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- **FDEP DATE-STAMPED RECEIVED PAGE/COVER LETTER**
- **SEALED CERTIFICATION OF CONSTRUCTION COMPLETION -DEP FORM#62-701.900(2) PAGE**

WEAVER

BOOS

CONSULTANTS

October 30, 2012

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OCT 31 2012
DEP Central District

Mr. F. Thomas Lubozynski, PE, Administrator
Waste Management Program, Central District
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Regarding: Omni Waste of Osceola County, LLC
J.E.D. Solid Waste Management Facility, St. Cloud, Florida
Phase 1 Partial Closure Construction Quality Assurance Certification Report
Permit Numbers SC49-0199726-022 and SO49-0199726-018

Dear Mr. Lubozynski:

Enclosed with this letter are two hardcopies and two digital of the Construction Quality Assurance Certification Report for the construction of 2012 partial closure of Phase 1 at the J.E.D. Solid Waste Management Facility in St. Cloud, Osceola County, Florida. Also enclosed is a completed and certified FDEP Form 62-701.900(2), "Certification of Construction Completion for a Solid Waste Management Facility".

It is my opinion that the 2012 partial closure of Phase 1 has been constructed in substantial conformance with the permitted plans and specifications for the final closure and the solid waste facility.

On behalf of Omni Waste of Osceola County, LLC, Weaver Boos is requesting that a site inspection of the 2012 partial closure of Phase 1 be scheduled at your convenience. Please contact Michael Kaiser, PE, Regional Engineer with Waste Services, Inc., to schedule a date and time for the inspection. Mr. Kaiser can be reached via email at mkaiser@wasteservicesinc.com or via telephone at (904) 673-0446.

Thank you for your time and consideration in this matter. Should you have any questions or concerns, please feel free to contact us.

Sincerely,
Weaver Boos Consultants Southeast, LLC

Jeffrey D. Schaffer, PE
Senior Project Manager

JEFFREY D. SCHAFFER
LICENSE
No 64716
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form # 62-701.900(2)
Form Title Certification of Construction Completion of a Solid Waste Management Facility
Effective Date May 19, 1994

RECEIVED
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DEP Central District

Certification of Construction Completion of a Solid Waste Management Facility

DEP Construction Permit No: SO49-0199726-018 County: Osceola

Name of Project: Phase 1 Partial Closure - J.E.D. Solid Waste Management Facility

Name of Owner: Omni Waste of Osceola County, LLC

Name of Engineer: Jeffrey D. Schaffer, PE, Weaver Boos Consultants Southeast LLC

Type of Project: Construction of Final Closure for Phase 1 (Cells 1, 2, 3, and 4) above 180 msl

Cost: Estimate $ $2,300,000 Actual $ $2,650,000

Site Design Quantity: 6,000 ton/day Site Acreage: 19.38 Acres

Deviations from Plans and Application Approved by DEP (attach additional pages as needed):

There were no significant deviations from the permitted plans and specifications

Address and Telephone No. of Site: 1501 Omni Way, St. Cloud, Florida 34773; (407) 981-3720

Name(s) of Site Supervisor: David Collins

Date Site inspection is requested: As soon as possible

This is to certify that, with the exception of any deviation noted above, the construction of the project has been completed in substantial accordance with the plans authorized by Construction

Permit No.: SC49-0199726-022 Dated: July 12, 2012

Date: October 30, 2012

Signature of Professional Engineer

JEFFREY D. SCHAFFER LICENSE 47216 STATE OF FLORIDA PROFESSIONAL ENGINEER

WEAVER
BOOS
CONSULTANTS

October 30, 2012

Mr. F. Thomas Lubozynski, PE, Administrator
Waste Management Program, Central District
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Regarding: Omni Waste of Osceola County, LLC
J.E.D. Solid Waste Management Facility, St. Cloud, Florida
Phase 1 Partial Closure Construction Quality Assurance Certification Report
Permit Numbers SC49-0199726-022 and SO49-0199726-018

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Thank you for your time and consideration in this matter. Should you have any questions or concerns, please feel free to contact us.

Sincerely,
Weaver Boos Consultants Southeast, LLC

Jeffrey D. Schaffer, PE
Senior Project Manager

J.E.D. Solid Waste Management Facility
Osceola County, Florida

CONSTRUCTION QUALITY ASSURANCE CERTIFICATION REPORT CONSTRUCTION OF THE 2012 PARTIAL CLOSURE OF PHASE 1

Submitted to:
Florida Department of Environmental Protection
Central District

Prepared for:

Omni Waste of Osceola County, LLC
1501 Omni Way
St. Cloud, Florida

Prepared by:

Weaver Boos Consultants Southeast, LLC
365 Citrus Tower Boulevard, Suite 110
Clermont, Florida 34711
(352) 241-0848 – www.weaverboos.com

WBC Project Number 3804-352-17-00
September 10, 2012

JED SOLID WASTE FACILITY PHASE 1 PARTIAL CLOSURE
Construction Quality Assurance Certification Report
October 2012

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TABLES

APPENDICES

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1.0 INTRODUCTION

1.1 Overview

This Certification Report summarizes the Construction Quality Assurance (hereafter "CQA") activities performed by Weaver Boos Consultants Southeast, LLC (hereafter "Weaver Boos"), Clermont, Florida, during construction of the 2012 partial closure of Phase 1 at the J.E.D. Solid Waste Management Facility (hereafter "JED"), a Class I landfill, located in Osceola County, Florida. The JED facility is owned by Omni Waste of Osceola County, LLC (hereafter "Omni"), which is a wholly owned subsidiary of Waste Services, Inc. (hereafter "WSI").

The CQA activities performed by Weaver Boos included monitoring of:

- earthwork construction;
- geosynthetics installation; and
- miscellaneous activities associated with the 2012 partial closure of Phase 1.

The CQA activities were performed to confirm that the construction materials and procedures were in compliance with the 2012 partial closure of Phase 1 – Intermediate Modification Permit No. SO49-0199726-018 (hereafter "Permit") issued by the Florida Department of Environmental Protection (hereafter "FDEP"), Central District on July 28, 2011 and in accordance with Chapter 62-701, Solid Waste Management Facilities, Florida Administrative Code (hereafter "FAC")

The Permit covers the construction of the Phase 1 final closure system and includes the construction of the final cover system of the side slopes above the elevation of 180 feet (msl), as well as the top of the Phase 1 development (Cell 1 through Cell 4). The side slopes below the elevation of 180 feet (msl) were closed in 2009. In addition, the permit covers the construction of the storm water management system associated with the final closure of the Phase 1 landfill. This certification report covers the 2012 partial closure of Phase 1 construction activities and was prepared for Mr. Michael Kaiser, PE, Regional Engineer with WSI. The report was prepared by Mr. Jeffery A. Blum and Mr. Jeffery D. Schaffer, PE, with Weaver Boos.

1.2 Report Organization

The remainder of the certification report is organized as described below:

- A brief description of the project is provided in **Section 2.0**;
- A summary of the CQA program is presented in **Section 3.0**;
- A description of the CQA monitoring and testing activities performed during earthwork related construction activities for final closure system construction is provided in **Section**

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4.0;

- A description of the CQA monitoring and testing activities performed during the geosynthetics installation in the final closure system is provided in **Section 5.0**;
- A description of the CQA monitoring and testing performed during miscellaneous construction activities associated with the final cover system of the facility (i.e., stormwater management system features) is provided in **Section 6.0**; and
- A summary of the observations resulting from the CQA monitoring and testing activities performed by Weaver Boos and a certification statement signed and sealed by a professional engineer registered in the State of Florida are presented in **Section 7.0**.

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2.0 PROJECT DESCRIPTION

2.1 General

The JED facility is located in southeastern Osceola County, Florida, west of highway U.S. 441, approximately 6.5 miles south of Holopaw. The JED facility site comprises a total of approximately 2,179 acres. The landfill footprint at final build-out is approximately 360 acres and consists of a total of 23 landfill cells that provide available waste capacity for approximately 30 years. The first five-year construction and operation permit for Phase 1 development of the facility was issued by FDEP in October 2002. A five-year construction and operation renewal permit for development of Phases 2 and 3 was issued in March 2007.

Phase 1 development at the JED facility includes four landfill cells, Cells 1 through 4, located in the northern part of the landfill. Waste placement within Phase 1 commenced in January 2004 with the construction of Cell 1. A gas collection and control system (GCCS) was installed within the Phase 1 development area between August 2008 and January 2009. Further GCCS construction between 2009 and 2012 has included addition wells and laterals to the top of the Phase 1 development. A partial closure of the side slopes of Phase 1, up to an elevation of 180 feet (msl) was completed between March 2009 and October 2009.

The 2012 partial closure of Phase 1 includes approximately 19.38 acres of Phase 1 (Cell 1 through Cell 4). A temporary soil cover (daily cover) approximately 6 inches thick had been previously installed on the side slopes and top prior to this partial closure system construction project.

This report primarily addresses the CQA activities performed during the 2012 partial closure of Phase construction, from the previous partial closure of the side slopes up to an elevation of 180 feet (msl), up to and including the top of the Phase 1 development (Cells 1 through 4), at an approximate elevation 270 feet (msl).

2.2 Construction Activities

This Certification Report pertains to CQA monitoring and testing activities performed during construction of the partial closure of Phase 1 on the side slopes above an elevation of 180 feet (msl) and the top of Cell 1 through Cell 4. The partial closure of Phase 1 included earthwork, Geomembrane liner system installation, geocomposite installation, and stormwater management system installation as indicated in the construction drawings prepared for the construction.

2.2.1 Landfill Final Cover System Components

The 2012 partial closure system of Phase 1 design incorporates components that meet or exceed the requirements of Chapter 62-701, FAC. The closure system on the side slopes consists of the

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following components (from bottom to top):

- six-inch (6”) layer of daily cover and a minimum twelve-inch (12”) layer of intermediate cover; and
- geomembrane barrier layer, consisting of a 40-mil (1.0 mm) thick textured LLDPE liner; and
- geocomposite drainage layer, consisting of a HDPE geonet with a needle-punched, non-woven geotextile heat bonded to each side, hereafter referred to as geocomposite;
- minimum 24-inch thick protective soil layer, and;
- Bahia sod placement

The final cover system on the top consists of the following components (from bottom to top):

- prepared subgrade consisting of a six-inch (6”) layer of daily cover and a minimum twelve-inch (12”) layer of intermediate cover; and
- geomembrane barrier layer, consisting of a 40-mil (1.0 mm) thick textured LLDPE liner;
- minimum 24-inch thick protective soil layer, and;
- Bahia sod placement.

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3.0 CONSTRUCTION QUALITY ASSURANCE PROGRAM

3.1 General

The scope of CQA monitoring, testing, and documentation services performed by Weaver Boos during the construction of the final closure system at the JED facility included review of documents, field CQA operations, and preparation of this certification report, which includes as-built drawings for the partial closure of Phase 1. These activities are described in the following sections of this report.

Weaver Boos provided the CQA monitoring, testing, and documentation. Geosyntec Consultants, Tampa, Florida, was responsible for the original design and construction drawings. A list of personnel involved in the 2012 partial closure of Phase 1 at the JED facility is included in **Section 3.6** of this report.

The activities related to the construction of the 2012 partial closure of Phase 1 began on March 1, 2012. Installation of the geomembranes commenced on March 29, 2012 followed by placement of the protective cover soil starting on April 11, 2012. Due to tropical storms the project was shut down June 22, 2012 and restarted July 5, 2012. Construction of the 2012 partial closure of Phase 1 was completed on July 17, 2012.

3.2 Related Documents

As previously noted, this certification report summarizes the CQA activities performed by Weaver Boos during construction of the partial closure of Phase 1 at the JED facility. The CQA activities conducted by Weaver Boos were intended to satisfy the requirements of the following referenced documents:

- Permit modification application entitled "Intermediate Permit Modification Application for Final Closure of Upper Side Slopes and Top Areas of Cells 1 through 4, Phase1, J.E.D. Solid Waste Management Facility", prepared by Geosyntec Consultants, dated March 10, 2011.
- Response to Request for Additional Information "Partial Landfill Closure – Application for an Intermediate Permit Modification, J.E.D. Solid Waste Management Facility", prepared by Geosyntec Consultants, dated April 28, 2011.
- Notice of Permit Modification of Permit No. SO49-0199726-015, as requested in Permit Application No. SO49-0199726-018, issued by the Florida Department of Environmental Protection on July 27, 2011.

All of the above documents are hereafter collectively referred to as the CQA Documents in this

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Certification Report.

3.3 Minor Changes for Construction

The following minor changes from the construction drawings took place:

3.3.1 Geomembrane

Due to an unanticipated shortage of 40-mil LLDPE liner material, a small portion of the top of the closure, near the southeast corner, utilized 60-mil HDPE in the cover system. Approximately 6,650 square feet (1/2 roll) of 60-mil textured liner was used for panel numbers 228, 229, 230 and 231. Documentation is provided in Appendix H, Panel Placement Summary, Page 11. The 60-mil liner was left over from the recently completed Cell 8 construction project and had met all conformance testing requirements for that project.

3.3.2 Protective Cover

Due to the settlement of the 3:1 side slopes of the previously constructed final cover system, a portion of the upper side slopes and drainage bench of the previously closed area was re-graded. Additional protective cover soil was placed over the existing protective cover from approximately 140 ft. elevation to the bench located at approximately 180 ft. elevation. This was required to reconstruct the drainage bench near the geomembrane liner tie-in location at approximately 180 ft. elevation. The protective cover at the interface between the previous closure and this closure varied from between two feet in thickness to six feet in thickness due to settlement. Areas that required additional protective cover soil in the previously closed area were resodded.

3.3.3 Vegetative Soil

Bahia sod was placed over the partial closure of Phase 1 in-place of vegetative soil and seeding. This is common practice in Florida due to the difficulty in establishing vegetation on sloped areas from seed applications. The sod contains an organic layer of vegetative soil that provides sufficient organic material to produce root growth in the underlying protective cover soil. Additionally, the Contractor applied organic fertilizer as necessary to promote establishment of the sod.

3.4 Field CQA Operations

The following activities were performed as part of the on-site CQA services conducted by Weaver Boos:

3.4.1 Earthwork

- collecting samples of soils used as intermediate cover (general fill) to construct the subbase

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of the closure for testing at an off-site geotechnical laboratory;

- collecting samples of soils used for protective soil layer for testing at the off-site geotechnical laboratory;
- reviewing and evaluating geotechnical laboratory test results to ensure compliance with the requirements of the CQA Documents;
- monitoring placement, grading, and compaction of earthwork related construction activities;
- testing density and moisture content of earthwork related construction activities to ensure compliance with the requirements of the CQA Documents;
- notifying Contractor of areas that need additional compaction based on failing tests and re-testing these areas to ensure compliance with the requirements of the CQA Documents; and
- monitoring anchorage of the geosynthetics in the perimeter anchor trenches.

3.4.2 Geosynthetics

- monitoring delivery, storage, and tracking the inventory of geosynthetic materials delivered for the project;
- coordinating the collection of geosynthetic conformance samples from in-plant sources and forwarding samples to an off-site geosynthetics testing laboratory;
- collecting and reviewing geosynthetic manufacturers' quality control (MQC) certification documents and geosynthetic laboratory conformance test results to verify compliance with the requirements of the CQA Documents;
- monitoring installation of geosynthetic materials in the 2012 partial closure of Phase 1 including trial seams, production seaming, nondestructive testing, and repair operations; and
- performing destructive testing of geomembrane seams at the minimum frequency required by the CQA Documents.

3.4.3 Miscellaneous Activities

- monitoring installation of storm water drainage structures and associated culvert pipes;
- monitoring installation of a storm water pipes and inlet structures; and
- monitoring installation of sod.

During construction activities involving monitoring and/or testing, the observations made and results obtained by Weaver Boos CQA personnel were compared with the requirements of the CQA Documents. The construction manager and the appropriate contractor were notified of any

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deficiencies in construction practices and/or materials to ensure appropriate corrective actions were taken. The corrective actions were monitored and/or tested by CQA personnel to ensure compliance with the requirements of the CQA Documents.

3.5 Certification Report and Record Drawings

Record Drawings for the 2012 partial closure of Phase 1 construction and this CQA Certification Report were prepared as the final task of the CQA program for construction of the 2012 partial closure of Phase 1. The record drawings are included in **Appendix C** of this report.

This Certification Report summarizes the CQA monitoring, testing, and documentation activities performed by Weaver Boos. During construction of the 2012 partial closure of Phase 1, CQA monitoring and testing activities were documented by CQA personnel in Daily Field Reports and various other forms. In addition, QC certificates for the geosynthetics, other construction materials, and surveyor's data were provided to Weaver Boos for review. These and other construction-related documents are maintained by Omni and Weaver Boos as part of the project file. Results of CQA monitoring and testing activities that are critical with respect to the satisfactory performance of the 2012 partial closure of Phase 1 at the JED facility and protection of the surrounding environment have been summarized in a tabular form and are included in the Tables section of this Certification Report.

3.6 Project Personnel

Major personnel or representatives of the firms involved in the project are as follows:

Owner:	Omni Waste of Osceola County, LLC / Waste Services, Inc.
	Michael Kaiser, PE, Regional Engineer
	David Collins, Facility Management
	Keith Lunsford, Facility Technician
CQA Consultant:	Weaver Boos Consultants Southeast, LLC
	Jeffery Schaffer, PE, Managing Engineer
	Jeffrey A. Blum, Project Manager
	Jimmy King, CQA Site Manager (Earthwork)
	Jon Wolfe, CQA Site Manager (Geosynthetics and Earthwork)
	Steve Arthur, Geosynthetic Field Monitor
	Dwayne Stanford, Geosynthetics Field Monitor
Earthwork Contractor:	RCS Excavation, Inc.
	Mike Rowley, Project Manager and Site Superintendent
Geosynthetics Installer:	Comanco Environmental Corporation

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	David Barnett, Project Manager
	Luis Espinal, Site Superintendent
Surveyor:	Peavey & Associates
	Deborah Peavey, PLS, Professional Surveyor
Geotechnical Laboratories:	Universal Engineering Sciences
	Brian Meikle, Project Manager
Geosynthetics Laboratory:	TRI/Environmental
	Melissa Hunter, Project Manager

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4.0 CONSTRUCTION QUALITY ASSURANCE: EARTHWORK

4.1 General

Weaver Boos monitored earthwork related to various components of the 2012 partial closure of Phase 1 at the JED facility. The earthwork included: grading of the existing daily cover and waste on the Phase 1 side slopes and top: placement, compaction and grading of general fill material for use as intermediate cover; placement, compaction and grading of the protective soil layers (cap protective cover and vegetative soil); and the construction of the side-slope drainage swales and downchute structures. The soils used to construct the various components of the 2012 partial closure of Phase 1 were all obtained from the Bronson property (Bronson Borrow Area, located directly adjacent to and west of the landfill) are similar in nature.

General Fill was used as intermediate cover and to fill in areas of the existing slopes where the waste grades were lower than the proposed final grades. The cap protective layer soil was placed to a minimum 30-inch thickness above the geosynthetic components of the 2012 partial closure of Phase 1. The final surface of the 2012 partial closure of Phase 1 received sod upon its completion.

CQA personnel observed the earthwork related construction activities and tested the soils to confirm that the material properties conformed to the CQA Documents, that maximum lift thicknesses were not exceeded, and that minimum soil thicknesses were met. During construction, geotechnical soil tests were performed at an off-site geotechnical laboratory, Universal Engineering Sciences, under the supervision of Brian Meikle, Project Manager.

4.2 Soil Source and Requirements

The general fill, protective soil, and vegetative soils were obtained from the Bronson Borrow Area on the Bronson property (Bronson Borrow Area) located directly adjacent to and west of the landfill. Representative samples of soils were obtained and tested to verify conformance with specified material requirements in the CQA Documents. The geotechnical tests were performed to confirm that the following requirements were met for the specific soils:

4.2.1 General Fill

General Fill was classified as SP or SP-SM in accordance with the Unified Soil Classification System (USCS) per ASTM D 2487 and was relatively free of debris, foreign objects, large rock fragments, organic matter, and other deleterious materials. In addition, general fill used as liner subbase was free of sharp materials.

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4.2.2 Protective Layer Soil

Protective Layer Soil was classified as SP and SP-SM in accordance with the USCS; had fines content of less than 15 percent per ASTM D 422; and were relatively homogeneous soils free of deleterious materials. Regardless of the classification, protective layer soil was required to exhibit a hydraulic conductivity no less than 1.0×10^{-5} cm/sec when tested in accordance with ASTM D 2434.

4.3 CQA Monitoring and Testing

Weaver Boos CQA personnel monitored the grading of existing daily cover/waste and filling in of low areas on the 2012 partial closure of Phase 1. CQA personnel also monitored the placement and/or compaction of soils as described in **Section 3.0**. As part of CQA activities, geotechnical testing was performed on the soils used in construction of 2012 partial closure of Phase 1 at the JED facility.

The following geotechnical tests were performed:

- in-situ nuclear moisture/density tests on compacted lifts of general fill (the tests were performed in accordance with ASTM D 6938);
- moisture content tests on general fill in accordance with ASTM D 6938;
- standard Proctor compaction tests on general fill in accordance with ASTM D 698;
- grain-size analysis or fines content determination in accordance with ASTM D 422;
- hydraulic conductivity tests in accordance with ASTM D 2434; and
- interface friction tests for the interfaces between general fill and GCL and between protective layer soil and primary drainage geocomposite, as discussed in **Section 5.0**.

Weaver Boos provided a Troxler Model 3440 nuclear gauge that was used to perform the moisture/density tests. The gauge was calibrated daily prior to use by the “standard count” method.

4.4 General Fill

CQA personnel monitored the excavation (from the Bronson Borrow Area), placement, and compaction of general fill, which was used to construct the structural fill layer of the 2012 partial closure of Phase 1. Earthwork using general fill consisted of the following activities:

- excavating and hauling general fill from Bronson Borrow Area using tracked excavators and articulated off-road dump trucks, respectively;

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- placing and spreading general fill 12-inch lift using bulldozers;
- compaction of the general fill using a Caterpillar D6 bulldozer; and
- surveying the limits and elevations of the general fill (Record Drawings from the surveyor are included in **Appendix C**).

General fill was required to be compacted to at least 85 percent of the corresponding standard Proctor (ASTM D 698) maximum dry unit weight. The tests performed on compacted general fill materials are discussed below. The CQA laboratory reports for the general fill samples are included in **Appendix D**.

4.4.1 Grain Size Analyses and USCS Classification

Grain-size distribution analyses (ASTM D 422) were performed to evaluate the USCS classification (ASTM D 2487) of general fill materials used to construct the intermediate cover of the 2012 partial closure of Phase 1. Grain size distribution analyses and USCS classification were required to be performed at a minimum frequency of one test per 10,000 cy of compacted general fill. Four grain size distribution analyses and USCS classification were performed during construction for approximately 31,000 cy of compacted general fill placed. The actual CQA test frequency of one test per 7,750 cy of compacted general fill meets the minimum testing frequency required by the CQA Documents. The grain size distribution analyses and USCS classification performed during construction of the 2012 partial closure of Phase 1 are summarized in **Appendix D**.

4.4.2 Standard Proctor Tests

Standard Proctor tests were performed to evaluate the percent compaction from the measured in-situ densities of compacted general fill. Standard Proctor tests were required to be performed at a minimum frequency of one test per 25,000 cubic yards (hereafter "cy") of compacted general fill.

Four standard Proctor tests were performed during construction for approximately 31,000 cy of compacted general fill placed as part of the 2012 partial closure of Phase 1. The actual CQA test frequency of one test per 7,750 cy (approximate) of compacted general fill exceeds the minimum testing frequency required by the CQA Documents. The Standard Proctor tests performed during construction are summarized and presented in **Appendix D**. As noted, the maximum dry unit weight varied from 101.0 to 110.0 pounds per cubic foot (hereafter "pcf") and the optimum moisture content varied from 11.0 to 13.0 percent.

4.4.3 Density and Percent Compaction of Subgrade

Nuclear moisture/density tests were required to be performed at a frequency of five tests per acre

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per lift for earthwork performed using general fill. If the density test failed to meet the minimum compaction requirements, the contractor reworked and re-compacted the area surrounding the failure, and the area was retested by CQA personnel. The procedure was repeated until satisfactory moisture/density test results were obtained at each test location.

Approximately 31,000 cy of general fill was used in the construction of the 2012 partial closure of Phase 1. Field logs of the in-place nuclear moisture/density tests performed to evaluate the compaction of general fill are presented in **Appendix E**. A total of 105 nuclear moisture/density tests were performed on general fill, which correspond to a CQA test frequency of 5 tests per/lift acre (approx.), which exceeds the minimum required compaction testing of 5 tests per/lift acre.

4.4.4 Sand Cone Tests

In-situ moisture/densities were measured using the sand cone method (ASTM D 1556) periodically to verify the moisture/density tests results obtained using the nuclear gauge. A total of 5 moisture/densities were measured using the sand cone method for the general fill used in the construction of the 2012 partial closure of Phase 1. A sand cone was performed for approximately every 25 nuclear density tests performed on the general fill soil, which meets the minimum testing frequency required by the CQA Documents. The sand cone test logs have been included in **Appendix E**. As noted, the densities measured using the two methods were in general agreement.

4.4.5 Anchorage of Geosynthetics

Weaver Boos CQA personnel monitored the method of anchorage for the geosynthetic materials along the perimeter locations. The anchor trench was constructed two-foot deep by two-foot wide (minimum) trench and the geomembrane and geocomposite was installed into the anchor trench and across the bottom. The anchor trench was backfilled with general fill soils and compacted. Along the north, east, and west side of the 2012 partial closure of Phase 1, each layer of geosynthetics was tied into the respective layer of geosynthetics previously installed below elevation 180.

4.5 Protective Layer

4.5.1 General

The protective soil layer component of the 2012 partial closure of Phase 1 included a minimum 24-inch layer of soil over the geosynthetic components.

Sandy soils from the Bronson Borrow Area were used as the protective layer soil. CQA personnel monitored the placement of the soil in the 2012 partial closure of Phase 1. The construction sequence of protective soil layer was as follows:

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- articulated dump trucks hauled the sandy soils from Bronson Borrow Area to the 2012 partial closure of Phase 1 area; and
- the sandy soils were placed and compacted using low ground pressure bulldozers.

During placement of the Cap Protective Cover, CQA personnel monitored the contractor's activities to assure that the risk of damage to the underlying geosynthetics was minimized. CQA personnel also monitored the placement and compaction of the protective cover soils used in construction of the 2012 partial closure of Phase 1. The protective cover soil was typically required to be placed in an initial 18-inch lift above the geosynthetics and compacted to at least 85 percent of the corresponding standard Proctor (ASTM D 698) maximum dry unit weight

CQA personnel confirmed that a first lift of at least 18 inches of protective cover was placed over the geosynthetics prior to compaction. CQA personnel also assured that a total minimum protective cover layer thickness of 24-inches was placed over the geosynthetics by checking the as-built survey data. Additionally, CQA personnel verified that a temporary minimum 3-ft thick layer of soils was maintained where the articulated off-road dump trucks operated above the geosynthetics.

4.5.2 Grain Size Analyses and USCS Classification

Grain-size distribution analyses (ASTM D 422) were performed to evaluate the USCS classification (ASTM D 2487) of protective cover material used in the construction of the 2012 partial closure of Phase 1. Grain size distribution analyses and USCS classification were required to be performed at a minimum frequency of 1 test per 5,000 cy of protective cover soil.

