEV.	0.94		
INSIDE TRACK (WELD "B")			
1	89.3	FTB-SE1	<10
2	89.2	FTB-SE1	<10
3	90.0	FTB-SE1	<10
4	89.1	FTB-SE1	<10
5	88.0	FTB-SE1	<10
AVERAGE	**89.1**		
STD. DEV.	0.72		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	94.9	FTB-SE1
2	94.9	FTB-SE1
3	88.7	FTB-SE1
4	95.2	FTB-SE1
5	95.1	FTB-SE1
AVERAGE	**93.8**	
STD. DEV.	2.83	

CHECKED BY: MPS DATE: 5-28-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTIN

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-06
LAB ID NO.: 2004-S006-06-03
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-38

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	91.2	FTB-SE1	<10
2	92.8	FTB-SE1	<10
3	92.5	FTB-SE1	<10
4	92.8	FTB-SE1	<10
5	91.4	FTB-SE1	<10
AVERAGE	**92.1**		
STD. DEV.	0.78		
INSIDE TRACK (WELD "B")			
1	86.3	FTB-SE1	<10
2	89.1	FTB-SE1	<10
3	90.1	FTB-SE1	<10
4	88.5	FTB-SE1	<10
5	91.0	FTB-SE1	<10
AVERAGE	**89.0**		
STD. DEV.	1.79		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	95.1	FTB-SE1
2	96.3	FTB-SE1
3	95.2	FTB-SE1
4	95.3	FTB-SE1
5	92.7	FTB-SE1
AVERAGE	**94.9**	
STD. DEV.	1.33	

CHECKED BY: MPS DATE: 5-28-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-06
LAB ID NO.: 2004-S006-06-04
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-39

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.3	FTB-SE1	<10
2	87.5	FTB-SE1	<10
3	85.7	FTB-SE1	<10
4	85.5	FTB-SE1	<10
5	85.7	FTB-SE1	<10
AVERAGE	**86.1**		
STD. DEV.	0.82		
INSIDE TRACK (WELD "B")			
1	86.4	FTB-SE1	<10
2	89.7	FTB-SE1	<10
3	88.7	FTB-SE1	<10
4	88.1	FTB-SE1	<10
5	88.0	FTB-SE1	<10
AVERAGE	**88.2**		
STD. DEV.	1.20		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	85.1	FTB-SE1
2	96.2	FTB-SE1
3	92.6	FTB-SE1
4	94.6	FTB-SE1
5	95.7	FTB-SE1
AVERAGE	**92.8**	
STD. DEV.	4.54	

CHECKED BY: AMS DATE: 5-28-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTIN

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-06
LAB ID NO.: 2004-S006-06-05
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-40

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.8	FTB-SE1	<10
2	85.3	FTB-SE1	<10
3	86.8	FTB-SE1	<10
4	87.3	FTB-SE1	<10
5	87.2	FTB-SE1	<10
AVERAGE	**86.7**		
STD. DEV.	0.80		
INSIDE TRACK (WELD "B")			
1	91.8	FTB-SE1	<10
2	92.1	FTB-SE1	<10
3	89.0	FTB-SE1	<10
4	91.5	FTB-SE1	<10
5	91.2	FTB-SE1	<10
AVERAGE	**91.1**		
STD. DEV.	1.23		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	95.3	FTB-SE1
2	96.2	FTB-SE1
3	96.2	FTB-SE1
4	96.1	FTB-SE1
5	95.2	FTB-SE1
AVERAGE	**95.8**	
STD. DEV.	0.50	

CHECKED BY: MPS DATE: 5-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-SC 2004-S006-06-05 5/28/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-06
LAB ID NO.: 2004-S006-06-06
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-41

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	94.6	FTB-SE1	<10
2	90.8	FTB-SE1	<10
3	91.1	FTB-SE1	<10
4	91.4	FTB-SE1	<10
5	91.8	FTB-SE1	<10
AVERAGE	**91.9**		
STD. DEV.	1.53		
INSIDE TRACK (WELD "B")			
1	94.6	FTB-SE1	<10
2	92.0	FTB-SE1	<10
3	91.7	FTB-SE1	<10
4	92.3	FTB-SE1	<10
5	93.8	FTB-SE1	<10
AVERAGE	**92.9**		
STD. DEV.	1.26		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	100.7	FTB-SE1
2	98.3	FTB-SE1
3	100.7	FTB-SE1
4	101.9	FTB-SE1
5	100.6	FTB-SE1
AVERAGE	**100.4**	
STD. DEV.	1.31	

CHECKED BY: MPS DATE: 5-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-06-06

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTI

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-06
LAB ID NO.: 2004-S006-06-07
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-42

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.1	FTB-SE1	<10
2	87.4	FTB-SE1	<10
3	86.7	FTB-SE1	<10
4	87.7	FTB-SE1	<10
5	85.1	FTB-SE1	<10
AVERAGE	**86.6**		
STD. DEV.	1.04		
INSIDE TRACK (WELD "B")			
1	85.2	FTB-SE1	<10
2	86.4	FTB-SE1	<10
3	87.6	FTB-SE1	<10
4	84.2	FTB-SE1	<10
5	87.5	FTB-SE1	<10
AVERAGE	**86.2**		
STD. DEV.	1.47		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	95.4	FTB-SE1
2	96.2	FTB-SE1
3	96.9	FTB-SE1
4	97.8	FTB-SE1
5	96.0	FTB-SE1
AVERAGE	**96.5**	
STD. DEV.	0.92	

CHECKED BY: MLS DATE: 5-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-06-07

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-06
LAB ID NO.: 2004-S006-06-08
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-43

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	87.5	FTB-SE1	<10
2	88.2	FTB-SE1	<10
3	88.4	FTB-SE1	<10
4	87.0	FTB-SE1	<10
5	88.5	FTB-SE1	<10
AVERAGE	**87.9**		
STD. DEV.	0.65		
INSIDE TRACK (WELD "B")			
1	84.8	FTB-SE1	<10
2	86.0	FTB-SE1	<10
3	84.3	FTB-SE1	<10
4	85.9	FTB-SE1	<10
5	85.1	FTB-SE1	<10
AVERAGE	**85.2**		
STD. DEV.	0.73		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	90.4	FTB-SE1
2	92.4	FTB-SE1
3	95.0	FTB-SE1
4	92.6	FTB-SE1
5	93.4	FTB-SE1
AVERAGE	**92.8**	
STD. DEV.	1.67	

CHECKED BY: MPS DATE: 5-28-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTI

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-06
LAB ID NO.: 2004-S006-06-09
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-44

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.2	FTB-SE1	<10
2	86.7	FTB-SE1	<10
3	86.9	FTB-SE1	<10
4	83.3	FTB-SE1	<10
5	87.6	FTB-SE1	<10
AVERAGE	**86.1**		
STD. DEV.	1.67		
INSIDE TRACK (WELD "B")			
1	85.2	FTB-SE1	<10
2	87.1	FTB-SE1	<10
3	86.4	FTB-SE1	<10
4	86.8	FTB-SE1	<10
5	87.2	FTB-SE1	<10
AVERAGE	**86.5**		
STD. DEV.	0.81		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	90.5	FTB-SE1
2	88.6	FTB-SE1
3	93.0	FTB-SE1
4	95.4	FTB-SE1
5	94.9	FTB-SE1
AVERAGE	**92.5**	
STD. DEV.	2.90	

CHECKED BY: MPS DATE: 5-28-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-06
LAB ID NO.: 2004-S006-06-10
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-45

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	83.7	FTB-SE1	<10
2	82.9	FTB-SE1	<10
3	83.2	FTB-SE1	<10
4	80.2	FTB-SE1	<10
5	85.2	FTB-SE1	<10
AVERAGE	**83.0**		
STD. DEV.	1.82		
INSIDE TRACK (WELD "B")			
1	80.2	FTB-SE1	<10
2	81.3	FTB-SE1	<10
3	82.0	FTB-SE1	<10
4	86.6	FTB-SE1	<10
5	83.6	FTB-SE1	<10
AVERAGE	**82.7**		
STD. DEV.	2.49		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	87.7	FTB-SE1
2	88.8	FTB-SE1
3	90.3	FTB-SE1
4	88.2	FTB-SE1
5	89.4	FTB-SE1
AVERAGE	**88.9**	
STD. DEV.	1.02	

CHECKED BY: MPS DATE: 5-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-06-10 5/28/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTI

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-06
LAB ID NO.: 2004-S006-06-11
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-46

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	85.8	FTB-SE1	<10
2	80.4	FTB-SE1	<10
3	86.7	FTB-SE1	<10
4	83.2	FTB-SE1	<10
5	84.2	FTB-SE1	<10
AVERAGE	**84.1**		
STD. DEV.	2.46		
INSIDE TRACK (WELD "B")			
1	80.6	FTB-SE1	<10
2	82.3	FTB-SE1	<10
3	80.3	FTB-SE1	<10
4	79.4	FTB-SE1	<10
5	75.5	FTB-SE1	<10
AVERAGE	**79.6**		
STD. DEV.	2.53		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	94.3	FTB-SE1
2	86.3	FTB-SE1
3	92.3	FTB-SE1
4	95.1	FTB-SE1
5	96.5	FTB-SE1
AVERAGE	**92.9**	
STD. DEV.	3.99	

CHECKED BY: MPS DATE: 5-28-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-06
LAB ID NO.: 2004-S006-06-12
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-47

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	84.5	FTB-SE1	<10
2	83.4	FTB-SE1	<10
3	82.5	FTB-SE1	<10
4	85.4	FTB-SE1	<10
5	83.4	FTB-SE1	<10
AVERAGE	**83.8**		
STD. DEV.	1.12		
INSIDE TRACK (WELD "B")			
1	80.4	FTB-SE1	<10
2	85.1	FTB-SE1	<10
3	85.1	FTB-SE1	<10
4	82.0	FTB-SE1	<10
5	85.6	FTB-SE1	<10
AVERAGE	**83.6**		
STD. DEV.	2.31		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	91.9	FTB-SE1
2	90.0	FTB-SE1
3	89.7	FTB-SE1
4	89.3	FTB-SE1
5	88.5	FTB-SE1
AVERAGE	**89.9**	
STD. DEV.	1.26	

CHECKED BY: MPS DATE: 5-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-06-12

5/28/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-07
LAB ID NO.: 2004-S006-07-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-48

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	88.5	FTB-SE1	<10
2	91.1	FTB-SE1	<10
3	89.3	FTB-SE1	<10
4	90.4	FTB-SE1	<10
5	91.1	FTB-SE1	<10
AVERAGE	**90.1**		
STD. DEV.	1.15		
INSIDE TRACK (WELD "B")			
1	90.9	FTB-SE1	<10
2	89.2	FTB-SE1	<10
3	91.0	FTB-SE1	<10
4	88.0	FTB-SE1	<10
5	93.3	FTB-SE1	<10
AVERAGE	**90.5**		
STD. DEV.	2.01		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	92.8	FTB-SE1
2	94.1	FTB-SE1
3	94.2	FTB-SE1
4	91.9	FTB-SE1
5	94.2	FTB-SE1
AVERAGE	**93.4**	
STD. DEV.	1.05	

CHECKED BY: MWS DATE: 6-8-04

C:\My Documents\EXCEL\Template\[HDP&S-DFusion.xls]Sheet1

\\Davejenks1\c\GEOSYN~1\HALLAT~1\[2004-S006-07-01.xls]Sheet1 2004-S006-07-01 6/8/2004

geotechnics
INTEGRITY IN TESTING

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-07
LAB ID NO.: 2004-S006-07-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-49

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	82.4	FTB-SE1	<10
2	84.1	FTB-SE1	<10
3	83.6	FTB-SE1	<10
4	85.0	FTB-SE1	<10
5	84.4	FTB-SE1	<10
AVERAGE	**83.9**		
STD. DEV.	0.98		
INSIDE TRACK (WELD "B")			
1	83.3	FTB-SE1	<10
2	82.3	FTB-SE1	<10
3	86.4	FTB-SE1	<10
4	85.2	FTB-SE1	<10
5	83.3	FTB-SE1	<10
AVERAGE	**84.1**		
STD. DEV.	1.66		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	90.8	FTB-SE1
2	92.4	FTB-SE1
3	91.3	FTB-SE1
4	91.4	FTB-SE1
5	91.7	FTB-SE1
AVERAGE	**91.5**	
STD. DEV.	0.59	

CHECKED BY: [illegible] DATE: 6/8/04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Davejenks1\c\GEOSYN-1\HALLAT-1\[2004-S006-07-02.xls]Sheet1 2004-S006-07-02 6/8/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-07
LAB ID NO.: 2004-S006-07-03
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-50

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	85.3	FTB-SE1	<10
2	82.7	FTB-SE1	<10
3	85.7	FTB-SE1	<10
4	84.4	FTB-SE1	<10
5	85.7	FTB-SE1	<10
AVERAGE	**84.8**		
STD. DEV.	1.27		
INSIDE TRACK (WELD "B")			
1	85.5	FTB-SE1	<10
2	81.1	FTB-SE1	<10
3	86.5	FTB-SE1	<10
4	80.7	FTB-SE1	<10
5	86.3	FTB-SE1	<10
AVERAGE	**84.0**		
STD. DEV.	2.88		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	94.3	FTB-SE1
2	95.3	FTB-SE1
3	95.9	FTB-SE1
4	96.2	FTB-SE1
5	93.4	FTB-SE1
AVERAGE	**95.0**	
STD. DEV.	1.16	

CHECKED BY: [illegible] DATE: 6/8/04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Davejenks1\c\GEOSYN~1\HALLAT~1\[2004-S006-07-03.xls]Sheet1 2004-S006-07-03 6/8/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-07
LAB ID NO.: 2004-S006-07-04
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-51

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.9	FTB-SE1	<10
2	83.2	FTB-SE1	<10
3	86.8	FTB-SE1	<10
4	86.4	FTB-SE1	<10
5	87.1	FTB-SE1	<10
AVERAGE	**86.1**		
STD. DEV.	1.63		
INSIDE TRACK (WELD "B")			
1	82.6	FTB-SE1	<10
2	80.1	FTB-SE1	<10
3	84.5	FTB-SE1	<10
4	82.3	FTB-SE1	<10
5	82.7	FTB-SE1	<10
AVERAGE	**82.4**		
STD. DEV.	1.57		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	88.8	FTB-SE1
2	89.2	FTB-SE1
3	90.6	FTB-SE1
4	92.1	FTB-SE1
5	86.9	FTB-SE1
AVERAGE	**89.5**	
STD. DEV.	1.96	

CHECKED BY: HWS DATE: 6/8/04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Davelenks1\c\GEOSYN~1\HALLAT~1\[2004-S006-07-04.xls]Sheet1 2004-S006-07-04 6/8/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-07
LAB ID NO.: 2004-S006-07-05
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-52

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	74.9	FTB-SE1	<10
2	75.2	FTB-SE1	<10
3	72.3	FTB-AD-BRK	<50
4	71.1	FTB-SE1	<10
5	65.1	FTB-AD-BRK	<75
AVERAGE	**71.7**		
STD. DEV.	4.09		
INSIDE TRACK (WELD "B")			
1	82.6	FTB-SE1	<10
2	81.5	FTB-SE1	<10
3	79.4	FTB-SE1	<10
4	75.0	FTB-SE1	<10
5	80.3	FTB-SE1	<10
AVERAGE	**79.8**		
STD. DEV.	2.92		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	82.2	FTB-SE1
2	85.1	FTB-SE1
3	81.6	FTB-SE1
4	80.8	FTB-SE1
5	80.6	FTB-SE1
AVERAGE	**82.1**	
STD. DEV.	1.82	

CHECKED BY: MMS DATE: 6-8-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\DaVejenke1\c\GEOS\YN-1\HALLAT~1\[2004-S006-07-05.xls]Sheet1 2004-S006-07-05 8/8/2004

geotechnics
INTEGRITY IN TESTING

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-07
LAB ID NO.: 2004-S006-07-06
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-53

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	85.0	FTB-SE1	<10
2	85.6	FTB-SE1	<10
3	84.7	FTB-SE1	<10
4	86.9	FTB-SE1	<10
5	87.7	FTB-SE1	<10
AVERAGE	**86.0**		
STD. DEV.	1.28		
INSIDE TRACK (WELD "B")			
1	85.2	FTB-SE1	<10
2	87.3	FTB-SE1	<10
3	86.2	FTB-SE1	<10
4	85.7	FTB-SE1	<10
5	81.2	FTB-SE1	<10
AVERAGE	**85.1**		
STD. DEV.	2.33		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	90.3	FTB-SE1
2	87.6	FTB-SE1
3	87.3	FTB-SE1
4	88.8	FTB-SE1
5	87.4	FTB-SE1
AVERAGE	**88.3**	
STD. DEV.	1.28	

CHECKED BY: [illegible] DATE: 6/8/04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

\\Davejenks1\c\GEOSYN~1\HALLAT~1\[2004-S006-07-06.xls]Sheet1 2004-S006-07-06 6/8/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-07
LAB ID NO.: 2004-S006-07-07
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-54

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	68.4	FTB-AD-BRK	<25
2	84.5	FTB-SE1	<10
3	85.6	FTB-SE1	<10
4	85.8	FTB-SE1	<10
5	84.8	FTB-SE1	<10
AVERAGE	**81.8**		
STD. DEV.	7.52		
INSIDE TRACK (WELD "B")			
1	81.8	FTB-SE1	<10
2	83.7	FTB-SE1	<10
3	84.2	FTB-SE1	<10
4	84.8	FTB-SE1	<10
5	80.5	FTB-SE1	<10
AVERAGE	**83.0**		
STD. DEV.	1.79		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	90.6	FTB-SE1
2	89.8	FTB-SE1
3	91.1	FTB-SE1
4	91.4	FTB-SE1
5	90.3	FTB-SE1
AVERAGE	**90.6**	
STD. DEV.	0.63	

CHECKED BY: MWS DATE: 6/8/04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

\\Dave\jon\a1\e\GEOSYN~1\HALLAT~1\[2004-S006-07-07.xls]Sheet1 2004-S006-07-07 6/8/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-07
LAB ID NO.: 2004-S006-07-08
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-55

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	83.2	FTB-SE1	<10
2	84.8	FTB-SE1	<10
3	85.0	FTB-SE1	<10
4	85.2	FTB-SE1	<10
5	84.4	FTB-SE1	<10
AVERAGE	**84.5**		
STD. DEV.	0.79		
INSIDE TRACK (WELD "B")			
1	82.7	FTB-SE1	<10
2	81.6	FTB-SE1	<10
3	82.7	FTB-SE1	<10
4	82.9	FTB-SE1	<10
5	82.7	FTB-SE1	<10
AVERAGE	**82.5**		
STD. DEV.	0.52		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	88.9	FTB-SE1
2	87.8	FTB-SE1
3	87.7	FTB-SE1
4	88.6	FTB-SE1
5	89.0	FTB-SE1
AVERAGE	**88.4**	
STD. DEV.	0.61	

CHECKED BY: MM DATE: 6-8-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Davejenks1\c\GEOSYN~1\HALLAT~1\[2004-S006-07-08.xls]Sheet1 2004-S006-07-08 6/8/2004

geotechnics
INTEGRITY IN TESTING

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 W/NSF 54

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-07
LAB ID NO.: 2004-S006-07-09
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-56

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	82.8	FTB-SE1	<10
2	81.7	FTB-SE1	<10
3	82.4	FTB-SE1	<10
4	83.7	FTB-SE1	<10
5	80.8	FTB-SE1	<10
AVERAGE	**82.3**		
STD. DEV.	1.10		
INSIDE TRACK (WELD "B")			
1	80.9	FTB-SE1	<10
2	83.8	FTB-SE1	<10
3	83.2	FTB-SE1	<10
4	84.4	FTB-SE1	<10
5	84.4	FTB-SE1	<10
AVERAGE	**83.3**		
STD. DEV.	1.45		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	90.0	FTB-SE1
2	87.6	FTB-SE1
3	88.6	FTB-SE1
4	87.7	FTB-SE1
5	86.1	FTB-SE1
AVERAGE	**88.0**	
STD. DEV.	1.43	

CHECKED BY: [illegible] DATE: 6/9/04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Davejenks1\d\GEOSYN~1\HALLAT~1\[2004-S006-07-09.xls]Sheet1 2004-S006-07-09 6/8/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-08
LAB ID NO.: 2004-S006-08-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-57

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	94.1	FTB-SE1	<10
2	93.6	FTB-SE1	<10
3	93.7	FTB-SE1	<10
4	89.9	FTB-SE1	<10
5	92.6	FTB-SE1	<10
AVERAGE	**92.8**		
STD. DEV.	1.70		
INSIDE TRACK (WELD "B")			
1	90.2	FTB-SE1	<10
2	89.7	FTB-SE1	<10
3	89.5	FTB-SE1	<10
4	89.5	FTB-SE1	<10
5	91.7	FTB-SE1	<10
AVERAGE	**90.1**		
STD. DEV.	0.93		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	101.9	FTB-SE1
2	98.0	FTB-SE1
3	99.2	FTB-SE1
4	99.8	FTB-SE1
5	97.4	FTB-SE1
AVERAGE	**99.3**	
STD. DEV.	1.75	

CHECKED BY: MPS DATE: 6-10-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-08
LAB ID NO.: 2004-S006-08-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-58

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	89.0	FTB-SE1	<10
2	90.7	FTB-SE1	<10
3	88.2	FTB-SE1	<10
4	88.8	FTB-SE1	<10
5	88.4	FTB-SE1	<10
AVERAGE	**89.0**		
STD. DEV.	0.99		
INSIDE TRACK (WELD "B")			
1	87.8	FTB-SE1	<10
2	90.3	FTB-SE1	<10
3	91.0	FTB-SE1	<10
4	87.7	FTB-SE1	<10
5	89.3	FTB-SE1	<10
AVERAGE	**89.2**		
STD. DEV.	1.47		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	95.1	FTB-SE1
2	97.7	FTB-SE1
3	95.1	FTB-SE1
4	94.8	FTB-SE1
5	95.9	FTB-SE1
AVERAGE	**95.7**	
STD. DEV.	1.18	

CHECKED BY: MPS DATE: 6-10-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-08
LAB ID NO.: 2004-S006-08-03
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-59

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	87.2	FTB-SE1	<10
2	88.4	FTB-SE1	<10
3	88.2	FTB-SE1	<10
4	86.3	FTB-SE1	<10
5	86.5	FTB-SE1	<10
AVERAGE	**87.3**		
STD. DEV.	0.96		
INSIDE TRACK (WELD "B")			
1	86.9	FTB-SE1	<10
2	85.4	FTB-SE1	<10
3	84.0	FTB-SE1	<10
4	82.7	FTB-SE1	<10
5	87.9	FTB-SE1	<10
AVERAGE	**85.4**		
STD. DEV.	2.11		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	96.4	FTB-SE1
2	96.6	FTB-SE1
3	96.8	FTB-SE1
4	97.7	FTB-SE1
5	96.8	FTB-SE1
AVERAGE	**96.9**	
STD. DEV.	0.50	

CHECKED BY: MMS DATE: 6-10-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 W/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-08
LAB ID NO.: 2004-S006-08-04
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-60

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	89.1	FTB-SE1	<10
2	85.7	FTB-SE1	<10
3	87.3	FTB-SE1	<10
4	85.0	FTB-SE1	<10
5	88.6	FTB-SE1	<10
AVERAGE	**87.1**		
STD. DEV.	1.78		
INSIDE TRACK (WELD "B")			
1	84.3	FTB-SE1	<10
2	83.5	FTB-SE1	<10
3	83.9	FTB-SE1	<10
4	83.7	FTB-SE1	<10
5	83.6	FTB-SE1	<10
AVERAGE	**83.8**		
STD. DEV.	0.32		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	95.2	FTB-SE1
2	93.0	FTB-SE1
3	95.2	FTB-SE1
4	94.7	FTB-SE1
5	94.9	FTB-SE1
AVERAGE	**94.6**	
STD. DEV.	0.92	

CHECKED BY: RBS DATE: 6-10-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-08
LAB ID NO.: 2004-S006-08-05
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-61

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.6	FTB-SE1	<10
2	86.3	FTB-SE1	<10
3	88.2	FTB-SE1	<10
4	88.5	FTB-SE1	<10
5	87.3	FTB-SE1	<10
AVERAGE	**87.4**		
STD. DEV.	0.96		
INSIDE TRACK (WELD "B")			
1	88.4	FTB-SE1	<10
2	88.9	FTB-SE1	<10
3	87.6	FTB-SE1	<10
4	89.7	FTB-SE1	<10
5	88.2	FTB-SE1	<10
AVERAGE	**88.6**		
STD. DEV.	0.79		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	94.4	FTB-SE1
2	95.7	FTB-SE1
3	95.0	FTB-SE1
4	93.5	FTB-SE1
5	95.6	FTB-SE1
AVERAGE	**94.8**	
STD. DEV.	0.91	

CHECKED BY: BWS DATE: 6-16-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-08
LAB ID NO.: 2004-S006-08-06
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-62