Forty-two (42) grain-size distribution analyses and USCS classification were performed for approximately 78,643 cy (approximate) of protective cover soil used in the construction of the 2012 partial closure of Phase 1. The actual CQA test frequency of 1 test per 1,872 cy (approx.) of protective cover exceeded the minimum testing frequency required by the CQA Documents. The grain-size distribution analyses and USCS classification performed during construction are included in **Appendix D**. As noted, the protective cover material used in construction of the 2012 partial closure of Phase 1 classified as SP-SM and SM in accordance with the USCS classification.

4.5.3 Standard Proctor Tests

Standard Proctor tests were performed to evaluate the percent compaction from the measured in-place densities of compacted protective cover. Standard Proctor tests were required to be performed at a minimum frequency of 1 test per 25,000 cy of protective cover soil.

Five (5) standard Proctor tests were performed during construction of approximately 78,643 cy

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of protective cover soil placed in the 2012 partial closure of Phase 1. The actual CQA test frequency of 1 test per 15,728 cy (approx.) of protective cover soil exceeded the minimum testing frequency required by the CQA Documents. The standard Proctor tests performed during construction are included in **Appendix D**.

4.5.4 Hydraulic Conductivity

Forty-two (42) hydraulic conductivity (ASTM D 2434) tests were performed on samples of protective cover soil. Samples of the protective cover soil were collected as the material was placed. Hydraulic conductivity tests were to be performed at a minimum frequency of 1 test per 5,000 cy. The actual CQA test frequency of 1 test per 1,872 cy (approx.) of protective cover soil exceeded the minimum testing frequency required by the CQA Documents. As indicated in the test reports included in **Appendix D**, the measured hydraulic conductivities of protective soil exceeded the minimum hydraulic conductivity of 1.0×10^{-5} cm/sec required by the CQA Documents.

4.5.5 Density and Percent Compaction

In-situ nuclear moisture/density tests were required to be performed at a frequency of 5 tests per acre per lift for earthwork performed using protective cover soil. If the density test failed to meet the minimum compaction requirements, the contractor reworked and recompacted the area surrounding the failure, and the area was retested by CQA personnel. The procedure was repeated until satisfactory moisture/density test results were obtained at each test location.

Approximately 78,643 cy of protective cover soil was used to construct the 2012 partial closure of Phase 1. Field logs of the in-place nuclear moisture/density tests performed to evaluate the compaction of the protective cover are presented in **Appendix E**. A total of 318 nuclear moisture/density tests met CQA criteria, which correspond to a CQA test frequency of 5 tests per acre (approx.) of compacted protective cover, which exceeds the minimum frequency stipulated in the CQA Documents.

4.5.6 Sand Cone Tests

In-situ moisture/densities were measured using the sand cone method (ASTM D 1556) periodically to verify the moisture/density tests results obtained using the nuclear gauge. A total of 13 moisture/densities were measured using the sand cone method for the protective cover used in the construction of the 2012 partial closure of Phase 1. A sand cone was performed for approximately every 25 nuclear density tests performed on the protective cover soil, which meets the minimum testing frequency required by the CQA Documents. The sand cone test logs have been included in **Appendix E**. As noted, the densities measured using the two methods were in general agreement.

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4.6 Sod Placement

4.6.1 General

In place of vegetative soil and seeding for vegetative growth Bahia sod was placed above the protective soil layer component of the 2012 partial closure of Phase 1. Placement of sod consisted of the following activities:

- grading of the protective cover soils to a smooth surface in preparation for the sod;
- manually placement of the sod in staggered format.

During placement of the sod, CQA personnel monitored the contractor's activities to assure that the risk of damage to the underlying geosynthetics was minimized. CQA personnel also monitored the placement of the sod materials used in construction of the 2012 partial closure of Phase 1. Sod documentation is included in **Appendix J**.

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5.0 CONSTRUCTION QUALITY ASSURANCE: GEOSYNTHETICS

5.1 General

Weaver Boos monitored the installation of the geosynthetic components of the composite liner system installed in the 2012 partial closure of Phase 1, as described in **Section 2.0**. This section includes documentation that shows all geosynthetic materials used in the project met the requirements of the CQA Documents.

5.2 CQA of Geomembrane Installation

5.2.1 Conformance Testing and Documentation

A 40-mil textured LLDPE geomembrane was installed as the geomembrane liner in the 2012 partial closure of Phase 1. The 40-mil textured geomembrane was supplied by Agru America, Inc. (Agru). Conformance samples of the geomembrane were collected from the rolls produced for the project by TRI/Environmental, which coordinated with the manufacturer to collect the CQA samples at the Agru manufacturing plant. TRI/Environmental also performed the CQA conformance testing in accordance with the CQA Documents on the samples of geomembrane collected.

The MQC certificates and test results and the CQA conformance test results were reviewed by CQA personnel and were found to be in compliance with the CQA Documents. The geomembrane MQC certificates have been included in **Appendix F**.

A total of ten CQA conformance samples were tested for approximately 844,000 ft^2 of geomembrane delivered to the site. The actual CQA test frequency of one test per 84,400 ft^2 for the textured geomembrane meets the minimum frequency of one test per 100,000 ft^2 required by the CQA Documents. **Table 3** summarizes the CQA tests performed, the required CQA test frequencies, and the CQA Documents acceptance criteria. The CQA laboratory test results for the geomembrane conformance samples have been included in **Appendix F**.

5.2.2 Field Monitoring Activities

5.2.2.1 Delivery and On-Site Storage

Upon delivery to the site, geomembrane rolls were stored in an area located outside of the closure area and stacked on an elevated soil berm. The rolls were typically transported by an off-road forklift with a spreader bar attachment or using the nylon slings which were attached to each roll. CQA personnel monitored the delivery, unloading, and storage procedures to ensure that the material was handled in an appropriate manner. The CQA personnel also compared the roll numbers of the geomembrane rolls delivered to the manufacturer's bill of lading. An inventory of the rolls delivered for the project was maintained by the CQA personnel. This

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inventory also included the rolls that were approved for installation based on MQC and CQA test results and the rolls that were used during construction. Only approved rolls were incorporated into the work.

5.2.2.2 Deployment

The geomembrane rolls were lifted using a spreader bar attached to a track-mounted skid steer vehicle with forklift attachment. The geomembrane panels were deployed by unrolling the geomembrane rolls using the low-ground pressure, track-mounted skid steer vehicle with forklift attachment.

CQA personnel monitored the deployment of each geomembrane panel. During deployment, the CQA personnel checked for the following:

- manufacturing defects;
- damage that may have occurred during shipment, storage, and handling; and
- damage resulting from installation activities, including damage as a consequence of panel placement, seaming operations, or weather.

If any materials were observed to be damaged or deficient, the installer was notified and the damaged materials were either discarded or repaired. CQA personnel observed and documented the repair locations to verify compliance with the CQA Documents. Details of the geomembrane panel placement were recorded by CQA personnel on panel placement logs, which are included in **Appendix H** of this report.

5.2.2.3 Trial Seams

Prior to production seaming, the installer prepared geomembrane trial seams for each piece of seaming equipment to be used. Additional trial seams were prepared approximately every five hours or when field conditions changed. CQA personnel evaluated the trial seams as follows:

- trial seams were welded under similar conditions as production seaming;
- test strips were cut from the trial seams at random locations with a die press;
- four (4) test strips were tested using a field tensiometer and compared to the passing criteria for the tests, which were as follows:

  Fusion

  - Peel tests – a minimum bonded seam strength of 50 lb/in (inside/outside); and
  - Shear test – a minimum bonded seam strength of 60 lb/in.

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Extrusion

- Peel tests – a minimum bonded seam strength of 44 lb/in; and
- Shear test – a minimum bonded seam strength of 60 lb/in.

If trial welds failed, the machine or welding process was adjusted and a new trial seam was prepared. The new sample was tested to ensure compliance with the above strength requirements. The procedure was repeated, as needed, until passing results were obtained.

Trial seam samples were not archived. Details of the trial seams, including the trial seam test results, are included in **Appendix H** of this report.

5.2.2.4 Production Seams

Geomembrane production seaming operations were monitored by CQA personnel. The majority of the geomembrane production seams were fabricated using double-track fusion welders. Seam repairs were made using hand-held extrusion welders. During or after fabrication, the geomembrane seams were visually examined for workmanship and continuity. Geomembrane seaming logs are included in **Appendix H** of this report.

5.2.3 Nondestructive Seam Testing

5.2.3.1 Scope

Nondestructive testing of geomembrane seams was monitored by CQA personnel. All geomembrane seams were nondestructively tested for continuity by the installer using the air pressure procedure for double-track fusion seams and the vacuum-box test procedure for extrusion welded seams. Failed air pressure seams, if applicable, were capped and then retested using vacuum-box test methods after determining the failed seam length. Leaks identified using the vacuum-box method were repaired and retested as described in *Section 5.2.5*.

5.2.3.2 Air Pressure Testing

Accessible double-track fusion seams were nondestructively tested using the air pressure test. The procedure used by the installer for air pressure testing was as follows:

- visually observe the integrity of the annulus of the section of seam being tested and isolate the section by sealing the ends using heat and pressure;
- insert the needle of a pressure test apparatus into the annulus at one end of the seam;
- inflate the annulus to a gauge pressure between 25-30 psi with an air pump and maintain the gauge pressure for at least five minutes;
- repair faulty area in accordance with *Section 5.2.5* if the pressure loss exceeds 3 psi or if the

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pressure does not stabilize; and

- confirm airflow through the entire annulus by releasing the air from the seam at the opposite end from where the needle was inserted.

5.2.3.3 Vacuum-Box Testing

The vacuum-box was used by the installer to nondestructively test extrusion seams and repairs. The procedure used by the installer for vacuum testing was as follows:

- wet a strip of seam with a soapy solution;
- place the vacuum-box assembly over the wetted area, close the bleed valve and open the vacuum valve;
- force the box onto the sheet until a vacuum is observed;
- examine the seam through the viewing window for a period of approximately 20 seconds for the occurrence of air bubbles;
- remove the assembly and continue the process over the entire length of the seam; and
- record the location of any leaks.

Nondestructive seam test results for geomembrane placed in the 2012 partial closure of Phase 1 are presented in **Appendix H**. If nondestructive testing indicated that repairs were necessary, repairs were made in accordance with procedures presented in *Section 5.2.5*. All repairs were tested using the vacuum-box test procedure.

5.2.4 Destructive Seam Sample Testing

5.2.4.1 Scope

In accordance with the CQA Documents, CQA personnel identified and collected geomembrane seam samples for destructive testing. These samples were tested at the off-site geosynthetics laboratory.

For a destructive seam sample to be considered as passing, the seam strength criteria described in *Section 5.2.2.3* had to be met for at least four out of the five test specimens obtained from the sample.

5.2.4.2 Sampling Procedures

Prior to the removal of the full seam sample, two geomembrane test strips were taken by the installer from either end of the proposed destructive sample. Each strip was peel-tested in the field. If the peel samples exhibited passing results, the adjacent destructive seam sample was removed and tested. At each destructive seam sample location, a test sample measuring

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approximately 12 inches across the seam and 42 inches along the seam was obtained. The sample was divided into three pieces and distributed to: (i) the off-site geosynthetics laboratory for testing, (ii) the installer, and (iii) the owner as an archive sample.

5.2.4.3 Test Results

Laboratory testing of geomembrane seam samples was performed in accordance with the CQA Documents. For destructive seam testing, five one-inch wide test specimens were removed from the destructive seam sample using a die press. On a calibrated tensiometer, five test specimens were peel-tested for adhesion strength. For fusion seams, peel tests were performed on both the bottom (inside track) and top (outside track) edges. Additionally, five specimens were tested for shear strength. The seam acceptance/rejection criteria described in *Section 5.2.2.3* and *Section 5.2.4.1* was used to evaluate the destructive seam samples.

The destructive seam test results for the geomembrane installed in the 2012 partial closure of Phase 1 are presented in **Appendix I**. The CQA laboratory destructive test results for the geomembrane is included in **Appendix I**.

For the geomembrane installed in the 2012 partial closure of Phase 1, 106 destructive seam samples were tested for a total seam length of 52,000 feet (approximate). This corresponds to an approximate sample frequency of one per 500 feet of seam. The actual destructive seam test frequencies meet or exceed the minimum frequency of 1 per 500 lf of production seams required by the CQA Documents.

5.2.5 Geomembrane Repairs

The repair procedures presented in this subsection were used by the installer to patch holes and tears, spot-extrude impact damage or other minor defects, and for grinding and extrusion welding small sections of failed fusion seams (if the exposed edge was accessible). In the cases where patches or caps were used to repair the damaged geomembrane (i.e., small holes, tears, or on seams which failed nondestructive or destructive testing), an approximately 12-inch wide capping strip was used.

During the repair or panel tie-in operations, the following procedures were implemented:

- technicians and seaming equipment used were required to pass trial welds;
- patches or caps extended at least six inches beyond the edge of the defect and all corners were rounded; and
- repairs were tested using a vacuum box and visually observed for continuity.

Repair summary logs prepared by Weaver Boos during CQA activities are included in **Appendix**

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H of this report. Record Drawings illustrating layout of panels, location of seams, destructive samples, and repairs are included in **Appendix C**.

5.3 CQA of Geocomposite Installation

5.3.1 Conformance Testing and Documentation

The geocomposite used was Transnet 270-2-8 manufactured by SKAPS Industries (hereafter "SKAPS"). The geocomposite conformance samples were collected by TRI/Environmental, which coordinated with the manufacturer to collect the CQA samples at the SKAPS manufacturing plant. TRI/Environmental also performed the CQA conformance testing on the samples of geocomposite collected.

The MQC certificates and test results and the CQA conformance test results were reviewed by CQA personnel and were found to be in compliance with the CQA Documents. The results of the MQC and CQA conformance tests for 250 rolls (700,000 ft^2) of geocomposite are found in **Appendix F**.

A total of four CQA conformance samples were tested for 660,800 ft^2 of geocomposite approved for installation in the 2012 partial closure of Phase 1. The actual CQA test frequency of one test per 175,000 ft^2 (approximate) of the geocomposite exceeded the minimum frequency of one test per 200,000 ft^2 required by the CQA Documents. **Table 4-A, 4-B, and 4-C** summarizes the CQA tests performed, the required CQA test frequencies, and the CQA Documents acceptance criteria.

It is noted that during CQA and MQC testing, the transmissivity of the geocomposite was measured under compressive stresses of 500 psf for a period of 24 hours. The tests were performed with the geocomposite sandwiched between 40-mil textured geomembrane and the soil actually used as part of the protective soil layer.

Table 4-A, 4-B, and 4-C, presents the CQA and MQC test results for the components used for the geocomposite rolls approved for the project.

The CQA laboratory test results for the geocomposite and geotextile used to manufacture the geocomposite have been included in **Appendix F**.

5.3.2 Field Monitoring Activities

5.3.2.1 Delivery and On-Site Storage

Upon delivery to the site, geocomposite rolls were stored in an area located outside of the closure area and stacked on an elevated soil berm. The rolls were typically transported by an off-road forklift. CQA personnel monitored the delivery, unloading, and storage procedures to ensure that the material was handled in an appropriate manner. The CQA personnel also compared the

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roll numbers of the geocomposite rolls delivered to the manufacturer's bill of lading. An inventory of the rolls delivered for the project was maintained by the CQA personnel. This inventory also includes the rolls that were approved for installation based on MQC and CQA test results and the rolls that were used during construction. Only approved rolls were incorporated into the work.

5.3.2.2 Deployment

CQA personnel monitored the deployment of the geocomposite for manufacturing defects, damage that may have occurred during shipment, storage, and handling, and damage resulting from installation activities.

If the materials were observed to be damaged, the installer was notified and the damaged materials were either discarded or repaired. CQA personnel observed repair locations to verify conformance with the CQA Documents.

CQA personnel periodically monitored the deployment of the geocomposite, as well as its condition after installation, to confirm that the installer took measures to:

- securely anchor the geocomposite in the anchor trench or ballast it with sand bags;
- unroll the geocomposite down the slope (i.e., rolls were aligned perpendicular to the slope contours) in a manner that kept the panel in sufficient tension to avoid excessive wrinkling;
- avoid entrapment of dust, stones, or other objects that would damage or clog the geocomposite;
- avoid damaging the underlying geomembrane during deployment;
- overlap the bottom geotextile edges;
- secure the geonet component of adjacent geocomposite panels with nylon fasteners, installed on a maximum five-foot spacing on longitudinal seams and one-foot spacing on end seams; and
- overlap and continuously sew the upper geotextile edges.

Any observed holes in the geotextile component of the geocomposite were repaired by placing a patch of non-woven geotextile over the hole that extended at least one foot beyond the edge of the hole. These patches were continuously thermally bonded to the undamaged portion of the geocomposite. This method was also used along the tie-in at the toe of the slope and along trimmed panels. Any observed holes or tears in the geonet component of the composite were repaired by the installer by placing a patch of the same material over or under the hole or tear, at least two feet beyond the edges of the hole or tear. These patches were secured using nylon

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fasteners, followed by thermal bonding of the uppermost geotextile of the patch to the undamaged portion of the geocomposite.

5.4 Interface Friction Testing

As discussed in **Section 2.0**, the final cover system in the 2012 partial closure of Phase 1 consists (from top to bottom) of protective soil layer, geocomposite, geomembrane and intermediate fill (general fill). Tests were performed in accordance with the CQA Documents to evaluate the interface shear strength for the various components of the final cover system. The test for interface shear strength was performed by TRI/Environmental.

The interface shear test was performed as part of CQA testing. The test was performed using samples of geosynthetics collected from rolls that were actually installed in the 2012 partial closure of Phase I. The soils for the protective soil layer and general fill were obtained from the Bronson Borrow Area and were similar to the sandy soils used in construction.

The interfaces between the various components of the final cover system were tested at normal stresses of 100, 300, and 500 psf. Peak (at small displacement) and residual (at large displacements) shear strengths were measured at each normal stress. The interface shear tests were conducted under wetted/saturated conditions.

The CQA laboratory interface test results have been included in **Appendix G**.

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6.0 CONSTRUCTION QUALITY ASSURANCE: OTHER CONSTRUCTION ACTIVITIES

6.1 Perforated Drainage Header Pipe

To remove storm water that percolates through the protective cover soil layers and collected by the geocomposite, a perforated header pipes were installed across the Phase 1 side slopes above the benches at elevations (approximate) 173-ft and 215-ft. The pipes consisted of 4-inch perforated corrugated HDPE piping with a factory installed geotextile filter sock. The pipes were installed in a saw-tooth pattern across the slopes and wrapped in the geocomposite. The high end of each pipe was capped to prevent soil intrusion and at each low point a T-connector was used to attach a discharge pipe which consisted of an approximate 8-ft long section of 4-inch diameter corrugated pipe. The MQC certificates provided by the Contractor were reviewed by the CQA personnel and were found to be in compliance with the CQA documents. The pipes were installed as indicated on the CQA documents. The as-built pipe inverts are as noted on the final as-built drawing in **Appendix C**.

6.2 Storm Water Down Chute Pipes

A total of six (6) storm water down chute pipes were installed as part of the storm water management system for the 2012 partial closure of Phase 1. The pipes consisted of 18-inch diameter smooth interior wall corrugated HDPE piping. The down chute pipes were connected to the existing storm water drainage down chute pipes that were previously installed in the lower elevation closure area of Phase 1. The MQC certificates provided by the Contractor were reviewed by the CQA personnel and were found to be in compliance with the CQA documents. The pipes were installed as indicated on the CQA documents. The as-built pipe inverts are as noted on the final as-built drawing in **Appendix C**.

6.3 Storm Water Drop-Inlet Structures

A total of twenty (20) storm water drop inlet structures were installed as part of the storm water management system for the 2012 partial closure of Phase 1. Eleven (11) were installed at the low points on the side slope bench drainage swales and nine (9) were constructed at the top of the closure area. The structures consisted of an approximate 5-ft by 8-ft, 6-inch thick concrete mitered end section with a protective galvanized steel grate. The locations of the structures are noted on the final as-built drawing in **Appendix C**.

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7.0 SUMMARY

Observation of the construction of the 2012 partial closure of Phase 1 at the JED facility was performed by Weaver Boos during the period of March 2012 through July 2012. During this time, CQA personnel monitored the installation of the following components:

- earthwork (intermediate cover, protective soil layer, and vegetative soil layer);
- geosynthetics; and
- and storm water management features.

During construction of the above components, CQA personnel verified that performance and conformance testing was performed at the frequencies required by the CQA Documents and that the installation met or exceeded the requirements of the CQA Documents. CQA personnel also verified that conditions or materials identified as not conforming to the CQA Plan were replaced, repaired, and/or retested, as described in this report.

The results of the CQA activities undertaken by Weaver Boos as described in this report indicate that the 2012 partial closure of Phase 1 was constructed in general accordance with the CQA Documents and the solid waste permit issued for the JED facility.

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TABLES

TABLE 1

GENERAL FILL SOIL LABORATORY TEST RESULTS

REQUIREMENTS			
	PARTICLE SIZE ANALYSIS	SOIL CLASSIFICATION	STANDARD PROCTOR
TEST STANDARD	ASTM D 422	ASTM D 2487	ASTM D 698
TESTING FREQUENCY	1 test per 10,000 yd^3	1 test per 10,000 yd^3	1 test per 25,000 yd^3

TEST RESULTS				
Sample ID	Percent Passing No. 200 Sieve (%)	Soil Classification [1]	Max Dry Unit Wt. @ Optimum Moisture Content	Pass/Fail (P/F)
N-6	4.8	SP	N/A [2]	P
N-7	4.9	SP	N/A [2]	P
N-8	4.9	SP	N/A [2]	P
N-9	5.1	SP	N/A [2]	P
12-P286	N/A [2]	N/A [2]	109.0 pcf @11.0%	P
12-P287	N/A [2]	N/A [2]	106.0 pcf @13.0%	P
12-P288	N/A [2]	N/A [2]	101.0 pcf @13.0%	P
12-P289	N/A [2]	N/A [2]	110.0 pcf @11.0%	P

Notes:

[1] General fill soils were required to classify as SW, SP, SW-SM, SW-SC, SP-SM, SP-SC, SM or SC.

[2] N/A = Not applicable

TABLE 2

PROTECTIVE SOILS LABORATORY TEST RESULTS

REQUIREMENTS						
	PARTICLE SIZE ANALYSIS	SOIL CLASSIFICATION	ATTERBERG LIMITS	STANDARD PROCTOR	HYDRAULIC CONDUCTIVITY	
TEST STANDARD	ASTM D 422	ASTM D 2487	ASTM D 4318	ASTM D 698	ASTM D 2434	
TESTING FREQUENCY	1 test per 5,000 yd^3	1 test per 5,000 yd^3	1 test per 5,000 yd^3	1 test per 25,000 yd^3	1 test per 5,000 yd^3	
TEST RESULTS						
Sample ID	Percent Passing No. 200 Sieve (%) [1]	Soil Classification [2]	LL/PL/PI [3]	Max Dry Unit Wt. @ Optimum Moisture Content	Hydraulic Conductivity [4] (cm/sec)	Pass/Fail (P/F)
N-1	6.5	SP	NP/NP/NP	N/A [5]	$3.33x10^{-3}$	P
N-2	6.5	SP	NP/NP/NP	N/A [5]	$1.97x10^{-3}$	P
N-3	3.9	SP	NP/NP/NP	N/A [5]	$2.10x10^{-3}$	P
N-4	6.4	SP	NP/NP/NP	N/A [5]	$9.70x10^{-4}$	P
N-5	4.9	SP	NP/NP/NP	N/A [5]	$2.83x10^{-3}$	P
N-10	5.0	SP	NP/NP/NP	N/A [5]	$4.93x10^{-3}$	P
N-11	4.0	SP	NP/NP/NP	N/A [5]	$3.65x10^{-3}$	P
N-12	7.0	SP-SM	NP/NP/NP	N/A [5]	$3.60x10^{-3}$	P
N-13	7.0	SP-SM	NP/NP/NP	N/A [5]	$3.26x10^{-3}$	P
N-14	5.0	SP	NP/NP/NP	N/A [5]	$3.14x10^{-3}$	P
N-15	4.0	SP	NP/NP/NP	N/A [5]	$6.41x10^{-3}$	P
N-16	3.0	SP	NP/NP/NP	N/A [5]	$4.80x10^{-3}$	P
N-17	3.0	SP	NP/NP/NP	N/A [5]	$1.11x10^{-2}$	P
N-18	3.0	SP	NP/NP/NP	N/A [5]	$5.57x10^{-3}$	P
N-19	3.0	SP	NP/NP/NP	N/A [5]	$6.84x10^{-3}$	P
N-20	6.0	SP-SM	NP/NP/NP	N/A [5]	$4.34x10^{-3}$	P
N-21	4.0	SP	NP/NP/NP	N/A [5]	$6.13x10^{-3}$	P
N-22	3.0	SP	NP/NP/NP	N/A [5]	$1.16x10^{-3}$	P
N-23	5.0	SP	NP/NP/NP	N/A [5]	$3.42x10^{-3}$	P
N-24	3.0	SP	NP/NP/NP	N/A [5]	$2.30x10^{-3}$	P
N-25	6.0	SP-SM	NP/NP/NP	N/A [5]	$4.38x10^{-3}$	P
N-26	7.0	SP-SM	NP/NP/NP	N/A [5]	$7.80x10^{-4}$	P
N-27	7.0	SP-SM	NP/NP/NP	N/A [5]	$1.40x10^{-4}$	P
N-28	14.0	SM	NP/NP/NP	N/A [5]	$1.48x10^{-3}$	P
N-29	8.0	SP-SM	NP/NP/NP	N/A [5]	$3.60x10^{-4}$	P
N-30	8.0	SP-SM	NP/NP/NP	N/A [5]	$6.60x10^{-4}$	P
N-31	10.0	SP-SM	NP/NP/NP	N/A [5]	$3.25x10^{-4}$	P
N-32	18.0	SM	NP/NP/NP	N/A [5]	$8.40x10^{-4}$	P
N-33	11.0	SP-SM	NP/NP/NP	N/A [5]	$2.12x10^{-3}$	P
N-34	12.0	SP-SM	NP/NP/NP	N/A [5]	$1.12x10^{-3}$	P
N-35	8.0	SP-SM	NP/NP/NP	N/A [5]	$4.20x10^{-4}$	P
N-36	4.0	SP	NP/NP/NP	N/A [5]	$1.80x10^{-4}$	P
N-37	9.0	SP-SM	NP/NP/NP	N/A [5]	$1.90x10^{-3}$	P
N-38	9.0	SP-SM	NP/NP/NP	N/A [5]	$5.40x10^{-4}$	P
N-39	17.0	SM	NP/NP/NP	N/A [5]	$1.56x10^{-3}$	P
N-40	7.0	SP-SM	NP/NP/NP	N/A [5]	$2.38x10^{-3}$	P
N-41	5.0	SP	NP/NP/NP	N/A [5]	$3.50x10^{-4}$	P
N-42	0.3	SP	NP/NP/NP	N/A [5]	$7.80x10^{-4}$	P
N-43	1.0	SP	NP/NP/NP	N/A [5]	$1.95x10^{-3}$	P
N-44	0.2	SP	NP/NP/NP	N/A [5]	$2.67x10^{-3}$	P
N-45	0.2	SP	NP/NP/NP	N/A [5]	$4.50x10^{-4}$	P
N-46	1.0	SP	NP/NP/NP	N/A [5]	$6.20x10^{-4}$	P
12-P259	N/A [5]	N/A [5]	N/A [5]	101.0 pcf @14.0%	N/A [5]	P
12-P655	N/A [5]	N/A [5]	N/A [5]	106.2 pcf @11.9%	N/A [5]	P
12-P656	N/A [5]	N/A [5]	N/A [5]	106.8 pcf @11.6%	N/A [5]	P
12-P657	N/A [5]	N/A [5]	N/A [5]	109.4 pcf @11.7%	N/A [5]	P
12-P658	N/A [5]	N/A [5]	N/A [5]	108.8 pcf @11.3%	N/A [5]	P

Notes:

1 Soils with fines content higher than 15% were accepted provided they met the specified hydraulic conductivity requirements.

2 Cap protective layer soils were required to classify as SW, SP, SW-SM, SW-SC, SP-SM, or SP-SC; other soil classification may be accepted by the Engineer provided the soil meets the hydraulic conductivity requirement.

3 NP= Non Plastic

4 Required hydraulic

5 N/A = Not applicable

TABLE 3

CQA AND MQC TEST RESULTS FOR 40-mil TEXTURED LLDPE GEOMEMBRANE

	CONSTRUCTION QUALITY ASSURANCE (CQA)						MANUFACTURING QUALITY CONTROL (MQC)							
PROPERTY	Thickness (mil)	Density (g/cm^3)	Carbon Black Content (%)	Carbon Black Dispersion	Break Strength[2] (lb/in)	Break Elongation[2] (%)	Thickness[1] (mil)	Density (g/cm^3)	Carbon Black Content (%)	Carbon Black Dispersion	Break Strength[2] (lb/in)	Break Elongation[2] (%)	Tear Resistance[2] (lb)	Puncture Resistance (lb)
TEST STANDARD	ASTM D 5994	ASTM D 1505	ASTM D 4218	ASTM D 5596	ASTM D 6693	ASTM D 6693	ASTM D 5994	ASTM D 792	ASTM D 4218	ASTM D 5596	ASTM D 6693	ASTM D 6693	ASTM D 1004	ASTM D 4833
PROJECT SPECS.	≥ 40 / 36	≥ 0.93	2 to 3	See Note 3	≥ 60	≥ 250	≥ 36 / 40	≥ 0.93	2 to 3	See Note 3	≥ 60	≥ 250	≥ 22	≥ 44
TESTING FREQUENCY	1 per 100,000 ft^2 [4]						Every Roll	1 Test/Lot	1 Test/5 Rolls	1 Test/10 Rolls	1 Test / 5 Rolls		1 Test/10 Rolls	1 Test/10 Rolls

ROLL NUMBER	TEST RESULTS						TEST RESULTS								PASS/FAIL (P/F)	
															CQA	MQC
Resin Lot # CAK810240																
403758	44/41	0.935	2.21	Note 3	164	485	43/40	0.936	2.26	10	149	527.2	40.3	92.2	P	P
403759							43/40	0.936	2.26	10	150	527.2	40.3	92.2		P
403760							39/42	0.936	2.28	10	165	541.7	36.385	94.93		P
403761							39/43	0.936	2.28	10	167	541.7	36.385	94.93		P
403762							39/43	0.936	2.28	10	168	541.7	36.385	94.93		P
403763							40/43	0.936	2.29	10	151	533.8	36.227	92.214		P
403764	45/43	0.933	2.31	Note 3	163	466	41/43	0.935	2.29	10	148	533.8	36.227	92.214		P
403765							39/43	0.935	2.29	10	148	533.8	36.227	92.214		P
403766							39/43	0.934	2.27	10	155	543.6	39.512	91.936		P
404101							40/43	0.934	2.27	10	155	543.6	39.512	91.936		P
404102							39/42	0.934	2.27	10	151	543.6	39.512	91.936		P
404103							38/43	0.934	2.24	10	146	525.4	37.753	97.464		P
404104	44/41	0.0934	2.28	Note 3	161	485	40/43	0.934	2.24	10	146	525.4	37.753	97.464		P
404105							39/43	0.934	2.24	10	143	525.4	37.753	97.464		P
404106							41/43	0.932	2.19	10	140	511.4	32.428	97.085		P
404107							40/43	0.932	2.19	10	140	511.4	32.428	97.085		P
404108							39/43	0.932	2.19	10	140	511.4	32.428	97.085		P
404109							41/43	0.934	2.29	10	146	502.5	33.717	103.52		P
404110	44/42	0.0934	2.29	Note 3	159	496	38/42	0.934	2.29	10	142	502.5	33.717	103.52		P
404111							38/41	0.934	2.29	10	140	502.5	33.717	103.52		P
Resin Lot # CAM810720																
404212							38/41	0.935	2.24	10	140	530.9	36.065	91.456		P
404213							36/42	0.935	2.24	10	142	530.9	36.065	91.456		P
404214							40/43	0.935	2.24	10	145	530.9	36.065	91.456		P
404215							39/42	0.936	2.35	10	156	537.2	37.403	103.43		P
404216	45/42	0.0935	2.37	Note 3	157	478	39/43	0.936	2.35	10	159	537.2	37.403	103.43	P	P
404217							40/43	0.936	2.35	10	159	537.2	37.403	103.43		P
404218							40/42	0.935	2.34	10	145	531.8	33.335	92.92		P
404219							40/42	0.935	2.34	10	145	531.8	33.335	92.92		P
404220							38/42	0.935	2.34	10	144	531.8	33.335	92.92		P
404221							37/42	0.935	2.22	10	148	540.9	36.231	97.35		P
404222	45/44	0.0933	2.03	Note 3	169	496	39/43	0.935	2.22	10	151	540.9	36.231	97.35		P
404223							36/43	0.935	2.22	10	151	540.9	36.231	97.35		P
404224							37/41	0.934	2.22	10	145	550.4	35.925	99.73		P
404225							40/43	0.934	2.22	10	152	550.4	35.925	99.73		P
404226							39/44	0.934	2.22	10	155	550.4	35.925	99.73		P
404227							37/42	0.936	2.12	10	151	567.3	33.704	95.608		P
404228	44/41	0.0934	2.13	Note 3	169	465	41/43	0.936	2.12	10	152	567.3	33.704	95.608	P	P
404229							39/43	0.936	2.12	10	154	567.3	33.704	95.608		P
404230							38/43	0.936	2.12	10	155	567.3	33.704	95.608		P

TABLE 3

CQA AND MQC TEST RESULTS FOR 40-mil TEXTURED LLDPE GEOMEMBRANE

	CONSTRUCTION QUALITY ASSURANCE (CQA)						MANUFACTURING QUALITY CONTROL (MQC)							
PROPERTY	Thickness (mil)	Density (g/cm^3)	Carbon Black Content (%)	Carbon Black Dispersion	Break Strength[2] (lb/in)	Break Elongation[2] (%)	Thickness[1] (mil)	Density (g/cm^3)	Carbon Black Content (%)	Carbon Black Dispersion	Break-Strength[2] (lb/in)	Break Elongation[2] (%)	Tear Resistance[2] (lb)	Puncture Resistance (lb)
TEST STANDARD	ASTM D 5994	ASTM D 1505	ASTM D 4218	ASTM D 5596	ASTM D 6693	ASTM D 6693	ASTM D 5994	ASTM D 792	ASTM D 4218	ASTM D 5596	ASTM D 6693	ASTM D 6693	ASTM D 1004	ASTM D 4833
PROJECT SPECS.	≥ 40 / 36	≥ 0.93	2 to 3	See Note 3	≥ 60	≥ 250	≥ 36 / 40	≥ 0.93	2 to 3	See Note 3	≥ 60	≥ 250	≥ 22	≥ 44
TESTING FREQUENCY	1 per 100,000 ft^2 [4]						Every Roll	1 Test/Lot	1 Test/5 Rolls	1 Test/10 Rolls	1 Test / 5 Rolls		1 Test/10 Rolls	1 Test/10 Rolls
Resin Lot # CCA810120																
207633							40/41	0.933	2.36	10	141	518.8	36.95	100.07		P
207634							41/43	0.933	2.36	10	145	518.8	36.95	100.07		P
207635							40/41	0.933	2.35	10	141	518.8	36.95	100.07		P
207636	44/41	0.0937	2.36	Note 3	163	477	41/43	0.933	2.35	10	146	518.8	36.95	100.07		P
207637							40/41	0.933	2.31	10	129	523.0	36.95	100.07		P
207638							41/42	0.933	2.31	10	131	523.0	36.95	100.07		P
207639							41/43	0.933	2.31	10	134	523.0	36.95	100.07		P
207640							37/43	0.933	2.34	10	132	523.0	36.95	100.07		P
207641							41/43	0.933	2.34	10	134	523.0	36.95	100.07		P
207742	43/41	0.937	2.21	Note 3	158	460	40/43	0.933	2.32	10	133	498.7	34.506	98.489		P
207743							41/43	0.933	2.32	10	133	498.7	34.506	98.489		P
207744							37/42	0.933	2.32	10	132	498.7	34.506	98.489		P
207745							40/43	0.933	2.32	10	134	498.7	34.506	98.489		P
207746							41/44	0.933	2.32	10	137	498.7	34.506	98.489		P
207747							41/43	0.933	2.27	10	146	516.3	34.506	98.489		P
207748							40/42	0.933	2.27	10	145	516.3	34.506	98.489		P
207749	45/43	0.936	2.3	Note 3	168	474	40/43	0.933	2.21	10	146	516.3	34.506	98.489	P	P
207750							41/43	0.933	2.21	10	146	516.3	34.506	98.489		P
207751							41/42	0.933	2.21	10	143	516.3	34.506	98.489		P
207752							41/42	0.933	2.2	10	136	513.4	36.137	100.64		P
207753							41/42	0.933	2.2	10	136	513.4	36.137	100.64		P
207754							41/43	0.933	2.2	10	139	513.4	36.137	100.64		P

Notes:

[1] Thickness was measured for every roll.

[2] Minimum property value in machine direction (MD) and transverse direction (TD).

[3] Project requirements for carbon black dispersion are: 8 of 10 in Category 1 or 2 and all in Category 1,2, or 3. Results are for Category 1 or 2.

[4] A minimum of 1 test per lot was required.

[5] Average / Minimum thickness.

TABLE 4-A

CQA AND MQC TEST RESULTS FOR GEOCOMPOSITE

	CONSTRUCTION QUALITY ASSURANCE (CQA)		MANUFACTURING QUALITY CONTROL (MQC)	
	GEOCOMPOSITE		GEOCOMPOSITE	
PROPERTY	Transmissivity (m^2/sec)	Peel Strength (lb/in)	Transmissivity (m^2/sec)	Peel Strength (lb/in)
TEST STANDARD	ASTM D 4716	ASTM D 7005	ASTM D 4716	ASTM D 7005
PROJECT SPECS.	$\geq 1.5 \times 10^{-3}$ at 500 psf	≥ 1.0	$\geq 1.5 \times 10^{-3}$ at 500 psf	≥ 1.0
TESTING FREQUENCY	1 per 200,000 ft^2 [1]		1 per 100,000 ft^2 [1]	

GEOCOMPOSITE ROLL NUMBER	LOT NO.	TEST RESULTS		TEST RESULTS		PASS/FAIL (P/F)	
						CQA	MQC
46941010001	UTCX050977			1.14×10^{-3}	1.27	--	P
46941010003	UTCX050977	7.97×10^{-4}	4.9/3.0	--	--	P	P
46941010015	UTCX050977	--	--	--	1.95	--	P
46941010030	UTCX050977	--	--	--	1.29	--	P
46941010035	UTCX050977	--	--	1.18×10^{-3}	--	--	P
46941010045	UTCX050977	--	--	--	1.41	--	P
46941010060	UTCX050977	--	--	--	1.48	--	P
46941010070	UTCX050977	--	--	1.11×10^{-3}	--	--	P
46941010075	UTCX050977	--	--	--	1.26	--	P
46941010086	UTCX050977	6.36×10^{-4}	4.0/2.5	--	--	P	P
46941010090	UTCX050977	--	--	--	2.02	--	P
46941010105	UTCX050977	--	--	1.09×10^{-3}	1.65	--	P
46941010120	UTCX050977	--	--	--	1.36	--	P
46941010135	UTCX050977	--	--	--	1.32	--	P
46941010140	UTCX050977	--	--	1.16×10^{-3}	--	--	P
46941010150	UTCX050977	--	--	--	1.47	--	P
46941010159	UTCX050977	8.45×10^{-4}	3.5/2.5	--	--	P	P
46941010165	UTCX050977	--	--	--	1.81	--	P
46941010175	UTCX050977	--	--	1.07×10^{-3}	--	--	P
46941010180	UTCX050977	--	--	--	1.97	--	P
46941010195	UTCX050977	--	--	--	1.49	--	P
46941010210	UTCX050977	--	--	1.08×10^{-3}	1.40	--	P
46941010225	UTCX050977	--	--	--	1.51	--	P
46941010227	UTCX050977	8.69×10^{-4}	3.7/2.1	--	--	P	P
46941010240	UTCX050977	--	--	--	1.63	--	P
46941010245	UTCX050977	--	--	1.20×10^{-3}	--	--	P

Notes:

[1] A minimum of 1 test per lot was required.

TABLE 4-B

CQA AND MQC TEST RESULTS FOR GEOTEXTILE USED TO MANUFACTURE GEOCOMPOSITE

	CONSTRUCTION QUALITY ASSURANCE (CQA)					MANUFACTURING QUALITY CONTROL (MQC)						
PROPERTY	Mass per Unit Area (oz/yd^2)	Grab Strength (lb)	Trapezoidal Tear Strength (lb)	Apparent Opening Size (mm)	Permittivity (sec^{-1})	Mass per Unit Area (oz/yd^2)	Grab Strength (lb)	Trapezoidal Tear Strength (lb)	Puncture Strength (lb)	Static Puncture Strength (lb/in^2)	Apparent Opening Size (mm)	Permittivity (sec^{-1})
TEST STANDARD	ASTM D 5261	ASTM D 4632	ASTM D 4533	ASTM D 4751	ASTM D 4491	ASTM D 5261	ASTM D 4632	ASTM D 4533	ASTM D 4833	ASTM D 6241	ASTM D 4751	ASTM D 4491
PROJECT SPECS.	≥ 8	≥ 200	≥ 75	≤ 0.21	≥ 0.5	≥ 8	≥ 200	≥ 75	≥ 90	≥ 500	≤ 0.21	≥ 0.5
TESTING FREQUENCY	1 per 200,000 ft^2			1 per 500,000 ft^2		1 per 100,000 ft^2					1 per 250,000 ft^2	

GEOTEXTILE ROLL NUMBER	TEST RESULTS					TEST RESULTS							PASS/FAIL (P/F)
4694.239	8.2	260	107	0.075	1.82	8.30	229	104	–	678	80	1.35	P
4694.243	–	–	–	–	–	8.45	233	100	–	657	80	1.35	P
4694.237	–	–	–	–	–	8.30	229	104	–	678	80	1.35	P
4694.274	–	–	–	–	–	8.50	227	96	–	670	80	1.39	P
4694.271	–	–	–	–	–	8.50	227	96	–	670	80	1.39	P
4694.276	–	–	–	–	–	8.53	225	96	–	670	80	1.39	P
4694.224	–	–	–	–	–	8.17	230	97	–	654	80	1.35	P
4694.211	–	–	–	–	–	8.14	234	95	–	686	80	1.35	P
4694.251	–	–	–	–	–	8.41	228	99	–	655	80	1.39	P
4694.204	–	–	–	–	–	8.56	231	101	–	696	80	1.35	P
4694.281	–	–	–	–	–	8.52	228	98	–	685	80	1.39	P
4694.263	–	–	–	–	–	8.40	231	105	–	700	80	1.39	P
4694.272	–	–	–	–	–	8.50	227	96	–	670	80	1.39	P
4694.222	–	–	–	–	–	8.17	230	97	–	654	80	1.35	P
4694.258	–	–	–	–	–	8.29	229	99	–	655	80	1.39	P
4694.210	–	–	–	–	–	8.14	234	95	–	686	80	1.35	P
4694.219	8.7	270	107	0.075	1.88	–	–	–	–	–	–	–	–
4694.215	8.8	267	102	–	–	–	–	–	–	–	–	–	–
4694.230	8.9	253	108	–	–	–	–	–	–	–	–	–	–

TABLE 4-C

MQC TEST RESULTS FOR GEONET USED TO MANUFACTURE GEOCOMPOSITE

PROPERTY	Polymer Density (g/cm^3)	Carbon Black Content (%)	Thickness (mil)
TEST STANDARD	ASTM D 1505	ASTM D 1603	ASTM D 5199
PROJECT SPECS.	≥ 0.93	2 to 3	≥ 200
TESTING FREQUENCY	1 per 100,000 ft^2		

GEONET ROLL NUMBER	LOT NO.	TEST RESULTS			PASS/FAIL (P/F)
46941010001	UTCX050977	0.956	2.35	264	P
46941010015	UTCX050977	0.956	2.64	274	P
46941010030	UTCX050977	0.956	2.32	270	P
46941010045	UTCX050977	0.956	2.49	265	P
46941010060	UTCX050977	0.956	2.61	269	P
46941010075	UTCX050977	0.956	2.34	272	P
46941010090	UTCX050977	0.956	2.32	266	P
46941010105	UTCX050977	0.956	2.34	267	P
46941010120	UTCX050977	0.956	2.49	277	P
46941010150	UTCX050977	0.956	2.55	273	P
46941010165	UTCX050977	0.956	2.45	268	P
46941010180	UTCX050977	0.956	2.61	263	P
46941010195	UTCX050977	0.956	2.57	271	P
46941010210	UTCX050977	0.956	2.43	278	P
46941010225	UTCX050977	0.956	2.54	275	P
46941010240	UTCX050977	0.956	2.27	264	P

Appendix A

Photograph Log

J.E.D. Solid Waste Management Facility
Partial Closure of Phase 1
Photograph Documentation Log

Photograph #1

Date: 02/24/12

Description:

West slope of the partial closure area of Phase 1 prior to grading and intermediate cover placement.

Photograph #2

Date: 02/24/12

Description:

Investigating the location of the existing geomembrane of the closure below the 180-ft elevation for future tie in of the upper closure geomembrane.

J.E.D. Solid Waste Management Facility
Partial Closure of Phase 1
Photograph Documentation Log

Photograph #3

Date: 03/05/12

Description:

Unloading intermediate cover soils at the closure area for spreading. Soils for the intermediate cover are coming from the Bronson borrow area.

Photograph #4

Date: 03/05/12

Description:

Spreading the 12-inch thick intermediate cover soils across the closure area.

J.E.D. Solid Waste Management Facility
Partial Closure of Phase 1
Photograph Documentation Log

Photograph #5

Date: 03/14/12

Description:

Intermediate fill placement.

Photograph #6

Date: 03/20/12

Description:

Performing a nuclear density test of the placed and compacted intermediate cover soil layer.

J.E.D. Solid Waste Management Facility
Partial Closure of Phase 1
Photograph Documentation Log

Photograph #7

Date: 03/22/12

Description:

Exposing the existing geomembrane of the closure below the 180-ft elevation for future tie in of the upper closure geomembrane.

Photograph #8

Date: 03/22/12

Description:

Spreading and grading the 12-inch thick intermediate cover soil layer.

Photograph #9

Date: 03/27/12

Description:

Final grading the intermediate cover layer in preparation for geomembrane installation.

Photograph #10

Date: 03/29/12

Description:

Deployment of the geomembrane on the west slope.

Photograph #11

Date: 03/29/12

Description:

Fusion welding the geomembrane seams.

Photograph #12

Date: 03/31/12

Description:

Deployment of the geomembrane on the west slope.

Photograph #13

Date: 04/02/12

Description:

Non-destructive air testing of the fusion welded seams.

Photograph #14

Date: 04/02/12

Description:

Extrusion welding the geomembrane repairs.

Photograph #15

Date: 04/04/12

Description:

Additional deployment of geomembrane. Using a loader to depoly the geomembrane down the slope.

Photograph #16

Date: 04/05/12

Description:

Deployment of the geomembrane and fusion welding of seams.

Photograph #17

Date: 04/07/12

Description:

Non destructive air pressure testing a fusion welded seam.

Photograph #18

Date: 04/11/12

Description:

Deployment of the geocomposite on the sideslope.

Photograph #19

Date: 04/10/12

Description:

Seaming the geonet component of the geocomposite using zip ties.

Photograph #20

Date: 04/23/12

Description:

Sewing the geotextile component of the geocomposite.

Photograph #21

Date: 04/24/12

Description:

Spreading protective layer soils over the completed geosynthetics.

Photograph #22

Date: 04/24/12

Description:

Spreading protective layer soils over the completed geosynthetics.

Photograph #23

Date: 04/25/12

Description:

Installation of the downchute pipes within the protective layer soil.

Photograph #24

Date: 05/01/12

Description:

Spreading protective layer soils over the completed geosynthetics.

Photograph #25

Date: 05/07/12

Description:

Final grading the protective layer surface.

Photograph #26

Date: 05/08/12

Description:

Beginning sod placement on the west slope.

Photograph #27

Date: 05/14/12

Description:

Installation of the sod on the completed sideslope areas.

Photograph #28

Date: 05/14/12

Description:

Area with completed sod placement.

Photograph #29

Date: 05/18/12

Description:

Sod installation.

Photograph #30

Date: 05/30/12

Description:

Continued spreading of protective layer soils over the completed geosynthetics.

Photograph #31

Date: 05/30/12

Description:

Installed sod and drainage catch grate at the elevation 180 bench.

Photograph #32

Date: 06/14/12

Description:

Spreading protective layer soils over the completed geosynthetics. Installation of the header pipe and outlet drains within the geocomposite.

Photograph #33

Date: 06/19/12

Description:

Placement of the intermediate fill soils at the top of the closure area.

Photograph #34

Date: 07/11/12

Description:

Geomembrane installation activities at the top of the closure area.

Photograph #35

Date: 07/14/12

Description:

Placement of the protective cover soil over the top of the closure completed geomembrane.

Photograph #36

Date: 07/16/12

Description:

The protective cover soils final graded and prepared for sod placement.

Photograph #37

Date: 07/18/12

Description:

Installation of the Bahia sod.

Photograph #38

Date: 10/16/12

Description:

Established vegetative growth.

Appendix B

Daily Field Reports

Weaver Boos Consultants **Day/Date:** 3-1-12 (Thursday)

Daily Field Report

Project: Partial Closure – Phase 1 Project No. 3804-352-17-00

Location: St Cloud ,FL Weather: AM: Foggy 70 deg

Client: JED Solid Waste Management PM: Partly Cloudy 88 deg

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for waste grades. RCS equipment being used includes 4 articulating haul trucks, 2 CAT Excavators, 3 D-6 dozers and 1 off road water truck.

Activities:

1. RCS hauled and placed 107 loads of material.
2. WBC observed placement of material on the west slope design grade top of waste.

Problems:

1. 1 off road haul truck is down.

Notes:

1. 7 hours of extra work by RCS approved by client. (1 operator and 1 Cat 320 excavator)

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-2-12 (Friday)

Daily Field Report

Project: Partial Closure – Phase 1 Project No. 3804-352-17-00
Location: St Cloud ,FL Weather: AM: Foggy 70 deg
Client: JED Solid Waste Management PM: Partly Cloudy 88 deg
Contractor(s): RCS Construction
Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for waste grades. RCS equipment being used includes 4 articulating haul trucks, 2 CAT Excavators, 3 D-6 dozers and 1 off road water truck.

Activities:

1. RCS hauled and placed 102 loads of material.
2. WBC observed placement of material on the west slope design grade top of waste.

Problems:

1. 1 off road haul truck is down.

Notes:

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-5-12 (Monday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 55 deg
Client:	JED Solid Waste Management	PM:	Sunny 70 deg
Contractor(s):	RCS Construction		
Contractor Sub(s):	Comanco		

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for waste grades. RCS equipment being used includes 5 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers and 1 off road water truck.

Activities:

1. RCS hauled and placed 130 loads of material.
2. WBC observed placement of material on the west slope design grade top of waste.
3. Topcon on site working on GPS

Problems:

1. Did not start hauling material until 9:15am
2. Dozer cutting grade had to be reset

Notes:

1. D-6 Dozer left site at 8 am
2. Liner material is going to start arriving on site Thursday, March 8th.

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-6-12 (Tuesday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 55 deg
Client:	JED Solid Waste Management	PM:	Sunny 75 deg
Contractor(s):	RCS Construction		
Contractor Sub(s):	Comanco		

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for waste grades. RCS equipment being used includes 5 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks and 1 off road water truck.

Activities:

1. RCS hauled and placed 131 loads of material.
2. WBC observed placement of material on the west slope design grade top of waste.
3. Peavey and Ass. On site shooting grade on the west slope for top of waste.

Problems:

1. None

Notes:

1. Volvo frontend loader with forks arrived on site to unload liner on Thursday.
2. Liner material is going to start arriving on site Thursday, March 8th.
3. 2 hours of extra work by RCS approved by client. (1 off road haul truck, 1 320 excavator, 1 D-6 Dozer And 3 operators).

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-7-12 (Wednesday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 65 deg
Client:	JED Solid Waste Management	PM:	Sunny 75 deg Windy
Contractor(s):	RCS Construction		
Contractor Sub(s):	Comanco		

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for waste grades and intermediate fill. RCS equipment being used includes 5 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks and 1 off road water truck.

Activities:

1. RCS hauled and placed 142 loads of material.
2. WBC observed placement of material on the west slope design grade top of waste.
3. Peavey and Ass. On site shooting grade on the west slope for top of waste.
4. RCS exposed Geosynthetics in preparation of tie in.

Problems:

1. Grading problems with the liner tie in.

Notes:

1. Volvo frontend loader with forks arrived on site to unload liner on Thursday.
2. Liner material is going to start arriving on site Thursday, March 8th.
3. Talked to Keith Lunsford with WSI a bought raising the gas wells to the proper grade. He informed Me that was going to do the wells as extra work. They will begin work on Monday, March 12th.
5. 6 hours of extra work exposing Geosynthetic liner by RCS. (1 operator, 1 laborer and 1, 320 Excavator)

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-8-12 (Thursday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 72 deg
Client:	JED Solid Waste Management	PM:	Partly Cloudy 75 deg
Contractor(s):	RCS Construction		
Contractor Sub(s):	Comanco		

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for waste grades and intermediate fill. RCS equipment being used includes 5 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks and 1 off road water truck.

Activities:

1. RCS hauled and placed 133 loads of material.
2. WBC observed placement of material on the west slope design grade top of intermediate cover.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC attended RCS safety meeting. (topic: Servicing Heavy Equipment)
5. WBC and RCS unloaded 3 trucks of Geosynthetic liner material.

Problems:

1. Grading problems with the liner tie in.
2. High moisture content of material being hauled for intermediate cover.

Notes:

1. All roll numbers match the shipping papers.
2. 2 hours of extra work by RCS exposing liner at tie in. (1 labor, 1 operator and 1 320 excavator)

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-9-12 (Friday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 72 deg
Client:	JED Solid Waste Management	PM:	Partly Cloudy 81 deg

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 5 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks and 1 off road water truck.

Activities:

1. RCS hauled and placed 100 loads of material.
2. WBC observed placement of material on the west slope design grade top of intermediate cover.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC and RCS unloaded 2 trucks of Geosynthetic liner material.
5. RCS created diversion berms and tracked all placed material in preparation of heavy rains in the forecast

Problems:

1. Grading problems with the liner tie in.
2. High moisture content of material being hauled for intermediate cover.
3. 1 load of Geosynthetic liner material did not make it to the project due equipment malfunction. Will arrive on site on Monday, March 12th.

Notes:

1. All roll numbers match the shipping papers.

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-12-12 (Monday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 72 deg
Client:	JED Solid Waste Management	PM:	Partly Cloudy 81 deg

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 4 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks and 1 off road water truck.

Activities:

1. RCS hauled and placed 38 loads of material.
2. RCS fixed the washouts that were created due to heavy rains.
3. WBC observed placement of material on the west slope design grade top of intermediate cover.
4. RCS cleaned out storm drains on the west slope.
5. WBC and RCS unloaded 1 truck of Geosynthetic liner material.
6. RCS restored diversion berms that were damaged due to heavy rains.