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	88.6	FTB-SE1	<10
2	87.3	FTB-SE1	<10
3	87.1	FTB-SE1	<10
4	89.5	FTB-SE1	<10
5	88.0	FTB-SE1	<10
AVERAGE	**88.1**		
STD. DEV.	0.98		
INSIDE TRACK (WELD "B")			
1	75.8	FTB-AD BRK	50%
2	88.8	FTB-SE1	<10
3	90.2	FTB-SE1	<10
4	90.3	FTB-SE1	<10
5	88.1	FTB-SE1	<10
AVERAGE	**86.6**		
STD. DEV.	6.13		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	92.4	FTB-SE1
2	95.1	FTB-SE1
3	96.6	FTB-SE1
4	94.4	FTB-SE1
5	93.9	FTB-SE1
AVERAGE	**94.5**	
STD. DEV.	1.54	

CHECKED BY: MPS DATE: 6-10-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-08
LAB ID NO.: 2004-S006-08-07
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-63

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	75.3	FTB- AD BRK	75%
2	89.7	FTB-SE1	<10
3	84.1	FTB-SE1	<10
4	80.9	FTB-AD BRK	50%
5	88.7	FTB-SE1	<10
AVERAGE	**83.7**		
STD. DEV.	5.91		
INSIDE TRACK (WELD "B")			
1	86.4	FTB-SE1	<10
2	85.5	FTB-SE1	<10
3	72.0	FTB-AD BRK	75%
4	80.7	FTB-SE1	<10
5	83.9	FTB-SE1	<10
AVERAGE	**81.7**		
STD. DEV.	5.84		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	91.4	FTB-SE1
2	92.7	FTB-SE1
3	92.4	FTB-SE1
4	92.9	FTB-SE1
5	94.0	FTB-SE1
AVERAGE	**92.7**	
STD. DEV.	0.94	

CHECKED BY: MMS DATE: 6-10-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-08
LAB ID NO.: 2004-S006-08-08
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-64

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	85.3	FTB-SE1	<10
2	85.5	FTB-SE1	<10
3	82.7	FTB-SE1	<10
4	85.2	FTB-SE1	<10
5	86.8	FTB-SE1	<10
AVERAGE	**85.1**		
STD. DEV.	1.49		
INSIDE TRACK (WELD "B")			
1	85.7	FTB-SE1	<10
2	87.0	FTB-SE1	<10
3	85.5	FTB-SE1	<10
4	85.9	FTB-SE1	<10
5	86.2	FTB-SE1	<10
AVERAGE	**86.1**		
STD. DEV.	0.59		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	91.4	FTB-SE1
2	90.0	FTB-SE1
3	90.6	FTB-SE1
4	91.2	FTB-SE1
5	88.9	FTB-SE1
AVERAGE	**90.4**	
STD. DEV.	1.01	

CHECKED BY: MPS DATE: 6-10-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-08
LAB ID NO.: 2004-S006-08-09
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-65

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.9	FTB-SE1	<10
2	86.7	FTB-SE1	<10
3	89.2	FTB-SE1	<10
4	90.2	FTB-SE1	<10
5	86.4	FTB-SE1	<10
AVERAGE	**87.9**		
STD. DEV.	1.71		
INSIDE TRACK (WELD "B")			
1	88.2	FTB-SE1	<10
2	88.1	FTB-SE1	<10
3	87.0	FTB-SE1	<10
4	87.9	FTB-SE1	<10
5	86.9	FTB-SE1	<10
AVERAGE	**87.6**		
STD. DEV.	0.62		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	93.5	FTB-SE1
2	93.2	FTB-SE1
3	92.6	FTB-SE1
4	93.2	FTB-SE1
5	92.3	FTB-SE1
AVERAGE	**93.0**	
STD. DEV.	0.49	

CHECKED BY: MPS DATE: 6-10-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-09
LAB ID NO.: 2004-S006-09-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-66

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	89.0	FTB-SE1	<10
2	88.5	FTB-SE1	<10
3	89.2	FTB-SE1	<10
4	89.1	FTB-SE1	<10
5	88.2	FTB-SE1	<10
AVERAGE	**88.8**		
STD. DEV.	0.43		
INSIDE TRACK (WELD "B")			
1	88.1	FTB-SE1	<10
2	86.6	FTB-SE1	<10
3	92.3	FTB-SE1	<10
4	87.2	FTB-SE1	<10
5	88.5	FTB-SE1	<10
AVERAGE	**88.5**		
STD. DEV.	2.23		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	93.0	FTB-SE1
2	92.4	FTB-SE1
3	93.5	FTB-SE1
4	93.7	FTB-SE1
5	92.0	FTB-SE1
AVERAGE	**92.9**	
STD. DEV.	0.72	

CHECKED BY: MMS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-09
LAB ID NO.: 2004-S006-09-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-67

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	89.3	FTB-SE1	<10
2	90.3	FTB-SE1	<10
3	89.6	FTB-SE1	<10
4	89.0	FTB-SE1	<10
5	88.6	FTB-SE1	<10
AVERAGE	**89.4**		
STD. DEV.	0.64		
INSIDE TRACK (WELD "B")			
1	84.2	FTB-SE1	<10
2	82.3	FTB-SE1	<10
3	82.9	FTB-SE1	<10
4	81.6	FTB-SE1	<10
5	80.1	FTB-SE1	<10
AVERAGE	**82.2**		
STD. DEV.	1.52		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	93.6	FTB-SE1
2	94.6	FTB-SE1
3	94.1	FTB-SE1
4	95.6	FTB-SE1
5	96.2	FTB-SE1
AVERAGE	**94.8**	
STD. DEV.	1.07	

CHECKED BY: MPS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-09
LAB ID NO.: 2004-S006-09-03
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-68

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	89.4	FTB-SE1	<10
2	82.7	FTB-SE1	<10
3	82.1	FTB-SE1	<10
4	87.9	FTB-SE1	<10
5	86.4	FTB-SE1	<10
AVERAGE	**85.7**		
STD. DEV.	3.20		
INSIDE TRACK (WELD "B")			
1	83.0	FTB-SE1	<10
2	80.7	FTB-SE1	<10
3	83.3	FTB-SE1	<10
4	81.0	FTB-SE1	<10
5	83.6	FTB-SE1	<10
AVERAGE	**82.3**		
STD. DEV.	1.36		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	93.7	FTB-SE1
2	94.1	FTB-SE1
3	94.0	FTB-SE1
4	93.1	FTB-SE1
5	93.8	FTB-SE1
AVERAGE	**93.7**	
STD. DEV.	0.39	

CHECKED BY: _____ DATE: _____

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-09
LAB ID NO.: 2004-S006-09-04
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-69

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.6	FTB-SE1	<10
2	88.1	FTB-SE1	<10
3	87.3	FTB-SE1	<10
4	85.0	FTB-SE1	<10
5	86.9	FTB-SE1	<10
AVERAGE	**86.8**		
STD. DEV.	1.14		
INSIDE TRACK (WELD "B")			
1	89.6	FTB-SE1	<10
2	89.5	FTB-SE1	<10
3	88.6	FTB-SE1	<10
4	88.8	FTB-SE1	<10
5	86.5	FTB-SE1	<10
AVERAGE	**88.6**		
STD. DEV.	1.25		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	91.4	FTB-SE1
2	90.5	FTB-SE1
3	91.3	FTB-SE1
4	89.6	FTB-SE1
5	85.9	FTB-SE1
AVERAGE	**89.7**	
STD. DEV.	2.27	

CHECKED BY: MHS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-09
LAB ID NO.: 2004-S006-09-05
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-70

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.8	FTB-SE1	<10
2	85.5	FTB-SE1	<10
3	86.4	FTB-SE1	<10
4	84.7	FTB-SE1	<10
5	84.6	FTB-SE1	<10
AVERAGE	**85.6**		
STD. DEV.	0.99		
INSIDE TRACK (WELD "B")			
1	89.4	FTB-SE1	<10
2	81.7	FTB-SE1	<10
3	87.4	FTB-SE1	<10
4	87.7	FTB-SE1	<10
5	84.0	FTB-SE1	<10
AVERAGE	**86.0**		
STD. DEV.	3.12		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	90.4	FTB-SE1
2	89.8	FTB-SE1
3	90.2	FTB-SE1
4	90.8	FTB-SE1
5	91.2	FTB-SE1
AVERAGE	**90.5**	
STD. DEV.	0.54	

CHECKED BY: MPS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-09
LAB ID NO.: 2004-S006-09-06
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-71

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	84.8	FTB-SE1	<10
2	83.9	FTB-SE1	<10
3	79.8	FTB-SE1	<10
4	81.2	FTB-SE1	<10
5	82.1	FTB-SE1	<10
AVERAGE	**82.4**		
STD. DEV.	2.02		
INSIDE TRACK (WELD "B")			
1	80.2	FTB-SE1	<10
2	80.2	FTB-SE1	<10
3	82.4	FTB-SE1	<10
4	84.2	FTB-SE1	<10
5	84.1	FTB-SE1	<10
AVERAGE	**82.2**		
STD. DEV.	1.98		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	86.0	FTB-SE1
2	83.5	FTB-SE1
3	83.9	FTB-SE1
4	86.0	FTB-SE1
5	84.8	FTB-SE1
AVERAGE	**84.8**	
STD. DEV.	1.16	

CHECKED BY: MMS DATE: 6-21-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-09-06

6/21/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-09
LAB ID NO.: 2004-S006-09-07
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-72

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	75.3	FTB-SE1	<10
2	71.0	FTB-SE1	<10
3	82.5	FTB-SE1	<10
4	84.9	FTB-SE1	<10
5	85.6	FTB-SE1	<10
AVERAGE	**79.9**		
STD. DEV.	6.42		
INSIDE TRACK (WELD "B")			
1	83.1	FTB-SE1	<10
2	82.2	FTB-SE1	<10
3	83.5	FTB-SE1	<10
4	83.3	FTB-SE1	<10
5	85.7	FTB-SE1	<10
AVERAGE	**83.6**		
STD. DEV.	1.30		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	90.9	FTB-SE1
2	90.8	FTB-SE1
3	91.5	FTB-SE1
4	90.9	FTB-SE1
5	90.5	FTB-SE1
AVERAGE	**90.9**	
STD. DEV.	0.36	

CHECKED BY: MMS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-09
LAB ID NO.: 2004-S006-09-08
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-73

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.6	FTB-SE1	<10
2	84.7	FTB-SE1	<10
3	89.5	FTB-SE1	<10
4	90.1	FTB-SE1	<10
5	89.5	FTB-SE1	<10
AVERAGE	**88.1**		
STD. DEV.	2.33		
INSIDE TRACK (WELD "B")			
1	81.9	FTB-SE1	<10
2	81.4	FTB-SE1	<10
3	83.1	FTB-SE1	<10
4	83.2	FTB-SE1	<10
5	82.3	FTB-SE1	<10
AVERAGE	**82.4**		
STD. DEV.	0.77		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	94.7	FTB-SE1
2	97.0	FTB-SE1
3	96.3	FTB-SE1
4	95.6	FTB-SE1
5	94.9	FTB-SE1
AVERAGE	**95.7**	
STD. DEV.	0.96	

CHECKED BY: MMS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-09
LAB ID NO.: 2004-S006-09-09
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-74

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	87.6	FTB-SE1	<10
2	85.7	FTB-SE1	<10
3	85.3	FTB-SE1	<10
4	87.1	FTB-SE1	<10
5	83.6	FTB-SE1	<10
AVERAGE	**85.9**		
STD. DEV.	1.58		
INSIDE TRACK (WELD "B")			
1	81.3	FTB-SE1	<10
2	84.9	FTB-SE1	<10
3	79.3	FTB-SE1	<10
4	83.9	FTB-SE1	<10
5	79.1	FTB-SE1	<10
AVERAGE	**81.7**		
STD. DEV.	2.63		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	94.4	FTB-SE1
2	94.7	FTB-SE1
3	93.5	FTB-SE1
4	93.9	FTB-SE1
5	94.4	FTB-SE1
AVERAGE	**94.2**	
STD. DEV.	0.48	

CHECKED BY: MMS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-09
LAB ID NO.: 2004-S006-09-10
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-75

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	72.6	FTB-AD BRK	75%
2	85.4	FTB-SE1	<10
3	71.9	FTB-AD BRK	75%
4	66.3	FTB-AD BRK	50%
5	82.5	FTB-SE1	<10
AVERAGE	**75.7**		
STD. DEV.	7.95		
INSIDE TRACK (WELD "B")			
1	77.4	FTB-SE1	<10
2	80.3	FTB-SE1	<10
3	79.4	FTB-SE1	<10
4	75.3	FTB-SE1	<10
5	79.3	FTB-SE1	<10
AVERAGE	**78.3**		
STD. DEV.	2.00		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	92.4	FTB-SE1
2	91.1	FTB-SE1
3	91.3	FTB-SE1
4	91.7	FTB-SE1
5	92.5	FTB-SE1
AVERAGE	**91.8**	
STD. DEV.	0.63	

CHECKED BY: MPS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-09
LAB ID NO.: 2004-S006-09-11
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-76

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	84.5	FTB-SE1	<10
2	83.8	FTB-SE1	<10
3	83.7	FTB-SE1	<10
4	83.0	FTB-SE1	<10
5	81.5	FTB-SE1	<10
AVERAGE	**83.3**		
STD. DEV.	1.14		
INSIDE TRACK (WELD "B")			
1	75.6	FTB-SE1	<10
2	76.1	FTB-SE1	<10
3	73.8	FTB-SE1	<10
4	78.1	FTB-SE1	<10
5	75.9	FTB-SE1	<10
AVERAGE	**75.9**		
STD. DEV.	1.53		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	91.8	FTB-SE1
2	90.3	FTB-SE1
3	90.7	FTB-SE1
4	91.1	FTB-SE1
5	90.7	FTB-SE1
AVERAGE	**90.9**	
STD. DEV.	0.57	

CHECKED BY: MHS DATE: 6-21-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-09-11

6/21/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-10
LAB ID NO.: 2004-S006-10-01
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-77

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.9	FTB-SE1	<10
2	85.9	FTB-SE1	<10
3	74.2	FTB-SE1	<10
4	78.4	FTB-SE1	<10
5	76.9	FTB-SE1	<10
AVERAGE	**80.5**		
STD. DEV.	5.64		
INSIDE TRACK (WELD "B")			
1	88.2	FTB-SE1	<10
2	90.5	FTB-SE1	<10
3	93.2	FTB-SE1	<10
4	89.3	FTB-SE1	<10
5	88.4	FTB-SE1	<10
AVERAGE	**89.9**		
STD. DEV.	2.05		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	93.1	FTB-SE1
2	95.0	FTB-SE1
3	94.7	FTB-SE1
4	93.5	FTB-SE1
5	94.8	FTB-SE1
AVERAGE	**94.2**	
STD. DEV.	0.86	

CHECKED BY: MMS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-10
LAB ID NO.: 2004-S006-10-02
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-78

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.3	FTB-SE1	<10
2	85.0	FTB-SE1	<10
3	86.9	FTB-SE1	<10
4	88.1	FTB-SE1	<10
5	87.2	FTB-SE1	<10
AVERAGE	**86.7**		
STD. DEV.	1.15		
INSIDE TRACK (WELD "B")			
1	88.9	FTB-SE1	<10
2	90.1	FTB-SE1	<10
3	89.6	FTB-SE1	<10
4	90.4	FTB-SE1	<10
5	87.9	FTB-SE1	<10
AVERAGE	**89.4**		
STD. DEV.	1.00		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	95.3	FTB-SE1
2	94.9	FTB-SE1
3	92.7	FTB-SE1
4	94.2	FTB-SE1
5	90.0	FTB-SE1
AVERAGE	**93.4**	
STD. DEV.	2.15	

CHECKED BY: MMS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-10
LAB ID NO.: 2004-S006-10-03
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-79

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	82.1	FTB-SE1	<10
2	98.0	FTB-SE1	<10
3	104.6	FTB-SE1	<10
4	92.1	FTB-SE1	<10
5	86.8	FTB-SE1	<10
AVERAGE	**92.7**		
STD. DEV.	8.91		
INSIDE TRACK (WELD "B")			
1	83.1	FTB-SE1	<10
2	86.5	FTB-SE1	<10
3	87.8	FTB-SE1	<10
4	75.4	FTB-SE1	<10
5	86.4	FTB-SE1	<10
AVERAGE	**83.8**		
STD. DEV.	5.03		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	103.4	FTB-SE1
2	92.0	FTB-SE1
3	88.4	FTB-SE1
4	105.0	FTB-SE1
5	99.6	FTB-SE1
AVERAGE	**97.7**	
STD. DEV.	7.22	

CHECKED BY: MM DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-10
LAB ID NO.: 2004-S006-10-04
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-80

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.4	FTB-SE1	<10
2	91.1	FTB-SE1	<10
3	83.5	FTB-SE1	<10
4	94.4	FTB-SE1	<10
5	90.9	FTB-SE1	<10
AVERAGE	**89.3**		
STD. DEV.	4.30		
INSIDE TRACK (WELD "B")			
1	80.4	FTB-SE1	<10
2	86.1	FTB-SE1	<10
3	84.5	FTB-SE1	<10
4	83.5	FTB-SE1	<10
5	89.2	FTB-SE1	<10
AVERAGE	**84.7**		
STD. DEV.	3.25		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	94.1	FTB-SE1
2	90.3	FTB-SE1
3	93.5	FTB-SE1
4	93.7	FTB-SE1
5	92.4	FTB-SE1
AVERAGE	**92.8**	
STD. DEV.	1.53	

CHECKED BY: MPS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-10
LAB ID NO.: 2004-S006-10-05
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-81

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	89.7	FTB-SE1	<10
2	91.4	FTB-SE1	<10
3	86.6	FTB-SE1	<10
4	91.8	FTB-SE1	<10
5	90.2	FTB-SE1	<10
AVERAGE	**89.9**		
STD. DEV.	2.05		
INSIDE TRACK (WELD "B")			
1	88.8	FTB-SE1	<10
2	87.3	FTB-SE1	<10
3	80.3	FTB-SE1	<10
4	89.4	FTB-SE1	<10
5	89.7	FTB-SE1	<10
AVERAGE	**87.1**		
STD. DEV.	3.91		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	99.1	FTB-SE1
2	96.8	FTB-SE1
3	96.0	FTB-SE1
4	95.0	FTB-SE1
5	100.5	FTB-SE1
AVERAGE	**97.5**	
STD. DEV.	2.27	

CHECKED BY: MMS DATE: 6-21-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-10-05 6/21/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnic
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-10
LAB ID NO.: 2004-S006-10-06
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-82

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	89.3	FTB-SE1	<10
2	90.1	FTB-SE1	<10
3	88.7	FTB-SE1	<10
4	90.0	FTB-SE1	<10
5	90.3	FTB-SE1	<10
AVERAGE	**89.7**		
STD. DEV.	0.66		
INSIDE TRACK (WELD "B")			
1	89.3	FTB-SE1	<10
2	96.0	FTB-SE1	<10
3	88.0	FTB-SE1	<10
4	88.7	FTB-SE1	<10
5	86.1	FTB-SE1	<10
AVERAGE	**89.6**		
STD. DEV.	3.76		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	92.9	FTB-SE1
2	97.9	FTB-SE1
3	96.1	FTB-SE1
4	97.2	FTB-SE1
5	96.8	FTB-SE1
AVERAGE	**96.2**	
STD. DEV.	1.95	

CHECKED BY: MMS DATE: 6-21-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-10
LAB ID NO.: 2004-S006-10-07
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-83

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	92.1	FTB-SE1	<10
2	85.4	FTB-SE1	<10
3	93.0	FTB-SE1	<10
4	88.1	FTB-SE1	<10
5	88.8	FTB-SE1	<10
AVERAGE	**89.5**		
STD. DEV.	3.09		
INSIDE TRACK (WELD "B")			
1	86.6	FTB-SE1	<10
2	89.7	FTB-SE1	<10
3	87.8	FTB-SE1	<10
4	87.4	FTB-SE1	<10
5	86.1	FTB-SE1	<10
AVERAGE	**87.5**		
STD. DEV.	1.39		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	98.0	FTB-SE1
2	98.1	FTB-SE1
3	95.0	FTB-SE1
4	96.0	FTB-SE1
5	96.9	FTB-SE1
AVERAGE	**96.8**	
STD. DEV.	1.32	

CHECKED BY: MPS DATE: 6-21-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-10-07

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnic
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-10
LAB ID NO.: 2004-S006-10-08
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-84

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	90.9	FTB-SE1	<10
2	92.1	FTB-SE1	<10
3	92.3	FTB-SE1	<10
4	91.3	FTB-SE1	<10
5	92.7	FTB-SE1	<10
AVERAGE	**91.9**		
STD. DEV.	0.74		
INSIDE TRACK (WELD "B")			
1	86.4	FTB-SE1	<10
2	85.5	FTB-SE1	<10
3	85.2	FTB-SE1	<10
4	85.0	FTB-SE1	<10
5	85.9	FTB-SE1	<10
AVERAGE	**85.6**		
STD. DEV.	0.56		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	93.1	FTB-SE1
2	94.3	FTB-SE1
3	93.2	FTB-SE1
4	94.5	FTB-SE1
5	94.5	FTB-SE1
AVERAGE	**93.9**	
STD. DEV.	0.71	

CHECKED BY: MPS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-10
LAB ID NO.: 2004-S006-10-09
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-85

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	96.5	FTB-SE1	<10
2	96.7	FTB-SE1	<10
3	97.8	FTB-SE1	<10
4	96.7	FTB-SE1	<10
5	96.5	FTB-SE1	<10
AVERAGE	**96.8**		
STD. DEV.	0.55		
INSIDE TRACK (WELD "B")			
1	95.0	FTB-SE1	<10
2	95.4	FTB-SE1	<10
3	95.7	FTB-SE1	<10
4	94.4	FTB-SE1	<10
5	95.1	FTB-SE1	<10
AVERAGE	**95.1**		
STD. DEV.	0.49		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	108.5	FTB-SE1
2	104.8	FTB-SE1
3	107.9	FTB-SE1
4	104.9	FTB-SE1
5	106.2	FTB-SE1
AVERAGE	**106.5**	
STD. DEV.	1.69	

CHECKED BY: MBS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnic
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-10
LAB ID NO.: 2004-S006-10-10
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-86

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	98.4	FTB-SE1	<10
2	97.3	FTB-SE1	<10
3	96.8	FTB-SE1	<10
4	96.5	FTB-SE1	<10
5	95.3	FTB-SE1	<10
AVERAGE	**96.9**		
STD. DEV.	1.13		
INSIDE TRACK (WELD "B")			
1	97.0	FTB-SE1	<10
2	95.3	FTB-SE1	<10
3	95.5	FTB-SE1	<10
4	95.7	FTB-SE1	<10
5	95.0	FTB-SE1	<10
AVERAGE	**95.7**		
STD. DEV.	0.77		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	98.7	FTB-SE1
2	102.5	FTB-SE1
3	101.9	FTB-SE1
4	103.4	FTB-SE1
5	103.9	FTB-SE1
AVERAGE	**102.1**	
STD. DEV.	2.04	

CHECKED BY: MMS DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHS. 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-10
LAB ID NO.: 2004-S006-10-11
MATERIAL: 40-MIL HDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-87

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	99.0	FTB-SE1	<10
2	97.3	FTB-SE1	<10
3	97.3	FTB-SE1	<10
4	100.5	FTB-SE1	<10
5	99.2	FTB-SE1	<10
AVERAGE	**98.7**		
STD. DEV.	1.37		
INSIDE TRACK (WELD "B")			
1	95.4	FTB-SE1	<10
2	96.3	FTB-SE1	<10
3	95.3	FTB-SE1	<10
4	99.0	FTB-SE1	<10
5	96.7	FTB-SE1	<10
AVERAGE	**96.5**		
STD. DEV.	1.50		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	109.3	FTB-SE1
2	109.9	FTB-SE1
3	109.2	FTB-SE1
4	108.3	FTB-SE1
5	108.6	FTB-SE1
AVERAGE	**109.1**	
STD. DEV.	0.63	

CHECKED BY: MM DATE: 6-21-04

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-11
LAB ID NO.: 2004-S006-11-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-88

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	79.9	FTB-SE1	<10
2	80.7	FTB-SE1	<10
3	77.7	FTB-SE1	<10
4	79.6	FTB-SE1	<10
5	75.9	FTB-SE1	<10
AVERAGE	**78.8**		
STD. DEV.	1.94		
INSIDE TRACK (WELD "B")			
1	81.9	FTB-SE1	<10
2	82.7	FTB-SE1	<10
3	80.0	FTB-SE1	<10
4	79.4	FTB-SE1	<10
5	81.3	FTB-SE1	<10
AVERAGE	**81.1**		
STD. DEV.	1.35		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	86.3	FTB-SE1
2	84.6	FTB-SE1
3	83.6	FTB-SE1
4	81.4	FTB-SE1
5	82.7	FTB-SE1
AVERAGE	**83.7**	
STD. DEV.	1.86	

CHECKED BY: MWS DATE: 6-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

\\Davejenks1\c\GEOSYN~1\HALLAT~1\[2004-S006-11-01.xls]Sheet1 2004-S006-11-01 6/28/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-11
LAB ID NO.: 2004-S006-11-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-89

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	73.7	FTB-SE1	<10
2	72.4	FTB-SE1	<10
3	75.6	FTB-SE1	<10
4	76.6	FTB-SE1	<10
5	75.3	FTB-SE1	<10
AVERAGE	**74.7**		
STD. DEV.	1.66		
INSIDE TRACK (WELD "B")			
1	79.1	FTB-SE1	<10
2	77.7	FTB-SE1	<10
3	79.0	FTB-SE1	<10
4	79.2	FTB-SE1	<10
5	80.2	FTB-SE1	<10
AVERAGE	**79.0**		
STD. DEV.	0.89		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	82.7	FTB-SE1
2	79.9	FTB-SE1
3	82.1	FTB-SE1
4	83.6	FTB-SE1
5	82.0	FTB-SE1
AVERAGE	**82.1**	
STD. DEV.	1.36	

CHECKED BY: MMS DATE: 6-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Davejenks1\c\GEOSYN~1\HALLAT~1\[2004-S006-11-02.xls]Sheet1 2004-S006-11-02 6/28/2004

geotechnics
INTEGRITY IN TESTING

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-11
LAB ID NO.: 2004-S006-11-03
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-90

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	63.1	FTB-SE1	<10
2	66.4	FTB-SE1	<10
3	62.6	FTB-SE1	<10
4	62.8	FTB-SE1	<10
5	66.3	FTB-SE1	<10
AVERAGE	**64.2**		
STD. DEV.	1.93		
INSIDE TRACK (WELD "B")			
1	77.4	FTB-SE1	<10
2	77.5	FTB-SE1	<10
3	78.4	FTB-SE1	<10
4	77.8	FTB-SE1	<10
5	78.3	FTB-SE1	<10
AVERAGE	**77.9**		
STD. DEV.	0.45		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	84.9	FTB-SE1
2	85.6	FTB-SE1
3	84.2	FTB-SE1
4	85.3	FTB-SE1
5	86.2	FTB-SE1
AVERAGE	**85.2**	
STD. DEV.	0.75	

CHECKED BY: HMS DATE: 6-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Davejenks1\c\GEOSYN-1\HALLAT-1\[2004-S006-11-02.xls]Sheet1 2004-S006-11-03 6/28/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-11
LAB ID NO.: 2004-S006-11-04
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-91

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	85.3	FTB-SE1	<10
2	85.7	FTB-SE1	<10
3	86.3	FTB-SE1	<10
4	85.0	FTB-SE1	<10
5	83.9	FTB-SE1	<10
AVERAGE	**85.2**		
STD. DEV.	0.89		
INSIDE TRACK (WELD "B")			
1	85.3	FTB-SE1	<10
2	86.8	FTB-SE1	<10
3	85.4	FTB-SE1	<10
4	84.2	FTB-SE1	<10
5	85.7	FTB-SE1	<10
AVERAGE	**85.5**		
STD. DEV.	0.93		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	90.9	FTB-SE1
2	90.5	FTB-SE1
3	90.7	FTB-SE1
4	91.3	FTB-SE1
5	90.4	FTB-SE1
AVERAGE	**90.8**	
STD. DEV.	0.36	

CHECKED BY: MPS DATE: 6-29-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Davejenks1\c\GEOSYN~1\HALLAT~1\[2004-S006-11-03.xls]Sheet1 2004-S006-11-04 6/29/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-11
LAB ID NO.: 2004-S006-11-05
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-92

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	82.7	FTB-SE1	<10
2	84.5	FTB-SE1	<10
3	79.0	FTB-SE1	<10
4	82.1	FTB-SE1	<10
5	81.8	FTB-SE1	<10
AVERAGE	**82.0**		
STD. DEV.	1.99		
INSIDE TRACK (WELD "B")			
1	66.0	FTB-SE1	<10
2	68.8	FTB-SE1	<10
3	65.9	FTB-SE1	<10
4	68.1	FTB-SE1	<10
5	66.8	FTB-SE1	<10
AVERAGE	**67.1**		
STD. DEV.	1.29		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	88.9	FTB-SE1
2	88.9	FTB-SE1
3	90.3	FTB-SE1
4	91.2	FTB-SE1
5	89.1	FTB-SE1
AVERAGE	**89.7**	
STD. DEV.	1.03	

CHECKED BY: _____ DATE: _____

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Davejenka1\c\GEOSYN~1\HALLAT~1\[2004-S006-11-05.xls]Sheet1 2004-S006-11-05 5/28/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-12
LAB ID NO.: 2004-S006-12-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-93

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	82.8	FTB-SE1	<10
2	81.4	FTB-SE1	<10
3	83.4	FTB-SE1	<10
4	82.7	FTB-SE1	<10
5	81.7	FTB-SE1	<10
AVERAGE	**82.4**		
STD. DEV.	0.83		
INSIDE TRACK (WELD "B")			
1	94.4	FTB-SE1	<10
2	90.7	FTB-SE1	<10
3	87.8	FTB-SE1	<10
4	93.5	FTB-SE1	<10
5	89.2	FTB-SE1	<10
AVERAGE	**91.1**		
STD. DEV.	2.80		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	93.7	FTB-SE1
2	91.2	FTB-SE1
3	94.1	FTB-SE1
4	97.4	FTB-SE1
5	96.3	FTB-SE1
AVERAGE	**94.5**	
STD. DEV.	2.42	

CHECKED BY: [illegible] DATE: 6-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Davejenks1\c\GEOSYN~1\HALLAT~1\[2004-S006-11-05.xls]Sheet1 2004-S006-12-01 6/28/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-12
LAB ID NO.: 2004-S006-12-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-94

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	86.2	FTB-SE1	<10
2	84.3	FTB-SE1	<10
3	80.8	FTB-SE1	<10
4	84.9	FTB-SE1	<10
5	79.6	FTB-SE1	<10
AVERAGE	**83.2**		
STD. DEV.	2.82		
INSIDE TRACK (WELD "B")			
1	82.1	FTB-SE1	<10
2	80.8	FTB-SE1	<10
3	83.5	FTB-SE1	<10
4	81.0	FTB-SE1	<10
5	81.4	FTB-SE1	<10
AVERAGE	**81.8**		
STD. DEV.	1.09		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	91.4	FTB-SE1
2	94.0	FTB-SE1
3	90.4	FTB-SE1
4	93.0	FTB-SE1
5	91.3	FTB-SE1
AVERAGE	**92.0**	
STD. DEV.	1.45	

CHECKED BY: Eam DATE: 6-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Davejenka1\c\GEOSYN-1\HALLAT-1\[2004-S006-12-01.xls]Sheet1 2004-S006-12-02 6/29/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-12
LAB ID NO.: 2004-S006-12-03
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-95

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	57.9	FTB-SE1	<10
2	61.8	FTB-SE1	<10
3	60.8	FTB-SE1	<10
4	61.5	FTB-SE1	<10
5	61.7	FTB-SE1	<10
AVERAGE	**60.7**		
STD. DEV.	1.63		
INSIDE TRACK (WELD "B")			
1	79.5	FTB-SE1	<10
2	78.5	FTB-SE1	<10
3	77.3	FTB-SE1	<10
4	79.9	FTB-SE1	<10
5	76.5	FTB-SE1	<10
AVERAGE	**78.3**		
STD. DEV.	1.44		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	93.1	FTB-SE1
2	91.9	FTB-SE1
3	90.7	FTB-SE1
4	93.6	FTB-SE1
5	95.7	FTB-SE1
AVERAGE	**93.0**	
STD. DEV.	1.88	

CHECKED BY: VEm DATE: 6-28-04

C:\My Documents\EXCEL\Templates\[HDPE&S-DFusion.xls]Sheet1

\\Davejenks1\c\GEOSYN~1\HALLAT~1\[2004-S006-12-02.xls]Sheet1 2004-S006-12-03 6/26/2004

geotechnics
INTEGRITY IN TESTING

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-12
LAB ID NO.: 2004-S006-12-04
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-96

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	83.4	FTB-SE1	<10
2	81.2	FTB-SE1	<10
3	82.6	FTB-SE1	<10
4	81.9	FTB-SE1	<10
5	82.2	FTB-SE1	<10
AVERAGE	**82.3**		
STD. DEV.	0.82		
INSIDE TRACK (WELD "B")			
1	77.4	FTB-SE1	<10
2	80.8	FTB-SE1	<10
3	81.0	FTB-SE1	<10
4	80.9	FTB-SE1	<10
5	80.9	FTB-SE1	<10
AVERAGE	**80.2**		
STD. DEV.	1.57		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	89.7	FTB-SE1
2	87.7	FTB-SE1
3	87.8	FTB-SE1
4	89.4	FTB-SE1
5	89.1	FTB-SE1
AVERAGE	**88.7**	
STD. DEV.	0.93	

CHECKED BY: bam DATE: 6-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Davejenks1\c\GEOSYN~1\HALLAT~1\[2004-S006-12-03.xls]Sheet1 2004-S006-12-04 6/28/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LF PHS 1 CLOSURE

CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-12
LAB ID NO.: 2004-S006-12-05
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-97

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	83.4	FTB-SE1	<10
2	84.6	FTB-SE1	<10
3	83.6	FTB-SE1	<10
4	83.2	FTB-SE1	<10
5	82.7	FTB-SE1	<10
AVERAGE	**83.5**		
STD. DEV.	0.70		
INSIDE TRACK (WELD "B")			
1	84.5	FTB-SE1	<10
2	84.1	FTB-SE1	<10
3	83.4	FTB-SE1	<10
4	82.7	FTB-SE1	<10
5	83.8	FTB-SE1	<10
AVERAGE	**83.7**		
STD. DEV.	0.69		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	88.2	FTB-SE1
2	88.2	FTB-SE1
3	87.0	FTB-SE1
4	87.9	FTB-SE1
5	87.5	FTB-SE1
AVERAGE	**87.8**	
STD. DEV.	0.51	

CHECKED BY: Gem DATE: 6-28-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1
\\Devejenks1\c\GEOSYN-1\HALLAT-1\[2004-S006-12-04.xls]Sheet1 2004-S006-12-05 6/28/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-13
LAB ID NO.: 2004-S006-13-01
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-98

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	89.7	FTB-SE1	<10
2	92.3	FTB-SE1	<10
3	93.3	FTB-SE1	<10
4	97.2	FTB-SE1	<10
5	91.9	FTB-SE1	<10
AVERAGE	**92.9**		
STD. DEV.	2.75		
INSIDE TRACK (WELD "B")			
1	88.7	FTB-SE1	<10
2	88.7	FTB-SE1	<10
3	89.4	FTB-SE1	<10
4	86.2	FTB-SE1	<10
5	88.6	FTB-SE1	<10
AVERAGE	**88.3**		
STD. DEV.	1.23		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	95.0	FTB-SE1
2	96.2	FTB-SE1
3	99.7	FTB-SE1
4	99.5	FTB-SE1
5	98.4	FTB-SE1
AVERAGE	**97.8**	
STD. DEV.	2.08	

CHECKED BY: MWS DATE: 6-30-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-13-01 6/30/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-13
LAB ID NO.: 2004-S006-13-02
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-99

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	82.3	FTB-SE1	<10
2	84.9	FTB-SE1	<10
3	86.9	FTB-SE1	<10
4	85.5	FTB-SE1	<10
5	85.1	FTB-SE1	<10
AVERAGE	**84.9**		
STD. DEV.	1.67		
INSIDE TRACK (WELD "B")			
1	84.1	FTB-SE1	<10
2	83.8	FTB-SE1	<10
3	82.9	FTB-SE1	<10
4	80.8	FTB-SE1	<10
5	80.8	FTB-SE1	<10
AVERAGE	**82.5**		
STD. DEV.	1.60		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	92.6	FTB-SE1
2	94.9	FTB-SE1
3	95.1	FTB-SE1
4	94.8	FTB-SE1
5	96.0	FTB-SE1
AVERAGE	**94.7**	
STD. DEV.	1.26	

CHECKED BY: PMS DATE: 6-30-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-S0 2004-S006-13-02 6/30/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-13
LAB ID NO.: 2004-S006-13-03
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-100

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	83.5	FTB-SE1	<10
2	86.3	FTB-SE1	<10
3	84.0	FTB-SE1	<10
4	79.6	FTB-SE1	<10
5	87.9	FTB-SE1	<10
AVERAGE	**84.3**		
STD. DEV.	3.15		
INSIDE TRACK (WELD "B")			
1	86.4	FTB-SE1	<10
2	68.9	NON-FTB	100
3	87.7	FTB-SE1	<10
4	87.6	FTB-SE1	<10
5	88.5	FTB-SE1	<10
AVERAGE	**83.8**		
STD. DEV.	8.37		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	96.5	FTB-SE1
2	97.9	FTB-SE1
3	96.7	FTB-SE1
4	94.6	FTB-SE1
5	94.4	FTB-SE1
AVERAGE	**96.0**	
STD. DEV.	1.49	

CHECKED BY: MPS DATE: 6-30-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-SC 2004-S006-13-03 6/30/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-13
LAB ID NO.: 2004-S006-13-04
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-101

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	87.0	FTB-SE1	<10
2	87.3	FTB-SE1	<10
3	86.0	FTB-SE1	<10
4	87.1	FTB-SE1	<10
5	90.6	FTB-SE1	<10
AVERAGE	**87.6**		
STD. DEV.	1.75		
INSIDE TRACK (WELD "B")			
1	87.2	FTB-SE1	<10
2	84.8	FTB-SE1	<10
3	88.6	FTB-SE1	<10
4	82.8	FTB-SE1	<10
5	87.0	FTB-SE1	<10
AVERAGE	**86.1**		
STD. DEV.	2.28		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	99.8	FTB-SE1
2	95.2	FTB-SE1
3	96.5	FTB-SE1
4	99.3	FTB-SE1
5	95.6	FTB-SE1
AVERAGE	**97.3**	
STD. DEV.	2.13	

CHECKED BY: MPS DATE: 6-30-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-SC 2004-S006-13-04 6/30/2004

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLATON, INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE
RALEIGH, NC
CLIENT PROJ. NO.: NA
PROJECT NO.: 2004-S006-13
LAB ID NO.: 2004-S006-13-05
MATERIAL: 40 MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-102

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	80.8	FTB-SE1	<10
2	86.0	FTB-SE1	<10
3	87.4	FTB-SE1	<10
4	88.1	FTB-SE1	<10
5	85.1	FTB-SE1	<10
AVERAGE	**85.5**		
STD. DEV.	2.87		
INSIDE TRACK (WELD "B")			
1	81.6	FTB-SE1	<10
2	85.9	FTB-SE1	<10
3	83.6	FTB-SE1	<10
4	83.6	FTB-SE1	<10
5	85.0	FTB-SE1	<10
AVERAGE	**83.9**		
STD. DEV.	1.63		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	92.1	FTB-SE1
2	91.8	FTB-SE1
3	91.3	FTB-SE1
4	92.2	FTB-SE1
5	90.6	FTB-SE1
AVERAGE	**91.6**	
STD. DEV.	0.66	

CHECKED BY: MPS DATE: 6-30-04

C:\My Documents\EXCEL\Templates\[HDP&S-DFusion.xls]Sheet1

C:\Documents and Settings\Michael P. Smith\Desktop\2004 Synthetics Projects\2004-SC 2004-S006-13-05 6/30/2004

2200 Westinghouse Boulevard • Suite 105 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

Geotechnics
INTEGRITY IN TESTING

CLIENT: HALLTON INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE

CLIENT PROJ. NO.: N.A.
PROJECT NO.: 2004-S006-14
LAB ID NO.: 2004-S006-14-01
MATERIAL: 40-MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-103

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	85.9	FTB-SE1	<10
2	86.8	FTB-SE1	<10
3	88.4	FTB-SE1	<10
4	88.0	FTB-SE1	<10
5	88.7	FTB-SE1	<10
AVERAGE	**87.6**		
STD. DEV.	1.18		
INSIDE TRACK (WELD "B")			
1	82.7	FTB-SE1	<10
2	80.0	FTB-SE1	<10
3	86.1	FTB-SE1	<10
4	83.6	FTB-SE1	<10
5	86.0	FTB-SE1	<10
AVERAGE	**83.7**		
STD. DEV.	2.54		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	89.7	FTB-SE1
2	89.9	FTB-SE1
3	91.2	FTB-SE1
4	90.2	FTB-SE1
5	89.6	FTB-SE1
AVERAGE	**90.1**	
STD. DEV.	0.65	

CHECKED BY: BA DATE: 7/1

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLTON INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE

CLIENT PROJ. NO.: N.A.
PROJECT NO.: 2004-S006-14
LAB ID NO.: 2004-S006-14-02
MATERIAL: 40-MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-104

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	75.1	FTB-AD BRK	75%
2	73.8	NON-FTB	100%
3	73.0	FTB-AD BRK	75%
4	73.4	FTB-AD BRK	75%
5	69.1	FTB-AD BRK	75%
AVERAGE	**72.9**		
STD. DEV.	2.26		
INSIDE TRACK (WELD "B")			
1	90.6	FTB-SE1	<10
2	86.5	FTB-SE1	<10
3	89.5	FTB-SE1	<10
4	89.5	FTB-SE1	<10
5	93.3	FTB-SE1	<10
AVERAGE	**89.9**		
STD. DEV.	2.45		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	97.1	FTB-SE1
2	96.9	FTB-SE1
3	98.3	FTB-SE1
4	97.5	FTB-SE1
5	98.0	FTB-SE1
AVERAGE	**97.6**	
STD. DEV.	0.59	

CHECKED BY: [illegible] DATE: 7-7-04

geotechnics
INTEGRITY IN TESTING

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

CLIENT: HALLTON INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE

CLIENT PROJ. NO.: N.A.
PROJECT NO.: 2004-S006-14
LAB ID NO.: 2004-S006-14-03
MATERIAL: 40-MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-105

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	81.1	FTB-SE1	<10
2	79.9	FTB-SE1	<10
3	84.8	FTB-SE1	<10
4	84.3	FTB-SE1	<10
5	80.8	FTB-SE1	<10
AVERAGE	**82.2**		
STD. DEV.	2.22		
INSIDE TRACK (WELD "B")			
1	82.2	FTB-SE1	<10
2	80.5	FTB-SE1	<10
3	83.1	FTB-SE1	<10
4	81.2	FTB-SE1	<10
5	81.9	FTB-SE1	<10
AVERAGE	**81.8**		
STD. DEV.	0.99		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	79.1	FTB-SE1
2	81.5	FTB-SE1
3	85.3	FTB-SE1
4	84.7	FTB-SE1
5	84.2	FTB-SE1
AVERAGE	**83.0**	
STD. DEV.	2.60	

CHECKED BY: PA DATE: 7/1

PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 6392 & 4437 w/NSF 54

geotechnics
INTEGRITY IN TESTING

CLIENT: HALLTON INC.
CLIENT PROJECT: N. WAKE LANDFILL PHASE 1 CLOSURE

CLIENT PROJ. NO.: N.A.
PROJECT NO.: 2004-S006-14
LAB ID NO.: 2004-S006-14-04
MATERIAL: 40-MIL LLDPE
SEAM TYPE: DOUBLE FUSION

SAMPLE I.D.: DS-106

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
OUTSIDE TRACK (WELD "A")			
1	87.3	FTB-SE1	<10
2	86.9	FTB-SE1	<10
3	86.4	FTB-SE1	<10
4	86.0	FTB-SE1	<10
5	84.5	FTB-SE1	<10
AVERAGE	**86.2**		
STD. DEV.	1.08		
INSIDE TRACK (WELD "B")			
1	81.9	FTB-SE1	<10
2	82.9	FTB-SE1	<10
3	86.3	FTB-SE1	<10
4	74.4	FTB-SE1	<10
5	79.8	FTB-SE1	<10
AVERAGE	**81.1**		
STD. DEV.	4.40		

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	88.1	FTB-SE1
2	90.1	FTB-SE1
3	91.9	FTB-SE1
4	92.5	FTB-SE1
5	91.5	FTB-SE1
AVERAGE	**90.8**	
STD. DEV.	1.76	

CHECKED BY: BA DATE: 7/1

Appendix B-12

LLDPE Liner Patch Replacement Log (CQC-107)

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-13-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
0850	R-1	10' BOS P1/P2 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
0854	R-2	35' BOS P1/P2 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
0901	R-3	10' BOS P1/P2 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
0915	R-4	10' BOS P1/P2 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
0919	R-5	10' BOS P1/P2 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
0935	R-6	4' BOS P2/P3 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
0942	R-7	35' BOS P2/P3 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
0950	R-8	92' BOS P2/P3 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
1000	R-9	174' BOS P2/P3 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
1015	R-10	150' BOS P2/P3 3*2	PG	M#1	450/350	YES	PASS	DESTRUCT # 1
1025	R-11	P3/P4/P5 2*2	PG	M#1	450/350	YES	PASS	AIR TEST
1050	R-12	P4/P5/P6 2*2	PG	M#1	450/350	YES	PASS	AIR TEST

COMMENTS: see next page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-13-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1100	R-13	EOS P1/P2 2*2	PG	M#1	450/350	YES	PASS	BURN OUT
1215	R-14	P8/P9/P7 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
1320	R-15	P8/P9 12' BOS 3*2	PG	M#1	450/350	YES	PASS	DESTRUCT # 4
1425	R-16	P8/P9/P10 2*2	PG	M#1	450/350	YES	PASS	AIR TEST
1250	R-17	P6/P7 50' BOS 3*2	PG	M#1	450/350	YES	PASS	DESTRUCT #2
1210	R-18	P7/P8 60' BOS 3*2	PG	M#1	450/350	YES	PASS	DESTRUCT #3
1435	R-19	P8/P10 25' EOS 5*2	PG	M#1	450/350	YES	PASS	DESTRUCT #4 AT
1445	R-20	P11/P12/P13 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
1450	R-21	P12/P13/P14 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
1455	R-27	P15/P17/P18 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
1500	R-28	P17/P18/P16 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
1505	R-29	P15/P18 20' BOS 1*1	PG	M#1	450/350	YES	PASS	BURN OUT, AT

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-14-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
812	R-22	P11/P13 35' EOS 3*2	PG	M#1	450/350	YES	PASS	DESTRUCT # 6
740	R-23	P10/P11 3' BOS 1*1	PG	M#1	450/350	YES	PASS	MATERIAL DAMAGE, AIR TEST
930	R-24	P14/P15 150' BOS 1*1	PG	M#1	450/350	YES	PASS	DESTRUCT #7
835	R-25	P15/P16/P17 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
840	R-26	P16/P17 25' BOS 3*2	PG	M#1	450/350	YES	PASS	DESTRUCT #8
940	R-31	P20/P24/P25/P26 2*2	PG	M#1	450/350	YES	PASS	AIR TEST
945	R-32	P20/P26 ANCHOR TRENCH 3*1	PG	M#1	450/350	YES	PASS	AIR TEST, BURN OUT
932	R-33	P24/P25/P23 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
930	R-34	P24/P23 8' BOS 1*1	PG	M#1	450/350	YES	PASS	AIR TEST, BURN OUT
1010	R-35	P22/P23 10' BOS 1*1	PG	M#1	450/350	YES	PASS	AIR TEST, BURN OUT
905	R-36	P21/P22/P23 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
900	R-37	P21/P22/P27 1*1	PG	M#1	450/350	YES	PASS	AIR TEST

COMMENTS: see next page for totals

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-14-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
845	R-38	P21/P27 88' BOS 4*2	PG	M#1	450/350	YES	PASS	DESTRUCT # 10
850	R-39	P20/P21/P23 2*2	PG	M#1	450/350	YES	PASS	AIR TEST
855	R-40	P20/P23 90' BOS 3*2	PG	M#1	450/350	YES	PASS	DESTRUCT #9
810	R-41	P20/P24/P23 2*2	PG	M#1	450/350	YES	PASS	AIR TEST
920	R-42	P20/P24 40' BOS 3*2	PG	M#1	450/350	YES	PASS	BURN OUT
920	R-43	P20/P24 43' BOS 2*1	PG	M#1	450/350	YES	PASS	BURN OUT
1015	R-44	P24/P28/P29 2*2	PG	M#1	450/350	YES	PASS	AIR TEST
1020	R-45	P28/P29/P30 2*2	PG	M#1	450/350	YES	PASS	AIR TEST
800	R-46	P29/P30 70' BOS 3*2	PG	M#1	450/350	YES	PASS	DESTRUCT # 11
750	R-47	P29/P30 2' BOS 1*1	PG	M#1	450/350	YES	PASS	AIR TEST, BURN OUT
755	R-48	P30/P31/P32 1*1	PG	M#1	450/350	YES	PASS	AIR TEST
1020	R-49	P30/P31 138' BOS 1*1	PG	M#1	450/350	YES	PASS	BURN OUT