Problems:

1. Grading problems with the liner tie in.
2. High moisture content of material being hauled for intermediate cover.
3. Over 2 inches of rain fell on project over the weekend.
4. Severe washout on the west slope due to heavy rains.
5. 1 haul truck broke down.

Notes:

1. All roll numbers match the shipping papers.

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-13-12 (Tuesday)

Daily Field Report

Project: Partial Closure – Phase 1 Project No. 3804-352-17-00
Location: St Cloud ,FL Weather: AM: Sunny 72 deg
Client: JED Solid Waste Management PM: Sunny 81 deg
Contractor(s): RCS Construction
Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 4 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks and 1 off road water truck.

Activities:

1. RCS hauled and placed 89 loads of material.
2. RCS exposed Geosynthetics in preparation of tie in.
3. WBC observed placement of material on the west slope design grade top of intermediate cover.

Problems:

1. Grading problems with the liner tie in.
2. High moisture content of material being hauled for intermediate cover.
3. 18" Drain pipe was damaged on west slope while exposing liner.
4. 1 haul truck broke down.

Notes:

1. Haul truck that was broke down was repaired by the end of the work day.

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-14-12 (Wednesday)

Daily Field Report

Project: Partial Closure – Phase 1 Project No. 3804-352-17-00
Location: St Cloud ,FL Weather: AM: Sunny 66 deg
Client: JED Solid Waste Management PM: Sunny 81 deg
Contractor(s): RCS Construction
Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 5 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks and 1 off road water truck.

Activities:

1. RCS hauled and placed 107 loads of material.
2. RCS exposed Geosynthetics in preparation of tie in.
3. WBC observed placement of material on the west slope design grade top of intermediate cover.
4. RCS began grading the North Slope to top of waste.

Problems:

1. Grading problems with the liner tie in.
2. High moisture content of material being hauled for intermediate cover.

Notes:

None

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-15-12 (Thursday)

Daily Field Report

Project: Partial Closure – Phase 1 Project No. 3804-352-17-00
Location: St Cloud ,FL Weather: AM: Sunny 69 deg
Client: JED Solid Waste Management PM: Sunny 85 deg
Contractor(s): RCS Construction
Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 5 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks and 1 off road water truck.

Activities:

1. RCS hauled and placed 109 loads of material.
2. RCS exposed Geosynthetics in preparation of tie in.
3. WBC observed placement of material on the west slope design grade top of intermediate cover.
4. RCS continued grading the North Slope to top of waste.

Problems:

1. Grading problems with the liner tie in.
2. High moisture content of material being hauled for intermediate cover.
3. One haul truck broke down for 5 hours.

Notes:

None

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-16-12 (Friday)

Daily Field Report

Project: Partial Closure – Phase 1 Project No. 3804-352-17-00
Location: St Cloud ,FL Weather: AM: Sunny 69 dig
Client: JED Solid Waste Management PM: Sunny 85 dig
Contractor(s): RCS Construction
Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 5 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks and 1 off road water truck.

Activities:

1. RCS hauled and placed 105 loads of material.
2. RCS exposed Geosynthetics in preparation of tie in.
3. WBC observed placement of material on the west slope design grade top of intermediate cover.
4. RCS unloaded 3 trucks of geocomposite. (81 rolls)

Problems:

1. Grading problems with the liner tie in.
2. High moisture content of material being hauled for intermediate cover.

Notes:

None

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-19-12 (Monday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 66 dig
Client:	JED Solid Waste Management	PM:	Sunny 85 dig
Contractor(s):	RCS Construction		
Contractor Sub(s):	Comanco		

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 4 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks and 1 off road water truck.

Activities:

1. RCS hauled and placed 110 loads of material.
2. RCS exposed Geosynthetics in preparation of tie in.
3. WBC observed placement of material on the west slope design grade top of intermediate cover. Test I-3 and I-4 did not meet project specifications. Retesting will be required.
4. RCS unloaded 2 trucks of geocomposite. (54 rolls and 4 bags of zip ties)
5. RCS unloaded 3 trucks of 18" pipe with fittings.
6. RCS surveyor arrived on site.

Problems:

1. Grading problems with the liner tie in.
2. High moisture content of material being hauled for intermediate cover.
3. One haul truck broke down.

Notes:

None.

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-20-12 (Tuesday)

Daily Field Report

Project: Partial Closure – Phase 1 Project No. 3804-352-17-00
Location: St Cloud ,FL Weather: AM: Sunny 66 dig
Client: JED Solid Waste Management PM: Sunny 85 dig
Contractor(s): RCS Construction
Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 4 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks and 1 off road water truck.

Activities:

1. RCS hauled and placed 111 loads of material.
2. RCS began grading the west slope.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC observed placement of material on the West and North slope. All density/moisture testing meets project requirements.
5. RCS unloaded 1 truck of geocomposite. (27 rolls and 2 bags of zip ties)
6. RCS surveyor arrived on site.

Problems:

1. High moisture content of material being hauled for intermediate cover.
2. One haul truck broke down.

Notes:

None.

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-21-12 (Wednesday)

Daily Field Report

Project: Partial Closure – Phase 1 Project No. 3804-352-17-00
Location: St Cloud ,FL Weather: AM: Sunny 69 dig
Client: JED Solid Waste Management PM: Sunny 83 dig
Contractor(s): RCS Construction
Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 4 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 94 loads of material.
2. RCS cut and hauled 23 loads of cut material and placed them in fill areas on top of the hill.
3. RCS continued grading the west slope.
4. RCS exposed Geosynthetics in preparation of tie in.
5. WBC observed placement of material on the West and North Slope.
6. RCS removed one storm water structure.

Problems:

1. High moisture content of material being hauled for intermediate cover.
2. Two haul trucks broke down.

Notes:

.10 inches of perception in short periods of rainfall fell on site today. RCS postponed the hauling of material until the rain passed.

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-22-12 (Thursday)

Daily Field Report

Project: Partial Closure – Phase 1 Project No. 3804-352-17-00
Location: St Cloud ,FL Weather: AM: Sunny 69 dig
Client: JED Solid Waste Management PM: Sunny 83 dig
Contractor(s): RCS Construction
Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 5 articulating haul trucks, 2 CAT Excavators, 2 D-6 dozers, 1 frontend loader with forks, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 117 loads of material.
2. RCS cut and hauled 10 loads of cut material and placed them in fill areas on top of the hill.
3. RCS continued grading the west slope.
4. RCS exposed Geosynthetics in preparation of tie in.
5. WBC observed placement of material on the West and North Slope.
6. RCS removed two storm water structures.

Problems:

1. High moisture content of material being hauled for intermediate cover.
2. 1 haul truck broke down.

Notes:

1. Discussed waste paper in intermediate fill and miner seeps on the west slope with Mike Rowley and Mike Kaiser.

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-24-12 (Saturday)

Daily Field Report

Project: Partial Closure – Phase 1 Project No. 3804-352-17-00
Location: St Cloud ,FL Weather: AM: Sunny 80 dig
Client: JED Solid Waste Management PM: Partly cloudy 86 dig
Contractor(s): RCS Construction
Contractor Sub(s): Commando

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 5 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 frontend loader with forks, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 138 loads of material.
2. RCS continued grading the west slope.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC observed placement of material on the West and North Slope.
5. RCS removed two storm water structures.
6. RCS created storm water diversion berms in preparation of poor weather forecast.
7. RCS cleaned out storm water structures in preparation of heavy rains.

Problems:

1. High moisture content of material being hauled for intermediate cover.
2. 1 haul truck broke down.

Notes:

1. WBC attended RCS safety meeting. (topic: Personal Protective Equipment)

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-26-12 (Monday)

Daily Field Report

Project: Partial Closure – Phase 1 Project No. 3804-352-17-00
Location: St Cloud ,FL Weather: AM: Sunny 74 dig
Client: JED Solid Waste Management PM: Partly cloudy 85 dig
Contractor(s): RCS Construction
Contractor Sub(s): Commando

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 5 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 frontend loader with forks, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 145 loads of material.
2. RCS continued grading the west slope to top of intermediate fill.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC observed placement of material on the West and North Slope.
5. RCS removed one storm water structures.
6. RCS rebuilt haul road to barrow pit.
7. RCS unloaded the last load of Geocomposite. (27 rolls)

Problems:

1. High moisture content of material being hauled for intermediate cover.
2. 1 haul truck broke down.

Notes:

1. WBC attended RCS safety meeting. (topic: First Aid and Bone Breaks)

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-27-12 (Tuesday)

Daily Field Report

Project: Partial Closure – Phase 1 Project No. 3804-352-17-00
Location: St Cloud ,FL Weather: AM: Sunny 74 dig
Client: JED Solid Waste Management PM: Partly cloudy 85 dig
Contractor(s): RCS Construction
Contractor Sub(s): Commando

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 6 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 frontend loader with forks, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 129 loads of material.
2. RCS continued grading the west slope to top of intermediate fill.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC observed placement of material on the West and North Slope.
5. RCS removed one storm water structures.
6. RCS rebuilt haul road to barrow pit.
7. Peavey survey began the as-built on the west slope.

Problems:

1. High moisture content of material being hauled for intermediate cover.
2. 1 haul truck broke down.

Notes:

1. The broke down haul truck was up and running at 2:00 pm.

Name: Loren King

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon 3-26-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	
Client:	JED Solid Waste Management	PM:	

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.

Met with Jimmy King and Steve Arthur with Weaver Boos Consultants.

Walked the cap area and is not ready for liner. Talked to Mike Rowley with RCS.

Departed sit to do some job preparation for when the geosynthetics start.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed 3-28-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	
Client:	JED Solid Waste Management	PM:	

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Arrived on site today in the pm.

Comanco mobilized on site in the pm.

Met with the superintendent with Comanco, Mike Rowley with RCS and Mike Kaiser with WSI.

Walked the final cover area with RCS. Discussed what to final grade to get Comanco ready for deployment of the 40 mil liner.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-28-12 (Wednesday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 60°
Client:	JED Solid Waste Management	PM:	P. cloudy 78°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 6 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 122 loads of material.
2. RCS continued grading the west and north slopes to top of intermediate fill.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC observed placement of material on the West and North Slope.
5. RCS cut ten loads of trash from the north slope to achieve the proper grade
6. RCS extended the west slope approximately five feet south to include the gas well at the limits
7. RCS raised gas wells 18 and 21 approximately five feet

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur 3-29-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/63
Client:	JED Solid Waste Management	PM:	Sun/82

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Arrived on site at 7:00AM

Comanco on site with 11 people.
Observed Comanco deploy panels 9 through 30 of the 40 mil LLDP geomembrane.The panels were installed on the west slope working to the north.Deployment of the LLPDE geomembrane was performed pulling the panels down the slope using a skid loader.
Approximately 58902 square feet of 40 mil LLDPE was installed.

. Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.

Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. Two fusion welders were used for seaming today. Monitored the fusion welders for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 2338 feet of seaming was performed.

Marked destructive samples DS-1 through DS-4 in todays welded seams.

Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams.
Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-29-12 (Thursday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	M: sunny 55°
Client:	JED Solid Waste Management	PM:	M. sunny 84°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 6 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 126 loads of material.
2. RCS continued grading the north slope to top of intermediate fill.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC observed placement of material on the North Slope.
5. RCS dug the anchor trench along the south end of the west slope, and along the top of the slope
6. RCS raised gas well No. 30 five feet
7. RCS smoothed the west slope in preparation for liner placement

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri 3-30-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/62
Client:	JED Solid Waste Management	PM:	Sun/83

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Arrived on site at 7:00AM

Comanco on site with 11 people.
Observed Comanco deploy panels 9 through 30 of the 40 mil LLDP geomembrane.The panels were installed on the west slope working to the north.Deployment of the LLPDE geomembrane was performed pulling the panels down the slope using a skid loader.
Approximately 118083 square feet of 40 mil LLDPE was installed.

. Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications

Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. Two fusion welders were used for seaming today. Monitored the fusion welders for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 5347 feet of seaming was performed.

Marked destructive samples DS-5 through DS-15 in todays welded seams.

Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams.
Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-30-12 (Friday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	M. sunny 60°
Client:	JED Solid Waste Management	PM:	M. sunny 84°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 7 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 139 loads of material.
2. RCS continued grading the North slope to the top of intermediate fill.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC observed placement of material on the North Slope.
5. RCS picked trash and sticks from the west slope before liner placement
6. RCS smoothed the west slope in preparation for liner placement
7. Surveyors on site to verify top of intermediate cover at north end of west slope

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Sat/3-31-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/65
Client:	JED Solid Waste Management	PM:	p.cloudy/83

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.

Comanco on site with 12 people.
Observed Comanco deploy panels 1 through 12 of the 40 mil LLDP geomembrane.The panels were installed on the west slope working to the north.Deployment of the LLPDE geomembrane was performed pulling the panels down the slope using a skid loader.
Approximately 51840 square feet of 40 mil LLDPE was installed

Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.

Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. Three fusion welders were used for seaming today. Monitored the fusion welders for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 2350 feet of seaming was Performed.

Marked destructive samples DS-16 through DS-19 in todays welded seams.

Observed Comanco perform extrusion trial weld prior to any welding of the LLDP was performed.The trial weld was tested using the field tensiometer.All coupons tested met or exceeded the project specifications.

Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 3-31-12 (Saturday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	sunny 60°
Client:	JED Solid Waste Management	PM:	sunny 85°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 7 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 149 loads of material.
2. RCS continued grading the North slope to the top of intermediate fill.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC observed placement of material on the North Slope.
5. RCS picked trash and sticks from the west slope before liner placement

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon/4-2-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/65
Client:	JED Solid Waste Management	PM:	sun/86

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrive on site at 7:00AM.
Comanco on site with 12 people.

Observed Comanco perform fusion and extrusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.

Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. One fusion welder was used for seaming today. Monitored the fusion welders for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 670 feet of seaming was Performed. Seaming was performed at the west tie-in area.

Marked destructive sample DS-20 in todays fusion welded seams.

Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.

Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams. Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.

Departed site at 4:00PM.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-2-12 (Monday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	sunny 63°
Client:	JED Solid Waste Management	PM:	M. sunny 94°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 7 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 159 loads of material.
2. RCS continued grading the North, and NE slopes to the top of intermediate fill.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC observed placement of material on the North Slope.
5. RCS picked trash and sticks from the west slope before liner placement

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue./ 4-3-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/65
Client:	JED Solid Waste Management	PM:	sun/87

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.

Comanco on site with 13 people.
Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform extrusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. One fusion welder was used for seaming today. Monitored the fusion welders for speed and temperature during the welding Process. Seams were clean and dry during the seaming process. Approximately 179 feet of seaming was Performed.
Marked destructive sample DS-21 in todays welded seams.
Comanco field tested destructive samples DS-1 thru DS-21 today.
Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams. Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Obtained destructive samples DS-1 thru DS-21 for laboratory testing.
Departed site at 5:00PM.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-3-12 (Tuesday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	sunny 63°
Client:	JED Solid Waste Management	PM:	sunny 90°
Contractor(s):	RCS Construction		
Contractor Sub(s):	Commanco		

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 182 loads of material.
2. RCS continued grading the NE slope to the top of intermediate fill.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC observed placement of material on the Northeast Slope.
5. RCS picked trash and sticks from the slope before liner placement

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/4-4-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/65
Client:	JED Solid Waste Management	PM:	Sun/89

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM
Comanco on site with 9 people.
Observed Comanco deploy panels 41 through 55 of the 40 mil LLDP geomembrane.The panels were installed on the west slope working to the north.Deployment of the LLPDE geomembrane was performed pulling the panels down the slope using a skid loader. Approximately 69255 square feet of 40 mil LLDPE was installed.
. Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. Two fusion welders were used for seaming today. Monitored the fusion welders for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 3184 feet of seaming was Performed.
Marked destructive samples DS-22 through DS-28 in todays welded seams.
Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams.
Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Departed site at 6:00PM

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-4-12 (Wednesday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	sunny 62°
Client:	JED Solid Waste Management	PM:	sunny 90°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated:

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 188 loads of material.
2. RCS continued grading the NE and East slopes to the top of intermediate fill.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC observed placement of material on the Slope.
5. RCS picked trash and sticks from the slope before liner placement
6. RCS excavated the anchor trench at crest of the north slope
7. RCS raised gas wells 4R, and 45 approximately five feet

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/4-5-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/87

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM
Comanco on site with 14 people.
.No production was performed in the AM do to rain.
Comanco arrived on site at 12:00PM.
Observed Comanco deploy panels 56 through 72 of the 40 mil LLDP geomembrane.The panels were installed on the north west end and north slope Deployment of the LLPDE geomembrane was performed pulling the panels down the slope using a skid loader. Approximately 29692 square feet of 40 mil LLDPE was installed.
. Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. Two fusion welders were used for seaming today. Monitored the fusion welders for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 1584 feet of seaming was Performed.
Marked destructive samples DS-29 through DS-32 in todays welded seams.
Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams.
Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Production was stopped do to high winds.
Departed site at5 :00PM

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-5-12 (Thursday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	P. sunny 66°
Client:	JED Solid Waste Management	PM:	P. sunny 89°
Contractor(s):	RCS Construction		
Contractor Sub(s):	Commanco		

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 188 loads of material. 12 loads also used on haul road.
2. RCS continued grading the East slope to the top of intermediate fill.
3. RCS exposed Geosynthetics in preparation of tie in.
4. WBC observed placement of material on the Slope.
5. RCS picked trash and sticks from the slope before liner placement
6. RCS installed a new six inch lateral from gas well 50 to the top of the slope toward 51. The lateral will be extended to 51 after fill is placed. It was capped with a hard welded cap until it can be completed.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri/4-6-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/86

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM
Comanco on site with 15 people.
Observed Comanco deploy panels 73 through 90 of the 40 mil LLDP geomembrane.The panels were installed on the north slope working to the east.Deployment of the LLPDE geomembrane was performed pulling the panels down the slope using a skid loader. Approximately 46243 square feet of 40 mil LLDPE was installed.
. Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. Two fusion welders were used for seaming today. Monitored the fusion welders for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 2574 feet of seaming was Performed.
Marked destructive samples DS-33 through DS-38 in todays welded seams.
Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams.
Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Deployment was stopped after panel 90 do to high winds.
. Observed Comanco perform extrusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
Production was stopped do to high winds.
Departed site at 3:00PM

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-6-12 (Friday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	M. Cloudy 65°
Client:	JED Solid Waste Management	PM:	M. Cloudy 80°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 200 loads of material. Two loads also used on haul roads.
2. RCS continued grading the East slope to the top of intermediate fill.
3. WBC observed placement of material on the Slope.
4. RCS picked trash and sticks from the slope before liner placement
5. The surveyors were on site today to certify the slopes that are completed.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Sat/4-7-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/65
Client:	JED Solid Waste Management	PM:	Sun/86

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM
Comanco on site with 15 people.
Observed Comanco deploy panels 91 through 98 of the 40 mil LLDP geomembrane.The panels were installed on the west slope working to the north.Deployment of the LLPDE geomembrane was performed pulling the panels down the slope using a skid loader. Approximately 33413 square feet of 40 mil LLDPE was installed.
. Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. Three fusion welders were used for seaming today. Monitored the fusion welders for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 1551 feet of seaming was Performed.
Marked destructive samples DS-39 through DS-41 in todays welded seams.
Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams.
Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Production was stopped today at approximately 10:00AM do to high winds.
Departed site at 11:00AM.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-7-12 (Saturday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	M. Cloudy 65°
Client:	JED Solid Waste Management	PM:	M. Cloudy 78°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill. RCS equipment being used includes 5 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 59 loads of material.
2. RCS continued grading the East slope to the top of intermediate fill.
3. WBC observed placement of material on the Slope.
4. RCS picked trash and sticks from the slope before liner placement.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon/4-9-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/60
Client:	JED Solid Waste Management	PM:	Sun/80

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 8:00AM
Comanco on site with 14 people.
Observed Comanco deploy panels 99 through 122 of the 40 mil LLDP geomembrane.The panels were installed on the north slope and northeast slope.Deployment of the LLPDE geomembrane was performed pulling the panels down the slope using a skid loader. Approximately 95965 square feet of 40 mil LLDPE was installed.
. Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. Two fusion welders were used for seaming today. Monitored the fusion welders for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 4680 feet of seaming was Performed.
Marked destructive samples DS-42 through DS-50 in todays welded seams.
Observed Comanco perform extrusion trial welds prior to any welding of the LLDP was performed.The trial Welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
Observed Comanco perform non destructive vacuum testing of the extrusion welded repairs. The vacuum testing apparatus maintained a minimum of 5 psi vacuum for 20 seconds as required by the CQA plan.

Departed site at 6:00PM

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-9-12 (Monday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	M. Sunny 55°
Client:	JED Solid Waste Management	PM:	M. Sunny 80°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and placing material for intermediate fill, and protective cover soils. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 207 loads of material.
2. RCS finished grading the East slope to the top of intermediate fill.
3. WBC observed placement of material on the Slope.
4. RCS picked trash and sticks from the slope before liner placement.
5. RCS excavated the anchor trench along the NE slope.
6. RCS hauled soils to the south end of the west slope and built a haul road down the slope in preparation for the protective cover placement.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue/410-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/68
Client:	JED Solid Waste Management	PM:	Sun/85

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM
Comanco on site with 15 people.
. Observed Comanco perform fusion and extrusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. One fusion welder was used for seaming today. Monitored the fusion welder for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 468 feet of seaming was performed. Welding was performed at the west tie-in.
Marked destructive sample DS-51 in todays fusion welded seams.
Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams. Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
Observed Comanco deploy geocomposite on the west slope working south to north.Rolls were deployed by rolling the rolls down the slope. Approximately 67500 square feet of geocomposite was deployed.
Performed walk through prior deployment of the geocomposite.
Surveyers on site to mark location of the 4 inch header pipe.
Observed Comanco perform non destructive vacuum testing of the extrusion welded repairs. The vacuum testing apparatus maintained a minimum of 5 psi vacuum for 20 seconds as required by the CQA plan.
Departed site at 5:00PM

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-10-12 (Tuesday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 54°
Client:	JED Solid Waste Management	PM:	Sunny 80°

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling and stockpiling material for protective cover soils. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 185 loads of material.
2. RCS backbladed the east slope in preparation for liner placement.
3. RCS picked trash and sticks from the East slope before liner placement.
4. RCS stockpiled soils along the south end of the west slope in preparation for the protective cover placement.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/4-11-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/68
Client:	JED Solid Waste Management	PM:	Sun/84

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM
Comanco on site with 15 people.
Observed Comanco deploy panels 123 through 139 of the 40 mil LLDP geomembrane.The panels were installed on the east slope working to the south.Deployment of the LLPDE geomembrane was performed pulling the panels down the slope using a skid loader. Approximately 85233 square feet of 40 mil LLDPE was installed.
. Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. Two fusion welders were used for seaming today. Monitored the fusion welders for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 3877 feet of seaming was Performed.
Marked destructive samples DS-52 through DS-59 in todays welded seams.
Observed Comanco perform non destructive air pressure testing on north slope of the LLDPE fusion welded seams.
Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Observed Comanco deploy geocomposite on the west slope.Approximately 67000 square feet of geocomposite was deployed today.
Departed site at 5:00PM

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-11-12 (Wednesday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 59°
Client:	JED Solid Waste Management	PM:	Sunny 82°

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling, placing, and stockpiling material for protective cover soils. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 154 loads of material.
2. RCS picked trash and sticks from the slope before liner placement.
3. RCS began placing protective cover soils at the south end of the west slope.
4. RCS installed a new six inch lateral from the riser at well 53 up the slope to well 54. The installed gas collection piping was approximately 215 feet.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/4-12-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/60
Client:	JED Solid Waste Management	PM:	Sun/81

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM
Comanco on site with 15 people.
Observed Comanco deploy panels 140 through 146 of the 40 mil LLDP geomembrane.The panels were installed on the east slope working to the south.Deployment of the LLPDE geomembrane was performed pulling the panels down the slope using a skid loader. Approximately 32740 square feet of 40 mil LLDPE was installed.
. Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. One fusion welder was used for seaming today. Monitored the fusion welder for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 1501 feet of seaming was Performed.
Marked destructive samples DS-60 through DS-62 in todays welded seams.
Observed Comanco perform non destructive air pressure testing on the north west slope and west tie-in of the LLDPE fusion welded seams. Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any change in pressure.
Observed Comanco deploy geocomposite on the west slope.Approximately 54000 square feet of geocomposite was deployed today.
Observed Comanco extrusion tack weld the 40 mil flap for the 4 inch header pipe on the upper slope west side of cap south to north. Approximately 300 feet of flap was installed.
Performed walk through of the 40 mil liner prior placement of the geocomposite.
Comanco field tested destructive samples DS-22 through DS-41 and DS-51 today.
Obtained destructive samples for laboratory testing.
Do to grade change on the lower half of cap the 4 inch header pipe elevation will change to the elevation of 186.5 at high point and 181.5 at low point about 3% fall.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/4-12-12

Daily Field Report

Observed Comanco perform non destructive vacuum testing of the extrusion welded repairs. The vacuum testing apparatus maintained a minimum of 5 psi vacuum for 20 seconds as required by the CQA plan.
Departed site at 5:00PM.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-12-12 (Thursday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 59°
Client:	JED Solid Waste Management	PM:	Sunny 80°

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling, placing, and stockpiling material for protective cover soils. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 217 loads of soil.
2. RCS picked trash and sticks from the slope before liner placement.
3. RCS continued placing protective cover soils at the south end of the west slope.
4. RCS installed four inch drain pipe for the drains above both benches
5. WBC observed soil placement, and pipe installation to verify that it was done in compliance with the project specifications.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri/4-13-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/60
Client:	JED Solid Waste Management	PM:	Sun/81

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM
Comanco on site with 15 people
. Observed Comanco perform extrusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
25 feet of extrusion welded seams was performed today during repairs.Marked DS-63 in todays extrusion welded Seam.
Observed Comanco perform non destructive air pressure testing on the north slope and west tie-in of the LLDPE fusion welded seams. Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any change in pressure.
Observed Comanco extrusion tack weld the 40 mil flap for the 4 inch header pipe on the lower slope west side of cap south to north. Approximately 300 feet of flap was placed today.
Observed Comanco perform non destructive vacuum testing of the extrusion welded repairs. The vacuum testing apparatus maintained a minimum of 5 psi vacuum for 20 seconds as required by the CQA plan.
Departed site at 5:00PM.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-13-12 (Friday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	P. Sunny 55°
Client:	JED Solid Waste Management	PM:	P. Sunny 78°
Contractor(s):	RCS Construction		
Contractor Sub(s):	Commanco		

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling, placing, and stockpiling material for protective cover soils. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 171 loads of soil.
2. RCS picked trash and sticks from the slopes.
3. RCS continued placing protective cover soils at the south end of the west slope.
4. RCS exposed more of the liner at the tie-in along the north north and East slopes.
5. WBC observed soil placement over the geosynthetics.
6. RCS also finished digging the anchor trench today along the east slope.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Sat/4-14-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Cloudy/68
Client:	JED Solid Waste Management	PM:	Cloudy/73

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 6:00AM
Comanco on site with 15 people.
Observed Comanco deploy geocomposite on the west slope. Aproximately 18900 square feet was deployed.
Observed Comanco deploy panels 147 through 161 of the 40 mil LLDP geomembrane.The panels were installed on the east slope working to the south end .Deployment of the LLPDE geomembrane was performed pulling the panels down the slope using a skid loader.
. Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. Three fusion welders were used for seaming today. Monitored the fusion welder for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 3252 feet of seaming was Performed.
Marked destructive samples DS-64 through DS-69 in todays welded seams.
Do to high winds production was stopped today.
Liner was secured with sandbags before departing site.
Departed site at 1:30PM.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-14-12 (Saturday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Cloudy 68°
Client:	JED Solid Waste Management	PM:	Cloudy 78°

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling, placing, and stockpiling material for protective cover soils. RCS equipment being used includes 7 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 127 loads of soil.
2. RCS continued placing protective cover soils on the west slope.
3. RCS removed any foreign material from the cover soils that was observed.
4. RCS exposed more of the liner at the tie-in along the north north and East slopes.
5. WBC observed soil placement over the geosynthetics.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon/4-116-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Cloudy/66
Client:	JED Solid Waste Management	PM:	P.Sun/81

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 8:00AM
Comanco on site with 15 people.
Observed Comanco deploy panels 162 through 172 of the 40 mil LLDP geomembrane.The panels were installed on the east slope working to the south.Deployment of the LLPDE geomembrane was performed pulling the panels down the slope using a skid loader. Approximately 42307 square feet of 40 mil LLDPE was installed.
. Observed Comanco perform fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. Two fusion welders were used for seaming today. Monitored the fusion welders for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 2487 feet of seaming was Performed.
Marked destructive samples DS-70 through DS-74 in todays welded seams.
Observed Comanco perform non destructive air pressure testing on north slope of the LLDPE fusion welded seams.
Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Observed Comanco deploy geocomposite on the west slope.Approximately 24300 square feet of geocomposite was deployed today.
Deployment of the 40 mil geomembrane is complete on slopes to the south cap limits.
Departed site at 4:00PM

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-16-12 (Monday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Cloudy 56°
Client:	JED Solid Waste Management	PM:	P. Cloudy 83°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling, placing, and stockpiling material for protective cover soils. RCS equipment being used includes 8 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 200 loads of soil.
2. RCS continued placing protective cover soils on the west slope.
3. RCS removed any foreign material from the cover soils that was observed.
4. WBC observed soil placement over the geosynthetics.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue/417-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/66
Client:	JED Solid Waste Management	PM:	Sun/82

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM
Comanco on site with 15 people.
. Observed Comanco perform fusion and extrusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. One fusion welder was used for seaming today. Monitored the fusion welder for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 825 feet of seaming was performed. Welding was performed at the north tie-in and northeast tie-in.
Marked destructive sample DS-76 and DS-77 in todays fusion welded seams.
Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams. Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
Marked destructive sample DS-75 for extrusion gun 70 today.
Observed Comanco deploy geocomposite on the west slope working south to north.Rolls were deployed by rolling the rolls down the slope. Approximately 48600 square feet of geocomposite was deployed.
Performed walk through prior deployment of the geocomposite.Zip tying of the geocomposite was performed to the project specifications.
Comanco field tested destructive samples DS- 42 thru DS- 50 and DS-63 today.
Obtained destructive samples DS-42 thru DS-50 and 63 for laboratory testing.
Departed site at 5:00PM

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-17-12 (Tuesday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No:	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 53°
Client:	JED Solid Waste Management	PM:	P. Cloudy 82°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling, placing, and stockpiling material for protective cover soils. RCS equipment being used includes 8 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 203 loads of soil.
2. RCS continued placing protective cover soils on the west slope.
3. RCS removed any foreign material from the cover soils that was observed.
4. WBC observed soil placement over the geosynthetics.
5. RCS raised gas wells 24 and 26 today.
6. RCS spread intermediate cover on the top of the closure area today and graded the entire area in preparation for rain.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/418-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/64
Client:	JED Solid Waste Management	PM:	PSun/82

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM
Comanco on site with 15 people.
. Observed Comanco perform fusion and extrusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. One fusion welder was used for seaming today. Monitored the fusion welder for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 491 feet of seaming was performed. Welding was performed on the east side tie-in working south.
Marked destructive sample DS-78 in todays fusion welded seams.
Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams. each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
Observed Comanco perform non destructive vacuum testing of the extrusion welded repairs. The vacuum testing apparatus maintained a minimum of 5 psi vacuum for 20 seconds as required by the CQA plan.
Observed Comanco cut and pull back the 40 mil liner at panels 41 and 43 on the west slope so RCS can excavate trench for lateral from well-14 to well 15.RCS ran the Case track hoe to excavate trench. Trench was excavated at 3.5 feet in depth up slope and 5% at anchor trench.
Observed RCS electric fusion the lateral to the 6 inch vacuum pipe.93 feet of 6 inch pipe was installed.
Observed RCS back fill trench using the Case track hoe. Trench was compacted with the track hoe.
Observed Comanco repair 40 mil liner in trench area. See repair summary.
Observed Comanco extrusion weld the 40 mil flap for the 4 inch header pipe on the west side of cap.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-18-12 (Wednesday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	P. Cloudy 58°
Client:	JED Solid Waste Management	PM:	P. Cloudy 82°

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling, placing, and stockpiling material for protective cover soils. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 242 loads of soil.
2. RCS continued placing protective cover soils on the west slope.
3. RCS removed any foreign material from the cover soils that was observed.
4. WBC observed soil placement over the geosynthetics.
5. RCS spread cover soils from the bottom of the current closure area to the next bench down to achieve a 3 to 1 slope starting at the south end and working north approximately 400 feet.
6. RCS installed a lateral from 14R to the top of the slope which ended in a cap and will be completed at a later date.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/4-19-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/69
Client:	JED Solid Waste Management	PM:	PSun/82

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM
Comanco on site with 15 people.
. Observed Comanco perform extrusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform non destructive air pressure testing on the east side of cap of the LLDPE fusion welded seams.
Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any change in pressure.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.Three extrusion machines were ran today.
Observed Comanco perform non destructive vacuum testing of the extrusion welded repairs. The vacuum testing apparatus maintained a minimum of 5 psi vacuum for 20 seconds as required by the CQA plan.
Jan Cooper with WeaverBoos was on site today to help with the geosynthetics.
Production was stopped today at 3:30PM do to high winds.
Departed site at 3:30PM.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-19-12 (Thursday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	P. Cloudy 66°
Client:	JED Solid Waste Management	PM:	P. Cloudy 81°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling, placing, and stockpiling material for protective cover soils. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 241 loads of soil.
2. RCS continued placing protective cover soils on the west slope to approximately N1,356,650.
3. RCS removed any foreign material from the cover soils that was observed.
4. WBC observed soil placement over the geosynthetics.
5. RCS spread cover soils from the bottom of the current closure area to the next bench down to achieve a 3 to 1 slope as the rest of the cover was placed. Thick areas were done in lifts to achieve proper compaction.
6. RCS installed the four inch pipe for the toe drains on both of the benches to approximately one hundred feet past the work area.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri/4-20-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/69
Client:	JED Solid Waste Management	PM:	PSun/84

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Comanco on site with 15 people.
. Observed Comanco perform extrusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
One extrusion gun was ran today at the Northeast and East tie-in areas.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams. Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Observed Comanco deploy geocomposite on the Northwest slope of cap today. Approximately 40,500 Square feet was deployed today.
Jan Cooper with WeaverBoos was on site today to help with the geosynthetics.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-20-12 (Friday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	M. Cloudy 62°
Client:	JED Solid Waste Management	PM:	M. Cloudy 81°

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling, placing, and stockpiling material for protective cover soils. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 203 loads of soil.
2. RCS continued placing protective cover soils on the west slope and started final grading at the south end of the west slope.
3. RCS removed any foreign material from the cover soils that was observed.
4. WBC observed soil placement over the geosynthetics.
5. RCS spread cover soils from the bottom of the current closure area to the next bench down to achieve a 3 to 1 slope as the rest of the cover was placed. Thick areas were done in lifts to achieve proper compaction.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** SAT/4-21-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Rain
Client:	JED Solid Waste Management	PM:	

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

No work today on the geosynthetics do to am rain.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-21-12 (Saturday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Cloudy 64°
Client:	JED Solid Waste Management	PM:	Cloudy 78°

Contractor(s): RCS Construction

Contractor Sub(s): Commanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling, placing, and stockpiling material for protective cover soils. RCS equipment being used includes 7 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 161 loads of soil.
2. RCS continued placing protective cover soils on the west slope and final grading at the south end of the west slope.
3. RCS removed any foreign material from the cover soils that was observed.
4. WBC observed soil placement over the geosynthetics.
5. RCS spread cover soils from the bottom of the current closure area to the next bench down to achieve a 3 to 1 slope as the rest of the cover was placed. Thick areas were done in lifts to achieve proper compaction.
6. RCS installed four inch pipes for the toe drains on both benches on the west slope.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon/4-23-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/56
Client:	JED Solid Waste Management	PM:	

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 8:00AM.
Comanco on site with 11 people.
Observed Comanco deploy geocomposite on the lower half of cap at the northwest end.
Approximately 5400 square feet was deployed today.
Observed Comanco sew the seams of the geocomposite using the double stitch sewing machine.
Deployment was stopped at 12:00PM do to high winds.
Departed site at 12:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** 4-23-12 (Monday)

Daily Field Report

Project:	Partial Closure – Phase 1	Project No.	3804-352-17-00
Location:	St Cloud ,FL	Weather: AM:	Sunny 51°
Client:	JED Solid Waste Management	PM:	Sunny 74°

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS onsite hauling, placing, and stockpiling material for protective cover soils. RCS equipment being used includes 9 articulating haul trucks, 2 CAT Excavators, 1 Case 220 Excavator, 2 D-6 dozers, 1 JD 329 skid steer and 1 off road water truck.

Activities:

1. RCS hauled and placed or stockpiled 227 loads of soil.
2. RCS continued placing protective cover soils and final grading the west slope.
3. RCS removed any foreign material from the cover soils that was observed.
4. WBC observed soil placement over the geosynthetics.
5. RCS spread cover soils from the bottom of the current closure area to the next bench down to achieve a 3 to 1 slope as the rest of the cover was placed. Thick areas were done in lifts to achieve proper compaction.

Name: Steven Arthur

Title: Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue/4-24-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/51
Client:	JED Solid Waste Management	PM:	Sun/75

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 11 people.
Observed Comanco deploy geocomposite on the lower half of cap at the northwest end.
Approximately 35100 square feet was deployed today.
Observed Comanco sew the seams of the geocomposite using the double stitch sewing machine.
All seams were tied in accordance of the CQA plan.
Observed Comanco perform extrusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.Repairs were performed on the east tie-in.
Departed site at 5:30P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/4-25-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/51
Client:	JED Solid Waste Management	PM:	Sun/78

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 11 people.
Observed Comanco deploy geocomposite on the cap at the northwest end of the north slope working east.
Approximately 48600 square feet was deployed today.
Observed Comanco sew the seams of the geocomposite using the double stitch sewing machine.
All seams were tied in accordance of the CQA plan.
Observed Comanco perform extrusion and fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.Repairs were performed on the east tie-in.
Observed Comanco perform fusion welding of the 40 mil LLDPE geomembrane. One fusion welder was used for seaming today. Monitored the fusion welders for speed and temperature during the welding process. Seams were clean and dry during the seaming process. Approximately 334 feet of seaming was performed. Seaming was performed on the east tie-in south end.
Marked destructive sample DS-79 in todays welded seams.
Obtained destructive samples DS-52 thru DS- 79 for laboratory testing.
Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams.
Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Departed site at 6:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/4-26-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/64
Client:	JED Solid Waste Management	PM:	Sun/87

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 15 people.
Observed Comanco deploy geocomposite on the north and northeast slopes working east and south.
Approximately 59400 square feet was deployed today.
Observed Comanco sew the seams of the geocomposite using the double stitch sewing machine.
All seams were tied in accordance of the CQA plan.
Observed Comanco perform extrusion and fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.Repairs were performed on the east tie-in at south end.
Departed site at 6:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri/4-27-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/64
Client:	JED Solid Waste Management	PM:	Sun/87

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 15 people.
Observed Comanco deploy geocomposite on the east slope working to the south.
Approximately 86400 square feet was deployed today.
Observed Comanco sew the seams of the geocomposite using the double stitch sewing machine.
All seams were tied in accordance of the CQA plan.All end seams were capped with geotextile.
Observed Comanco perform extrusion and fusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.Repairs were performed on the east tie-in at south end.
Observed Comanco perform non destructive vacuum testing of the extrusion welded repairs. The vacuum testing apparatus maintained a minimum of 5 psi vacuum for 20 seconds as required by the CQA plan.
38 rolls of Geocomposite arrived on site today.

RCS on site with 18 People.
Observed RCS place the cover soil on the west slope down the slope and to the north.
RCS ran the following equipment: 2-track hoes, 2-D6 dozers, 10-off road trucks and water truck.
Approximately 3200 yards of cover soil was hauled to cap today.
RCS installed the 18 inch ADS downlet pipe on the west slope today. Approximately 163 feet was installed.
The pipe was continued up slope to top of cap from the previously placed 18 inch pipe.
2-18 inch elbows, 1- end cap and 2-Ys were installed.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sat/4-28-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/68
Client:	JED Solid Waste Management	PM:	Sun/85

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 15 people.
Observed Comanco deploy geocomposite on the east slope working to the south.
Approximately 40500 square feet was deployed today.
Observed Comanco sew the seams of the geocomposite using the double stitch sewing machine.
All seams were tied in accordance of the CQA plan.All end seams were capped with geotextile.
Observed Comanco perform non destructive vacuum testing of the extrusion welded repairs. The vacuum testing apparatus maintained a minimum of 5 psi vacuum for 20 seconds as required by the CQA plan.

RCS on site with 18 People.
Observed RCS place the cover soil on the west slope down the slope and to the north.
RCS ran the following equipment: 2-track hoes, 2-D6 dozers, 10-off road trucks and water truck.
Approximately 3072 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
RCS installed the 18 inch ADS downlet pipe on the west slope today at the south end of cap. Approximately 45 feet was installed.
RCS installed the 18 inch Ys at the 3rd downlet from south at tie-in approximately 23 feet of 18 inch was installed.
2-18 inch elbows, 5- end cap and 4-Ys were installed.
Performed nuclear density tests today on the west slope. See compaction summary.
Departed site at 2:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon/4-30-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	P.Sun/68
Client:	JED Solid Waste Management	PM:	P.Sun/83

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 15 people.
Observed Comanco deploy geocomposite on the east slope lower half working to the south.
Approximately 24300 square feet was deployed today.
Performed walk through of 40 mil liner prior placement of geocomposite.
Deployment was stopped at 1:00P do to high winds.
Observed Comanco sew the seams of the geocomposite using the double stitch sewing machine.
All seams were tied in accordance of the CQA plan.All end seams were capped with geotextile.
Observed Comanco install the 40 mil flap for the 4 inch header pipe at the northwest end of west slope.
Approximately 300 feet of flap was tack welded today.

RCS on site with 18 People.
Observed RCS place the cover soil on the west slope down the slope and to the north.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 10-off road trucks and water truck.
Approximately 3601 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
RCS installed the 18 inch ADS downlet pipe on the west slope today at the south end of cap. Approximately 120 feet was installed.
1-18 inch elbow, 2- end caps and 2-Ys were installed.
RCS installed 4 inch header pipe at the northwest end of cap today. Approximately 300 feet was installed.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue/5-1-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/68
Client:	JED Solid Waste Management	PM:	Sun/83

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 15 people.
Observed Comanco sew the seams of the geocomposite using the double stitch sewing machine.
All seams were tied in accordance of the CQA plan.All end seams were capped with geotextile.
Geocomposite is 100% complete to 1356700N east side.
Observed Comanco install the 40 mil flap for the 4 inch header pipe at the northwest end of west slope.
Approximately 100 feet of flap was tack welded today.

RCS on site with 18 People.
Observed RCS place the cover soil on the west slope down the slope and to the north.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 10-off road trucks and water truck.
Approximately 3575 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
RCS installed the 18 inch ADS downlet pipe on the west slope today at the south end of cap. Approximately 145 feet was installed to the top bench.
2-18 inch elbow, 1- end cap and 2-Ys were installed.
RCS installed 4 inch header pipe at the northwest end of cap today. Approximately 100 feet was installed.
RCS ran the GPS dozer to grade the west slope.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/5-2-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/71
Client:	JED Solid Waste Management	PM:	Sun/86

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 19 people.
Observed Comanco deploy geocomposite on the east slope working to the south.
Approximately 89100 square feet was deployed today.
Observed Comanco sew the seams of the geocomposite using the double stitch sewing machine.
All seams were tied in accordance of the CQA plan.All end seams were capped with geotextile.
Observed Comanco install the 40 mil flap for the 4 inch header pipe on the north slope west end.
Approximately 350 feet of flap was tack welded today.
Observed Comanco perform extrusion trial welds prior to any welding of the LLDP was performed.The trial welds were tested using the field tensiometer.All coupons tested met or exceeded the project specifications.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
Comanco completed repairs of the 40 mil geomembrane today
Observed Comanco perform non destructive vacuum testing of the extrusion welded repairs. The vacuum testing apparatus maintained a minimum of 5 psi vacuum for 20 seconds as required by the CQA plan
Walk through was performed today on the 40 mil geomembrane prior placement of geocomposite.

RCS on site with 18 People.
Observed RCS place the cover soil on the west slope down the slope and to the north at the north west end.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 10-off road trucks and water truck.
Approximately 2613 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
RCS installed the 18 inch ADS downlet pipe on the west slope today at the northwest end of cap. Approximately 20 feet was installed.
1-18 inch elbow, 2- end caps and 2-Ys were installed.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/5-2-12

Daily Field Report

RCS installed 4 inch header pipe at the northwest end north slope of cap today. Approximately 350 feet was installed.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/5-3-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/71
Client:	JED Solid Waste Management	PM:	Sun/86

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 11 people.
Observed Comanco deploy geocomposite on the east slope working to the south.
Approximately 10800 square feet was deployed today.
Observed Comanco sew the seams of the geocomposite using the double stitch sewing machine.
All seams were tied in accordance of the CQA plan.All end seams were capped with geotextile.
Observed Comanco install the 40 mil flap for the 4 inch header pipe on the north slope west end.
Approximately 100 feet of flap was tack welded today.
Walk through was performed today on the 40 mil geomembrane prior placement of geocomposite.
Comanco needs 4 more rolls of geocomposite to finish the east side.

RCS on site with 18 People.
Observed RCS place the cover soil on the west slope down the slope and to the north at the north west end.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 10-off road trucks and water truck.
Approximately 3055 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
RCS raised GW-10 and GW-12 today.
RCS installed 4 inch header pipe at the northwest end north slope of cap today. Approximately 100 feet was installed.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri/5-4-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/89

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 11 people.
Comanco raised the boots on 3 gas wells today. Stainless steel clamps and caulking was added to boots.

RCS on site with 18 People.
Observed RCS place the cover soil on the west slope down the slope and to the north at the north west end.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 10-off road trucks and water truck.
Approximately 3172 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
RCS raised GW-10 and GW-12 today.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sat/5-5-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/89

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco did not work today

RCS on site with 18 People.
Observed RCS place the cover soil on the west and north slope down the slope and to the east at the north west end.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 10-off road trucks and water truck.
Approximately 2548 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
Performed nuclear density tests today. See compaction summary for this date for further information.

Departed site at 2:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon/5-7-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/85

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 6 people.
Comanco installed 140 feet of geomembrane for the 4 inch header pipe on the west slope today.
5 rolls of geocomposite arrived on site today.

RCS on site with 18 People.
Observed RCS place the cover soil on the west slope below tie-in area down the slope and to the north at the north west end.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 9-off road trucks and water truck.
Approximately 2587 yards of cover soil was hauled to cap today.
The GPS D6 graded the west slope from middle to north.
Surveyers on site to survey the cover soil on the west slope middle to south.
RCS had sod delivered to site today.
Walk through was performed over the geocomposite prior placement of cover soil.
Departed site at 6:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue/5-8-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/71
Client:	JED Solid Waste Management	PM:	Sun/86

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 6 people.
Observed Comanco deploy geocomposite on the east slope south end.
Comanco completed geocomposite today.
Approximately 11000 square feet was deployed today.
Observed Comanco sew the seams of the geocomposite using the double stitch sewing machine.
All seams were tied in accordance of the CQA plan.All end seams were capped with geotextile.
Observed Comanco install the 40 mil flap for the 4 inch header pipe on the north slope to east
Approximately 400 feet of flap was tack welded today.
Walk through was performed today on the 40 mil geomembrane prior placement of geocomposite.
Comanco booted one gas well today.

RCS on site with 18 People.
Observed RCS place the cover soil on the northwest slope down the slope and to the north below the tie-in and to the east on the north slope.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 9-off road trucks and water truck.
Approximately 2457 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
RCS installed 4 inch header pipe at the northwest end north slope of cap today. Approximately 300 feet was installed.
Departed site at 5:30P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/5-9-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/87

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 6 people.
Comanco installed 180 feet of geomembrane for the 4 inch header pipe on the east slope today.
Comanco raised one boot today at GW-45 on the east slope.

RCS on site with 18 People.
Observed RCS place the cover soil on the north slope east of downlet 6 down the slope and to the east over the geocomposite.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Approximately 2782 yards of cover soil was hauled to cap today.
RCS had sod delivered to site today.
Walk through was performed over the geocomposite prior placement of cover soil.
RCS installed the 18 inch downlet pipe to the Ys at No.-6. Approximately 25 feet was installed today.
RCS installed 2-4 inch drain pipe on the west slope south end today.
Sod crew on site with 6 people to continue placing sod on the west slope top half working north.
RCS installed 60 feet of 4 inch header pipe on the north slope upper half.
Departed site at 5:30P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/5-10-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/87

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 6 people.
Comanco installed 150 feet of geomembrane for the 4 inch header pipe on the north slope today.
Comanco raised five boots today on the west slope.

RCS on site with 18 People.
Observed RCS place the cover soil on the middle of north slope down the slope and to the east over the geocomposite.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Approximately 2912 yards of cover soil was hauled to cap today.
RCS had sod delivered to site today.
Walk through was performed over the geocomposite prior placement of cover soil.
RCS installed the 18 inch downlet pipe on north slope No.-7 at tie-in area. Approximately 25 feet was installed today.
RCS installed 2-4 inch drain pipe on the west slope south end today.
Sod crew on site with 7 people to continue placing sod on the west slope top half working north.
RCS installed 150 feet of 4 inch header pipe on the north slope lower half.
The D6 dozer graded the west slope north end today.
Performed nuclear density tests today. See compaction summary.
Departed site at 5:30P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri/5-11-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/67
Client:	JED Solid Waste Management	PM:	Sun/84

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 6 people.
Comanco installed 402 feet of geomembrane for the 4 inch header pipe on the north and east slope lower half today.
Comanco raised two boots today on the west and north slope.

RCS on site with 18 People.
Observed RCS place the cover soil on the middle of north slope down the slope and to the east over the geocomposite.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Approximately 2964 yards of cover soil was hauled to cap today.
RCS had sod delivered to site today.
Walk through was performed over the geocomposite prior placement of cover soil.
Sod crew on site with 8 people to continue placing sod on the west slope bottom half working north.
RCS installed 402 feet of 4 inch header pipe on the north and east slope lower half.
The D6 dozer graded the west slope north end today.
Performed nuclear density tests today. See compaction summary.
Departed site at 4:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sat/5-12-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/65
Client:	JED Solid Waste Management	PM:	Sun/85

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco did not work today

RCS on site with 18 People.
Observed RCS place the cover soil on north slope down the slope and to the east to the northeast end.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 9-off road trucks and water truck.
Approximately 2080 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
Performed nuclear density tests today. See compaction summary for this date for further information.
RCS raised GW-2 and 39 today.
Sod was placed on the west slope today.
Departed site at 2:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon/5-14-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/87

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:30AM.
Comanco on site with 5 people.
Comanco raised boots today at GW-2 and GW 39 on the north slope.

RCS on site with 18 People.
Observed RCS place the cover soil on the north slope down the slope and to the east over the geocomposite.
RCS placed cover soil on north slope west end lower half.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Approximately 2652 yards of cover soil was hauled to cap today.
RCS had sod delivered to site today.
Walk through was performed over the geocomposite prior placement of cover soil.
RCS installed 4-4 inch drain pipe on the west slope northwest end today.
Sod crew on site with 12 people to continue placing sod on the west slope bottom half working north.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue/5-15-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/89

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 5 people.
Comanco installed 300 feet of geomembrane for the 4 inch header pipe on the east slope upper half today.

RCS on site with 18 People.
Observed RCS place the cover soil on the north slope to the lower slope below tie-in.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Approximately 2041yards of cover soil was hauled to cap today.
RCS had sod delivered to site today.
Sod crew on site with 12 people to continue placing sod on the west slope bottom half working north.
The D6 dozer graded the north slope northwest end today.
Performed nuclear density tests today. See compaction summary.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/5-16-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Cloudy/70
Client:	JED Solid Waste Management	PM:	Cloudy/86

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 5 people.
Comanco installed 120 feet of geomembrane for the 4 inch header pipe on the east slope lower half today.

RCS on site with 3 People.
No production today do to overnight rain.
RCS ran the 2 dozers today to grade the west slope for sod.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/5-17-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Cloudy/70
Client:	JED Solid Waste Management	PM:	Cloudy/86

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 5 people.
Comanco installed 300 feet of geomembrane for the 4 inch header pipe on the east slope upper half today.

RCS on site with 3 People.
No production today do to overnight rain.
RCS ran the 2 dozers today to grade the west slope for sod.
Progress meeting was held in the conference room today.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri/5-18-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/87

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco did not work today.

RCS on site with 18 People.
Observed RCS place the cover soil on the north and east slope north end down the slope and to the east and south over the geocomposite.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Approximately 2743 yards of cover soil was hauled to cap today.
RCS had sod delivered to site today.
Walk through was performed over the geocomposite prior placement of cover soil.
Sod crew on site with 12 people to continue placing sod on the west slope north end working down slope.
RCS installed 300 feet of 4 inch header pipe on the east slope upper and lower half.
D6 dozer graded the north west end of cap today.
RCS ran the 320 track hoe to remove silt from bottom bench of west slope.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sat/5-19-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/87

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco did not work today.

RCS on site with 15 People.
Observed RCS place the cover soil on the east slope north end down the slope and to the south over the geocomposite.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Approximately 2483 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
Sod crew on site with 8 people to continue placing sod on the west slope north end working down slope.
RCS installed 200 feet of 4 inch header pipe on the east slope lower half.
D6 dozer graded the north slope today.
RCS ran the 320 track hoe to remove silt from bottom bench of north slope.
Performed nuclear density tests today. See compaction summary.
Departed site at 3:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sun/5-20-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/88

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 8:00AM.
Comanco did not work today.

RCS on site with 13 People.
Observed RCS place the cover soil on the north slope down the slope to the bottom bench.
RCS ran the following equipment: 1-track hoe, 2-D6 dozers, 8-off road trucks and water truck.
Approximately 2873 yards of cover soil was hauled to cap today.
2-D6 dozers pushed cover soil down the north slope today.
No cover soil was pushed over the geocomposite today on east side of cap.
Performed nuclear density tests today. See compaction summary.
Departed site at 10:00A.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon/5-21-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Cloudy/68
Client:	JED Solid Waste Management	PM:	Cloudy/88

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 5 people.
Comanco installed 180 feet of geomembrane for the 4 inch header pipe on the east slope lower half today.
Comanco raised pipe boots at GW-4r, GW-40 and GW-43.

RCS on site with18 People.
RCS placed cover soil on bottom of north slope and east slope to south to 1357000N.
Approximately 2756 yards of cover soil was hauled to cap today.
RCS ran the following equipment: 345 track hoe, 8 off road trucks, 3 D6 dozers and water truck.
D6 dozer graded the west slope north end and north slope west end.
RCS raised GW- 43 today.
Performed nuclear density tests today. See compaction summary.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue/5-22-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/91

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 4 people.
Comanco tack welded flap for the 4 inch header pipe on the east slope.
Comanco completed liner flap today. Approximately 600 feet was installed today.
Comanco demobilized site today at 1:00p.