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-14-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1100	R-50	P-31230' BOS 2 BOOTS	PG	M#1	450/350	YES	PASS	BOOTS
1205	R-51	P31/P32/P33 2*2	PG	M#1	450/350	YES	PASS	AIR TEST
1145	R-52	P31/P33 30' BOS 2*3	PG	M#1	450/350	YES	PASS	DESTRUCT #12
1140	R-53	P33/P34 140' BOS 2*3	PG	M#1	450/350	YES	PASS	DESTRUCT #13
1135	R-54	P34/P35/P36 2*2	PG	M#1	450/350	YES	PASS	AIR TEST
1137	R-55	P35/P36 1*1	PG	M#1	450/350	YES	PASS	LINER CUT
1130	R-56	P35P36/P35 2*2	PG	M#1	450/350	YES	PASS	AIR TEST
1125	R-57	P37/P38 50' EOS 5*2	PG	M#1	450/350	YES	PASS	AIR TEST BOOT
1155	R-58	P36/P37 157' BOS 2*3	PG	M#1	450/350	YES	PASS	DESTRUCT # 14
1200	R-59	P32/P33 3' BOS 1*1	PG	M#1	450/350	YES	PASS	AIR TEST, BURN OUT
1515	R-60	P36/P37 14' BPS 2*2	PG	M#1	450/350	YES	PASS	CAP DT14A AND 14B
1625	R-61	P37/P38/P39 2*2	PG	M#1	450/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-14-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1630	R-62	P38/P39/P40 2*2	PG	M#1	450/350	YES	PASS	AIR TEST
1634	R-63	40 20' BOS 3*2	PG	M#1	450/350	YES	PASS	DESTRUCT #15

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-18-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1152	R-64	P40/P41 121' BOS 2*2	GP	M#1	450/350	YES	PASS	BURN OUT
	R-65	P40/P41/P42 2*2	GP	M#1	450/350	YES	PASS	AIR TEST
	R-66	P43/P41/P42 2*2	GP	M#1	450/350	YES	PASS	AIR TEST
	R-67	P41/P43 50' BOS 2*3	GP	M#1	450/350	YES	PASS	DESTRUCT #16
1150	R-68	P44 40' EOS 15*4	GP	M#1	450/350	YES	PASS	BOOT
1445	R-69	P44/P45 20' BOS 2*3	GP	M#1	450/350	YES	PASS	DESTRUCT #17
1323	R-70	P44/P46 1' BOS 2*3	GP	M#1	450/350	YES	PASS	AIR TEST
1200	R-71	P44/P45/P46 1*1	GP	M#1	450/350	YES	PASS	AIR TEST
1250	R-72	P45/P46 2*1	GP	M#1	450/350	YES	PASS	BURN OUT,AIR TEST
1250	R-73	P47/P45/P46 1*1	GP	M#1	450/350	YES	PASS	AIR TEST
1205	R-74	P46 40' BOS	GP	M#1	450/350	YES	PASS	AIR TEST
1525	R-75	P48/P49/P50 1*1	GP	M#1	450/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-18-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 83 WIND: CALM WEATHER: AM 63 PM 83

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1520	R-76	P49/P50/P51 1*2	GP	M#1	450/350	YES	PASS	AIR TEST
1528	R-77	P49/P51 50 EOS 3*3	GP	M#1	450/350	YES	PASS	BOOT
1450	R-78	P47/P48 103' BOS 2*3	GP	M#1	450/350	YES	PASS	DESTRUCT #18
1517	R-79	P52/P54 54' BOS 2*2	GP	M#1	450/350	YES	PASS	BURN OUT
1515	R-80	P51/P52 44' BOS 2*2	GP	M#1	450/350	YES	PASS	BURN OUT
1510	R-81	P51/P52/P53 2*2	GP	M#1	450/350	YES	PASS	AIR TEST
1505	R-82	P54/P52/P53 2*2	GP	M#1	450/350	YES	PASS	AIR TEST
1455	R-83	P50/P51 85' BOS 2*3	GP	M#1	450/350	YES	PASS	DESTRUCT #19
1500	R-84	P53/P54 53' BOS 2*3	GP	M#1	450/350	YES	PASS	DESTRUCT #20
1415	R-85	P50/P51 30' BOS 12*5	GP	M#1	450/350	YES	PASS	BOOT,AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-20-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 87 WIND: CALM WEATHER: AM 64 PM 87

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1510	R-98	64/65/66 2*1	GP	MX#1	450/350	YES	PASS	AIR TEST
1505	R-99	65/66/67 2*1	GP	MX#1	450/350	YES	PASS	AIR TEST
1550	R-100	69/68/70 1*1	GP	MX#1	450/350	YES	PASS	AIR TEST
1540	R-101	67/68/69 1*1	GP	MX#1	450/350	YES	PASS	AIR TEST
1640	R-102	66/67 110' BOS 3*2	GP	MX#1	450/350	YES	PASS	DESTRUCT #25
1625	R-103	69/70 76' BOS 3*2	GP	MX#1	450/350	YES	PASS	DESTRUCT #26
1625	R-104	70/71 47' BOS 1*1	GP	MX#1	450/350	YES	PASS	BURN OUT
1600	R-105	70/71 75' BOS 1*1	GP	MX#1	450/350	YES	PASS	BURN OUT
1555	R-106	70/71 113' BOS 1*1	GP	MX#1	450/350	YES	PASS	BURN OUT
1645	R-107	71/72 120' BOS 3*2	GP	MX#1	450/350	YES	PASS	DESTRUCT #27

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-20-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 87 WIND: CALM WEATHER: AM 64 PM 87

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1430	R-86	54/56 30' eos 3*2	PG	MX#1	450/350	YES	PASS	DESTRUCT #21
1430	R-87	54/55/56 2*1	PG	MX#1	450/350	YES	PASS	AIR TEST
1430	R-88	55/54 93' eos 2*2	PG	MX#1	450/350	YES	PASS	BURN OUT
1150	R-89	55/56/57 2*2	PG	MX#1	450/350	YES	PASS	AIR TEST
1225	R-90	57/58 50' bos 3*2	PG	MX#1	450/350	YES	PASS	DESTRUCT #22
1445	R-91	59/60 15' bos 3*2	PG	MX#1	450/350	YES	PASS	DESTRUCT #23
1450	R-92	59/60 1' bos 2*2	PG	MX#1	450/350	YES	PASS	AIR TEST
1335	R-93	60/62/63 2*2	PG	MX#1	450/350	YES	PASS	AIR TEST
1340	R-94	61/62/63 2*2	PG	MX#1	450/350	YES	PASS	AIR TEST
1205	R-95	60/61/62 2*2	PG	MX#1	450/350	YES	PASS	AIR TEST
1348	R-96	61/62 5' eos 1*1	PG	MX#1	450/350	YES	PASS	HOLE
1515	R-97	60/61/62 210' bos 3*2	PG	MX#1	450/350	YES	PASS	DESTRUCT-24

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 92 WIND: CALM WEATHER: AM 70 PM 92

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N.	PASS/ FAIL	COMMENTS
1009	R-156	126/125/127 2*1	GP	M#X1	450/350	YES	PASS	AIR TEST
1009	R-157	82/126/125/124 2*1	GP	M#X1	450/350	YES	PASS	AIR TEST
1009	R-158	80/82/126 2*1	GP	M#X1	450/350	YES	PASS	AIR TEST
0823	R-159	125/127 25' EOS 3*2	GP	M#X1	450/350	YES	PASS	DESTRUCT #47
0920	R-160	127/128 195' BOS 2*2	GP	M#X1	450/350	YES	PASS	BURN OUT
0920	R-161	82/83/124 2*1	GP	M#X1	450/350	YES	PASS	AIR TEST
0920	R-162	83/124/123 2*1	GP	M#X1	450/350	YES	PASS	AIR TEST
1030	R-163	83/84/123 1*1	GP	M#X1	450/350	YES	PASS	AIR TEST
1034	R-164	84/121/123 1*1	GP	M#X1	450/350	YES	PASS	AIR TEST
0910	R-165	122/123/124 4*2	GP	M#X1	450/350	YES	PASS	DESTRUCT #46
0855	R-166	121/122/123 2*2	GP	M#X1	450/350	YES	PASS	AIR TEST
1038	R-167	84/85/121 1*1	GP	M#X1	450/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-26-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 92 WIND: CALM WEATHER: AM 70 PM 92

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
0715	R-132	95/96 25' BOS 3*2	PG	M#X1	450/350	YES	PASS	DESTRUCT #38
0720	R-133	96/97/98 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
0725	R-134	97/98/99 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
0725	R-135	99/100 10' BOS 3*2	PG	M#X1	450/350	YES	PASS	DESTRUCT #39
1030	R-136	107/106/131 1*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1025	R-137	102/107/130 1*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1025	R-138	102/107/106 1*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1125	R-139	101/102/106 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1135	R-140	101/106/105 1*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1137	R-141	100/101/105 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1137	R-142	106/105 8' EOS 2*1	PG	M#X1	450/350	YES	PASS	BURN OUT
1120	R-143	105/104 10" EOS 2*1	PG	M#X1	450/350	YES	PASS	BURN OUT

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-26-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 92 WIND: CALM WEATHER: AM 70 PM 92

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1115	R-144	105/104 1' EOS 2*1	PG	M#X1	450/350	YES	PASS	BURN OUT
1142	R-145	100/129/105 1*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1146	R-146	104/105/129 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1150	R-147	100/99/104/129 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1155	R-148	104/103 20' BOS 3*2	PG	M#X1	450/350	YES	PASS	DESTRUCT #40
1200	R-149	98/99/104/103 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1320	R-150	96/98/103/108 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1320	R-151	108/109 10' EOS 1*1	PG	M#X1	450/350	YES	PASS	BURN OUT
0939	R-152	78/79/128 1*1	PG	M#X1	450/350	YES	PASS	AIR TEST
0943	R-153	79/127/128 1*1	PG	M#X1	450/350	YES	PASS	AIR TEST
0954	R-154	79/80/127 1*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1004	R-155	80/126/127 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-26-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 92 WIND: CALM WEATHER: AM 70 PM 92

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1042	R-168	85/120/121 1*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1317	R-169	120/121 80' BOS 3*2	PG	M#X1	450/350	YES	PASS	DESTRUCT #45
1046	R-170	85/86/120 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1053	R-171	86/120/118 3*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1057	R-172	86/87/118 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1100	R-173	87/117/118 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1159	R-174	118/120 1*1	PG	M#X1	450/350	YES	PASS	BURN OUT
1153	R-175	117/118/119 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1156	R-176	118/119/120 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1104	R-177	87/88/117 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1107	R-178	88/117/116 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1310	R-179	117/118 55' BOS 2*2	PG	M#X1	450/350	YES	PASS	DESTRUCT #44

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-26-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 92 WIND: CALM WEATHER: AM 70 PM 92

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1112	R-180	88/89/116 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1115	R-181	89/114/116 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1142	R-182	115/116/114 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1142	R-183	115/116/117 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1148	R-184	114/115 60' BOS 3*2	PG	M#X1	450/350	YES	PASS	DESTRUCT #43
1211	R-185	89/90/114 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1125	R-186	90/114/113 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1128	R-187	90/92/113 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1350	R-188	92/113/112 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1345	R-189	92/93/112 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1342	R-190	93/110/112 1*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1354	R-191	110/111/112 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 05-26-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 92 WIND: CALM WEATHER: AM 70 PM 92

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1352	R-192	111/112/113 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1400	R-193	111/113 100' EOS 3*2	PG	M#X1	450/350	YES	PASS	DESTRUCT #42
1355	R-194	109/110 59' BOS 3*2	PG	M#X1	450/350	YES	PASS	DESTRUCT #41
1335	R-195	94/110/109 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1330	R-196	94/95/109 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1325	R-197	95/108/109 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1318	R-198	95/96/108 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1340	R-199	93/94/110 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-02-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 91 WIND: CALM WEATHER: AM 58 PM 91

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1405	R-200	128/132/133 1*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1407	R-201	128/132/133 1*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1407	R-202	128/133 16' eos 1*1	PG	M#X1	450/350	YES	PASS	AIR CUT
1520	R-203	128/132 100' bos 3*2	PG	M#X1	450/350	YES	PASS	DESTRUCT #48
1510	R-204	128/132 35' bos 1*1	PG	M#X1	450/350	YES	PASS	MD HOLE
1415	R-205	132/134 232' bos 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1415	R-206	132/134 182 bos 2*1	PG	M#X1	450/350	YES	PASS	BURN OUT
1535	R-207	132/134/135 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1540	R-208	134/135/136 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1600	R-209	134/136 50'bos 2*2	PG	M#X1	450/350	YES	PASS	DESTRUCT #49
1543	R-210	136/137/138 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1545	R-211	137/138/139 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-02-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 91 WIND: CALM WEATHER: AM 58 PM 91

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1610	R-212	137/139 54' bos 3*2	PG	M#X1	450/350	YES	PASS	Destruct # 50
1625	R-213	140/142 65' bos 4*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1312	R-214	140/142 10' bos 3*2	PG	M#X1	450/350	YES	PASS	Destruct # 51
1755	R-215	140/141/142 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1800	R-216	134/140/141 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1645	R-217	143/145/146 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1630	R-218	143/145 80' bos 3*2	PG	M#X1	450/350	YES	PASS	Destruct # 52
1745	R-219	143/145/144 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1750	R-220	142/143/144 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1740	R-221	145/147/148 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1735	R-222	147/148/149 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1635	R-223	147/149 123' bos 3*2	PG	M#X1	450/350	YES	PASS	Destruct # 53

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-02-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 91 WIND: CALM WEATHER: AM 58 PM 91

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1635	R-224	150/152 244' bos 2*2	PG	M#X1	450/350	YES	PASS	AIR TEST
1650	R-225	150/152 40' bos 3*2	PG	M#X1	450/350	YES	PASS	Destruct # 54
1724	R-226	150/151/152 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1720	R-227	149/150/151 2*1	PG	M#X1	450/350	YES	PASS	AIR TEST
1720	R-228	155/156 60' bos 3*2	PG	M#X1	450/350	YES	PASS	Destruct # 56
1710	R-229	153/154 85' bos 3*2	PG	M#X1	450/350	YES	PASS	Destruct # 55

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-03-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 89 WIND: CALM WEATHER: AM 63 PM 89

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1740	R-230	144/145/148/149/151 93*7	KM	M#X2	450/350	YES	PASS	Panel to short
1740	R-231	144/145 bos 1*1	KM	M#X2	450/350	YES	PASS	AIR TEST
1740	R-232	152/153 bos 1*1	KM	M#X2	450/350	YES	PASS	AIR TEST
1740	R-233	154 24*7	KM	M#X2	450/350	YES	PASS	Panel to short
1740	R-234	155/156 bos 2*1	KM	M#X2	450/350	YES	PASS	AIR TEST
1740	R-235	141/142 bos 2*1	KM	M#X2	450/350	YES	PASS	AIR TEST
1740	R-236	139/140 bos 2*1	KM	M#X2	450/350	YES	PASS	AIR TEST
1740	R-237	139/138 bos 2*1	KM	M#X2	450/350	YES	PASS	AIR TEST
1740	R-238	136/138 bos 2*1	KM	M#X2	450/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-07-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 89 WIND: CALM WEATHER: AM 63 PM 89

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1607	R-239	149/150 20' eos 3*2	PG	M#x1	450/350	YES	PASS	DESTRICT-57
1600	R-240	153/154 15' eos 3*2	PG	M#x1	450/350	YES	PASS	DESTRICT-58
1555	R-241	155/156 20' eos 3*2	PG	M#x1	450/350	YES	PASS	DESTRICT-59
1615	R-242	156/157 73' eos 3*2	PG	M#x1	450/350	YES	PASS	DESTRICT-60
1622	R-243	157/158 107' eos 3*2	PG	M#x1	450/350	YES	PASS	DESTRICT-61
1622	R-244	158/159 196' bos 3*2	PG	M#x1	450/350	YES	PASS	DESTRICT-62
1622	R-245	159/160 150' bos 3*2	PG	M#x1	450/350	YES	PASS	DESTRICT-63
1622	R-246	160/161 97' bos 3*2	PG	M#x1	450/350	YES	PASS	DESTRICT-64
1622	R-247	161/162 53' bos 3*2	PG	M#x1	450/350	YES	PASS	DESTRICT-65
1622	R-248	162/163 bos 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-15-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 89 WIND: CALM WEATHER: AM 63 PM 89

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1600	R-249	163/164 107' EOS 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST/MATERIAL DAMAGE
1615	R-250	164/165 15' EOS 3*2	PG	M#x1	450/350	YES	PASS	AIR TEST/BURN OUT
1730	R-251	164/165 60' EOS 2*1	PG	M#x1	450/350	YES	PASS	BURN OUT
1730	R-252	163/164 60' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-66
1730	R-253	164/165 100' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-67
0730	R-254	164/165 BOS 1*1	PG	M#x1	450/350	YES	PASS	AIR TEST
0730	R-255	165/166 11' EOS 1*1	PG	M#x1	450/350	YES	PASS	BURN OUT
0730	R-256	165/166 22' EOS 1*1	PG	M#x1	450/350	YES	PASS	BURN OUT
1845	R-257	165/166 177' BOS 2*1	PG	M#x1	450/350	YES	PASS	BURN OUT
1850	R-258	165/166 100' BOS 2*1	PG	M#x1	450/350	YES	PASS	BURN OUT
0800	R-259	166/167 50' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-68
0805	R-260	167/169 40' BOS 2*2	PG	M#x1	450/350	YES	PASS	BURN OUT

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-15-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 89 WIND: CALM WEATHER: AM 63 PM 89

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1740	R-261	169/170 106' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-69
1740	R-262	167/168/169 2*2	PG	M#x1	450/350	YES	PASS	AIR TEST
1755	R-263	168/169/170 2*2	PG	M#x1	450/350	YES	PASS	AIR TEST
1800	R-264	168/170 2' EOS 1*1	PG	M#x1	450/350	YES	PASS	AIR TEST
0810	R-265	170/172 20' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-70
1810	R-266	170/171/172 2*2	PG	M#x1	450/350	YES	PASS	AIR TEST
1814	R-267	171/172/173 2*2	PG	M#x1	450/350	YES	PASS	AIR TEST
0820	R-268	172/173 100' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-71
0840	R-269	172/173 BOS 1*1	PG	M#x1	450/350	YES	PASS	AIR TEST
1830	R-270	173/174 25' EOS 2*1	PG	M#x1	450/350	YES	PASS	BURN OUT
1835	R-271	173/174/175 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST
1840	R-272	174/175/176 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-15-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 89 WIND: CALM WEATHER: AM 63 PM 89

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
0830	R-273	173/175 70' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-72
1530	R-274	175/176 23*3	PG	M#x1	450/350	YES	PASS	MATERIAL DAMAGE
1530	R-275	175/176 23*3	PG	M#x1	450/350	YES	PASS	MATERIAL DAMAGE
1530	R-276	175/176 23*3	PG	M#x1	450/350	YES	PASS	MATERIAL DAMAGE
0845	R-277	175/176 BOS 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST
0815	R-278	176/178 20' BOS 3*2	KM	M#x2	450/350	YES	PASS	DESTRUCT-73
0855	R-279	177/178/179 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST
0850	R-280	176/177/178 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST
0825	R-281	178/179 75' BOS 3*2	KM	M#x2	450/350	YES	PASS	DESTRUCT-74
0900	R-282	179/180/181 2*1	KM	M#x2	450/350	YES	PASS	AIR TEST
0905	R-283	180/181/182 2*1	KM	M#x2	450/350	YES	PASS	AIR TEST
0910	R-284	181/182 2'EOS 3*2	KM	M#x2	450/350	YES	PASS	DESTRUCT-75

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-15-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 89 WIND: CALM WEATHER: AM 63 PM 89

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
0930	R-285	173/175 70' BOS 3*2	KM	M#x2	450/350	YES	PASS	BURN OUR
0925	R-286	175/176 23*3	KM	M#x2	450/350	YES	PASS	AIR TEST
0935	R-287	175/176 23*3	KM	M#x2	450/350	YES	PASS	AIR TEST
0940	R-288	175/176 23*3	KM	M#x2	450/350	YES	PASS	DESTRUCT-76

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-17-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 89 WIND: CALM WEATHER: AM 63 PM 89

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1602	R-289	187/188 1' EOS	PG	M#x1	450/350	YES	PASS	AIR TEST
0748	R-290	185/186 110' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-77
0755	R-291	186/187 100' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-78
1715	R-292	188/189/190 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST
1715	R-293	189/190/191 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST
0800	R-294	188/190 50' BOS 3*2	PG	M#x2	450/350	YES	PASS	DESTRUCT-79
0805	R-295	190/191 90' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-80
1720	R-296	191/192/193 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST
1725	R-297	192/193/194 2*1	PG	M#x2	450/350	YES	PASS	AIR TEST
1735	R-298	195/196/197 2*1	PG	M#x2	450/350	YES	PASS	MATERIAL DAMAGE
1740	R-299	195/196/197 2*1	PG	M#x2	450/350	YES	PASS	AIR TEST
1730	R-300	194/195/196 2*1	PG	M#x2	450/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-17-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 89 WIND: CALM WEATHER: AM 63 PM 89

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
0830	R-301	194/196 100' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-82
0835	R-302	196/197 BOS 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST
0840	R-303	197/199 BOS 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST
0855	R-304	197/198 7' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-83
0845	R-305	197/198/199 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST
0900	R-306	198/199/200 2*1	PG	M#x2	450/350	YES	PASS	AIR TEST
0905	R-307	201/203 10' BOS 2*1	PG	M#x1	450/350	YES	PASS	DESTRUCT-85
0955	R-308	200/201 100' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-84
1015	R-309	201/202/203 2*1	PG	M#x2	450/350	YES	PASS	AIR TEST
1010	R-310	202/203/204 2*1	PG	M#x2	450/350	YES	PASS	AIR TEST
0915	R-311	204/206 BOS 2*1	PG	M#x2	450/350	YES	PASS	AIR TEST
0945	R-312	206/204 25' BOS 3*2	PG	M#x2	450/350	YES	PASS	DESTRUCT-86

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-17-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 89 WIND: CALM WEATHER: AM 63 PM 89

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1000	R-313	205/206/207 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST
1005	R-314	204/205/206 5*1	PG	M#x1	450/350	YES	PASS	AIR TEST/BURN OUT
0950	R-315	207/208 50' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-87
0920	R-316	208/209 BOS 2*1	PG	M#x1	450/350	YES	PASS	AIR TEST
0825	R-317	193/194 20' BOS 3*2	PG	M#x1	450/350	YES	PASS	DESTRUCT-81

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-23-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 89 WIND: CALM WEATHER: AM 63 PM 89

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1000	R-318	210/211 10'EOS 2*1	PG	M#x2	550/300	YES	PASS	BURN OUT
1005	R-319	211/212 10' EOS 2*1	PG	M#x2	550/300	YES	PASS	BURN OUT
1015	R-320	213/214/215 2*2	PG	M#x2	550/300	YES	PASS	AIR TEST
1010	R-321	212/213/214 2*2	PG	M#x2	550/300	YES	PASS	AIR TEST
1035	R-322	216/217/218 2*2	PG	M#x2	550/300	YES	PASS	AIR TEST
1041	R-323	217/218/219 2*2	PG	M#x2	550/300	YES	PASS	AIR TEST
1045	R-324	214/215 6' EOS 3*2	PG	M#x2	550/300	YES	PASS	DESTRUCT-88
1050	R-325	218/219 5' EOS 3*2	PG	M#x2	550/300	YES	PASS	DESTRUCT-89
1100	R-326	220/221/222 2*1	PG	M#x2	550/300	YES	PASS	AIR TEST
1103	R-327	221/222/223 2*1	PG	M#x2	550/300	YES	PASS	AIR TEST
1105	R-328	222/223 2' EOS 3*2	PG	M#x2	550/300	YES	PASS	DESTRUCT-90
1140	R-329	224/225/226 2*1	PG	M#x2	550/300	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-23-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-75 PM 89 WIND: CALM WEATHER: AM 63 PM 89

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1110	R-330	226 5' 224 1' EOS 1*-1	PG	M#x2	550/300	YES	PASS	MATERIAL DAMAGE
1150	R-331	225/226/227 2*2	PG	M#x2	550/300	YES	PASS	AIR TEST
1345	R-332	226/227 10' EOS 3*2	PG	M#x2	550/300	YES	PASS	DESTRUCT-91
1300	R-333	225/227 15' EOS 2*1	PG	M#x2	550/300	YES	PASS	BURN OUT
1315	R-334	228/229/230 2*1	PG	M#x2	550/300	YES	PASS	AIR TEST
1310	R-335	229/230/231 2*1	PG	M#x2	550/300	YES	PASS	AIR TEST
1350	R-336	230/231 10' EOS 3*2	PG	M#x2	550/300	YES	PASS	DESTRUCT-92
1320	R-337	231/230 2*2	PG	M#x2	550/300	YES	PASS	AIR TEST
1320	R-338	232/233/234 2*2	PG	M#x2	550/300	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-25-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-73 PM 88 WIND: CALM WEATHER: AM 63 PM 88

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1100	R-339	233/234/235 2*1	PG	M#x3	550/300	YES	PASS	AIR TEST
1310	R-340	234/235 5' EIS 3*2	PG	M#x3	550/300	YES	PASS	DESTRUCT-93
1330	R-341	238/239/240 2*1	PG	M#x3	550/300	YES	PASS	AIR TEST
1335	R-342	239/240/241 2*1	PG	M#x3	550/300	YES	PASS	AIR TEST
1340	R-343	239/241 5' BOS 3*2	PG	M#x3	550/300	YES	PASS	DESTRUCT-94
1345	R-344	239/241 EOS 2*1	PG	M#x3	550/300	YES	PASS	BURN OUT
1350	R-345	241/242 154' BOS 2*1	PG	M#x3	550/300	YES	PASS	BURN OUT
1400	R-346	243/242 2' BOS 3*2	PG	M#x3	550/300	YES	PASS	DESTRUCT-95
1405	R-347	242/243/244 2*1	PG	M#x3	550/300	YES	PASS	AIR TEST
1410	R-348	243/244/245 2*1	PG	M#x3	550/300	YES	PASS	AIR TEST
1430	R-349	246/245 10' EOS 2*1	PG	M#x3	550/300	YES	PASS	BURN OUT
1450	R-350	224/225/226 2*1	PG	M#x3	550/300	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-29-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-73 PM 88 WIND: CALM WEATHER: AM 63 PM 88

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1530	R-398	253/255 5' EOS 4*2	PG	M#x3	500/250	YES	PASS	BURN OUT
1535	R-399	253/255 7' EOS 1*1	PG	M#x3	500/250	YES	PASS	BURN OUT
1615	R-400	253/254/255 4*2	PG	M#x3	500/250	YES	PASS	DESTRUCT-98,AT
1617	R-401	254/255 10' BOS 1*2	PG	M#x3	500/250	YES	PASS	BURN OUT/AIR TEST
1610	R-402	255/256 25' EOS 2*2	PG	M#x3	500/250	YES	PASS	BURN OUT
1613	R-403	255/256 EOS 2*2	PG	M#x3	500/250	YES	PASS	BURN OUT
1550	R-404	256/257/258 4*2	PG	M#x3	500/250	YES	PASS	DESTRUCT-99,AT
1600	R-405	257/258/259 2*2	PG	M#x3	500/250	YES	PASS	AIR TEST
1605	R-406	257/259 10' EOS 2*1	PG	M#x3	500/250	YES	PASS	BURN OUT
1630	R-407	259/260/261 4*2	PG	M#x3	500/250	YES	PASS	DESTRUCT-100,AT
1632	R-408	260/261 12' BOS 1*1	PG	M#x3	500/250	YES	PASS	BURN OUT
1635	R-409	260/261/262 2*2	PG	M#x3	500/250	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-29-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-73 PM 88 WIND: CALM WEATHER: AM 63 PM 88

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1645	R-410	263/262 30' bos 2*2	PG	M#x3	500/250	YES	PASS	BURN OUT
1650	R-411	262/263/264 2*2	PG	M#x3	500/250	YES	PASS	AIR TEST
1655	R-412	263/264/265 4*2	PG	M#x3	500/250	YES	PASS	DESTRUCT-101,AT
1720	R-413	262/264/R-414 23*3	PG	M#x3	500/250	YES	PASS	AIR TEST
1725	R-414	262/264/R-413 23*3	PG	M#x3	500/250	YES	PASS	AIR TEST
1732	R-415	262/264/R-414 23*3	PG	M#x3	500/250	YES	PASS	AIR TEST
1740	R-416	265/267 42' BOS 4*2	PG	M#x3	500/250	YES	PASS	BURN OUT
1745	R-417	267/268 6' EOS 2*1	PG	M#x3	500/250	YES	PASS	BURN OUT
1800	R-418	263/265 8' EOS 2*1	PG	M#x3	500/250	YES	PASS	BURN OUT
1805	R-419	265/266 40' BOS 4*2	PG	M#x3	500/250	YES	PASS	BURN OUT
1750	R-420	265/266/267 2*2	PG	M#x3	500/250	YES	PASS	AIR TEST
1756	R-421	266/267/268 4*3	PG	M#x3	500/250	YES	PASS	AIR TEST,DESTRUCT-102

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 06-30-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-73 PM 88 WIND: CALM WEATHER: AM 63 PM 88

			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
1330	R-422	268/269/270 4*2	PG	M#x3	550/350	YES	PASS	DESTRUCT-103, AIR TEST
1335	R-423	269/270/271 2*2	PG	M#x3	550/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

FORM CQC - 107
PATCH PLACEMENT LOG
(one sheet per day)

DATE: 07-01-04 JOB NAME: North wake subtitle D landfill closure JOB NO.: 6172-42378 MATERIAL: 40 MIL LLDPE
AMBIENT TEMP.: AM 70-73 PM 88 WIND: CALM WEATHER: AM 63 PM 88

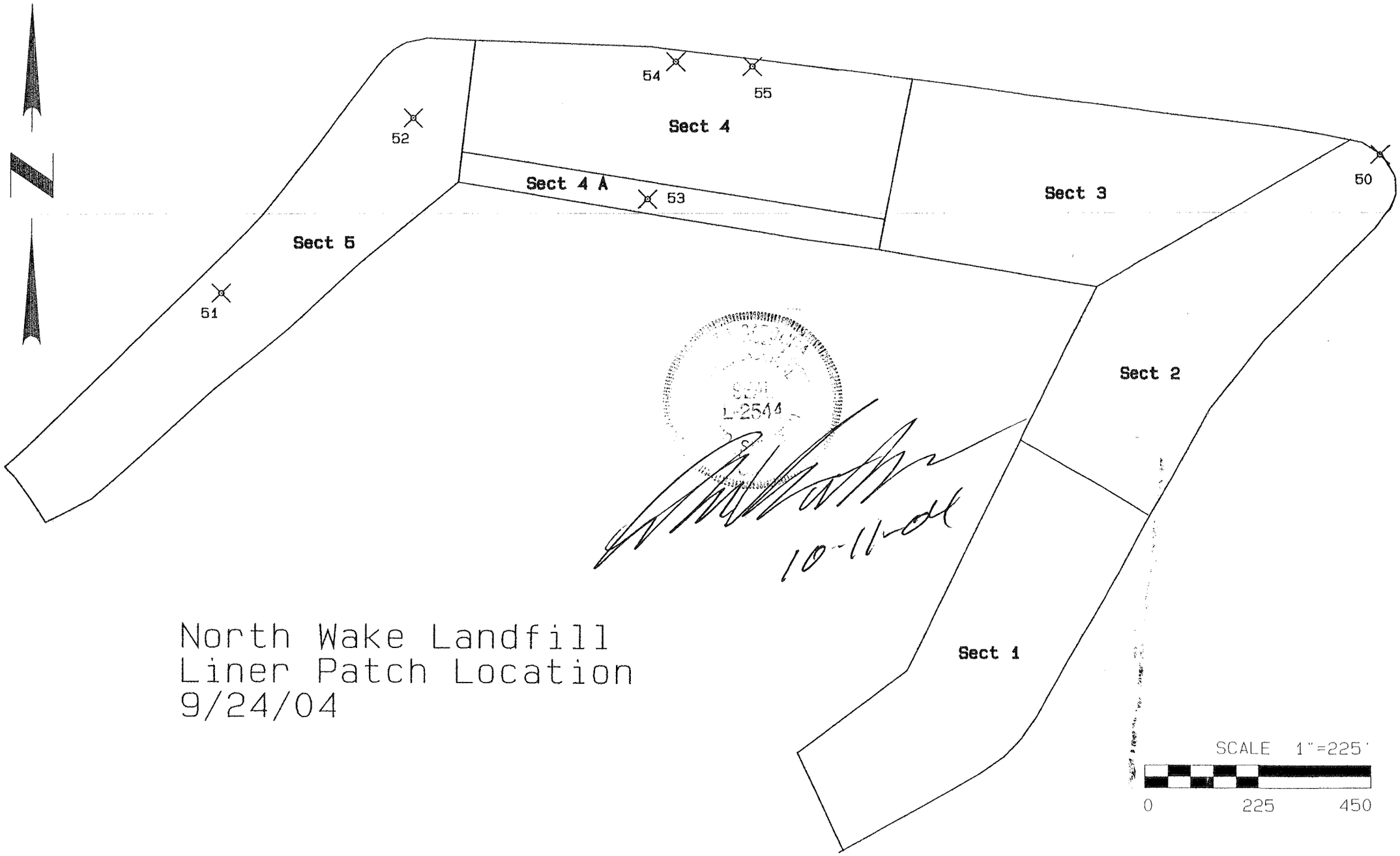
			INSTALLATION			EXTRUSION WELD		
TIME	PATCH NO.	DESCRIPTION LOCATION	TECH.	MACH ID. NO.	MACH. TEMP.	VAC. TEST Y/N	PASS/ FAIL	COMMENTS
0845	R-436	274/279 EOS 2*2	PG	M#x3	550/350	YES	PASS	MATERIAL DAMAGE
0850	R-437	280/281 EOS 2*2	PG	M#x3	550/350	YES	PASS	BURN OUT
0835	R-438	278/277 EOS 3*2	PG	M#x3	550/350	YES	PASS	MATERIAL DAMAGE
0900	R-439	280/279/278 2*1	PG	M#x3	550/350	YES	PASS	AIR TEST
0905	R-440	274/279/278 3*2	PG	M#x3	550/350	YES	PASS	AIR TEST
0910	R-441	274/278/277 2*1	PG	M#x3	550/350	YES	PASS	AIR TEST
0836	R-442	274/277/276 2*1	PG	M#x3	550/350	YES	PASS	AIR TEST
0832	R-443	275/274/276 2*1	PG	M#x3	550/350	YES	PASS	AIR TEST
0825	R-444	275/276/271 2*2	PG	M#x3	550/350	YES	PASS	AIR TEST
0820	R-445	275/271 BOS 2*2	PG	M#x3	550/350	YES	PASS	AIR TEST

COMMENTS:

DAILY TOTALS: LINER_____sq. ft., Length Seamed_____ft., No. Destructs marked _____

Appendix B-13

Supplemental LLDPE Liner Patch Replacement Survey (To patch temporary cuts to release landfill gas pressure under liner)



North Wake Landfill
Liner Patch Location
9/24/04

Coordinate data from project:
NTH WAKE LANDFILL
09/28/04 11:01:45

Point	Northing	Easting	Elevation	Description	Layer Name
50	786,135.0290	2,125,976.9000	0.00	liner patch	LIN PATCH
51	785,851.6000	2,123,693.2000	0.00	liner patch	LIN PATCH
52	786,198.0200	2,124,067.4000	0.00	liner patch	LIN PATCH
53	786,040.7000	2,124,530.3000	0.00	liner patch	LIN PATCH
54	786,312.3000	2,124,583.3000	0.00	liner patch	LIN PATCH
55	786,303.1000	2,124,734.2000	0.00	liner patch	LIN PATCH

Appendix C-1

Drainage Geocomposite Receiving Logs (CQC-101)

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-5-04 TIME: 9 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5022

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193277 through 1193303

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED:

OPERATOR: Matthew Garland

COMMENTS: Grad-All

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 70

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5022

Date Shipped: 5/4/2004

Cust. P.O. # 8863

Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193277	2800	18	1193294	2800
2	1193278	2800	19	1193295	2800
3	1193279	2800	20	1193296	2800
4	1193280	2800	21	1193297	2800
5	1193281	2800	22	1193298	2800
6	1193282	2800	23	1193299	2800
7	1193283	2800	24	1193300	2800
8	1193284	2800	25	1193301	2800
9	1193285	2800	26	1193302	2800
10	1193286	2800	27	1193303	2800
11	1193287	2800			
12	1193288	2800			
13	1193289	2800			
14	1193290	2800			
15	1193291	2800			
16	1193292	2800			
17	1193293	2800			

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here If you received 2 bags

Received by:

Sign:

BOL#: 5826

Deliver by Date:
Driver's Name:
Driver's Sign:
Driver's Cell Phone #:
Trucking Co.: R.T.
Trucking Co.'s Phone #:

Total Rolls: 27
Total Sq. Feet: 75,600
Total Weight: 32,588

SIGN HERE FOR SHIPPER

DATE: 5/4/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the service to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official [illegible] Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor [illegible]pment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage to containers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

5-5-4

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-5-04 TIME: 9 AM PROJECT NUMBER: 4101

TRUCKERS ID: 5018

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193055 through 1193081

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED:

OPERATOR:

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 70

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

Job # 884
207-200

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5018

Date Shipped: 5/4/2004

Cust. P.O. # 8863

Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193055	2800	18	1193072	2800
2	1193056	2800	19	1193073	2800
3	1193057	2800	20	1193074	2800
4	1193058	2800	21	1193075	2520
5	1193059	2800	22	1193076	2800
6	1193060	2800	23	1193077	2800
7	1193061	2800	24	1193078	2800
8	1193062	2800	25	1193079	2800
9	1193063	2800	26	1193080	1680
10	1193064	2800	27	1193081	2800
11	1193065	2800			
12	1193066	2800			
13	1193067	2800			
14	1193068	2800			
15	1193069	2800			
16	1193070	2800			
17	1193071	2800			

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here If you received 2 bags

Received by:

Sign:

BOL#:

Deliver by Date:
Driver's Name:
Driver's Sign:
Driver's Cell Phone #:
Trucking Co.: LoadPro
Trucking Co.'s Phone #:

Total Rolls: 27
Total Sq. Feet: 74,200
Total Weight: 31,830

SIGN HERE FOR SHIPPER

DATE: 5/4/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

eceived at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, nd destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the roperty) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination nd as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as ndicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation xisting between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the ervice to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official outhern, Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor ment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage s, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

ubject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this ipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

5-5-4
BD

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-7-04 TIME: 11 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5028

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193328 through 1193354

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED:

OPERATOR:

COMMENTS:

STORAGE AREA

CONDITION *(surface)*: Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 80

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

Job # 884
207-200

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5020

Date Shipped: 5/4/2004

Cust. P.O. # 8863

Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193328	2800	18	1193345	2800
2	1193329	2800	19	1193346	2800
3	1193330	2800	20	1193347	2800
4	1193331	2800	21	1193348	2800
5	1193332	2800	22	1193349	2800
6	1193333	2800	23	1193350	2800
7	1193334	2800	24	1193351	2800
8	1193335	2800	25	1193352	2380
9	1193336	2800	26	1193353	2800
10	1193337	2800	27	1193354	2800
11	1193338	2800			
12	1193339	2800			
13	1193340	2800			
14	1193341	2800			
15	1193342	2100			
16	1193343	2800			
17	1193344	2800			

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here If you received 2 bags

Received by: Ervin Edmonds Jr.
Sign: Ervin Edmonds Jr.
BOL#:

Deliver by Date:
Driver's Name:
Driver's Sign:
Driver's Cell Phone #:
Trucking Co.: LoadPro
Trucking Co.'s Phone #:

Total Rolls: 27
Total Sq. Feet: 74,480
Total Weight: 31,992

SIGN HERE FOR SHIPPER
SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

DATE: 5/4/2004

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the service to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official [illegible] Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor [illegible]ment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage to containers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

5-5-4 BD

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-7-04 TIME: 9 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5028

NO. OF PIECES ON BOARD: 26 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193168 through 1193181

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED:

OPERATOR:

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 70

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
skaps.com e-mail: info@skaps.com

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5028

Date Shipped: 5/6/2004

Cust. P.O. # 8863

Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193168	2800	14	1193182	2800
2	1193169	2800	15	1193183	2800
3	1193170	2800	16	1193184	2800
4	1193171	2800	17	1193185	2800
5	1193172	2800	18	1193186	2800
6	1193173	2800	19	1193210	2800
7	1193175	2800	20	1193216	2800
8	1193176	2800	21	1193217	2800
9	1193177	2800	22	1193218	2800
10	1193178	2800	23	1193219	2800
11	1193179	2800	24	1193220	2800
12	1193180	2800	25	1193221	2800
13	1193181	2800	26	1193222	2800

Please Collect 2 - Bags of Ties From the Driver

Driver Sign Here If you received 2 bags

Received by:

Sign:

BOL#:

Product Code: GT106-15

No	Roll#	Sq.Yds.
1	300125715	500
2	NG0980663	500

Product Code: TN330-2-6

Total Rolls: 26
Total Sq. Feet: 72,800
Total Weight: 31,080

Product Code: GT106-15

Total Rolls: 2
Total Sq. Yds.: 1,000
Total Weight: 380

Deliver by Date:
Driver's Name: 5-7-04
Driver's Sign:
Driver's Cell Phone #:
Trucking Co.: McNair
Trucking Co.'s Phone #: 706-595-9260

SIGN HERE FOR SHIPPER

DATE: 5/6/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the [illegible] e performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official [illegible] Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage to containers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

5-7-4

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-10-04 TIME: 11 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5042

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193223 through 1193249

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED:

OPERATOR:

COMMENTS:

STORAGE AREA

CONDITION *(surface)*: Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
skaps.com e-mail: info@skaps.com

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's #	5042
Date Shipped:	5/7/2004
Cust. P.O. #	8863
Job #	1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193223	2800	18	1193240	2800
2	1193224	2800	19	1193241	2800
3	1193225	2800	20	1193242	2800
4	1193226	2800	21	1193243	2800
5	1193227	2520	22	1193244	2800
6	1193228	2800	23	1193245	2380
7	1193229	2800	24	1193246	2800
8	1193230	2800	25	1193247	2800
9	1193231	2800	26	1193248	2800
10	1193232	2800	27	1193249	2800
11	1193233	2800			
12	1193234	2800			
13	1193235	2800			
14	1193236	2800			
15	1193237	2800			
16	1193238	2800			
17	1193239	2800			

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here If you received 2 bags

Received by:
Sign:
BOL#:

Total Rolls:	27
Total Sq. Feet:	74,900
Total Weight:	32,016

Deliver by Date:	
Driver's Name:	
Driver's Sign:	
Driver's Cell Phone #:	
Trucking Co.:	Load Pro 3-556-2722
Trucking Co.'s Phone #:	

SIGN HERE FOR SHIPPER

DATE: 5/7/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the ser[illegible] to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official [illegible] Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor [illegible] shipment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage to containers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper. Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-12-04 TIME: 10 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5060

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193113, 1193114, and 1193116 through 1193140

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED:

OPERATOR:

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5060

Date Shipped: 5/11/2004

Cust. P.O. # 8863

Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193113	2800	18	1193131	2800
2	1193114	2800	19	1193132	2800
3	1193116	2800	20	1193133	2800
4	1193117	2800	21	1193134	2800
5	1193118	2800	22	1193135	2800
6	1193119	2800	23	1193136	2800
7	1193120	2800	24	1193137	2800
8	1193121	2800	25	1193138	2800
9	1193122	2800	26	1193139	2800
10	1193123	2800	27	1193140	2800
11	1193124	2800			
12	1193125	2800			
13	1193126	2800			
14	1193127	2800			
15	1193128	2800			
16	1193129	2800			
17	1193130	2800			

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here If you received 2 bags

Received by:

Sign:

BOL#:

Deliver by Date: 5-11-04

Driver's Name: Bill Lee

Driver's Sign:

Driver's Cell Phone #: 706-254-5017

Trucking Co.: Landstar

Trucking Co.'s Phone #:

Total Rolls: 27

Total Sq. Feet: 75,600

Total Weight: 32,110

SIGN HERE FOR SHIPPER

DATE: 5/11/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the service to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official Southern Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor shipment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage losses, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper. Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-12-04 TIME: 10 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5058

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193187 through 1193195, 1193197 through 1193209, 1193211 through 1193215

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED:

OPERATOR:

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

Hallaton Inc.
c/o Thalle Construction

Job Name: North Wake Landfill
Address: Deponie Dr.
City, State, Zip: Wake Forest, NC
Contact: Rick Wood / Scott Brinkerhoff
Phone: (410) 583-7700

Shipper's # 5058
Date Shipped: 5/11/2004
Cust. P.O. # 8863
Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193187	2800	18	1193205	2800
2	1193188	2800	19	1193206	2800
3	1193189	2800	20	1193207	2800
4	1193190	2800	21	1193208	2800
5	1193191	2800	22	1193209	2800
6	1193192	2800	23	1193211	2800
7	1193193	2800	24	1193212	2800
8	1193194	2800	25	1193213	2800
9	1193195	2800	26	1193214	2800
10	1193197	2800	27	1193215	2800
11	1193198	2800			
12	1193199	2800			
13	1193200	2800			
14	1193201	2800			
15	1193202	2800			
16	1193203	2800			
17	1193204	2800			

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here If you received 2 bags

Received by:
Sign:
BOL#:

Deliver by Date: 5-6-04
Driver's Name:
Driver's Sign:
Driver's Cell Phone #:
Trucking Co.: McAlister Trucking
Trucking Co.'s Phone #: 24[illegible]

Total Rolls: 27
Total Sq. Feet: 75,600
Total Weight: 32,330

SIGN HERE FOR SHIPPER
SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

DATE: 5/11/2004

eceived at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, nd destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the roperty) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination nd as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as dicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation isting between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the ervice to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official outhern, Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor ment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage s, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

ubject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this ipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

BD

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-13-04 TIME: 10 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5061

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193112, 1193115, 1193174, 1193304through 1193327

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED:

OPERATOR:

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5061

Date Shipped: 5/12/2004

Cust. P.O. # 8863

Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193112	2800	18	1193318	2800
2	1193115	1680	19	1193319	2800
3	1193174	2800	20	1193320	2800
4	1193304	2800	21	1193321	2800
5	1193305	2800	22	1193322	2800
6	1193306	2800	23	1193323	2800
7	1193307	2800	24	1193324	2800
8	1193308	2800	25	1193325	2800
9	1193309	2800	26	1193326	2800
10	1193310	2800	27	1193327	2800
11	1193311	2800			
12	1193312	2800			
13	1193313	2800			
14	1193314	2800			
15	1193315	1260			
16	1193316	2800			
17	1193317	2800			

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here If you received 2 bags

James Pruitt

Received by:

Sign:

BOL#: 5065

Deliver by Date: 5/13/04

Driver's Name: James Pruitt

Driver's Sign:

Driver's Cell Phone #:

Trucking Co.: LoadPro

Trucking Co.'s Phone #: J T Bozard ~~1-800-523-8305~~

Total Rolls: 27

Total Sq. Feet: 72,940

Total Weight: 31,626

SIGN HERE FOR SHIPPER

DATE: 5/12/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the service to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official South[illegible]n, Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor [illegible]ment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage [illegible]ers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-17-04 TIME: 7 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5084

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193026, 1193027, 1193029, through 1193040, 1193042 through 1193054

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED:

OPERATOR:

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5084

Date Shipped: 5/15/2004

Cust. P.O. # 8863

Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193026	2800	18	1193045	2800
2	1193027	2800	19	1193046	2800
3	1193029	2800	20	1193047	2800
4	1193030	2800	21	1193048	2800
5	1193031	2800	22	1193049	2800
6	1193032	2800	23	1193050	2800
7	1193033	2800	24	1193051	2800
8	1193034	2800	25	1193052	2800
9	1193035	2800	26	1193053	2800
10	1193036	2800	27	1193054	2800
11	1193037	2800			
12	1193038	2800			
13	1193039	2800			
14	1193040	2800			
15	1193042	2800			
16	1193043	2800			
17	1193044	2800			

Please Collect 2 - Bags of Ties From the Driver

Driver Sign Here If you received 2 bags

Received by:

Sign:

BOL#:

Total Rolls:	27
Total Sq. Feet:	75,600
Total Weight:	32,343

Deliver by Date:	
Driver's Name:	
Driver's Sign:	
Driver's Cell Phone #:	
Trucking Co.:	Jarvis
Trucking Co.'s Phone #:	

SIGN HERE FOR SHIPPER

DATE: 5/15/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the service to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official S[illegible], Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor [illegible]ipment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage [illegible]ontainers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-19-04 TIME: 9 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5085

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193141 through 1193167

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad-All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: PC TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Matt Garland

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

SKAPS Industries

1 Industrial Parkway
ommerce, GA 30529
336-7000 Fax: 706-336-7007
ps.com e-mail: info@skaps.com

Job Name: Hallaton Inc.
c/o Thalle Construction
Address: North Wake Landfill
City, State, Zip: Deponie Dr.
Contact: Wake Forest, NC
Phone: Rick Wood / Scott Brinkerhoff
(410) 583-7700

Shipper's # 5085
Date Shipped: 5/18/2004
Cust. P.O. # 8863
Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193141	2800	18	1193158	2800
2	1193142	2800	19	1193159	2800
3	1193143	2800	20	1193160	2800
4	1193144	2800	21	1193161	2800
5	1193145	2800	22	1193162	2800
6	1193146	2800	23	1193163	2800
7	1193147	2800	24	1193164	2800
8	1193148	2800	25	1193165	2800
9	1193149	2800	26	1193166	2800
10	1193150	2800	27	1193167	2800
11	1193151	2800			
12	1193152	2800			
13	1193153	2800			
14	1193154	2800			
15	1193155	2800			
16	1193156	2800			
17	1193157	2800			

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here if you received 2 bags

Received by:
Sign:
BOL#: 5085

Deliver by Date: 5-19-04
Driver's Name: Ray McRay
Driver's Sign: Ray McRay
Driver's Cell Phone #: 828-320-4627
Trucking Co.: LoadPro
Trucking Co.'s Phone #: 828-464-9597