RCS on site with 15 People.
Observed RCS place the cover soil on the lower north slope and east slope to lower slope and to the south.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers and 8-off road trucks.
Approximately 2912 yards of cover soil was hauled to cap today.
RCS had sod delivered to site today.
Walk through was performed over the geocomposite prior placement of cover soil.
Sod crew on site with 8 people to continue placing sod on the west slope bottom half to north end.
Surveyers on site to survey the north slope west of downlet to upper bench.
Departed site at 4:30P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/5-23-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/68
Client:	JED Solid Waste Management	PM:	Sun/92

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 17 People.
Observed RCS place the cover soil on the east slope north end down the slope and to the south over the geocomposite.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers and 9-off road trucks.
Approximately 2847 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
Sod crew on site with 6 people to continue placing sod on the northwest end of west slope working up slope and placing sod on bottom of north slope west end.
D6 dozer graded the north slope today.
Laborers installed 2-4 inch drain pipe at middle slope northwest end.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/5-24-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/90

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 17 People.
Observed RCS place the cover soil on the east slope north end down the slope and to the south over the geocomposite.
RCS ran the following equipment: 3-track hoes, 3-D6 dozers and 9-off road trucks.
Approximately 2847 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
Sod crew on site with 7 people to continue placing sod on the north slope west end lower and middle to downlet.
D6 dozer graded the north slope and east slope north end today.
Laborers installed approximately 160 feet of 4 inch header pipe on the east slope middle above tie-in.
RCS installed 160 feet of 18 inch ADS pipe at the northeast end of east slope.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri/5-25-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/88

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 17 People.
Observed RCS place the cover soil on the east slope north end down the slope and to the south over the geocomposite south of downlet 8.
RCS ran the following equipment: 3-track hoes, 3-D6 dozers and 8-off road trucks.
Approximately 2184 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
Sod crew on site with 7 people to continue placing sod on the north slope lower and middle between downlets.
D6 dozer graded the north slope and east slope north end today.
RCS installed 120 feet of 18 inch ADS pipe at the northeast end of east slope upper half.
Surveyers on site to survey the north slope.
Departed site at 4:30P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sat/5-26-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/70
Client:	JED Solid Waste Management	PM:	Sun/92

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 17 People.
Observed RCS place the cover soil on the east slope north end down the slope to the bottom of cap.
RCS ran the following equipment: 2-track hoes, 2-D6 dozers and 9-off road trucks.
Approximately 3146 yards of cover soil was hauled to cap today.
Sod crew on site with 7 people to continue placing sod on the north slope middle between downlets.
D6 dozer graded the north slope and east slope north end today.
Departed site at 9:00A.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue/5-29-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/73
Client:	JED Solid Waste Management	PM:	Sun/85

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 8:00AM.
RCS on site with 17 People.
Observed RCS place the cover soil on the east slope north end down the slope and to the south over the geocomposite south of downlet 8.
RCS ran the following equipment: 3-track hoes, 2-D6 dozers and 9-off road trucks.
Approximately 3458 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
Sod crew on site with 7 people to continue placing sod on the north slope lower east of downlet-7, middle between downlet-6 and upper to GW-40.
D6 dozer graded the north slope and east slope north end today
RCS installed 4 inch header drain on the north slope today..
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/5-30-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/73
Client:	JED Solid Waste Management	PM:	Sun/94

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 18 People.
Observed RCS place the cover soil on the east slope north end down the slope and to the south over the geocomposite south of downlet 8.
RCS ran the following equipment: 3-track hoes, 2-D6 dozers and 9-off road trucks.
Approximately 3666 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
Sod crew on site with 7 people to continue placing sod on the north slope lower east end and middle .
D6 dozer graded the east slope north end today
RCS installed 4 inch header drain on the north slope today.
RCS installed approximately 140 feet of 4 inch header pipe on the east middle slope today.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/5-31-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No:	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/73
Client:	JED Solid Waste Management	PM:	Sun/94

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 18 People.
Observed RCS place the cover soil on the east slope north end down the slope and to the south over the geocomposite south of downlet 8.
RCS ran the following equipment: 3-track hoes, 2-D6 dozers and 9-off road trucks.
Approximately 3185 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
Sod crew on site with 7 people to continue placing sod on the north slope upper east end and lower east slope.
D6 dozer graded the east slope north end today
RCS installed 4 inch header drain on the north and east slope today.
RCS installed approximately 450 feet of 4 inch header pipe on the east middle and upper slope today.
RCS raised GW-47 and GW-49 today.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri/6-1-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	cloudy/75
Client:	JED Solid Waste Management	PM:	Cloudy/85

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:30AM.
RCS on site with 18 People.
Observed RCS place the cover soil on the east slope north end down the slope and to the south over the geocomposite to downlet 9.
RCS ran the following equipment: 3-track hoes, 3-D6 dozers and 9-off road trucks.
Approximately 1495 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
Sod crew on site with 7 people to continue placing sod on the east slope lower and middle north end.
D6 dozer graded the east slope north end today
RCS raised GW-39 and GW-43 today.

Comanco on site today with 3 people to extend 4 boots at wells 43 and 47.
All production stopped today at 1:30 do to rain.
Departed site at 1:30P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sat/6-2-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Cloudy/70
Client:	JED Solid Waste Management	PM:	

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.

No production today do to overnight rain.
RCS pumped water from top of cap.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sun/6-3-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/74
Client:	JED Solid Waste Management	PM:	Sun/94

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

RCS on site with 6 people.
No production today do to slope and haul road still to wet.
RCS pumped water from top of cap.
RCS installed 18 inch ADS pipe on the east slope. Approximately 295 feet was installed today.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon/6-4-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/73
Client:	JED Solid Waste Management	PM:	Sun/93

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated:

Arrived on site at 7:00AM.
RCS on site with 18 People.
Observed RCS place the cover soil on the east slope down the slope and to the south over the geocomposite to bottom slope and south of downlet 9.
RCS ran the following equipment: 3-track hoes, 3-D6 dozers and 9-off road trucks.
Approximately 2704 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
D6 dozer graded the east slope north end today
No sod was placed today.
Sod was hauled to site today.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue/6-5-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/73
Client:	JED Solid Waste Management	PM:	Sun/93

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 18 People.
Observed RCS place the cover soil on the east slope down the slope and to the south over the geocomposite to bottom slope and south of downlet 9.
RCS ran the following equipment: 3-track hoes, 3-D6 dozers and 9-off road trucks.
Approximately 3315 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
D6 dozer graded the east slope north end bottom and upper and middle from downlet 8 to downlet 9 today
Sod was placed today on the east slope north side of downlet 8.
RCS installed 200 feet of 4 inch header pipe on the east slope middle from last turn to the south.
Performed nuclear density tests today on the east slope. See compaction summary.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/6-6-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Cloudy/73
Client:	JED Solid Waste Management	PM:	Cloudy/88

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 18 People.
Observed RCS place the cover soil on the east slope down the slope and to the south over the geocomposite towards the last turn of slope south of downlet 9.
RCS ran the following equipment: 3-track hoes, 3-D6 dozers and 9-off road trucks.
Approximately 2483 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
D6 dozer graded the east slope north end upper and middle from downlet 8 to downlet 9 today.
Sod was placed today on the east slope from downlet 8 top to bottom to the south to GW-49.
RCS installed 150 feet of 4 inch header pipe on the east slope middle from last turn to the south.
Performed nuclear density tests today on anchor trench.See compaction summary.
RCS began forming headers for the 18 inch pipe at downlet No.1.
RCS raised gas well 53 today.
Rain stopped production today at 4:30P.
Approximately 18.7 acres of sod has been placed to date.

Comanco on site with 2 people to raise boots at wells 47,49 and 37.
Departed site at 4:30P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/6-7-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Rain/73
Client:	JED Solid Waste Management	PM:	Rain/88

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 18 People.
RCS ran the following equipment: 3-track hoes, 3-D6 dozers and 9-off road trucks.
RCS hauled one round of cover soil today.
Approximately 104 yards of cover soil was hauled to cap today.
Rain stopped production today at 8:00A.
Departed site at 8:15A.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri/6-8-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Rain/73
Client:	JED Solid Waste Management	PM:	Rain/88

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

No production today do to heavy rain.
RCS pumped water from top of cap.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sat/6-9-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Rain/73
Client:	JED Solid Waste Management	PM:	Rain/88

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

No production today do to heavy rain.
RCS pumped water from top of cap.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sun/6-10-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/76
Client:	JED Solid Waste Management	PM:	Sun/88

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

No production today do to heavy rain.
RCS pumped water from top of cap.
RCS ran the 3 dozers to grade haul roads and blade working areas to set up for production Monday.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon/6-11-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/73
Client:	JED Solid Waste Management	PM:	Sun/90

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 21 People.
Observed RCS place the cover soil on the east slope down the slope and to the south over the geocomposite past the last turn of slope south of downlet 9.
RCS ran the following equipment: 3-track hoes, 3-D6 dozers and 9-off road trucks.
Approximately 2925 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
D6 dozer graded the east slope north end upper and middle from downlet 8 to downlet 9 today.
Performed nuclear density tests today.
RCS continued forming header walls for the 18 inch pipe at downlets No. 1 and No.2. RCS placed the wire mesh.
Laborers pumped water from top of cap.
RSC hauled silt from haul road that washed down from the previous rain. Material was hauled to top of cap separate from cover soil.
Departed site at 6:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue/6-12-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/75
Client:	JED Solid Waste Management	PM:	Sun/92

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 21 People.
Observed RCS place the cover soil on the east slope down the slope and to the south over the geocomposite past the last turn of slope south of downlet 9.
RCS ran the following equipment: 3-track hoes, 3-D6 dozers and 9-off road trucks.
Approximately 2522 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
D6 dozer graded the east slope north end upper and middle from downlet 8 to downlet 9 today.
Performed nuclear density tests today.
RCS continued forming header walls for the 18 inch pipe at downlets No. 1 and No.2. RCS placed the wire mesh.
Laborers pumped water from top of cap
RCS ran the 320 track hoe to remove silt from the bottom bench.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/6-13-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/75
Client:	JED Solid Waste Management	PM:	Sun/92

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 21 People.
Observed RCS place the cover soil on the east slope down the slope and to the south over the geocomposite to 1356450N.
RCS ran the following equipment: 3-track hoes, 3-D6 dozers and 7-off road trucks.
Approximately 2873 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
D6 dozer graded the east slope north end lower and middle from downlet 8 to downlet 9 today.
RCS ran skid loader to remove silt from bench on west side of slope.
D6 dozer graded washout areas on the east slope at north end. The small washouts were filled with soil and tracked in with dozer.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/6-14-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/73
Client:	JED Solid Waste Management	PM:	Sun/90

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:30AM.
RCS on site with 20 People.
Observed RCS place the cover soil on the east slope down the slope and to the south over the geocomposite to 1356400N.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers and 7-off road trucks.
Approximately 1846 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
D6 dozer graded the east slope north end lower and middle from downlet 8 to downlet 9 today.
Sod crew on site with 7 people to resod the east slope at the north end lower and middle areas.
D6 dozer graded washout areas on the east slope at north end. The small washouts were filled with soil and tracked in with dozer.
RCS installed 4 inch drain pipe on upper slope north of downlet No. 9.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri/6-15-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/78
Client:	JED Solid Waste Management	PM:	Sun/90

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 20 People.
Observed RCS place the cover soil on the east slope down the slope to the bottom north and south of last turn.
RCS ran the following equipment: 3-track hoes, 3-D6 dozers and 8-off road trucks.
Approximately 2535 yards of cover soil was hauled to cap today.
D6 dozer graded the east slope north end lower and middle from downlet 8 to downlet 9 today.
Sod crew on site with 7 people to resod the east slope at the north end lower and middle areas.
RCS installed 4 inch drain pipe on middle slope north of downlet No. 9.
RCS installed approximately 180 feet of 4 inch header pipe on the east slope middle to the south end.
Departed site at 3:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sat/6-16-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/74
Client:	JED Solid Waste Management	PM:	Sun/89

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 18 People.
Observed RCS place the cover soil on the east slope down the slope and to the south over the geocomposite from 1356400N to 1356350N.
RCS ran the following equipment: 2-track hoes, 2-D6 dozers and 7-off road trucks.
Approximately 2678 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
D6 dozer graded the east slope from downlet 9 to last turn today.
No sod was placed today.
Performed nuclear density testing today. See compaction summary.
Departed site at 12:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sun/6-17-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/74
Client:	JED Solid Waste Management	PM:	Sun/89

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 18 People.
Observed RCS place the cover soil on the east slope down the slope to bottom.
RCS ran the following equipment: 2-track hoes, 2-D6 dozers and 9-off road trucks.
Approximately 2691 yards of cover soil was hauled to cap today.
D6 dozer graded the east slope from last turn to 1356400 today.
No sod was placed today.
Departed site at 9:00A.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon/6-18-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/69
Client:	JED Solid Waste Management	PM:	Sun/82

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed; including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 20 People.
Observed RCS place the cover soil on the east slope down the slope and to the south over the geocomposite towards the south end downlet.
RCS ran the following equipment: 3-track hoes, 3-D6 dozers and 9-off road trucks.
Approximately 2483 yards of cover soil was hauled to cap today.
Walk through was performed over the geocomposite prior placement of cover soil.
D6 dozer graded the east slope south of downlet 9 today.
Sod crew was still resodding today on the east slope from downlet 8 bottom to the south.
RCS ran out of sod today. Sod crew departed site at 2:00P. Sod was hauled to site late afternoon.
Performed nuclear density tests today on anchor trench and east slope.See compaction summary.
RCS raised gas wells 45 and 58 today.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Thursday, July 5, 2012

Daily Field Report

Project:	JED 2012 Partial Closure	Project No.	3804-352-17-00
Location:	Saint Cloud, Florida	Weather: AM:	Sunny 85^0 F
Client:	Omni Waste / WSI	PM:	Sunny 95^0 F

Contractor(s): RCS (Earthwork), Comanco (Liner)

Contractor Sub(s):

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Jeffrey Schaffer and Dwayne Stanford (Weaver Boos) arrived at the project site at 7:30 AM.

RCS was on site with five people. Observed the following:
- RCS completed fine grading of western half of top of cells.
- RCS completed fine grading of eastern half of top of cells.
- RCS dug the southern anchor trench.
- RCS placed sod on eastern slope.
- RCS used the following equipment – 2 dozers, 1 track hoe, 1 skid steer.

Comanco arrived on site at 9:00 AM with seven people. Observed the following:
- Comanco inspected the remaining stockpiled 40 mil LLDPE.
- Comanco accepted the subgrade for deployment.
- Comanco deployed 40 mil LLDPE.
- Comanco performed fusion and extrusion trial welds prior to any welding; all coupons tested met specifications.
- Comanco seamed 40 mil LLDPE

Walked entire subgrade prior to deployment.
Walked 40 mil LLDPE that was deployed.
Marked destructive samples.

Jeffrey Schaffer and Dwayne Stanford departed site at 7:30 PM.

Name: Jeffrey Schaffer

Title: Senior Project Manager

Weaver Boos Consultants **Day/Date:** Friday, July 6, 2012

Daily Field Report

Project:	JED 2012 Partial Closure	Project No.	3804-352-17-00
Location:	Saint Cloud, Florida	Weather: AM:	Sunny 85^0 F
Client:	Omni Waste / WSI	PM:	Sunny 95^0 F

Contractor(s): RCS (Earthwork), Comanco (Liner)

Contractor Sub(s):

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Jeffrey Schaffer and Dwayne Stanford (Weaver Boos) arrived at the project site at 7:00 AM.

Comanco arrived on site at 7:30 AM with fourteen people. Observed the following:

- Comanco deployed 40 mil LLDPE.
- Comanco performed fusion and extrusion trial welds prior to any welding; all coupons tested met specifications.
- Comanco seamed 40 mil LLDPE.
- Comanco performed non-destructive air tests on seams; each seam was pressurized and observed for five minutes as required.
- Comanco extrusion welded repairs to 40 mil LLDPE.
- Comanco extrusion welded 40 mil LLDPE "boots" around gas wells.
- Comanco performed vacuum air tests on all extrusion welds.

Walked 40 mil LLDPE that was deployed.
Marked destructive samples.

Jeffrey Schaffer and Dwayne Stanford departed site at 8:00 PM.

Name: Jeffrey Schaffer

Title: Senior Project Manager

Weaver Boos Consultants **Day/Date:** Saturday, July 7, 2012

Daily Field Report

Project:	JED 2012 Partial Closure	Project No:	3804-352-17-00
Location:	Saint Cloud, Florida	Weather: AM:	Sunny 85^0 F
Client:	Omni Waste / WSI	PM:	Sunny 95^0 F

Contractor(s): RCS (Earthwork), Comanco (Liner)

Contractor Sub(s):

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Jeffrey Schaffer and Ben Ellis (Weaver Boos) arrived at the project site at 7:00 AM.

RCS was on site with twelve people. Observed the following:

- RCS constructed a haul road to the top of the cells.
- RCS hauled material from borrow pit to the top of the cells.
- RCS began to place protective cover fill, starting at the south end of the west side of the top of the cells and moving north; RCS operated on a minimum of three feet of cover over liner and removed any debris (such as limbs) from the fill as it was placed.
- RCS used the following equipment – 2 dozers, 8 haul trucks.

Comanco was on site with seven people. Observed the following:

- Comanco deployed 40 mil LLDPE.
- Comanco performed fusion and extrusion trial welds prior to any welding; all coupons tested met specifications.
- Comanco seamed 40 mil LLDPE.
- Comanco performed non-destructive air tests on seams; each seam was pressurized and observed for five minutes as required.
- Comanco extrusion welded repairs to 40 mil LLDPE.
- Comanco extrusion welded 40 mil LLDPE "boots" around gas wells.
- Comanco performed vacuum air tests on all extrusion welds.

One roll of 60 mil HDPE was delivered from another project site. Comanco deployed a portion of that 60 mil HDPE near the southeast corner of the top of the cells.

Name: Jeffrey Schaffer

Title: Senior Project Manager

Weaver Boos Consultants **Day/Date:** Saturday, July 7, 2012

Daily Field Report

Walked 40 mil LLDPE and 60 mil HDPE that was deployed.
Marked destructive samples.
Destructive samples were sent to off-site lab for testing.

All work was stopped at 4:30 PM due to lightning in the area and incoming rainfall. Comanco placed sandbags on liner not yet seamed to protect from high winds.

Jeffrey Schaffer and Ben Ellis departed site at 5:00 PM.

Name: Jeffrey Schaffer

Title: Senior Project Manager

Weaver Boos Consultants **Day/Date:** Monday, July 9, 2012

Daily Field Report

Project:	JED 2012 Partial Closure	Project No.	3804-352-17-00
Location:	Saint Cloud, Florida	Weather: AM:	Sunny 85^0 F
Client:	Omni Waste / WSI	PM:	Sunny 95^0 F

Contractor(s): RCS (Earthwork), Comanco (Liner)

Contractor Sub(s):

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Jeffrey Schaffer and Dwayne Stanford (Weaver Boos) arrived at the project site at 7:00 AM.

RCS was on site with twelve people. Observed the following:

- RCS hauled material from borrow pit to the top of the cells.
- RCS placed protective cover fill, continuing west side of the top of the cells and moving from south to north; RCS operated on a minimum of three feet of cover over liner and removed any debris (such as limbs) from the fill as it was placed.
- RCS used the following equipment – 2 dozers, 8 haul trucks.

Comanco was on site with seven people. Observed the following:

- Comanco performed fusion and extrusion trial welds prior to any welding; all coupons tested met specifications.
- Comanco seamed 40 mil LLDPE.
- Comanco performed non-destructive air tests on seams; each seam was pressurized and observed for five minutes as required.
- Comanco extrusion welded repairs to 40 mil LLDPE.
- Comanco performed vacuum air tests on all extrusion welds.

Marked destructive samples.

Jeffrey Schaffer and Dwayne Stanford departed site at 6:00 PM.

Name: Jeffrey Schaffer

Title: Senior Project Manager

Weaver Boos Consultants **Day/Date:** Mon/7-9-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	
Client:	JED Solid Waste Management	PM:	

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Mobilized to Saint Cloud Florida to JED Landfill.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue/7-10-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/80
Client:	JED Solid Waste Management	PM:	Sun/96

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 15 people.
Observed Comanco deploy 60 mil HDPE Geomembrane on the southeast end of cap.
Observed Comanco perform extrusion and fusion trial welds prior to any welding of the geomembrane was performed.
.All coupons tested met or exceeded the project specifications.
Observed Comanco perform fusion welding of the 40 mil LLDPE and 60 mil HDPE seams.
Observed Comanco perform non destructive air pressure testing of the LLDPE fusion welded seams.
Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
Marked destructive samples DS- through DS- in todays welded seams.
Walk through was performed on the geomembrane area today.
Sent out Destructive samples DS-88,93 thru 97 and 99and 100.
RCS on site with 16 People.
Observed RCS place the cover soil on top of cap to the north west half.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Walk through was performed over the geomembrane prior placement of cover soil.
RCS installed 4 inch header drain at the southeast end of slope of cap today.
Departed site at 6:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Wed/7-11-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/75
Client:	JED Solid Waste Management	PM:	Sun/98

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 15 people.
Observed Comanco perform extrusion trial welds prior to any welding of the geomembrane was performed.
.All coupons tested met or exceeded the project specifications.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
Walk through was performed on the geomembrane area today.
Observed Comanco extrusion weld the tie-in on the west side of cap and north end.
Observed Comanco perform non destructive vacuum testing of the extrusion welded repairs. The vacuum testing apparatus maintained a minimum of 5 psi vacuum for 20 seconds as required by the CQA plan.

RCS on site with 16 People.
Observed RCS place the cover soil on top of cap to the north west half.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Walk through was performed over the geomembrane prior placement of cover soil.
Departed site at 7:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Thur/7-12-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/75
Client:	JED Solid Waste Management	PM:	Sun/85

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 15 people.
Observed Comanco perform extrusion and fusion trial welds prior to any welding of the geomembrane was performed.
.All coupons tested met or exceeded the project specifications.
Observed Comanco perform fusion welding of the geomembrane on the east tie-in area.
Observed Comanco perform non destructive air pressure testing of the fusion welded seam.
Each seam tested was pressurized to a minimum pressure of 30 psi and observed for five minutes for any Change in pressure.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
Walk through was performed on the geomembrane area today.
Observed Comanco perform non destructive vacuum testing of the extrusion welded repairs. The vacuum testing apparatus maintained a minimum of 5 psi vacuum for 20 seconds as required by the CQA plan.

RCS on site with 16 People.
Observed RCS place the cover soil on top of cap north end west half and east half.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Walk through was performed over the geomembrane prior placement of cover soil.
Departed site at 6:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Fri/7-13-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/75
Client:	JED Solid Waste Management	PM:	Sun/90

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
Comanco on site with 12 people.
Observed Comanco perform extrusion trial welds prior to any welding of the geomembrane was performed.
.All coupons tested met or exceeded the project specifications.
Observed Comanco perform extrusion welding of the 40 mil LLDPE repairs. All repairs were sized to extend a minimum of 6 inches in all directions beyond the area being repaired. Seam areas for the extrusion welding were clean and dry during the welding process.
Walk through was performed on the geomembrane area today.
Observed Comanco perform non destructive vacuum testing of the extrusion welded repairs. The vacuum testing apparatus maintained a minimum of 5 psi vacuum for 20 seconds as required by the CQA plan.
Comanco demobilized site today.
RCS on site with 16 People.
Observed RCS place the cover soil on top of cap north end east half working south.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Walk through was performed over the geomembrane prior placement of cover soil.
RCS installed the downlets on top of cap today.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sat/7-14-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/75
Client:	JED Solid Waste Management	PM:	Sun/90

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 16 People.
Observed RCS place the cover soil on top of cap north end east half working south.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Walk through was performed over the geomembrane prior placement of cover soil.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Sun/7-15-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/75
Client:	JED Solid Waste Management	PM:	Sun/90

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 16 People.
Observed RCS place the cover soil on top of cap north end east half working south.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Walk through was performed over the geomembrane prior placement of cover soil.
Departed site at 5:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Mon/7-16-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	Sun/75
Client:	JED Solid Waste Management	PM:	Sun/90

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Arrived on site at 7:00AM.
RCS on site with 16 People.
Observed RCS complete the cover soil on top of cap south end east and west half today.
RCS ran the following equipment: 2-track hoes, 3-D6 dozers, 8-off road trucks and water truck.
Walk through was performed over the geomembrane prior placement of cover soil.
Departed site at 2:00P.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Weaver Boos Consultants **Day/Date:** Tue/7-17-12

Daily Field Report

Project:	Partial Closure Phase 1	Project No.	3804-352-17-00
Location:	ST Cloud FL	Weather: AM:	
Client:	JED Solid Waste Management	PM:	

Contractor(s): RCS Construction

Contractor Sub(s): Comanco

Summary of Technical and/or Engineering Services performed, including Field Test Data, Locations, Elevations and Depths are Estimated.

Demobed Saint Cloud Florida JED site today.

Name: Jon Wolfe

Jon Wolfe

Title: Senior Engineering Technician

Appendix C

As-Built Documentation Drawings

LEGEND

- PRE-TOPO SPOT ELEVATION
- PRE-TOPO CONTOUR (5' INTERVAL)
- PRE-TOPO CONTOUR (1' INTERVAL)
- ORIGINAL DESIGN LIMITS
- LB LICENSE BUSINESS
- NO NUMBER
- ELEV. ELEVATION

SURVEYOR's NOTES:

1.) North and coordinate basis is the East Zone of the Florida State Plane Coordinate System, and are based on NGS Control Station Numbers AJ7660(J496) and verified Pickett & Associates Targets 1 and 2 from Topographic Survey dated 12/13/01 as provided. The published values used for this survey are NAD 83 2007 adjustment

2.) Vertical information depicted on this report are GPS derived elevations based on the National Geodetic Vertical Datum of 1929 (NGVD29) utilizing site control as provided PK13 with an elevation of 92.92 and OC1406 with an elevation of 80.91.

NO.	DATE	REVISION

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

Drawn By: DLP
Party Chief: DR
Field Book: 17
FILE NAME: 1003 rcs jed stack closure pretopo.dwg

PEAVEY & ASSOCIATES
SURVEYING AND MAPPING, PA
690 ALICE PLACE
BARTOW, FLORIDA 33830
PHONE: (863) 738-4960
FAX: (863) 533-6972

CLIENT:
Waste Services, Inc.
JED Solid Waste Management Facility
1501 Omni Way
St. Cloud, Fl 34773

AS-BUILT SURVEY OF TOP OF WASTE OF CLOSEURE 2012

JED SOILD WASTE MANAGEMENT FACILITY

DEBORAH L. PEAVEY, B.S.M.
FLORIDA REGISTRATION NO. 6345
PEAVEY & ASSOCIATES
SURVEYING & MAPPING, PA
LICENSE BUSINESS NO. 7279
1/18/2012-2/25/2012
SURVEY DATE

SCALE	DRAWING NO.
1"=60'	223
PROJECT NO.	SHEET
1003	1

GRAPHIC SCALE

0 60 120 180 240

1 inch = 60 ft.