'otal Rolls: 27
'otal Sq. Feet: 75,600
'otal Weight: 32,412

IGN HERE FOR SHIPPER
DATE: 5/18/2004
HIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

ceived at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, d destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the operty) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination d as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as dic y the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation ween the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official outhern, Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor rrier shipment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage containers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

ubject to the above terms and conditions as to which party is the Shipper. Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this ipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-25-04 TIME: 7 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5021

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193250 through 1193276

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED:

OPERATOR:

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: Sunny TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR:

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5121

Date Shipped: 5/24/2004

Cust. P.O. # P9863

Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193250	2800	18	1193267	2800
2	1193251	2800	19	1193268	2800
3	1193252	2800	20	1193269	2800
4	1193253	2800	21	1193270	2800
5	1193254	2380	22	1193271	2800
6	1193255	2800	23	1193272	2800
7	1193256	2800	24	1193273	2800
8	1193257	2800	25	1193274	2800
9	1193258	2800	26	1193275	2800
10	1193259	2800	27	1193276	2800
11	1193260	2800			
12	1193261	2800			
13	1193262	2800			
14	1193263	2800			
15	1193264	2800			
16	1193265	2800			
17	1193266	1820			

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here If you received 2 bags

Received by:

Sign:

BOL#: 5912

Total Rolls:	27
Total Sq. Feet:	74,200
Total Weight:	31,840

Deliver by Date:	5-25-04
Driver's Name:	[illegible]
Driver's Sign:	[illegible]
Driver's Cell Phone #:	706-466-1098
Trucking Co.:	McNair
Trucking Co.'s Phone #:	

SIGN HERE FOR SHIPPER

DATE: 5/24/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the service to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official So[illegible] Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor [illegible]pment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage [illegible]tainers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-27-04 TIME: 9 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5139

NO. OF PIECES ON BOARD: 17 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193084, 1193085,1193095,1193099 through 1193111 and 1193196

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad-All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: PC TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Matt Garland

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5139

Date Shipped: 5/26/2004

Cust. P.O. # 8863

Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.
1	1193084	2800
2	1193085	2800
3	1193095	2800
4	1193099	2800
5	1193100	2800
6	1193101	2800
7	1193102	2800
8	1193103	2800
9	1193104	2800
10	1193105	2800
11	1193106	2800
12	1193107	2800
13	1193108	2800
14	1193109	2800
15	1193110	2800
16	1193111	2800
17	1193196	2800

Please Collect 1 - Bags of Tie From the Driver
Driver Sign Here If you received 1 bag

Received by:

Sign:

BOL#:

Deliver by Date: Bo' 5-27-04
Driver's Name: Bobby Winfrey
Driver's Sign: Bobby Winfrey
Driver's Cell Phone #: 466-1798
Trucking Co.: McNair
Trucking Co.'s Phone #:

Total Rolls: 17
Total Sq. Feet: 47,600
Total Weight: 20,332

SIGN HERE FOR SHIPPER

DATE: 5/26/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the service to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official Sc Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor pment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage ntainers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 5-28-04 TIME: 9 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5156

NO. OF PIECES ON BOARD: 12 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193086 through 1193089, 1193092 through 1193098, 1193382 and 1193393

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad-All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II and Phase III

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: PC TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Matt Garland

Use back for other comments

SHIPPING ORDER - PACKING LIST - ORIGINAL - NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

5/28

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5156

Date Shipped: 5/27/2004

Cust. P.O. # 8863

Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.
1	1193086	2800
2	1193087	2800
3	1193088	2800
4	1193089	2800
5	1193092	2800
6	1193093	2800
7	1193094	2800
8	1193096	2800
9	1193097	2800
10	1193098	2800
11	1193382	2800
12	1193393	2800

Received by:

Sign:

BOL#:

Deliver by Date:

Driver's Name:

Driver's Sign: C. Lovier

Driver's Cell Phone #:

Trucking Co.:

Trucking Co.'s Phone #:

Total Rolls: 12

Total Sq. Feet: 33,600

Total Weight: 14,376

SIGN HERE FOR SHIPPER

DATE: 5/27/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting soleiy as the agent for the denoted Shipper, and thus every aspect of the service to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official Sou[illegible] Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor [illegible]ment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage [illegible]ainers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

[illegible]bject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this [illegible]ment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 06-01-04 TIME: 9 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5156

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193001 through 1193025, 1193028 and 1193041

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad-All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II and Phase III

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: PC TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Matt Garland

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

6/1

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
skaps.com e-mail: info@skaps.com

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5166

Date Shipped: 5/28/2004

Cust. P.O. # 8863

Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193001	2800	18	1193018	2800
2	1193002	2800	19	1193019	2800
3	1193003	2800	20	1193020	2800
4	1193004	2800	21	1193021	2800
5	1193005	2800	22	1193022	2800
6	1193006	2800	23	1193023	2800
7	1193007	2380	24	1193024	2800
8	1193008	2520	25	1193025	2800
9	1193009	2800	26	1193028	2800
10	1193010	2800	27	1193041	1820
11	1193011	2800			
12	1193012	2800			
13	1193013	2800			
14	1193014	2800			
15	1193015	2800			
16	1193016	2800			
17	1193017	2800			

Please Collect 2 - Bags of Ties From the Driver

Driver Sign Here If you received 2 bags

John Abney

Received by:

Sign:

BOL#: 59860

Deliver by Date:

Driver's Name: John Abney

Driver's Sign: John Abney

Driver's Cell Phone #:

Trucking Co.: Fast Truck

Trucking Co.'s Phone #: 803-202-0914

Total Rolls: 27

Total Sq. Feet: 73,920

Total Weight: 32,346

SIGN HERE FOR SHIPPER N. Yates

DATE: 5/28/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the ser[illegible] be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official [illegible] Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor [illegible]r shipment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage to containers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper. Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 06-01-04 TIME: 9 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5167

NO. OF PIECES ON BOARD: 26 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193081 through 1193083, 1193383 through 1193405

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad-All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase I and Phase II and Phase III

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: PC TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Matt Garland

Use back for other comments

SHIPPING ORDER - PACKING LIST - ORIGINAL - NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

6/1

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5167

Date Shipped: 5/28/2004

Cust. P.O. # 8863

Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193080	2800	18	1193397	2800
2	1193081	2800	19	1193398	2800
3	1193082	2800	20	1193399	2520
4	1193083	2800	21	1193400	2800
5	1193383	2800	22	1193401	2800
6	1193384	2800	23	1193402	2800
7	1193385	2800	24	1193403	2800
8	1193386	2800	25	1193404	2800
9	1193387	2800	26	1193405	2800
10	1193388	2100			
11	1193389	2800			
12	1193390	2800			
13	1193391	2800			
14	1193392	2800			
15	1193394	2800			
16	1193395	2800			
17	1193396	2800			

Please Collect 2 - Bags of Ties From the Driver

Driver Sign Here If you received 2 bags

Received by:

Sign:

BOL#:

Deliver by Date:

Driver's Name:

Driver's Sign:

Driver's Cell Phone #:

Trucking Co.:

Trucking Co.'s Phone #:

Total Rolls: 26

Total Sq. Feet: 71,820

Total Weight: 33,082

SIGN HERE FOR SHIPPER

DATE: 5/28/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the service to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official Southern, Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor shipment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage tainers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 07-01-04 TIME: 7 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5331

NO. OF PIECES ON BOARD: 13 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193487 through 1193499

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad-All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase v

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: PC TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Matt Garland

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

ıdustries

.ay
,529
ɔ Fax: 706-336-7007
.m e-mail: info@skaps.com

Job Name: Hallaton Inc.
Address: c/o Thalle Construction
City, State, Zip: North Wake Landfill
Contact: Deponie Dr.
Phone: Wake Forest, NC
Rick Wood / Scott Brinkerhoff
(410) 583-7700

Shipper's # 5331
Date Shipped: 6/30/2004
Cust. P.O. # P9944
Job # 1193-A

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.
1	1193487	2800
2	1193488	2800
3	1193489	2800
4	1193490	2800
5	1193491	2800
6	1193492	2800
7	1193493	2800
8	1193494	2800
9	1193495	2800
10	1193496	2800
11	1193497	1820
12	1193498	2800
13	1193499	2800

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here If you received 2 bags

Received by:
Sign:
BOL#:

Deliver by Date:
Driver's Name:
Driver's Sign:
Driver's Cell Phone #:
Trucking Co.: LoadPro
Trucking Co.'s Phone #:

Total Rolls: 13
Total Sq. Feet: 35,420
Total Weight: 17,806

SIGN HERE FOR SHIPPER
SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

DATE: 6/30/2004

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the ·ce to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official .hern, Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage to containers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 06-18-04 TIME: 9 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5129

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193055 through 1193091

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad-All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase v

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: PC TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Matt Garland

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
skaps.com e-mail: info@skaps.com

Hallaton Inc.
c/o Thalle Construction

Job Name: North Wake Landfill
Address: Deponie Dr.
City, State, Zip: Wake Forest, NC
Contact: Rick Wood / Scott Brinkerhoff
Phone: (410) 583-7700

Shipper's # 5129
Date Shipped: 6/17/2004
Cust. P.O. # 8863
Job # 1193

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193055	2800	18	1193072	2800
2	1193056	2800	19	1193073	2800
3	1193057	2800	20	1193074	2380
4	1193058	2800	21	1193075	2800
5	1193059	2800	22	1193076	2660
6	1193060	2800	23	1193077	2660
7	1193061	2800	24	1193078	2240
8	1193062	2800	25	1193079	2800
9	1193063	2800	26	1193090	2800
10	1193064	2800	27	1193091	2800
11	1193065	2800			
12	1193066	2800			
13	1193067	2800			
14	1193068	2800			
15	1193069	2800			
16	1193070	2800			
17	1193071	2800			

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here If you received 2 bags

Received by:
Sign:
BOL#:

Total Rolls: 27
Total Sq. Feet: 74,340
Total Weight: 36,011

Deliver by Date:
Driver's Name: Malcolm Raggbes
Driver's Sign:
Driver's Cell Phone #: 410-[illegible]
Trucking Co.: Landstar
Trucking Co.'s Phone #:

SIGN HERE FOR SHIPPER
SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

DATE: 6/17/2004

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the [illegible]e to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official [illegible]ern, Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor [illegible]arrier shipment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage to containers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 06-25-04 TIME: 9 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5310

NO. OF PIECES ON BOARD: 26 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193406 through 1193432

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad-All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase v

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: PC TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Matt Garland

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
-336-7000 Fax: 706-336-7007
ww. kaps.com e-mail: info@skaps.com

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5310

Date Shipped: 6/24/2004

Cust. P.O. # P9944

Job # 1193-A

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193406	2800	18	1193423	2800
2	1193407	2440	19	1193424	2800
3	1193408	2800	20	1193425	2800
4	1193409	2800	21	1193426	2800
5	1193410	2800	22	1193427	2800
6	1193411	2800	23	1193428	2800
7	1193412	2800	24	1193429	2800
8	1193413	2800	25	1193430	2800
9	1193414	2800	26	1193431	2800
10	1193415	2800	27	1193432	2800
11	1193416	2800			
12	1193417	2800			
13	1193418	2800			
14	1193419	2800			
15	1193420	2800			
16	1193421	2800			
17	1193422	2800			

Please Collect 2 - Bags of Ties
From the Driver
Driver Sign Here If you received 2 bags

Received by:

Sign:

BOL#:

Total Rolls: 26
Total Sq. Feet: 75,240
Total Weight: 37,760

Deliver by Date:
Driver's Name:
Driver's Sign:
Driver's Cell Phone #:
Trucking Co.: McNair
Trucking Co.'s Phone #:

IGN HERE FOR SHIPPER

DATE: 6/24/2004

HIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

eceived at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, nd destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the operty) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination nd as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as dicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation istinc between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the r e performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor rier shipment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage containers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

bject to the above terms and conditions as to which party is the Shipper. Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this ipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 06-29-04 TIME: 11 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5327

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193460 through 1193486

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad-All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase v

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: PC TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Matt Garland

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

Job Name: Hallaton Inc.
Address: c/o Thalle Construction
City, State, Zip: North Wake Landfill
Contact: Deponie Dr.
Phone: Wake Forest, NC
Rick Wood / Scott Brinkerhoff
(410) 583-7700

Shipper's # 5327
Date Shipped: 6/28/2004
Cust. P.O. # P9944
Job # 1193-A

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193460	2800	18	1193477	2800
2	1193461	2800	19	1193478	2800
3	1193462	2800	20	1193479	2800
4	1193463	2800	21	1193480	2800
5	1193464	2800	22	1193481	2800
6	1193465	2800	23	1193482	2800
7	1193466	1400	24	1193483	1400
8	1193467	2800	25	1193484	2800
9	1193468	2800	26	1193485	2800
10	1193469	2800	27	1193486	2800
11	1193470	2800			
12	1193471	2800			
13	1193472	2800			
14	1193473	2800			
15	1193474	2800			
16	1193475	2800			
17	1193476	2800			

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here If you received 2 bags

Received by:
Sign:
BOL#: 10020

Deliver by Date:
Driver's Name: Frank Dill
Driver's Sign:
Driver's Cell Phone #:
Trucking Co.:
Trucking Co.'s Phone #:

Total Rolls: 27
Total Sq. Feet: 72,800
Total Weight: 37,978

SIGN HERE FOR SHIPPER
SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

DATE: 6/28/2004

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the [illegible] to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official [illegible]ern, Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage to containers, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

FORM CQC - 101
RECEIVING QC LOG
(one sheet per truck)

PROJECT NAME: North Wake Landfill Sub-title D Land Fill Phase I closure

DATE: 06-30-04 TIME: 11 AM PROJECT NUMBER: 6172-42378

TRUCKERS ID: 5330

NO. OF PIECES ON BOARD: 27 AGREE WITH PACKING LIST? Yes

CONDITION OF PACKAGING: Good

VERIFY PROPER MATERIALS: YES VERIFY PROPER THICKNESS: YES

IDENTIFY ROLL NUMBERS: 1193433 through 1193459

IDENTIFY ACCESSORIES (*adhesive, battens, boots, etc.*): None

IDENTIFY DAMAGED ITEMS: None

TYPE OF UNLOADING EQUIPMENT USED: Grad-All

OPERATOR: Matt Garland

COMMENTS:

STORAGE AREA

CONDITION (*surface*): Dry and flat

LOCATION TO PLACEMENT AREA: Top of Phase v

MATERIAL PROPERLY COVERED: Yes

WEATHER

CONDITIONS: PC TEMP: 72

SIGNATURES

QC INSPECTOR: Bion Dalton

SITE SUPERVISOR: Matt Garland

Use back for other comments

SHIPPING ORDER - PACKING LIST – ORIGINAL – NOT NEGOTIABLE

SKAPS Industries

571 Industrial Parkway
Commerce, GA 30529
Ph: 706-336-7000 Fax: 706-336-7007
www.skaps.com e-mail: info@skaps.com

	Hallaton Inc.
	c/o Thalle Construction
Job Name:	North Wake Landfill
Address:	Deponie Dr.
City, State, Zip:	Wake Forest, NC
Contact:	Rick Wood / Scott Brinkerhoff
Phone:	(410) 583-7700

Shipper's # 5330

Date Shipped: 6/29/2004

Cust. P.O. # P9944

Job # 1193-A

DRIVER MUST CALL 24 HOURS PRIOR TO DELIVERY

Product Code: TN330-2-6

No	Roll#	Sq.Ft.	No	Roll#	Sq.Ft.
1	1193433	2800	18	1193450	2800
2	1193434	2800	19	1193451	2800
3	1193435	2800	20	1193452	2800
4	1193436	2800	21	1193453	2800
5	1193437	2800	22	1193454	2800
6	1193438	2800	23	1193455	2660
7	1193439	2800	24	1193456	2800
8	1193440	2800	25	1193457	2800
9	1193441	2800	26	1193458	2800
10	1193442	2800	27	1193459	2800
11	1193443	2800			
12	1193444	2800			
13	1193445	2800			
14	1193446	2800			
15	1193447	2380			
16	1193448	2660			
17	1193449	2800			

Please Collect 2 - Bags of Ties From the Driver
Driver Sign Here If you received 2 bags

Received by:

Sign:

BOL#:

Total Rolls: 27
Total Sq. Feet: 74,900
Total Weight: 38,402

Deliver by Date:
Driver's Name:
Driver's Sign:
Driver's Cell Phone #:
Trucking Co.:
Trucking Co.'s Phone #:

SIGN HERE FOR SHIPPER

DATE: 6/29/2004

SHIPPER ADDRESS: 571 INDUSTRIAL PKWY.
COMMERCE, GA 30529

Received at Commerce, GA from Skaps Industries the property described above, in apparent good order except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated above, which said Carrier (the word "Carrier" being understood throughout this Shipping Order as meaning the person or corporation in possession of the property) agrees to carry to the place of delivery at said destination. It is mutually agreed as to each Carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service performed hereunder shall be subject to either: (a) if the shipper noted herein is Skaps Industries as indicated by the designation of the "Shipper" to be Skaps Industries, then the Shipper and Carrier are subject to the terms and conditions contained in the Contract for Truck Transportation existing between the parties or (b) if the Shipper noted herein is not Skaps Industries then Skaps Industries is acting solely as the agent for the denoted Shipper, and thus every aspect of the service to be performed hereunder between the Shipper and the Carrier shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official Southern, Western, and Illinois Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor [illegible]pment. When acting in the capacity of an agent for a Shipper in placing the material in transit on behalf of a Shipper, Skaps Industries accepts no liability for loss of cargo, damage [illegible]ners, or any other consequences occurring during transportation. Carrier having agreed that the transportation arrangement was initiated by the Shipper and not by Skaps Industries.

Subject to the above terms and conditions as to which party is the Shipper, Shipper hereby certifies that he is familiar with the terms and conditions that govern the transportation of this shipment, and the said terms and conditions are hereby agreed and accepted for himself and his assigns.

Appendix C-2

Drainage Geocomposite Manufacturer's Certification Reports and Conformance Testing

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193001	1193001 - N	2.10379	2.10412	1.15	1.33	1.51×10^{-3}
2	1193002	1193002 - N	2.10379	2.10412			
3	1193003	1193003 - N	2.10379	2.10412			
4	1193004	1193004 - N	2.10409	2.10388			
5	1193005	1193005 - N	2.10409	2.10388			
6	1193006	1193006 - N	2.10409	2.10388			
7	1193007	1193007 - N	2.10391	2.10403			
8	1193008	1193008 - N	2.10391	2.10403			
9	1193009	1193009 - N	2.10391	2.10403			
10	1193010	1193010 - N	2.10414	2.10407			
11	1193011	1193011 - N	2.10414	2.10407			
12	1193012	1193012 - N	2.10414	2.10407			
13	1193013	1193013 - N	2.10399	2.10398			
14	1193014	1193014 - N	2.10399	2.10398			
15	1193015	1193015 - N	2.10399	2.10398	1.21	1.42	
16	1193016	1193016 - N	2.10405	2.10394			
17	1193017	1193017 - N	2.10405	2.10394			
18	1193018	1193018 - N	2.10405	2.10394			
19	1193019	1193019 - N	2.10396	2.10410			
20	1193020	1193020 - N	2.10396	2.10410			
21	1193021	1193021 - N	2.10396	2.10410			
22	1193022	1193022 - N	2.10402	2.10400			
23	1193023	1193023 - N	2.10402	2.10400			
24	1193024	1193024 - N	2.10402	2.10400			
25	1193025	1193025 - N	2.10389	2.10406			
26	1193026	1193026 - N	2.10389	2.10406			
27	1193027	1193027 - N	2.10389	2.10406			

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193028	1193028 - N	2.10316	2.10358			
2	1193029	1193029 - N	2.10316	2.10358			
3	1193030	1193030 - N	2.10316	2.10358	1.43	2.10	
4	1193031	1193031 - N	2.10387	2.10386			
5	1193032	1193032 - N	2.10387	2.10386			
6	1193033	1193033 - N	2.10387	2.10386			
7	1193034	1193034 - N	2.10373	2.10362			
8	1193035	1193035 - N	2.10373	2.10362			
9	1193036	1193036 - N	2.10373	2.10362			
10	1193037	1193037 - N	2.10380	2.10369			
11	1193038	1193038 - N	2.10380	2.10369			
12	1193039	1193039 - N	2.10380	2.10369			
13	1193040	1193040 - N	2.10361	2.10374			
14	1193041	1193041 - N	2.10361	2.10374			
15	1193042	1193042 - N	2.10361	2.10374			
16	1193043	1193043 - N	2.10366	2.10382			
17	1193044	1193044 - N	2.10366	2.10382			
18	1193045	1193045 - N	2.10366	2.10382	1.36	3.02	
19	1193046	1193046 - N	2.10376	2.10377			
20	1193047	1193047 - N	2.10376	2.10377			
21	1193048	1193048 - N	2.10376	2.10377			
22	1193049	1193049 - N	2.10384	2.10360			
23	1193050	1193050 - N	2.10384	2.10360			
24	1193051	1193051 - N	2.10384	2.10360			
25	1193052	1193052 - N	2.10370	2.10372			
26	1193053	1193053 - N	2.10370	2.10372			
27	1193054	1193054 - N	2.10370	2.10372			

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

5|4|

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193055	1193055 - N	2.10413	2.10357			
2	1193056	1193056 - N	2.10413	2.10357			
3	1193057	1193057 - N	2.10413	2.10357			
4	1193058	1193058 - N	2.10401	2.10385			
5	1193059	1193059 - N	2.10401	2.10385			
6	1193060	1193060 - N	2.10401	2.10385	1.51	2.62	
7	1193061	1193061 - N	2.10390	2.10371			
8	1193062	1193062 - N	2.10390	2.10371			
9	1193063	1193063 - N	2.10390	2.10371			
10	1193064	1193064 - N	2.10408	2.10359			
11	1193065	1193065 - N	2.10408	2.10359			
12	1193066	1193066 - N	2.10408	2.10359			
13	1193067	1193067 - N	2.10393	2.10375			
14	1193068	1193068 - N	2.10393	2.10375			
15	1193069	1193069 - N	2.10393	2.10375			
16	1193070	1193070 - N	2.10411	2.10383			1.68×10^{-3}
17	1193071	1193071 - N	2.10411	2.10383			
18	1193072	1193072 - N	2.10411	2.10383			
19	1193073	1193073 - N	2.10397	2.10363			
20	1193074	1193074 - N	2.10397	2.10363			
21	1193075	1193075 - N	2.10397	2.10363	1.22	2.12	
22	1193076	1193076 - N	2.10404	2.10378			
23	1193077	1193077 - N	2.10404	2.10378			
24	1193078	1193078 - N	2.10404	2.10378			
25	1193079	1193079 - N	2.10395	2.10381			
26	1193080	1193080 - N	2.10395	2.10381			
27	1193081	1193081 - N	2.10395	2.10381			

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193082	1193082 - N	2.10918	2.10952			
2	1193083	1193083 - N	2.10918	2.10952			
3	1193084	1193084 - N	2.10918	2.10952			
4	1193085	1193085 - N	2.10953	2.10935			
5	1193086	1193086 - N	2.10953	2.10935			
6	1193087	1193087 - N	2.10953	2.10935			
7	1193088	1193088 - N	2.10934	2.10919			
8	1193089	1193089 - N	2.10934	2.10919			
9	1193090	1193090 - N	2.10934	2.10919	1.46	2.31	
10	1193091	1193091 - N	2.10927	2.10930			
11	1193092	1193092 - N	2.10927	2.10930			
12	1193093	1193093 - N	2.10927	2.10930			
13	1193094	1193094 - N	2.10942	2.10944			
14	1193095	1193095 - N	2.10942	2.10944			
15	1193096	1193096 - N	2.10942	2.10944			
16	1193097	1193097 - N	2.10924	2.10925			
17	1193098	1193098 - N	2.10924	2.10925			
18	1193099	1193099 - N	2.10924	2.10925			
19	1193100	1193100 - N	2.10938	2.10940			
20	1193101	1193101 - N	2.10938	2.10940			
21	1193102	1193102 - N	2.10938	2.10940			
22	1193103	1193103 - N	2.10945	2.10928			
23	1193104	1193104 - N	2.10945	2.10928			
24	1193105	1193105 - N	2.10945	2.10928	1.49	2.46	
25	1193106	1193106 - N	2.10929	2.10937			
26	1193107	1193107 - N	2.10929	2.10937			
27	1193108	1193108 - N	2.10929	2.10937			

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193109	1193109 - N	2.11032	2.11407			
2	1193110	1193110 - N	2.11032	2.11407			
3	1193111	1193111 - N	2.11032	2.11407			
4	1193112	1193112 - N	2.11408	2.11034			
5	1193113	1193113 - N	2.11408	2.11034			
6	1193114	1193114 - N	2.11408	2.11034			
7	1193115	1193115 - N	2.11359	2.11362			
8	1193116	1193116 - N	2.11359	2.11362			
9	1193117	1193117 - N	2.11359	2.11362			
10	1193118	1193118 - N	2.11367	2.11369			
11	1193119	1193119 - N	2.11367	2.11369			
12	1193120	1193120 - N	2.11367	2.11369	1.64	3.33	
13	1193121	1193121 - N	2.11054	2.11365			
14	1193122	1193122 - N	2.11054	2.11365			
15	1193123	1193123 - N	2.11054	2.11365			
16	1193124	1193124 - N	2.11372	2.11358			
17	1193125	1193125 - N	2.11372	2.11358			
18	1193126	1193126 - N	2.11372	2.11358			
19	1193127	1193127 - N	2.11355	2.11377			
20	1193128	1193128 - N	2.11355	2.11377			
21	1193129	1193129 - N	2.11355	2.11377			
22	1193130	1193130 - N	2.11364	2.11352			
23	1193131	1193131 - N	2.11364	2.11352			
24	1193132	1193132 - N	2.11364	2.11352			
25	1193133	1193133 - N	2.11382	2.11371			
26	1193134	1193134 - N	2.11382	2.11371			
27	1193135	1193135 - N	2.11382	2.11371	1.58	2.76	

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193136	1193136 - N	2.10923	2.11383			
2	1193137	1193137 - N	2.10923	2.11383			
3	1193138	1193138 - N	2.10923	2.11383			
4	1193139	1193139 - N	2.10946	2.11033			
5	1193140	1193140 - N	2.10946	2.11033			1.48×10^{-3}
6	1193141	1193141 - N	2.10946	2.11033			
7	1193142	1193142 - N	2.10932	2.11363			
8	1193143	1193143 - N	2.10932	2.11363			
9	1193144	1193144 - N	2.10932	2.11363			
10	1193145	1193145 - N	2.10941	2.11035			
11	1193146	1193146 - N	2.10941	2.11035			
12	1193147	1193147 - N	2.10941	2.11035			
13	1193148	1193148 - N	2.10926	2.11370			
14	1193149	1193149 - N	2.10926	2.11370			
15	1193150	1193150 - N	2.10926	2.11370	1.40	2.00	
16	1193151	1193151 - N	2.10931	2.11356			
17	1193152	1193152 - N	2.10931	2.11356			
18	1193153	1193153 - N	2.10931	2.11356			
19	1193154	1193154 - N	2.10943	2.11368			
20	1193155	1193155 - N	2.10943	2.11368			
21	1193156	1193156 - N	2.10943	2.11368			
22	1193157	1193157 - N	2.10936	2.11360			
23	1193158	1193158 - N	2.10936	2.11360			
24	1193159	1193159 - N	2.10936	2.11360			
25	1193160	1193160 - N	2.10939	2.11366			
26	1193161	1193161 - N	2.10939	2.11366			
27	1193162	1193162 - N	2.10939	2.11366			

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193163	1193163 - N	2.10993	2.11350			
2	1193164	1193164 - N	2.10993	2.11350			
3	1193165	1193165 - N	2.10993	2.11350	1.26	2.03	
4	1193166	1193166 - N	2.11351	2.11008			
5	1193167	1193167 - N	2.11351	2.11008			
6	1193168	1193168 - N	2.11351	2.11008			
7	1193169	1193169 - N	2.11005	2.10995			
8	1193170	1193170 - N	2.11005	2.10995			
9	1193171	1193171 - N	2.11005	2.10995			
10	1193172	1193172 - N	2.11017	2.11012			
11	1193173	1193173 - N	2.11017	2.11012			
12	1193174	1193174 - N	2.11017	2.11012			
13	1193175	1193175 - N	2.10997	2.10998			
14	1193176	1193176 - N	2.10997	2.10998			
15	1193177	1193177 - N	2.10997	2.10998			
16	1193178	1193178 - N	2.11011	2.11002			
17	1193179	1193179 - N	2.11011	2.11002			
18	1193180	1193180 - N	2.11011	2.11002	1.53	1.79	
19	1193181	1193181 - N	2.10999	2.11016			
20	1193182	1193182 - N	2.10999	2.11016			
21	1193183	1193183 - N	2.10999	2.11016			
22	1193184	1193184 - N	2.11014	2.11006			
23	1193185	1193185 - N	2.11014	2.11006			
24	1193186	1193186 - N	2.11014	2.11006			
25	1193187	1193187 - N	2.11001	2.11019			
26	1193188	1193188 - N	2.11001	2.11019			
27	1193189	1193189 - N	2.11001	2.11019			

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193190	1193190 - N	2.10668	2.10966			
2	1193191	1193191 - N	2.10668	2.10966			
3	1193192	1193192 - N	2.10668	2.10966			
4	1193193	1193193 - N	2.10963	2.10947			
5	1193194	1193194 - N	2.10963	2.10947			
6	1193195	1193195 - N	2.10963	2.10947	1.71	2.78	
7	1193196	1193196 - N	2.10687	2.10669			
8	1193197	1193197 - N	2.10687	2.10669			
9	1193198	1193198 - N	2.10687	2.10669			
10	1193199	1193199 - N	2.10949	2.10682			
11	1193200	1193200 - N	2.10949	2.10682			
12	1193201	1193201 - N	2.10949	2.10682			
13	1193202	1193202 - N	2.10674	2.10694			
14	1193203	1193203 - N	2.10674	2.10694			
15	1193204	1193204 - N	2.10674	2.10694			
16	1193205	1193205 - N	2.10696	2.10955			
17	1193206	1193206 - N	2.10696	2.10955			
18	1193207	1193207 - N	2.10696	2.10955			
19	1193208	1193208 - N	2.10956	2.10684			
20	1193209	1193209 - N	2.10956	2.10684			
21	1193210	1193210 - N	2.10956	2.10684	1.66	3.25	1.72×10^{-3}
22	1193211	1193211 - N	2.10676	2.10675			
23	1193212	1193212 - N	2.10676	2.10675			
24	1193213	1193213 - N	2.10676	2.10675			
25	1193214	1193214 - N	2.10951	2.10957			
26	1193215	1193215 - N	2.10951	2.10957			
27	1193216	1193216 - N	2.10951	2.10957			

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193217	1193217 - N	2.11004	2.10670			
2	1193218	1193218 - N	2.11004	2.10670			
3	1193219	1193219 - N	2.11004	2.10670			
4	1193220	1193220 - N	2.10996	2.10961			
5	1193221	1193221 - N	2.10996	2.10961			
6	1193222	1193222 - N	2.10996	2.10961			
7	1193223	1193223 - N	2.11015	2.10683			
8	1193224	1193224 - N	2.11015	2.10683			
9	1193225	1193225 - N	2.11015	2.10683	1.28	1.56	
10	1193226	1193226 - N	2.11000	2.10950			
11	1193227	1193227 - N	2.11000	2.10950			
12	1193228	1193228 - N	2.11000	2.10950			
13	1193229	1193229 - N	2.11020	2.10671			
14	1193230	1193230 - N	2.11020	2.10671			
15	1193231	1193231 - N	2.11020	2.10671			
16	1193232	1193232 - N	2.11007	2.10686			
17	1193233	1193233 - N	2.11007	2.10686			
18	1193234	1193234 - N	2.11007	2.10686			
19	1193235	1193235 - N	2.11010	2.10910			
20	1193236	1193236 - N	2.11010	2.10910			
21	1193237	1193237 - N	2.11010	2.10910			
22	1193238	1193238 - N	2.11013	2.10692			
23	1193239	1193239 - N	2.11013	2.10692			
24	1193240	1193240 - N	2.11013	2.10692	1.55	2.11	
25	1193241	1193241 - N	2.11009	2.10948			
26	1193242	1193242 - N	2.11009	2.10948			
27	1193243	1193243 - N	2.11009	2.10948			

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193244	1193244 - N	2.11566	2.11734			
2	1193245	1193245 - N	2.11566	2.11734			
3	1193246	1193246 - N	2.11566	2.11734			
4	1193247	1193247 - N	2.11735	2.11571			
5	1193248	1193248 - N	2.11735	2.11571			
6	1193249	1193249 - N	2.11735	2.11571			
7	1193250	1193250 - N	2.11721	2.11720			
8	1193251	1193251 - N	2.11721	2.11720			
9	1193252	1193252 - N	2.11721	2.11720			
10	1193253	1193253 - N	2.11714	2.11729			
11	1193254	1193254 - N	2.11714	2.11729			
12	1193255	1193255 - N	2.11714	2.11729	1.39	1.99	
13	1193256	1193256 - N	2.11728	2.11568			
14	1193257	1193257 - N	2.11728	2.11568			
15	1193258	1193258 - N	2.11728	2.11568			
16	1193259	1193259 - N	2.11717	2.11723			
17	1193260	1193260 - N	2.11717	2.11723			
18	1193261	1193261 - N	2.11717	2.11723			
19	1193262	1193262 - N	2.11725	2.11726			
20	1193263	1193263 - N	2.11725	2.11726			
21	1193264	1193264 - N	2.11725	2.11726			
22	1193265	1193265 - N	2.11732	2.11715			
23	1193266	1193266 - N	2.11732	2.11715			
24	1193267	1193267 - N	2.11732	2.11715			
25	1193268	1193268 - N	2.11569	2.11718			
26	1193269	1193269 - N	2.11569	2.11718			
27	1193270	1193270 - N	2.11569	2.11718	1.60	2.26	

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193271	1193271 - N	2.9209	2.10079			
2	1193272	1193272 - N	2.9209	2.10079			
3	1193273	1193273 - N	2.9209	2.10079			
4	1193274	1193274 - N	2.10082	2.10062			
5	1193275	1193275 - N	2.10082	2.10062			
6	1193276	1193276 - N	2.10082	2.10062			
7	1193277	1193277 - N	2.10055	2.9547			
8	1193278	1193278 - N	2.10055	2.9547			
9	1193279	1193279 - N	2.10055	2.9547			
10	1193280	1193280 - N	2.9549	2.10052			1.61×10^{-3}
11	1193281	1193281 - N	2.9549	2.10052			
12	1193282	1193282 - N	2.9549	2.10052			
13	1193283	1193283 - N	2.10064	2.10066			
14	1193284	1193284 - N	2.10064	2.10066			
15	1193285	1193285 - N	2.10064	2.10066	1.54	1.68	
16	1193286	1193286 - N	2.10050	2.9552			
17	1193287	1193287 - N	2.10050	2.9552			
18	1193288	1193288 - N	2.10050	2.9552			
19	1193289	1193289 - N	2.10068	2.10069			
20	1193290	1193290 - N	2.10068	2.10069			
21	1193291	1193291 - N	2.10068	2.10069			
22	1193292	1193292 - N	2.9475	2.10056			
23	1193293	1193293 - N	2.9475	2.10056			
24	1193294	1193294 - N	2.9475	2.10056			
25	1193295	1193295 - N	2.10071	2.9210			
26	1193296	1193296 - N	2.10071	2.9210			
27	1193297	1193297 - N	2.10071	2.9210			

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193298	1193298 - N	2.11713	2.10057			
2	1193299	1193299 - N	2.11713	2.10057			
3	1193300	1193300 - N	2.11713	2.10057	1.77	3.56	
4	1193301	1193301 - N	2.11733	2.9548			
5	1193302	1193302 - N	2.11733	2.9548			
6	1193303	1193303 - N	2.11733	2.9548			
7	1193304	1193304 - N	2.11719	2.10063			
8	1193305	1193305 - N	2.11719	2.10063			
9	1193306	1193306 - N	2.11719	2.10063			
10	1193307	1193307 - N	2.11730	2.10053			
11	1193308	1193308 - N	2.11730	2.10053			
12	1193309	1193309 - N	2.11730	2.10053			
13	1193310	1193310 - N	2.11716	2.9553			
14	1193311	1193311 - N	2.11716	2.9553			
15	1193312	1193312 - N	2.11716	2.9553			
16	1193313	1193313 - N	2.11731	2.10065			
17	1193314	1193314 - N	2.11731	2.10065			
18	1193315	1193315 - N	2.11731	2.10065	1.61	2.29	
19	1193316	1193316 - N	2.11722	2.10054			
20	1193317	1193317 - N	2.11722	2.10054			
21	1193318	1193318 - N	2.11722	2.10054			
22	1193319	1193319 - N	2.11727	2.10067			
23	1193320	1193320 - N	2.11727	2.10067			
24	1193321	1193321 - N	2.11727	2.10067			
25	1193322	1193322 - N	2.11724	2.10051			
26	1193323	1193323 - N	2.11724	2.10051			
27	1193324	1193324 - N	2.11724	2.10051			

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193325	1193325 - N	2.12655	2.12682			
2	1193326	1193326 - N	2.12655	2.12682			
3	1193327	1193327 - N	2.12655	2.12682			
4	1193328	1193328 - N	2.12683	2.12656			
5	1193329	1193329 - N	2.12683	2.12656			
6	1193330	1193330 - N	2.12683	2.12656	1.57	1.93	
7	1193331	1193331 - N	2.12667	2.12665			
8	1193332	1193332 - N	2.12667	2.12665			
9	1193333	1193333 - N	2.12667	2.12665			
10	1193334	1193334 - N	2.12677	2.12678			
11	1193335	1193335 - N	2.12677	2.12678			
12	1193336	1193336 - N	2.12677	2.12678			
13	1193337	1193337 - N	2.12661	2.12659			
14	1193338	1193338 - N	2.12661	2.12659			
15	1193339	1193339 - N	2.12661	2.12659			
16	1193340	1193340 - N	2.12658	2.12673			
17	1193341	1193341 - N	2.12658	2.12673			
18	1193342	1193342 - N	2.12658	2.12673			
19	1193343	1193343 - N	2.12664	2.12662			
20	1193344	1193344 - N	2.12664	2.12662			
21	1193345	1193345 - N	2.12664	2.12662	1.72	2.30	
22	1193346	1193346 - N	2.12670	2.12668			
23	1193347	1193347 - N	2.12670	2.12668			
24	1193348	1193348 - N	2.12670	2.12668			
25	1193349	1193349 - N	2.12680	2.12676			
26	1193350	1193350 - N	2.12680	2.12676			1.86×10^{-3}
27	1193351	1193351 - N	2.12680	2.12676			

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193352	1193352 - N	2.11024	2.11422			
2	1193353	1193353 - N	2.11024	2.11422			
3	1193354	1193354 - N	2.11024	2.11422			
4	1193355	1193355 - N	2.11423	2.11025			
5	1193356	1193356 - N	2.11423	2.11025			
6	1193357	1193357 - N	2.11423	2.11025			
7	1193358	1193358 - N	2.11409	2.11410			
8	1193359	1193359 - N	2.11409	2.11410			
9	1193360	1193360 - N	2.11409	2.11410	1.63	2.43	
10	1193361	1193361 - N	2.11030	2.11027			
11	1193362	1193362 - N	2.11030	2.11027			
12	1193363	1193363 - N	2.11030	2.11027			
13	1193364	1193364 - N	2.11415	2.11416			
14	1193365	1193365 - N	2.11415	2.11416			
15	1193366	1193366 - N	2.11415	2.11416			
16	1193367	1193367 - N	2.11056	2.11354			
17	1193368	1193368 - N	2.11056	2.11354			
18	1193369	1193369 - N	2.11056	2.11354			
19	1193370	1193370 - N	2.11419	2.11031			
20	1193371	1193371 - N	2.11419	2.11031			
21	1193372	1193372 - N	2.11419	2.11031			
22	1193373	1193373 - N	2.11412	2.11413			
23	1193374	1193374 - N	2.11412	2.11413			
24	1193375	1193375 - N	2.11412	2.11413	1.37	2.05	
25	1193376	1193376 - N	2.11026	2.11420			
26	1193377	1193377 - N	2.11026	2.11420			
27	1193378	1193378 - N	2.11026	2.11420			

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

SKAPS Industries

Engineered Synthetic Products, Inc.

Product : TN330-2-H060
Project : North Wake Landfill, Wake Forest, NC

We, the Geocomposite manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity* (m^2/sec)
			Top	Bottom	Minimum	Average	
1	1193379	1193379 - N	2.12681	2.11094			
2	1193380	1193380 - N	2.12681	2.11094			
3	1193381	1193381 - N	2.12681	2.11094			
4	1193382	1193382 - N	2.12657	2.11421			
5	1193383	1193383 - N	2.12657	2.11421			
6	1193384	1193384 - N	2.12657	2.11421			
7	1193385	1193385 - N	2.12669	2.11037			
8	1193386	1193386 - N	2.12669	2.11037			
9	1193387	1193387 - N	2.12669	2.11037			
10	1193388	1193388 - N	2.12660	2.11417			
11	1193389	1193389 - N	2.12660	2.11417			
12	1193390	1193390 - N	2.12660	2.11417	1.83	3.88	
13	1193391	1193391 - N	2.12679	2.11357			
14	1193392	1193392 - N	2.12679	2.11357			
15	1193393	1193393 - N	2.12679	2.11357			
16	1193394	1193394 - N	2.12666	2.11414			
17	1193395	1193395 - N	2.12666	2.11414			
18	1193396	1193396 - N	2.12666	2.11414			
19	1193397	1193397 - N	2.12674	2.11361			
20	1193398	1193398 - N	2.12674	2.11361			
21	1193399	1193399 - N	2.12674	2.11361			
22	1193400	1193400 - N	2.12663	2.11418			
23	1193401	1193401 - N	2.12663	2.11418			
24	1193402	1193402 - N	2.12663	2.11418			
25	1193403	1193403 - N	2.12671	2.11411			
26	1193404	1193404 - N	2.12671	2.11411			
27	1193405	1193405 - N	2.12671	2.11411	1.70	2.78	

* Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.1 and a confining pressure of 10000 psf between steel plates after 15 minutes.

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 **Phone:** 706-336-7000 **Fax:** 706-336-7007 **Email:** skaps@skaps.com

Appendix D-1

Project Record Drawings
(Prepared by Thalle Construction Co., Inc.)

Appendix D-2

Intermediate Cover, Final Cover and Vegetative Cover Thickness Verification Spreadsheets (Prepared by Thalle Construction Co., Inc.)

ALOIS CALLEMYN, PLS
PROFESSIONAL LAND SURVEYOR #L-2544
3500 JUSTAMERE FARM RD.
HILLSBOROUGH, NC 27278

November 29, 2004

Chris Haverstrum
Thalle Construction Co.
228 S. Churton St.
Hillsborough, NC 27278

RE: Survey – Wake County Landfill Asbuilt

Dear Chris:

Attached to this cover letter is a spreadsheet showing the different elevations at each grid points taken at each stage of the job. The five stages are; existing grade, waste, intermediate cover, protective cover and vegetative (top soil). The exact location of each grid point is shown with the north and east coordinate and is plotted on the plat by me entitled "North Wake Landfill", sheet 2 of 2.

The columns labeled "PT #" are the point numbers for each location measurement. The first point number '101) was the existing grade, the second column labeled "PT#" (11101) was the waste, and repeats for all five .ages. The last three numbers in each column reflex that the same grid location was measured.

The column labeled "SEP." is the separation in feet of each stage. Blank spaces in these or other columns due to missed measurements taken at that grid point due to construction interference or structures place in that location.

Furthermore:

ALL COORDINATE DATA AND ELEVATIONS SHOWN ON THE ATTACHED SPREADSHEETS ARE TIED TO NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NAD 1983 (HORIZONTAL) AND NAVD-29 (VERTICAL).

AND

I, ALOIS CALLEMYN, PLS, CERTIFY THAT THE ATTACHED INFORMATION WAS COMPUTED UNDER MY SUPERVISION, FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THAT THIS INFORMATION WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA, AS AMENDED. WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 29 DAY OF NOVEMBER, 2004.

NORTH CAROLINA PROFESSIONAL SEAL L-2544 LAND SURVEYOR ALOIS CALLEMYN

ALOIS CALLEMYN, PLS
LICENSE NO. L-2544

IORTH WAKE SUBTITLE D LANDFILL - PHASE I CLOSURE - SECTION ONE - THALLE CONSTRUCTION COMPANY - 11/15/04 REV. 2/28/05

	EXISTING GRADE			WASTE			INTERMEDIATE			PROTECTIVE			VEGETATIVE		
'T. #	NORTH	EAST	ELEV.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.
101	785,478.11	2,125,221.51	355.53	11101	353.86	-1.67	12101	355.88	2.02	13101	357.22	1.34	14101	358.13	0.91
102	785,388.15	2,125,177.71	356.01	11102	354.40	-1.61	12102	356.15	1.75	13102	357.72	1.57	14102	358.24	0.52
103	785,298.18	2,125,134.10	355.53	11103	354.02	-1.51	12103	355.30	1.28	13103	357.95	2.65	14103	358.45	0.50
104	785,208.17	2,125,090.44	354.60	11104	353.33	-1.27	12104	355.31	1.98	13104	356.70	1.39	14104	357.37	0.67
106	785,114.03	2,125,044.78	354.29	11106	352.44	-1.85	12106	354.55	2.11	13106	356.03	1.48	14106	356.56	0.53
107	785,053.82	2,124,964.91	358.08	11107	357.35	-0.72	12107	358.35	1.00	13107	360.48	2.13	14107	361.08	0.60
108	784,993.71	2,124,884.93	357.85	11108	356.30	-1.56	12108	358.20	1.90	13108	360.26	2.06	14108	360.94	0.68
109	784,953.15	2,124,831.68	356.88	11109	356.14	-0.74	12109	357.13	0.99	13109	358.55	1.42	14109	359.10	0.55
110	785,434.62	2,125,311.13	332.03	11110	330.41	-1.62	12110	331.99	1.58	13110	333.76	1.77	14110	334.45	0.69
111	785,344.52	2,125,267.83	332.09	11111	330.59	-1.50	12111	332.17	1.58	13111	333.62	1.45	14111	334.24	0.62
112	785,254.53	2,125,224.07	332.10	11112	330.48	-1.62	12112	332.13	1.65	13112	334.03	1.90	14112	334.58	0.55
113	785,164.49	2,125,180.36	331.87	11113	330.43	-1.44	12113	332.13	1.70	13113	333.68	1.55	14113	334.25	0.57
114	785,074.62	2,125,136.86	331.93	11114	331.06	-0.87	12114	332.00	0.95	13114	334.31	2.31	14114	334.89	0.58
115	785,034.13	2,125,105.00	332.78	11115	331.11	-1.67	12115	333.15	2.04	13115	334.56	1.41	14115	335.23	0.67
116	784,973.99	2,125,025.09	334.63	11116	333.17	-1.46	12116	334.93	1.76	13116	336.41	1.48	14116	337.01	0.60
117	784,913.71	2,124,945.44	333.20	11117	330.91	-2.29	12117	333.17	2.26	13117	334.49	1.32	14117	335.25	0.76
118	784,860.71	2,124,874.97	331.07	11118	329.62	-1.45	12118	331.30	1.68	13118	332.85	1.55	14118	333.40	0.55
119	785,390.85	2,125,401.28	305.33	11119	303.84	-1.49	12119	306.12	2.28	13119	307.41	1.29	14119	308.14	0.73
120	785,300.81	2,125,357.60	305.91	11120	304.88	-1.03	12120	306.19	1.31	13120	308.58	2.39	14120	309.12	0.54
121	785,211.02	2,125,314.25	306.60	11121	304.97	-1.63	12121	307.13	2.16	13121	308.76	1.63	14121	309.30	0.54
122	785,121.03	2,125,270.56	307.47	11122	306.02	-1.45	12122	308.70	2.68	13122	310.15	1.45	14122	310.77	0.62
123	785,030.78	2,125,226.91	308.22	11123	306.86	-1.36	12123	308.78	1.92	13123	310.28	1.50	14123	310.79	0.51
124	784,954.38	2,125,165.19	308.07	11124	306.94	-1.13	12124	308.94	2.00	13124	310.73	1.79	14124	311.41	0.68
125	784,894.07	2,125,085.39	309.07	11125	307.88	-1.19	12125	309.06	1.18	13125	310.28	1.22	14126	311.08	0.80
126	784,833.88	2,125,005.32	307.34	11126	306.09	-1.25	12126	307.62	1.53	13127	309.62	2.00	14127	310.13	0.51
137	784,775.02	2,124,914.27	306.40	11137	305.56	-0.84	12137	306.71	1.15	13137	308.17	1.46	14137	308.73	0.56
138	784,825.87	2,124,890.83	320.21	11138	318.61	-1.61	12138	320.56	1.95	13138	323.51	2.95	14138	324.09	0.58
139	784,872.95	2,125,100.77	301.17	11139	299.35	-1.82	12139	300.83	1.48	13139	302.98	2.15	14141	303.57	0.59
140	784,825.15	2,125,011.76	304.32	11140	303.38	-0.94	12140	304.49	1.11	13140	306.10	1.61	14140	306.61	0.51
141	784,925.50	2,125,187.24	298.81	11141	297.18	-1.63	12141	300.02	2.84	13141	301.43	1.41	14142	302.00	0.57