LEGEND

- ASBUILT SPOT ELEVATION
- DESIGN CONTROL POINT
- ASBUILT CONTOUR (5' INTERVAL)
- ASBUILT CONTOUR (1' INTERVAL)
- ORIGINAL DESIGN LIMITS
- ASBUILT ANCHOR TRENCH

NO.	DATE	REVISION

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

Drawn By: DLP
Party Chief: DR
Field Book: 17
FILE NAME: 1003 rcs jed stockclosure intermediate-cob

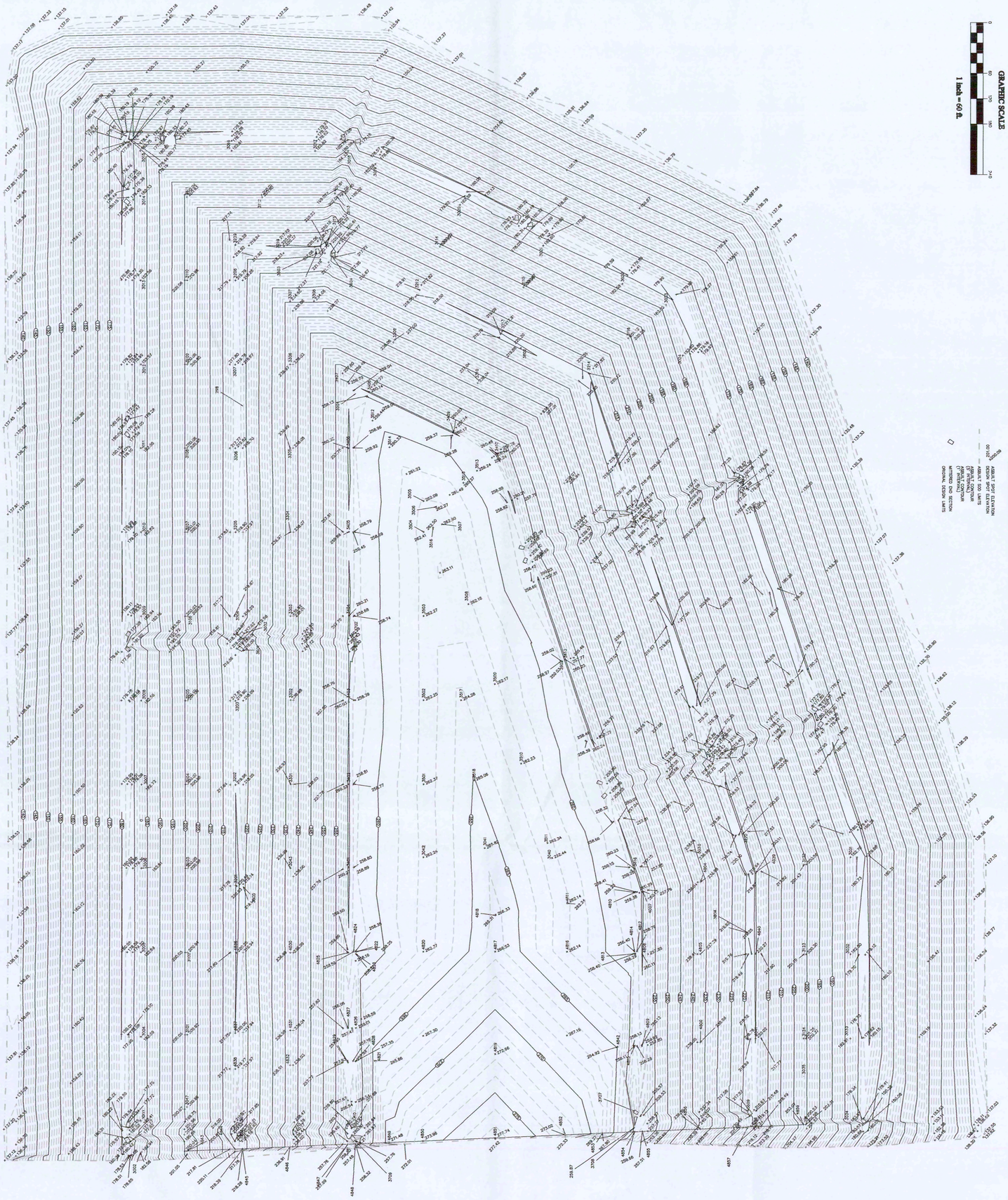
PEAVEY & ASSOCIATES
SURVEYING AND MAPPING, PA
690 ALICE PLACE
BARTOW, FLORIDA 33830
PHONE: (863) 738-4860
FAX: (863) 533-6872

CLIENT:
RCS Excavation, Inc.
851 Lake June Road
Lake Placid, FL 33852

AS-BUILT SURVEY OF TOP OF INTERMEDIATE COVER CLOSEURE 2012
JED SOILD WASTE MANAGEMENT FACILITY

DEBORAH E. PEAVEY, P.S.M.
FLORIDA REGISTRATION NO. 6345
PEAVEY & ASSOCIATES
SURVEYING & MAPPING PA
LICENSE BUSINESS NO. 7779
~~9/27/2012~~
~~10/26/2012~~
11/2/2012
SURVEY DATE

SCALE	DRAWING NO.
1"=60'	223
PROJECT NO.	SHEET
1003	2



AS-BUILT SURVEY OF TOP OF FINAL COVER CLOSEURE 2012

JED SOILD WASTE MANAGEMENT FACILITY

CLIENT:

RCS Excavation, Inc.
851 Lake June Road
Lake Placid, FL 33852

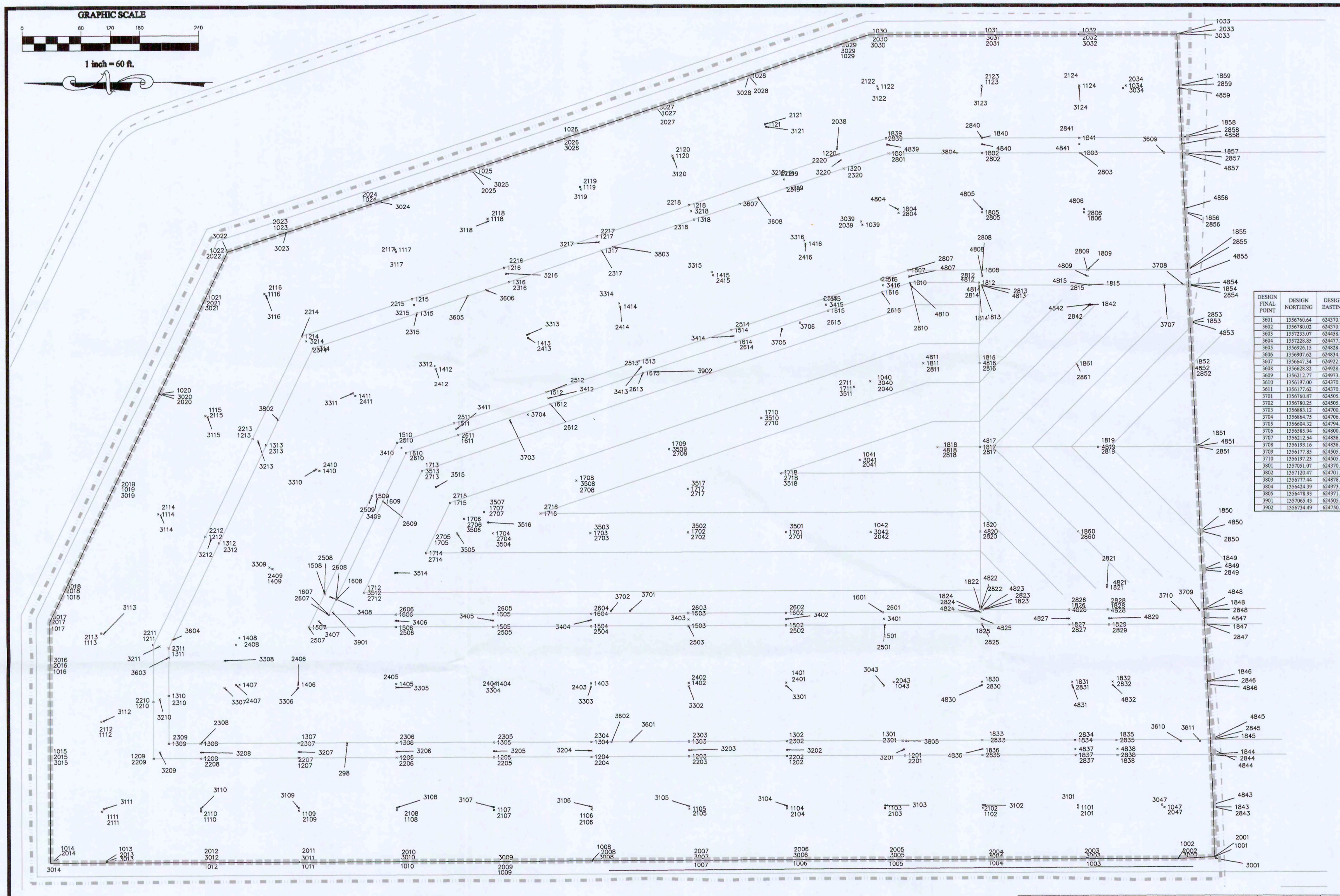
PEAVEY & ASSOCIATES
SURVEYING AND MAPPING, PA
690 ALICE PLACE
BARTOW, FLORIDA 33830
PHONE: (863) 738-4960
FAX: (863) 533-6972

Drawn By:	DLP
Party Chief:	DR
Field Book:	17
FILE NAME:	1003 rcs jed stack closeure asb final cover-WITHTOP.dwg

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

NO.	DATE	REVISION

PROJECT NO.	1003
SCALE	1"=60'
DRAWING NO.	223
SHEET	1
SURVEY DATE	12/20/2012



DESIGN FINAL POINT	DESIGN NORTHING	DESIGN EASTING	DESIGN ELEVATION	ASBUILT ELEVATION
3601	1356760.64	624370.79	218.00	218.16
3602	1356780.02	624370.76	218.00	217.62
3603	1357233.07	624458.94	218.00	216.47
3604	1357228.85	624477.28	218.00	216.53
3605	1356926.15	624828.69	218.00	217.20
3606	1356907.62	624834.90	218.00	217.28
3607	1356647.34	624922.25	218.00	217.02
3608	1356628.82	624928.47	218.00	216.84
3609	1356212.77	624973.89	218.00	217.15
3610	1356197.00	624370.76	218.00	216.66
3611	1356177.62	624370.79	218.00	216.60
3701	1356760.87	624505.79	258.00	257.52
3702	1356780.25	624505.76	258.00	257.45
3703	1356883.12	624700.73	258.00	257.61
3704	1356864.75	624706.89	258.00	257.46
3705	1356604.32	624794.29	258.00	257.35
3706	1356585.94	624800.46	258.00	257.61
3707	1356212.54	624838.89	258.00	255.74
3708	1356193.16	624838.92	259.00	259.87
3709	1356177.85	624505.79	258.00	255.47
3710	1356197.23	624505.76	258.00	255.35
3801	1357051.07	624370.30	219.50	219.88
3802	1357120.47	624701.80	219.50	219.88
3803	1356777.44	624878.59	219.50	219.80
3804	1356424.39	624973.53	219.50	219.62
3805	1356478.93	624371.27	219.50	219.14
3901	1357065.43	624505.27	259.50	259.03
3902	1356734.49	624750.60	259.50	259.03

DESIGN WASTE POINT	ASBUILT WASTE ELEV	DESIGN WASTE ELEV	DESIGN INTERMEDIATE POINT	DESIGN INTERMEDIATE ELEV.	ASBUILT INTERMEDIATE ELEV.	DESIGN FINAL POINT	DESIGN NORTHING	DESIGN EASTING	DESIGN ELEVATION	ASBUILT ELEVATION
1602	251.50	254.87	2602	255.87	255.95					258.77
			-	-	-	3403	1356700.89	624496.90	260.00	260.03
1503	251.10	254.74	2503	255.74	255.77					257.80
1603	252.71	254.87	2603	255.87	255.94					258.39
			-	-	-	3404	1356800.89	624496.72	260.00	260.21
1504	251.76	254.74	2504	255.74	255.80					257.80
1604	252.96	254.87	2604	255.87	255.88					258.74
			-	-	-	3405	1356900.89	624496.55	260.00	259.89
1505	252.07	254.74	2505	255.74	255.79					257.81
1605	253.00	254.87	2605	255.87	255.99					258.79
			-	-	-	3406	1357000.89	624496.38	260.00	260.32
1506	251.97	254.74	2506	255.74	255.77					257.78
1606	252.18	254.87	2606	255.87	255.89					258.96
			-	-	-	3407	1357079.78	624496.25	260.00	259.49
1507	250.96	254.74	2507	255.74	255.78					257.80
1607	251.38	254.87	2607	255.87	255.96					259.04
			-	-	-	3408	1357067.74	624521.21	260.00	260.14
1508	251.23	254.74	2508	255.74	255.77					257.77
1608	251.54	254.87	2608	255.87	255.91					259.13
			-	-	-	3409	1357019.46	624621.21	260.00	260.03
1509	250.73	254.74	2509	255.74	255.76					257.77
1609	251.22	254.87	2609	255.87	255.98					259.28
			-	-	-	3410	1356994.55	624672.83	260.00	260.23
1510	250.34	254.74	2510	255.74	255.78					257.78
1610	250.91	254.87	2610	255.87	255.86					259.24
			-	-	-	3411	1356938.40	624691.67	260.00	260.21
1511	250.05	254.74	2511	255.74	255.78					257.79
1611	251.12	254.87	2611	255.87	255.89					258.82
			-	-	-	3412	1356843.59	624723.49	260.00	260.23
1512	250.66	254.74	2512	255.74	255.79					257.81
1612	251.21	254.87	2612	255.87	255.93					258.69
			-	-	-	3413	1356748.79	624755.30	260.00	260.20
1513	252.12	254.74	2513	255.74	255.76					257.77
1613	253.82	254.87	2613	255.87	255.87					258.97
			-	-	-	3414	1356653.98	624787.12	260.00	260.24
1514	251.66	254.74	2514	255.74	255.78					257.79
1614	252.46	254.87	2614	255.87	255.88					258.39
			-	-	-	3415	1356559.18	624818.93	260.00	260.01
1515	250.02	254.74	2515	255.74	255.79					257.81
1615	252.81	254.87	2615	255.87	255.94					258.66
			-	-	-	3416	1356500.85	624838.51	260.00	260.23
1516	249.57	254.74	2516	255.74	255.75					257.85
1616	252.91	254.87	2616	255.87	255.92					259.15
1701	257.57	259.00	2701	260.00	260.29	3501	1356601.05	624586.07	262.00	262.37
1702	257.25	259.00	2702	260.00	260.16	3502	1356701.05	624585.90	262.00	262.25
1703	256.87	259.00	2703	260.00	260.18	3503	1356801.05	624585.73	262.00	262.27
1704	255.81	258.64	2704	260.00	260.06	3504	1356901.05	624585.56	262.00	262.41

DESIGN WASTE POINT	ASBUILT WASTE ELEV	DESIGN WASTE ELEV	DESIGN INTERMEDIATE POINT	DESIGN INTERMEDIATE ELEV.	ASBUILT INTERMEDIATE ELEV.	DESIGN FINAL POINT	DESIGN NORTHING	DESIGN EASTING	DESIGN ELEVATION	ASBUILT ELEVATION
1705	255.02	258.08	2705	260.00	260.05	3505	1356937.86	624585.50	262.00	262.09
1706	255.73	258.08	2706	260.00	260.06	3506	1356930.69	624600.37	262.00	262.27
1707	256.16	258.42	2707	260.00	260.05	3507	1356910.08	624607.29	262.00	262.60
1708	256.15	259.00	2708	260.00	260.18	3508	1356815.27	624639.10	262.00	262.20
1709	255.32	259.00	2709	260.00	260.08	3509	1356720.47	624670.92	262.00	262.17
1710	256.06	259.00	2710	260.00	260.28	3510	1356625.67	624702.73	262.00	262.30
1711	257.01	259.00	2711	260.00	260.32	3511	1356530.86	624734.55	262.00	262.34
1712	251.88	256.00	2712	257.00	257.08	3512	1357033.50	624525.35	259.00	259.44
1713	251.28	256.00	2713	257.00	257.20	3513	1356973.72	624649.20	259.00	259.24
			-	-	-	3514	1357001.66	624545.38	261.00	260.33
1714	253.56	258.00	2714	259.00	259.06					261.22
			-	-	-	3515	1356959.39	624632.94	261.00	260.37
1715	254.26	258.00	2715	259.00	259.03					261.49
			-	-	-	3516	1356906.14	624596.74	263.00	262.50
1716	256.34	260.00	2716	261.00	261.03					263.11
1717	257.13	260.21	2717	262.23	262.38	3517	1356701.12	624630.44	264.23	264.38
1718	258.21	262.00	2718	263.00	263.03	3518	1356605.99	624646.06	265.00	265.06
			-	-	-	4804	1356484.98	624912.95	238.16	238.04
1804	231.69	235.00	2804	236.00	236.06					238.07
			-	-	-	4805	1356399.22	624913.09	238.16	237.29
1805	233.05	235.00	2805	236.00	236.06					238.41
			-	-	-	4806	1356294.70	624913.27	238.16	236.96
1806	234.31	235.00	2806	236.00	236.01					238.02
			-	-	-	4807	1356474.22	624847.44	257.90	260.12
1807	249.43	254.74	2807	255.74	255.78					257.80
			-	-	-	4808	1356399.11	624847.57	257.90	260.11
1808	253.12	254.74	2808	255.74	255.81					257.88
			-	-	-	4809	1356291.24	624847.75	257.90	260.13
1809	253.81	254.74	2809	255.74	255.81					257.82
			-	-	-	4810	1356473.15	624840.94	258.03	259.23
1810	252.73	254.87	2810	255.87	255.90				257.76	259.41
1811	256.51	259.00	2811	260.00	260.21	4811	1356459.72	624758.42	262.16	262.24
1812	252.34	254.80	2812	255.80	255.88	4812	1356402.55	624841.06	257.96	258.79
1813	252.44	254.90	2813	255.90	255.98	4813	1356399.89	624838.40	258.06	258.40
1814	252.47	254.87	2814	255.87	256.40	4814	1356402.55	624838.01	258.03	258.40
1815	254.85	254.99	2815	255.90	255.93	4815	1356290.34	624838.59	258.06	258.11
1816	259.04	259.00	2816	260.00	260.18	4816	1356402.41	624758.42	262.17	262.19
1817	261.59	263.30	2817	266.30	264.35	4817	1356402.27	624672.49	266.46	266.53
1818	259.91	262.29	2818	263.29	264.29	4818	1356445.50	624672.41	265.45	266.31
1819	268.04	269.08	2819	270.08	270.58	4819	1356280.65	624672.69	272.24	272.66
1820	257.44	259.00	2820	260.00	260.10	4820	1356402.12	624586.41	262.17	262.37
1821	258.10	262.48	2821	263.48	263.54	4821	1356272.29	624529.52	265.64	265.86
1822	253.48	254.87	2822	255.87	255.91	4822	1356401.99	624506.96	258.03	258.25
1823	253.40	254.90	2823	255.90	255.99	4823	1356399.32	624506.58	258.06	258.21
1824	253.12	254.80	2824	255.80	255.88	4824	1356401.98	624503.91	257.96	258.56
			-	-	-	4825	1356400.88	624497.41	257.90	259.86
1825	251.30	254.74	2825	255.74	255.77					257.80

DESIGN WASTE POINT	ASBUILT WASTE ELEV	DESIGN WASTE ELEV	DESIGN INTERMEDIATE POINT	DESIGN INTERMEDIATE ELEV.	ASBUILT INTERMEDIATE ELEV.	DESIGN FINAL POINT	DESIGN NORTHING	DESIGN EASTING	DESIGN ELEVATION	ASBUILT ELEVATION
1826	254.92	254.90	2826	255.90	255.96	4826	1356311.36	624506.73	258.06	258.01
			-	-	-	4827	1356310.70	624497.56	257.90	258.06
1827	252.88	254.74	2827	255.74	255.84					257.85
1828	253.95	254.90	2828	255.90	255.95	4828	1356271.50	624506.91	258.06	257.96
			-	-	-	4829	1356270.07	624497.63	257.90	257.95
1829	252.80	254.74	2829	255.74	255.77					257.77
			-	-	-	4830	1356400.78	624428.41	238.16	236.99
1830	232.86	235.00	2830	236.00	236.01					238.09
			-	-	-	4831	1356308.17	624428.56	238.16	238.04
1831	233.38	235.00	2831	236.00	236.04					238.04
			-	-	-	4832	1356266.60	624428.64	238.16	236.91
1832	233.29	235.00	2832	236.00	236.00					238.03
			-	-	-	4836	1356400.65	624362.41	217.90	220.25
1836	214.75	214.74	2836	215.74	215.76					217.80
1833	214.91	214.90	2833	215.90	215.92					218.94
			-	-	-	4837	1356305.20	624362.57	217.90	220.00
1837	214.23	214.74	2837	215.74	215.74					217.75
1834	214.91	214.90	2834	215.90	215.95					217.95
			-	-	-	4838	1356262.18	624362.64	217.90	219.77
1838	214.14	214.74	2838	215.74	215.74					217.77
1835	214.97	214.90	2835	215.90	215.97					217.97
			-	-	-	4839	1356496.38	624982.40	220.00	220.11
1801	213.05	214.90	2801	215.90	215.99					219.87
1839	210.92	214.74	2839	215.74	215.75					217.82
			-	-	-	4840	1356399.34	624982.57	220.00	220.27
1840	211.53	214.74	2840	215.74	215.75					217.80
1802	213.87	214.90	2802	215.90	215.91					219.49
			-	-	-	4841	1356299.34	624982.74	220.00	220.02
1803	211.94	214.90	2803	215.90	215.93					218.52
1841	211.60	214.74	2841	215.74	215.76					217.77
1842	259.94	261.70	2842	262.70	262.77	4842	1356289.18	624818.76	264.86	264.92
			-	-	-	4843	1356164.18	624303.29	200.16	200.87
1843	196.93	197.00	2843	198.00	198.03					200.04
			-	-	-	4844	1356166.84	624362.80	217.90	218.00
1844	214.76	214.74	2844	215.74	215.80					217.81
1845	214.90	214.90	2845	215.90	215.94	4845	1356167.24	624371.98	218.06	218.28
			-	-	-	4846	1356169.93	624432.28	238.16	236.91
1846	234.97	235.00	2846	236.00	236.06					238.08
			-	-	-	4847	1356172.85	624497.80	257.90	257.99
1847	254.77	254.74	2847	255.74	255.80					257.82
1848	254.93	254.90	2848	255.90	255.95	4848	1356173.26	624506.96	258.06	258.32
1849		268.20	2849	269.25	269.28	4849	1356175.04	624546.85	271.35	271.48
1850	269.23	270.27	2850	271.26	270.99	4850	1356176.82	624586.80	273.27	273.96
1851	273.18	274.38	2851	275.38	275.39	4851	1356180.65	624672.86	277.38	277.74
1852	269.45	270.00	2852	271.00	271.14	4852	1356184.40	624756.95	273.00	273.15
1853	265.50	267.74	2853	268.74	268.79	4853	1356186.33	624800.24	270.74	270.80
1854	254.32	254.90	2854	255.90	255.91	4854	1356188.05	624838.76	258.06	259.66
			-	-	-	4855	1356188.46	624847.93	257.90	257.51
1855	252.20	254.74	2855	255.74	255.77					257.77
			-	-	-	4856	1356191.38	624913.45	238.16	238.36
1856	233.14	235.00	2856	236.00	236.04					239.39
1857	211.81	214.90	2857	215.90	215.93	4857	1356194.06	624973.75	218.00	221.65
			-	-	-	4858	1356194.47	624982.92	217.90	219.34
1858	211.72	214.74	2858	215.74	215.80					218.49
			-	-	-	4859	1356197.12	625042.39	200.17	203.07
1859	196.24	197.00	2859	198.00	198.06					202.31
1860	262.00	264.00	2860	265.00	265.00	4860	1356302.13	624586.58	267.00	267.30
1861	264.01	264.00	2861	265.00	265.17					267.19