NORTH WAKE SUBTITLE D LANDFILL - PHASE I CLOSURE - SECTION ONE - THALLE CONSTRUCTION COMPANY - 11/15/04 REV. 2/28/05

EXISTING GRADE				WASTE			INTERMEDIATE			PROTECTIVE			VEGETATIVE		
PT. #	NORTH	EAST	ELEV.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.
142	784,933.68	2,125,181.00	302.44	11142	301.18	-1.26	12142	302.46	1.28	13142	303.96	1.50	14150	304.48	0.52
143	785,179.82	2,125,146.91	340.90	11143	339.44	-1.46	12143	340.91	1.47	13143	342.46	1.55	14143	342.98	0.52
144	785,130.34	2,125,249.45	312.59	11144	311.15	-1.44	12144	313.73	2.58	13144	317.37	3.64	14144	317.99	0.62
145	785,107.71	2,125,297.08	301.54	11145	300.26	-1.28	12145	301.80	1.54	13145	303.16	1.36	14145	303.80	0.64
146	785,096.86	2,125,319.38	294.75	11146	293.24	-1.51	12146	295.49	2.24	13146	297.14	1.65	14146	297.68	0.54
147	785,018.98	2,125,251.48	302.70	11147	301.14	-1.56	12147	302.65	1.51	13147	304.15	1.50	14147	304.68	0.53
148	785,010.36	2,125,268.23	296.65	11148	296.03	-0.62	12148	297.70	1.67	13148	299.62	1.92	14148	300.13	0.51
149	785,267.81	2,125,196.42	338.76	11149	337.33	-1.43	12149	339.30	1.97	13149	340.76	1.46	14149	341.33	0.57
150	785,223.41	2,125,287.83	313.51	POINT	LOST	DUE	TO	DRAIN	LOCATION						
151	785,316.49	2,125,326.09	316.07	11151	314.10	-1.97	12151	315.90	1.80	13151	317.32	1.42	14151	317.92	0.60
152	785,287.47	2,125,383.20	298.82	11152	297.70	-1.12	12152	298.76	1.06	13152	300.65	1.89	14152	301.23	0.58
153	785,271.46	2,125,415.56	289.82	11153	288.16	-1.66	12153	290.19	2.03	13153	292.28	2.09	14153	292.83	0.55
154	785,185.52	2,125,367.23	292.30	11154	290.98	-1.32	12154	292.89	1.91	13154	295.00	2.11	14154	295.58	0.58
155	785,412.80	2,125,356.54	318.79	11155	317.20	-1.59	12400	319.08	1.88	131119	320.47	1.39	14125	321.15	0.68
156	785,361.30	2,125,461.49	288.25	11156	287.03	-1.22	12401	288.62	1.59	13156	290.75	2.13	14156	291.30	0.55

LOIS CALLEMYN, PLS

NORTH WAKE SUBTITLE D LANDFILL - PHASE I CLOSURE - SECTION TWO - THALLE CONSTRUCTION COMPANY - 11/15/04

EXISTING GRADE				WASTE			INTERMEDIATE			PROTECTIVE			VEGETATIVE		
PT. #	NORTH	EAST	ELEV.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.
200	785,781.55	2,125,368.48	355.24	11200	353.85	-1.40	12200	355.48	1.63	13200	356.90	1.42	14200	357.49	0.59
201	785,691.39	2,125,324.91	356.17	11201	354.95	-1.22	12201	356.14	1.19	13201	358.84	2.70	14201	359.37	0.53
202	785,601.60	2,125,281.15	356.03	11202	354.98	-1.05	12202	356.03	1.06	13202	357.50	1.47	14202	358.10	0.60
203	785,917.61	2,125,545.72	336.08	11203	334.60	-1.48	12203	336.60	2.00	13203	338.07	1.47	14203	338.60	0.53
204	785,827.58	2,125,502.19	331.47	11204	329.25	-2.22	12204	331.69	2.44	13204	333.14	1.45	14204	333.69	0.55
205	785,737.73	2,125,458.54	330.63	11205	328.58	-2.05	12205	330.98	2.40	13205	332.63	1.66	14205	333.04	0.41
206	785,647.84	2,125,414.88	330.34	11206	328.77	-1.57	12206	331.77	3.00	13206	333.20	1.43	14206	333.76	0.56
207	785,557.79	2,125,371.29	331.48	11207	329.76	-1.72	12207	331.64	1.88	13207	333.16	1.52	14207	333.71	0.55
208	785,963.86	2,125,679.39	322.77	11208	321.68	-1.09	12208	322.83	1.15	13208	324.39	1.56	14208	324.93	0.54
209	785,874.21	2,125,635.80	313.45	11209	312.04	-1.40	12209	314.13	2.09	13209	315.59	1.46	14209	316.25	0.66
210	785,784.15	2,125,592.15	307.81	11210	305.90	-1.91	12210	307.89	1.99	13210	309.62	1.73	14210	310.20	0.58
211	785,694.44	2,125,548.48	305.24	11211	303.41	-1.83	12211	306.37	2.96	13211	308.14	1.77	14211	308.71	0.57
212	785,604.01	2,125,504.91	306.15	11212	304.18	-1.98	12212	306.71	2.54	13212	308.15	1.44	14212	308.75	0.60
213	785,514.33	2,125,461.10	305.92	11213	303.92	-2.00	12213	305.90	1.98	13213	307.99	2.09	14213	308.52	0.53
214	786,100.38	2,125,856.71	284.48	11214	283.75	-0.73	12214	285.01	1.26	13214	286.53	1.52	14214	287.15	0.62
215	786,010.28	2,125,813.01	301.84	11215	299.31	-2.53	12215	302.18	2.87	13215	303.69	1.51	14215	304.24	0.55
216	785,920.68	2,125,769.53	295.37	11216	293.86	-1.52	12216	295.95	2.09	13216	297.36	1.41	14216	297.95	0.59
217	785,830.48	2,125,725.77	289.32	11217	286.99	-2.33	12217	289.93	2.94	13217	291.35	1.42	14217	291.98	0.63
218	785,740.33	2,125,682.17	283.38	11218	282.68	-0.70	12218	284.27	1.58	13218	286.67	2.40	14218	287.22	0.55
222	786,056.64	2,125,946.63	279.92	11222	278.87	-1.06	12222	280.17	1.30	13222	282.60	2.43	14222	283.13	0.53
223	785,966.87	2,125,903.11	278.60	11223	276.32	-2.28	12223	278.61	2.30	13223	280.72	2.11	14223	281.28	0.56
230	785,871.23	2,125,412.26	352.21	11230	351.20	-1.01	12230	352.40	1.20	13230	353.92	1.52	14230	354.42	0.50
231	785,480.27	2,125,532.24	285.37	11231	283.03	-2.33	12231	286.48	3.45	13231	288.17	1.69	14231	288.69	0.52
232	785,566.27	2,125,582.63	283.65	11232	282.54	-1.11	12232	285.30	2.76	13232	286.64	1.34	14232	287.34	0.70
233	785,653.83	2,125,634.01	282.10	11233	281.27	-0.82	12233	283.17	1.90	13233	285.65	2.48	14233	286.23	0.58
373	785,815.98	2,125,755.33	281.32	11373	277.42	-3.91	12373	281.94	4.52	13373	284.08	2.14	14373	284.73	0.65
438	785,895.52	2,125,822.24	281.63	11438	280.20	-1.43	12438	282.08	1.88	13438	283.96	1.88	14438	284.59	0.63

ALOIS CALLEMYN, PLS

NORTH WAKE SUBTITLE D LANDFILL - PHASE I CLOSURE - SECTION THREE - THALLE CONSTRUCTION COMPANY - 11/15/04

EXISTING GRADE				WASTE			INTERMEDIATE			PROTECTIVE			VEGETATIVE		
PT. #	NORTH	EAST	ELEV.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.
300	785,943.35	2,124,985.80	358.16	11300	356.45	-1.71	12800	357.97	1.52	13800	359.46	1.49	14800	360.01	0.55
301	785,926.50	2,125,084.40	355.50	11301	354.11	-1.39	12801	355.48	1.37	13801	357.01	1.53	14801	357.55	0.54
302	785,910.06	2,125,183.00	355.83	11302	353.91	-1.92	12802	355.45	1.55	13802	357.04	1.59	14802	357.60	0.56
303	785,893.50	2,125,281.59	355.26	11303	353.25	-2.01	12803	355.45	2.20	13803	356.93	1.48	14803	357.52	0.59
304	785,879.11	2,125,380.98	354.03	11304	351.85	-2.18	12804	353.81	1.95	13804	355.26	1.45	14804	355.81	0.55
305	786,041.86	2,125,002.42	333.78	11305	331.69	-2.09	12805	334.59	2.90	13805	336.12	1.53	14805	336.67	0.55
306	786,025.28	2,125,101.06	332.34	11306	331.80	-0.54	12806	333.48	1.68	13806	334.90	1.42	14806	335.50	0.60
307	786,008.59	2,125,199.68	332.96	11307	331.25	-1.71	12807	333.86	2.62	13807	335.34	1.48	14807	335.90	0.56
308	785,991.96	2,125,298.29	332.98	11308	330.90	-2.08	12808	333.66	2.76	13808	335.07	1.41	14808	335.66	0.59
309	785,975.56	2,125,396.77	334.37	11309	332.20	-2.17	12809	334.79	2.59	13809	336.21	1.42	14809	336.81	0.60
310	785,958.63	2,125,495.38	332.50	11310	330.80	-1.70	12310	333.49	2.69	13310	335.20	1.71	14310	335.75	0.55
312	786,139.36	2,125,025.56	311.47	11312	309.74	-1.73	12812	311.51	1.77	13812	313.02	1.51	14812	313.61	0.59
313	786,124.23	2,125,117.70	310.18	11313	307.27	-2.91	12813	311.02	3.75	13813	312.66	1.64	14813	313.21	0.55
314	786,107.06	2,125,216.39	310.85	11314	309.22	-1.63	12814	311.50	2.29	13814	312.88	1.37	14814	313.51	0.63
315	786,090.66	2,125,314.91	311.08	11315	309.88	-1.20	12815	311.69	1.81	13815	312.99	1.30	14815	313.71	0.71
316	786,074.60	2,125,413.15	311.67	11316	309.16	-2.51	12816	312.61	3.45	13816	315.71	3.10	14816	316.23	0.52
317	786,057.34	2,125,512.12	311.97	11317	309.23	-2.75	12317	313.10	3.87	13317	315.28	2.18	14317	315.79	0.51
318	786,040.74	2,125,610.73	310.46	11318	308.29	-2.18	12318	311.31	3.02	13318	313.33	2.02	14318	313.85	0.52
320	786,237.31	2,125,046.25	283.44	11320	281.91	-1.53	12820	284.78	2.87	13820	286.50	1.72	14820	287.01	0.51
321	786,222.71	2,125,134.34	283.04	11321	282.59	-0.45	12821	284.83	2.24	13821	286.54	1.71	14821	287.07	0.53
322	786,205.77	2,125,233.03	283.84	11322	282.12	-1.72	12822	285.84	3.72	13822	287.30	1.46	14822	287.86	0.56
323	786,189.21	2,125,331.75	286.28	11323	284.27	-2.01	12823	287.17	2.90	13823	288.64	1.47	14823	289.22	0.58
324	786,172.11	2,125,428.62	287.71	11324	287.12	-0.59	12824	288.58	1.46	13824	290.04	1.46	14824	290.63	0.59
325	786,155.89	2,125,528.71	287.37	11325	285.36	-2.01	12325	288.01	2.65	13325	289.57	1.56	14325	290.11	0.54
326	786,139.23	2,125,627.32	285.99	11326	284.42	-1.58	12326	286.40	1.98	13326	287.82	1.42	14326	288.40	0.58
327	786,122.63	2,125,726.02	284.86	11327	282.00	-2.86	12327	285.06	3.06	13327	286.75	1.69	14327	287.27	0.52
339	786,172.19	2,125,734.57	271.46	11339	270.42	-1.04	12339	272.87	2.45	13339	274.31	1.44	14339	274.87	0.56
340	786,183.34	2,125,634.84	273.39	11340	272.18	-1.21	12340	274.39	2.21	13340	275.84	1.45	14340	276.42	0.58
436	786,194.92	2,125,532.21	275.35	11436	273.71	-1.65	12436	277.13	3.42	13436	278.67	1.54	14436	279.17	0.50
440	786,212.42	2,125,436.00	276.17	11440	274.90	-1.26	12840	277.53	2.63	13840	278.97	1.44	14840	279.53	0.56
441	786,220.37	2,125,336.82	277.87	11441	276.38	-1.49	12841	279.62	3.25	13841	281.02	1.40	14841	281.63	0.61
442	786,232.04	2,125,237.34	278.16	11442	275.69	-2.47	12842	279.74	4.05	13842	281.21	1.47	14842	281.74	0.53
443	786,244.15	2,125,138.13	278.02	11443	276.22	-1.80	12843	280.07	3.85	13843	281.51	1.44	14843	282.08	0.57
444	786,255.13	2,125,050.20	278.60	11444	274.51	-4.09	12844	280.90	6.40	13844	282.49	1.59	14844	283.02	0.53

ALOIS CALLEMYN, PLS

NORTH WAKE SUBTITLE D LANDFILL - PHASE I CLOSURE - SECTION FOUR - THALLE CONSTRUCTION COMPANY - 11/15/04

EXISTING GRADE				WASTE			INTERMEDIATE			PROTECTIVE			VEGETATIVE		
PT. #	NORTH	EAST	ELEV.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.
400	786,132.13	2,124,163.77	341.73	11400	339.77	-1.96	12400	343.42	3.65	13400	344.92	1.50	14400	345.49	0.57
401	786,116.80	2,124,262.52	344.50	11401	343.05	-1.45	12401	344.95	1.90	13401	346.71	1.76	14401	347.18	0.47
402	786,101.35	2,124,361.16	343.77	11402	341.74	-2.03	12402	345.26	3.52	13402	346.83	1.57	14402	347.31	0.48
403	786,086.35	2,124,460.34	343.72	11403	342.20	-1.52	12403	344.96	2.75	13403	346.57	1.61	14403	347.04	0.47
404	786,070.82	2,124,558.96	344.44	11404	342.68	-1.76	12404	344.70	2.02	13404	346.75	2.05	14404	347.26	0.51
405	786,055.58	2,124,657.81	345.16	11405	342.93	-2.23	12405	345.24	2.31	13405	346.73	1.50	14405	347.31	0.57
406	786,040.59	2,124,756.83	345.58	11406	343.97	-1.61	12406	345.42	1.45	13406	346.69	1.27	14406	347.49	0.80
407	786,025.28	2,124,855.59	343.89	11407	342.60	-1.29									
408	786,009.93	2,124,954.34	342.99	11408	339.69	-3.30	12408	343.99	4.30	13408	345.53	1.54	14408	346.07	0.54
409	786,230.91	2,124,178.94	316.60	11409	313.40	-3.19	12409	317.33	3.93	13409	318.80	1.47	14409	319.36	0.56
410	786,215.54	2,124,277.60	318.31	11410	316.75	-1.56	12410	319.13	2.38	13410	320.48	1.35	14410	321.20	0.72
411	786,200.33	2,124,376.62	319.14	11411	316.79	-2.36	12411	320.30	3.52	13411	321.81	1.51	14411	322.43	0.62
412	786,185.07	2,124,475.47	318.77	11412	317.24	-1.53	12412	320.10	2.86	13412	321.63	1.53	14412	322.37	0.74
413	786,169.92	2,124,574.33	317.94	11413	315.38	-2.56	12413	319.15	3.77	13413	321.21	2.06	14413	321.67	0.46
414	786,154.71	2,124,673.10	319.20	11414	317.16	-2.03	12414	320.60	3.44	13414	322.42	1.82	14414	322.90	0.48
415	786,139.13	2,124,771.88	319.65	11415	318.33	-1.32	12415	320.28	1.95	13415	322.06	1.78	14415	322.46	0.40
416	786,123.84	2,124,870.72	319.44	11416	316.13	-3.31									
417	786,108.69	2,124,969.61	319.31	11417	316.45	-2.86	12417	319.91	3.46	13417	322.24	2.33	14417	322.65	0.41
418	786,324.48	2,124,193.12	293.14	11418	292.46	-0.69	12418	294.42	1.96	13418	296.25	1.83	14418	296.70	0.45
419	786,314.48	2,124,293.29	292.78	11419	292.22	-0.56	12419	294.19	1.97	13419	296.06	1.87	14419	296.53	0.47
420	786,299.16	2,124,391.91	293.33	11420	293.21	-0.12	12420	294.94	1.74	13420	296.61	1.67	14420	297.09	0.48
421	786,283.87	2,124,490.75	294.65	11421	292.34	-2.31	12421	295.91	3.57	13421	297.79	1.88	14421	298.48	0.69
422	786,268.59	2,124,589.58	295.24	11422	292.52	-2.72	12422	296.12	3.60	13422	297.55	1.43	14422	298.17	0.62
423	786,253.20	2,124,688.41	296.34	11423	294.58	-1.76	12423	297.02	2.44	13423	299.33	2.31	14423	299.84	0.51
424	786,237.85	2,124,786.99	296.00	11424	294.25	-1.75	12424	296.64	2.39	13424	299.10	2.46	14424	299.45	0.35
425	786,222.76	2,124,886.09	294.51	11425	292.56	-1.95									
426	786,206.72	2,124,985.45	294.65	11426	293.98	-0.67	12426	295.41	1.43	13426	297.04	1.63	14426	297.61	0.57
436	786,268.82	2,124,994.38	278.79	11436	276.31	-2.48	12436	280.02	3.71	13436	281.49	1.47	14436	282.14	0.65
437	786,275.87	2,124,894.41	281.16	11437	279.68	-1.48									
438	786,289.47	2,124,794.96	282.84	11438	280.09	-2.75	12438	284.42	4.33	13438	285.92	1.50	14438	286.48	0.56
439	786,299.52	2,124,695.59	284.89	11439	283.84	-1.05	12439	286.26	2.42	13440	287.70	1.44	14440	288.32	0.62
440	786,305.53	2,124,595.10	286.20	11440	285.04	-1.17	12440	288.17	3.13	13442	289.73	1.56	14442	290.30	0.57
441	786,316.96	2,124,495.46	286.66	11441	284.32	-2.33	12441	288.41	4.08	13441	290.00	1.59	14441	290.61	0.61

NORTH WAKE SUBTITLE D LANDFILL - PHASE I CLOSURE - SECTION FOUR - THALLE CONSTRUCTION COMPANY - 11/15/04

EXISTING GRADE				WASTE			INTERMEDIATE			PROTECTIVE			VEGETATIVE		
PT. #	NORTH	EAST	ELEV.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.	PT. #	ELEV.	SEP.
12620	786,272.39	2,124,914.07					12620	282.10		13620	284.09	1.99	14620	284.49	0.40
12621	786,219.76	2,124,905.57					12621	294.59		13621	297.24	2.65	14621	297.68	0.44
12622	786,122.17	2,124,888.73					12622	319.65		13622	321.08	1.43	14622	321.66	0.58
12623	786,022.67	2,124,874.94					12623	343.32		13623	345.46	2.14	14623	345.91	0.45
12624	786,278.60	2,124,874.38					12624	282.71		13624	284.86	2.15	14624	285.34	0.48
12625	786,241.80	2,124,868.53					12625	290.97		13625	297.96	6.99	14625	298.47	0.51
12626	786,128.40	2,124,849.47					12626	319.44		13626	320.86	1.42	14626	321.48	0.62
12627	786,027.61	2,124,835.51					12627	343.12		13627	345.17	2.05	14627	345.65	0.48

ALOIS CALLEMYN, PLS

NORTH WAKE SUBTITLE D LANDFILL - PHASE I CLOSURE - SECTION FIVE - THALLE CONSTRUCTION COMPANY - 11/15/04

EXISTING GRADE			
PT. #	NORTH	EAST	ELEV.
600	786,097.91	2,124,159.05	349.72
601	786,032.73	2,124,085.14	350.90
602	785,967.22	2,124,010.01	349.18
603	785,901.37	2,123,933.70	349.37
604	785,835.05	2,123,859.04	347.84
605	785,768.76	2,123,784.12	347.85
606	785,702.28	2,123,709.46	349.66
607	785,636.24	2,123,634.55	349.10
608	785,571.18	2,123,558.68	348.26
609	785,507.50	2,123,481.76	348.04
610	785,443.66	2,123,404.81	347.75
611	785,520.60	2,123,340.99	324.24
612	785,584.58	2,123,418.01	324.28
613	785,648.42	2,123,494.93	324.16
614	785,711.16	2,123,568.32	324.00
615	785,777.29	2,123,643.00	325.18
616	785,843.54	2,123,717.80	324.24
617	785,910.02	2,123,793.26	323.24
618	785,976.13	2,123,867.23	324.81
619	786,042.72	2,123,943.93	326.20
620	786,108.86	2,124,019.30	329.24
621	786,174.30	2,124,094.78	329.83
622	786,249.76	2,124,029.13	305.46
623	786,315.34	2,124,104.67	297.70
699	786,105.95	2,123,888.59	305.42
700	786,185.81	2,123,952.39	302.23
714	786,270.00	2,124,144.15	307.61
12900	785,856.17	2,123,732.37	
12901	785,782.02	2,123,799.12	
12902	785,829.94	2,123,703.08	
12903	785,755.66	2,123,769.05	

WASTE		
PT. #	ELEV.	SEP.
11600	349.75	0.03
11601	350.80	-0.10
11602	349.22	0.04
11603	348.19	-1.18
12831	347.81	-0.03
11605	346.27	-1.58
11606	348.67	-0.99
11607	348.08	-1.02
11608	347.38	-0.88
11609	346.94	-1.10
11610	346.33	-1.42
11611	321.90	-2.34
11612	322.64	-1.64
11613	322.45	-1.71
11614	323.21	-0.79
11615	323.97	-1.21
11616	322.50	-1.74
11617	321.47	-1.77
11618	323.04	-1.77
11619	325.24	-0.96
11620	328.76	-0.48
11621	328.56	-1.27
11622	304.48	-0.98
11623	297.45	-0.25
11699	304.95	-0.47
11700	301.71	-0.52
11714	307.04	-0.57

INTERMEDIATE		
PT. #	ELEV.	SEP.
12600	351.09	1.34
12601	353.74	2.94
12602	351.60	2.38
12603	349.48	1.29
12604	349.18	1.37
12606	350.16	1.49
12607	349.93	1.85
12608	349.15	1.77
12609	348.93	1.99
12610	348.83	2.50
12611	324.85	2.95
12612	325.62	2.98
12613	325.35	2.90
12614	325.71	2.50
12615	326.36	2.39
12617	324.82	3.35
12618	325.83	2.79
12619	327.88	2.64
12620	330.50	1.74
12621	331.30	2.74
12622	307.12	2.64
12623	300.06	2.61
12699	307.18	2.23
12700	304.66	2.95
12714	309.26	2.22
12900	325.48	
12901	348.38	
12902	325.89	
12903	348.72	

PROTECTIVE		
PT. #	ELEV.	SEP.
13600	355.33	4.24
13601	355.27	1.52
13602	353.13	1.53
13603	351.08	1.60
13604	350.65	1.47
13606	351.58	1.42
13607	351.46	1.53
13608	350.73	1.58
13609	350.40	1.47
13610	350.32	1.49
13611	326.36	1.51
13612	327.07	1.45
13613	326.80	1.45
13614	327.32	1.61
13615	327.88	1.52
13617	326.42	1.60
13618	327.50	1.67
13619	329.48	1.60
13620	332.21	1.71
13621	332.88	1.58
13622	308.56	1.44
13623	301.55	1.49
13699	308.57	1.39
13700	306.01	1.35
13714	313.75	4.49
13900	326.92	1.44
13901	350.32	1.94
13902	327.31	1.42
13903	350.43	1.71

VEGETATIVE		
PT. #	ELEV.	SEP.
14600	355.91	0.58
14601	355.94	0.67
14602	353.66	0.53
14603	351.64	0.56
14604	351.21	0.56
14606	352.21	0.63
14607	352.13	0.67
14608	351.34	0.61
14609	350.98	0.58
14610	350.96	0.64
14611	327.01	0.65
14612	327.64	0.57
14613	327.43	0.63
14614	327.83	0.51
14615	328.50	0.62
14617	326.92	0.50
14618	328.00	0.50
14619	330.03	0.55
14620	332.74	0.53
14621	333.38	0.50
14622	309.20	0.64
14623	302.09	0.54
14699	309.30	0.73
14700	306.70	0.69
14714	314.39	0.64
14900	327.58	0.66
14901	350.71	0.39
14902	327.90	0.59
14903	350.93	0.50

ALOIS CALLEMYN, PLS

Appendix D-3

LLDPE Geocomposite Liner As-Built Drawings
(Prepared by Hallaton, Inc.)

HALLATON, INC.

100 E. Pennsylvania Ave. Suite 203 • Towson, MD 21286
410 583 7700 • Fax: 410 583 7720

July 17, 2004

Mr. Chris Haverstrom
Thalle Construction Company, Inc.
228 South Churton Street
Hillsborough, NC 27278

919.245.1490
919.245.1516 fax

Re: North Wake Landfill Closure
02776 Liner Low Density Polyethylene Submittal #7
Liner Installation Certification - Confirmation

Dear Mr. Haverstrom,

In response to submittal D-02776-001-A review, Hallaton will install the geomembrane in accordance with all details contained in the Drawings .

Please contact me if have any questions or need additional information. Thank you.

Sincerely,

Scott Brinkerhoff

Scott Brinkerhoff

Certification Statement: By this submittal, I hereby represent that I have determined and verified all field measurements, field construction criteria, materials, dimensions, catalog numbers and similar data and I have checked and coordinated each item with other applicable approved shop drawings and all Contract requirements.

11/29/04

Thalle Construction Company, Inc.

D-02776-001-B