DESIGN WASTE POINT	ASBUILT WASTE ELEV	DESIGN WASTE ELEV	DESIGN INTERMEDIATE POINT	DESIGN INTERMEDIATE ELEV.	ASBUILT INTERMEDIATE ELEV.	DESIGN FINAL POINT	DESIGN NORTHING	DESIGN EASTING	DESIGN ELEVATION	ASBUILT ELEVATION
1001	177.07	180.00	2001	181.05	178.21	3001	1356163.33	624252.29	183.16	182.58
1002	176.45	179.51	2002	180.56	177.64	3002	1356200.47	624250.75	182.67	182.41
1003	176.35	179.51	2003	180.56	177.45	3003	1356300.41	624250.58	182.67	182.59
1004	176.31	179.51	2004	180.56	177.34	3004	1356400.47	624250.41	182.67	182.69
1005	177.10	179.51	2005	180.56	178.32	3005	1356500.47	624250.24	182.67	182.61
1006	177.27	179.51	2006	180.56	178.35	3006	1356600.47	624250.07	182.67	182.73
1007	177.04	179.51	2007	180.56	178.08	3007	1356700.47	624249.90	182.67	182.56
1008	177.15	179.51	2008	180.56	178.19	3008	1356800.47	624249.73	182.67	182.94
1009	176.30	179.51	2009	180.56	177.37	3009	1356900.47	624249.55	182.67	182.82
1010	176.41	179.51	2010	180.56	177.45	3010	1357000.47	624249.38	182.67	182.56
1011	176.70	179.51	2011	180.56	177.73	3011	1357100.47	624249.21	182.67	182.57
1012	176.78	179.51	2012	180.56	177.80	3012	1357200.47	624249.04	182.67	182.56
1013	175.61	179.51	2013	180.56	177.45	3013	1357300.47	624248.87	182.67	182.33
1014	169.09	179.51	2014	180.56	175.09	3014	1357354.07	624248.78	182.67	182.75
1015	175.77	179.51	2015	180.56	177.20	3015	1357354.07	624356.95	182.67	182.61
1016	174.56	179.51	2016	180.56	176.28	3016	1357354.07	624456.95	182.67	182.82
1017	174.07	179.51	2017	180.56	175.89	3017	1357354.07	624496.22	182.67	184.33
1018	175.05	179.51	2018	180.56	176.07	3018	1357338.45	624528.58	182.67	182.59
1019	174.99	179.51	2019	180.56	176.00	3019	1357290.18	624628.58	182.67	182.59
1020	174.82	179.51	2020	180.56	175.84	3020	1357241.90	624728.58	182.67	182.60
1021	174.60	179.51	2021	180.56	175.63	3021	1357196.75	624822.12	182.67	182.58
1022	173.56	179.51	2022	180.56	175.49	3022	1357171.76	624873.90	182.67	183.02
1023	174.32	179.51	2023	180.56	176.02	3023	1357111.78	624894.02	182.67	182.60
1024	175.57	179.51	2024	180.56	176.65	3024	1357016.98	624925.84	182.67	182.63
1025	175.03	179.51	2025	180.56	176.06	3025	1356922.18	624957.65	182.67	182.64
1026	174.56	179.51	2026	180.56	175.58	3026	1356827.37	624989.47	182.67	182.85
1027	174.40	179.51	2027	180.56	175.42	3027	1356732.57	625021.28	182.67	183.09
1028	174.93	179.51	2028	180.56	176.03	3028	1356637.76	625053.10	182.67	182.95
1029	175.26	179.51	2029	180.56	176.34	3029	1356542.96	625084.91	182.67	182.74
1030	174.11	179.51	2030	180.56	176.16	3030	1356514.76	625094.37	182.67	182.70
1031	175.05	179.51	2031	180.56	176.07	3031	1356399.53	625094.57	182.67	182.80
1032	175.01	179.51	2032	180.56	176.04	3032	1356299.53	625094.74	182.67	182.91
1033	175.55	179.51	2033	180.56	176.56	3033	1356199.46	625094.91	182.67	183.97
1034	195.91	197.01	2034	198.00	198.04	3034	1356254.46	625039.82	201.00	201.29
			-	-	-	3039	1356522.80	624903.92	237.00	236.98
1039	232.45	235.00	2039	236.00	236.04					238.04
1040	256.83	259.00	2040	260.00	260.27	3040	1356514.20	624740.14	262.00	262.44
1041	258.47	262.13	2041	263.66	263.69	3041	1356525.17	624659.33	265.19	265.82
1042	256.36	259.00	2042	260.00	260.10	3042	1356514.20	624586.21	262.00	262.24
			-	-	-	3043	1356500.78	624428.24	237.00	236.99
1043	233.54	235.00	2043	236.00	236.02					238.08
			-	-	-	3047	1356216.84	624305.72	201.00	200.96
1047	196.11	197.00	2047	198.00	198.05					200.07
			-	-	-	3101	1356302.76	624305.57	201.00	200.92
1101	195.80	197.00	2101	198.00	198.03					200.05
			-	-	-	3102	1356400.57	624305.41	201.00	200.94
1102	195.29	197.00	2102	198.00	198.03					200.05
			-	-	-	3103	1356500.57	624305.24	201.00	200.98
1103	195.80	197.00	2103	198.00	198.05					200.08
			-	-	-	3104	1356600.56	624305.07	201.00	200.96
1104	195.92	197.00	2104	198.00	198.00					200.07
			-	-	-	3105	1356700.57	624304.90	201.00	201.00
1105	195.59	197.00	2105	198.00	198.03					200.10
			-	-	-	3106	1356800.57	624304.73	201.00	200.92
1106	195.61	197.00	2106	198.00	198.04					200.05
			-	-	-	3107	1356900.57	624304.55	201.00	200.91
1107	196.87	197.00	2107	198.00	198.02					200.02
			-	-	-	3108	1357000.56	624304.38	201.00	200.95
1108	195.31	197.00	2108	198.00	198.05					200.06
			-	-	-	3109	1357100.57	624304.21	201.00	200.95
1109	196.05	197.00	2109	198.00	198.01					200.06
			-	-	-	3110	1357200.56	624304.04	201.00	200.96
1110	195.66	197.00	2110	198.00	198.09					200.10
			-	-	-	3111	1357299.07	624303.88	201.00	200.93
1111	187.62	197.00	2111	198.00	198.05					200.06
			-	-	-	3112	1357299.07	624393.76	201.00	200.90
1112	194.80	197.00	2112	198.00	198.06					200.08
			-	-	-	3113	1357299.07	624483.64	201.00	201.08
1113	192.30	197.00	2113	198.00	198.05					202.01
			-	-	-	3114	1357240.64	624604.67	201.00	200.99
1114	196.34	197.00	2114	198.00	198.01					200.09
			-	-	-	3115	1357192.37	624704.67	201.00	200.95
1115	196.39	197.00	2115	198.00	198.05					200.07
			-	-	-	3116	1357132.30	624829.12	201.00	201.12
1116	191.44	197.00	2116	198.00	198.01					200.23
			-	-	-	3117	1356999.48	624873.70	201.00	200.92
1117	196.30	197.00	2117	198.00	198.03					200.04
			-	-	-	3118	1356904.68	624905.51	201.00	200.97
1118	195.98	197.00	2118	198.00	198.01					200.09
			-	-	-	3119	1356809.87	624937.32	201.00	200.96
1119	195.33	197.00	2119	198.00	198.04					200.05
			-	-	-	3120	1356715.07	624969.14	201.00	201.23
1120	195.92	197.00	2120	198.00	198.06					200.34
			-	-	-	3121	1356620.27	625000.95	201.00	200.96
1121	195.87	197.00	2121	198.00	198.02					200.06
			-	-	-	3122	1356505.74	625039.39	201.00	201.43
1122	191.39	197.00	2122	198.00	198.03					200.56
			-	-	-	3123	1356399.44	625039.57	201.00	201.19
1123	195.11	197.00	2123	198.00	198.02					200.30
			-	-	-	3124	1356299.43	625039.74	201.00	201.25
1124	196.00	197.00	2124	198.00	198.02					200.37
			-	-	-	3201	1356480.72	624362.27	220.00	220.03
1201	213.91	214.74	2201	215.74	215.80					217.81
1301	214.43	214.90	2301	215.90	215.96					219.14
			-	-	-	3202	1356600.65	624362.07	220.00	219.96
1202	214.22	214.74	2202	215.74	215.79					217.84
1302	214.58	214.90	2302	215.90	215.97					218.05
			-	-	-	3203	1356700.66	624361.90	220.00	219.90
1203	214.13	214.74	2203	215.74	215.78					217.81
1303	214.64	214.90	2303	215.90	215.93					218.09
			-	-	-	3204	1356800.65	624361.72	220.00	219.91
1204	214.22	214.74	2204	215.74	215.80					217.80
1304	214.71	214.90	2304	215.90	215.92					218.29
			-	-	-	3205	1356900.66	624361.55	220.00	219.90
1205	214.16	214.74	2205	215.74	215.75					217.83
1305	214.90	214.90	2305	215.90	215.91					217.97
			-	-	-	3206	1357000.66	624361.38	220.00	219.82
1206	214.26	214.74	2206	215.74	215.76					217.77
1306	214.64	214.90	2306	215.90	215.95					218.70
			-	-	-	3207	1357100.65	624361.21	220.00	219.78
1207	214.15	214.74	2207	215.74	215.76					217.80
1307	214.66	214.90	2307	215.90	215.93					218.67
			-	-	-	3208	1357200.66	624361.04	220.00	219.79
1208	212.40	214.74	2208	215.74	215.75					217.79
1308	214.39	214.90	2308	215.90	215.95					218.26
			-	-	-	3209	1357242.07	624360.97	220.00	219.28
1209	210.95	214.74	2209	215.74	215.77					217.79
1309	214.90	214.90	2309	215.90	215.94					215.95
			-	-	-	3210	1357242.07	624415.79	220.00	220.04
1210	213.56	214.74	2210	215.74	215.76					217.78
1310	214.90	214.90	2310	215.90	215.92					218.23
			-	-	-	3211	1357242.07	624470.60	220.00	220.23
1211	210.05	214.74	2211	215.74	215.75					219.22
1311	214.76	214.90	2311	215.90	215.95					220.70
			-	-	-	3212	1357189.31	624579.89	220.00	219.91
1212	214.20	214.74	2212	215.74	215.82					217.82
1312	214.72	214.90	2312	215.90	215.98					218.55
			-	-	-	3213	1357141.04	624679.89	220.00	220.20
1213	214.10	214.74	2213	215.74	215.81					217.81
1313	214.77	214.90	2313	215.90	215.95					219.70
			-	-	-	3214	1357091.40	624782.72	220.00	220.12
1214	213.01	214.74	2214	215.74	215.76					217.82
1314	214.78	214.90	2314	215.90	216.00					220.36
			-	-	-	3215	1356981.35	624819.66	220.00	220.17
1215	214.21	214.74	2215	215.74	215.79					217.88
1315	214.88	214.90	2315	215.90	215.93					219.22
			-	-	-	3216	1356886.54	624851.47	220.00	219.94
1216	214.19	214.74	2216	215.74	215.79					217.80
1316	214.85	214.90	2316	215.90	215.97					219.03
			-	-	-	3217	1356791.74	624883.29	220.00	220.30
1217	214.14	214.74	2217	215.74	215.78					217.84
1317	214.80	214.90	2317	215.90	215.92					219.87
			-	-	-	3218	1356696.93	624915.10	220.00	220.09
1218	213.78	214.74	2218	215.74	215.84					217.85
1318	214.93	214.90	2318	215.90	215.99					219.29
			-	-	-	3219	1356602.13	624946.92	220.00	220.25
1219	212.81	214.74	2219	215.74	215.80					217.81
1319	214.36	214.90	2319		215.93					218.53
			-	-	-	3220	1356543.80	624966.49	220.00	220.20
1220	213.54	214.74	2220		215.78					217.83
1320	214.33	214.90	2320	215.90	215.96					219.34
			-	-	-	3301	1356600.78	624428.07	237.00	236.93
1401	233.65	235.00	2401	236.00	236.05					238.06
			-	-	-	3302	1356700.78	624427.90	237.00	236.96
1402	234.52	235.00	2402	236.00	236.04					238.05
			-	-	-	3303	1356800.78	624427.72	237.00	236.97
1403	234.59	235.00	2403	236.00	236.06					238.07
			-	-	-	3304	1356900.78	624427.55	237.00	237.00
1404	234.60	235.00	2404	236.00	236.05					238.07
			-	-	-	3305	1357000.78	624427.38	237.00	236.99
1405	234.68	235.00	2405	236.00	236.03					238.08
			-	-	-	3306	1357100.78	624427.21	237.00	236.97
1406	234.05	235.00	2406	236.00	236.01					238.03
			-	-	-	3307	1357176.07	624427.08	237.00	234.65
1407	232.71	235.00	2407	236.00	236.07					238.08
			-	-	-	3308	1357176.07	624455.50	237.00	234.66
1408	231.63	235.00	2408	236.00	236.06					238.07
			-	-	-	3309	1357129.87	624551.20	237.00	237.00
1409	234.55	235.00	2409	236.00	236.01					238.06
			-	-	-	3310	1357081.60	624651.20	237.00	237.04
1410	234.20	235.00	2410	236.00	236.01					238.04
			-	-	-	3311	1357044.05	624729.00	237.00	237.01
1411	232.88	235.00	2411	236.00	236.01					238.05
			-	-	-	3312	1356960.35	624757.09	237.00	236.94
1412	233.28	235.00	2412	236.00	236.03					238.07
			-	-	-	3313	1356865.55	624788.90	237.00	237.02
1413	233.97	235.00	2413	236.00	236.03					238.07
			-	-	-	3314	1356770.74	624820.72	237.00	237.03
1414	233.40	235.00	2414	236.00	236.02					238.02
			-	-	-	3315	1356675.94	624852.53	237.00	237.08
1415	233.41	235.00	2415	236.00	236.08					238.16
			-	-	-	3316	1356581.13	624884.35	237.00	237.01
1416	231.97	235.00	2416	236.00	236.04					238.09
			-	-	-	3401	1356500.86	624497.24	260.00	260.27
1501	250.87	254.74	2501	255.74	255.80					257.81
1601	253.02	254.87	2601	255.87	255.93					258.85
			-	-	-	3402	1356600.89	624497.07	260.00	260.33
1502	251.19	254.74	2502	255.74	255.79					257.80

REVISION	NO.	DATE

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

Drawn By: DLP
Party Chief: DR
Field Book: 17
FILE NAME: 1003 rcs jed stack closeure asb final cover-WITHTOP.dwg

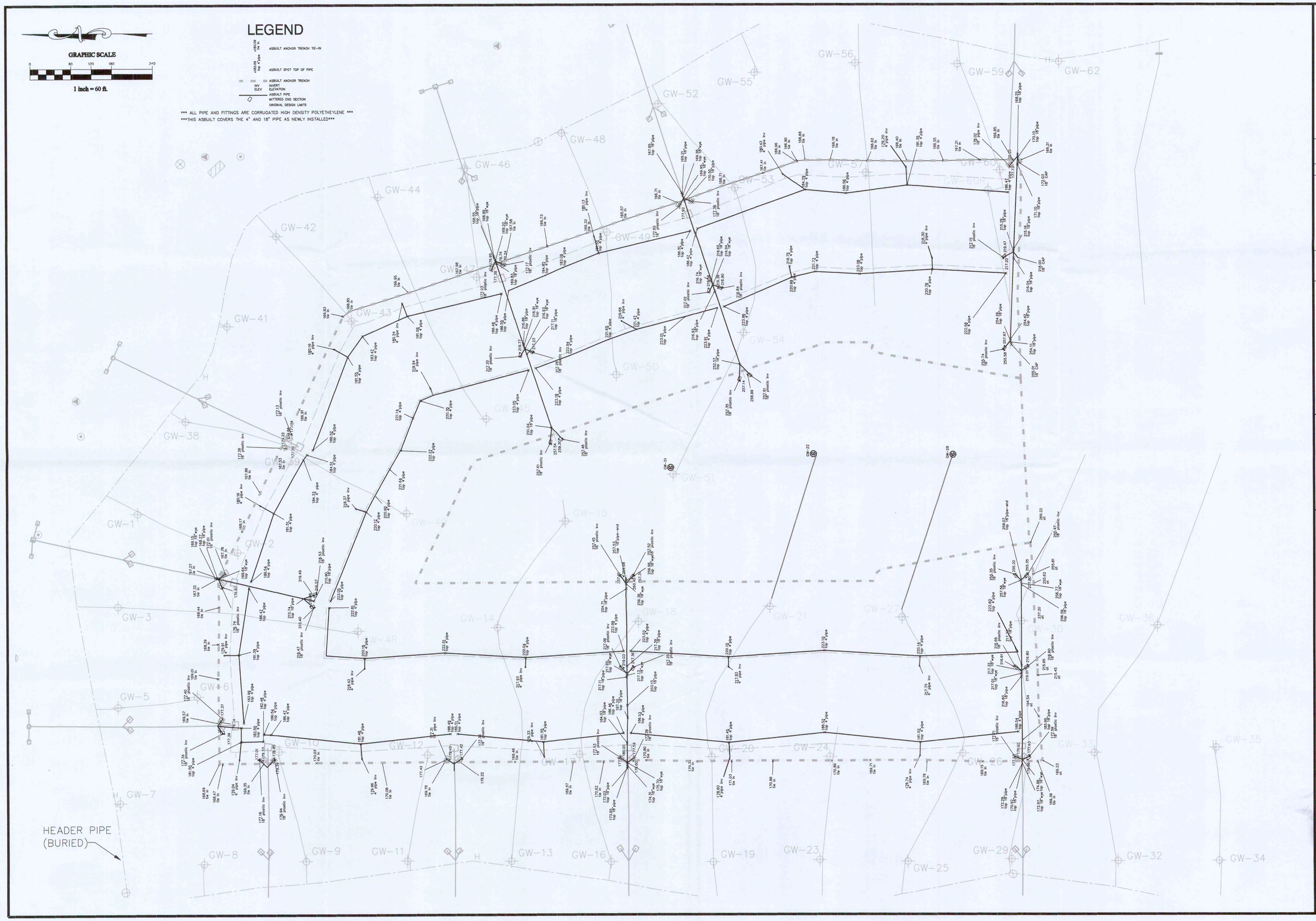
PEAVEY & ASSOCIATES
SURVEYING AND MAPPING, PA
690 ALICE PLACE
BARTOW, FLORIDA 33830
PHONE: (863) 738-4960
FAX: (863) 533-6972

CLIENT:
RCS Excavation, Inc.
851 Lake June Road
Lake Placid, FL 33852

AS-BUILT SURVEY
CONTROL POINT TABLE
CLOSEURE 2012
JED SOILD WASTE MANAGEMENT FACILITY

DEBORAH L. PEAVEY, P.S.M.
FLORIDA REGISTRATION NO. 6345
PEAVEY & ASSOCIATES
SURVEYING & MAPPING PA
LICENSE BUSINESS NO. 7779
8/7/2012
3/27&30/2012
4/2&6&10/2012
SURVEY DATE

SCALE	DRAWING NO.
1"=60'	223
PROJECT NO.	SHEET
1003	4



NO.	DATE	REVISION

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

Drawn By: DLP
Party Chief: DR
Field Book: 17
FILE NAME: 1003 rcs jed stock closeure asb pipe.dwg

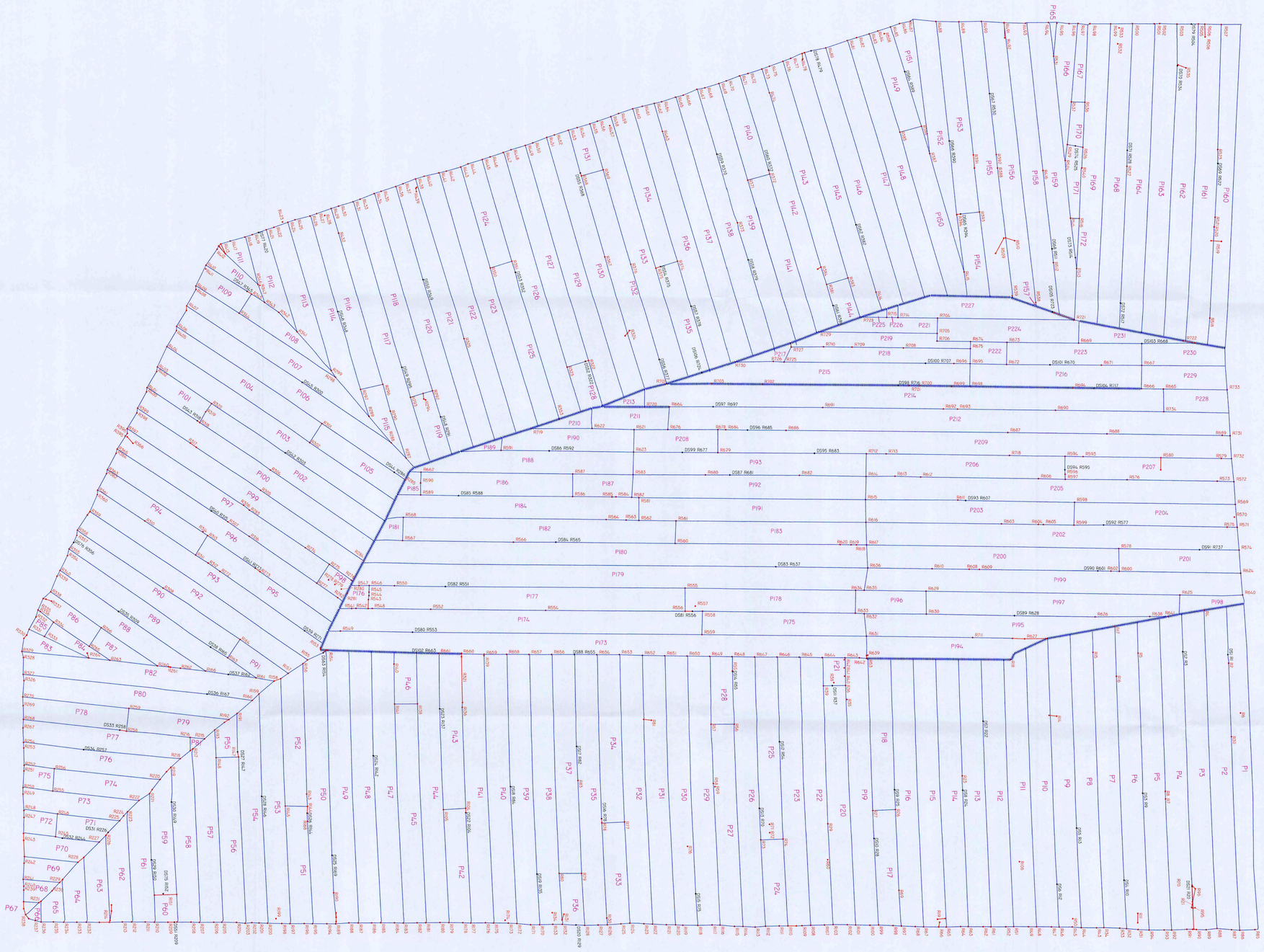
PEAVEY & ASSOCIATES
SURVEYING AND MAPPING, PA
690 ALICE PLACE
BARTOW, FLORIDA 33830
PHONE: (863) 734-4860
FAX: (863) 533-8972

CLIENT:
RCS Excavation, Inc.
851 Lake June Road
Lake Placid, FL 33852

AS-BUILT SURVEY OF STORMWATER MANAGEMENT FEATURES CLOSEURE 2012
JED SOILD WASTE MANAGEMENT FACILITY

DEBORAH C. PEAVEY, P.S.M.
FLORIDA REGISTRATION NO. 6345
PEAVEY & ASSOCIATES
SURVEYING & MAPPING, PA
LICENSE BUSINESS NO. 7779
3/21&30/2012
4/24&27/2012
7/27/2012
SURVEY DATE

SCALE	DRAWING NO.
1"=60'	223
PROJECT NO.	SHEET
1003	5



Jeffrey D. Schaffer, PE
Florida PE # 64716
Weaver Boos Consultants
365 Citrus Tower Blvd, Ste 110
Clermont, FL 34711
Florida Eng. Bus. 28055

LEGEND		
P PANEL NUMBER	— CAP	
R REPAIR NUMBER	O PATCH	
DT DESTRUCTIVE TEST NUMBER	O DESTRUCTIVE TEST	
	EXTRUSION WELD	

2012 PARTIAL
CLOSURE OF PHASE I
AS BUILT

J.E.D.
SOLID WASTE MANAGEMENT FACILITY
ST.CLOUD, FLORIDA

COMANCO®
ENVIRONMENTAL CORPORATION
4301 STERLING COMMERCE DR.
PLANT CITY, FL 33566-7372
TELEPHONE: (813) 988-8829
FAX: (813) 496-7305

DRAWN BY: WDS	CHKD. BY: CL	DWG. NO:
DATE: 10-29-12	APPRVD. BY: CL	6
PLOT SCALE: 1" = 60'	FILE NAME: J.E.D. SOLID WASTE MANAGEMENT PHASE 1	
PROJECT NO.: 03125248		

Appendix D

General Fill / Protective Laboratory Testing

Grain Size / Atterberg Limits Analysis
Standard Proctor Analysis
Hydraulic Conductivity Analysis

Grain Size / Atterberg Limits Analysis

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Consultants in: Geotechnical Engineering • Environmental Sciences
Construction Materials Testing • Threshold Inspection • Private Provider Inspection
3532 Maggie Boulevard • Orlando, FL 32811 • (407) 423-0504 • (407) 423-3106

Project No.: 0110.1100684.0001
Report No.: 955884.1
Date: April 9, 2012

REPORT ON PERCENT PASSING NO. 200 SIEVE AND ATTERBERG LIMITS (ASTM C-117 and ASTM D-4318) (AASHTO T-11, T90 and T89)

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Phase 2 Partial Closure, Lab Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Date Tested: 4-3-12 **Technician:** Client

Date Sampled: 3-28-12 **Tested By:** L. Fernandez

TEST RESULTS

Sample No.	Location	Soil Description	Moisture Content (%)	Percent Passing No. 200 Sieve	Atterberg Limits	
					Liquid Limit	Plasticity Index
N-1	N-1356758 E-622517 (76.52)	Dark Brown Fine Sand	12.8	6.5	16	Non-Plastic
N-2	N-1356693 E-622507 (El 79.20)	Dark Brown Fine Sand	11.8	6.5	16	Non-Plastic
N-3	N-1356610 E-622426 (El 80.1)	Tan White Fine Sand	2.5	3.9	15	Non-Plastic
N-4	N-1356644 E-622273 (El 73.1)	Dark Brown Sand with Traces of Tan Sand	11.3	6.4	15	Non-Plastic
N-5	N-1356541 E-622159 (El 77.80)	Brown Fine Sand	5.1	4.9	15	Non-Plastic
N-6		Brown Fine Sand	4.5	4.8	15	Non-Plastic
N-7		Brown Tan Fine Sand	5.8	4.9	15	Non-Plastic
N-8		Dark Brown Fine Sand	27.6	4.9	15	Non-Plastic
N-9		Dark Brown Fine Sand	5.9	5.1	15	Non-Plastic

dc (WO# N/S)

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ENGINEERING SCIENCES
Consultants In: Geotechnical Engineering • Environmental Sciences
Construction Materials Testing • Threshold Inspection • Private Provider Inspection
3532 Maggie Boulevard • Orlando, FL 32811 • (407) 423-0504 • (407) 423-3106

Project No.: 0110.1100558.0000
Report No.: 970751.1
Date: June 22, 2012

REPORT ON PERCENT PASSING NO. 200 SIEVE AND ATTERBERG LIMITS ASTM C-117 and ASTM D-4318 (AASHTO T-11, T90 and T89)

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Date Tested: 6-8-12 **Technician:** L. Fernandez, B. Jones

Date Sampled: 5-30-12 **Tested By:** Client

TEST RESULTS

Sample No.	Sample Location	Soil Description	Moisture Content (%)	Percent Passing No. 200 Wash	Atterberg Limits	
					Liquid Limit	Plasticity Index
N-10	N1356754.50 E622537.66	Brown Medium Fine SP Sand	-	5	Non-Plastic	Non-Plastic
N-11	N1356699.82 E622445.84	Dark Brown with Hard Pad Medium Fine SP Sand	-	4	Non-Plastic	Non-Plastic
N-12	N1356658.82 E622602.13	Light Brown to Tan Medium Fine SP-SM Sand with Silt	-	7	Non-Plastic	Non-Plastic
N-13	N1356656.87 E622451.70	Light Brown Medium Fine SP-SM Sand with Silts	-	7	Non-Plastic	Non-Plastic
N-14	N1356541.66 E 622574.78	Brown to Light Brown Medium Fine SP Sand	-	5	Non-Plastic	Non-Plastic
N-15	N1356481.13 E 622625.58	Light Brown Medium Fine SP Sand	-	4	Non-Plastic	Non-Plastic
N-16	N1356666.63 E 622328.62	Light Brown to Brown Medium Fine SP Sand	-	3	Non-Plastic	Non-Plastic
N-17	N1356574.86 E 622334.48	Light Brown to Tan Medium Fine SP Sand	-	3	Non-Plastic	Non-Plastic
N-18	N1356629.53 E 622225.07	Light Brown to Tan Medium Fine SP Sand	-	3	Non-Plastic	Non-Plastic

dc (WO# N/S)

Sample No.	Sample Location	Soil Description	Moisture Content (%)	Percent Passing No. 200 Wash	Atterberg Limits	
					Liquid Limit	Plasticity Index
N-19	N1356543.62 E622246.56	Light Brown Medium Fine SP Sand	-	3		
N-20	N1356578.76 E 622225.07	Dark Brown Medium Fine Sand SP-SM Sand with Silt	-	6	Non-Plastic	Non-Plastic
N-21	N1356582.67 E 622141.06	Light Brown Medium Fine SP Sand	-	4	Non-Plastic	Non-Plastic
N-22	N1356524.09 E 622144.97	Light Brown to Brown Medium Fine SP Sand	-	3	Non-Plastic	Non-Plastic
N-23	N1356582.67 E 622055.10	Brown Medium Fine SP Sand	-	5	Non-Plastic	Non-Plastic
N-24	N1356453.80 E 622328.62	Brown to Dark Brown Medium Fine Sand with Traces of Hard Pan	-	3	Non-Plastic	Non-Plastic
N-25	N1356438.18 E 622203.58	Brown with Traces of Hard Pan Medium Fine SP-SM Sand with Silt	-	6	Non-Plastic	Non-Plastic
N-26	N1356453.80 E 622125.43	Brown Medium Fine SP-SM Sand with Silt	-	7	Non-Plastic	Non-Plastic
N-27	N1356424.51 E 622100.03	Brown Medium Fine SP-SM Sand with Silt	-	7	Non-Plastic	Non-Plastic
N-28	N1356512.37 E 621937.88	Dark Brown with Traces of Hard Pan Medium Fine SM Silty Sand	-	14	Non-Plastic	Non-Plastic
N-29	N1356321.02 E 621986.72	Brown Medium Fine SP-SM Sand with Silt	-	8	Non-Plastic	Non-Plastic
N-30	N1356332.74 E 622070.73	Brown Medium Fine SP-SM Sand with Silt	-	8	Non-Plastic	Non-Plastic
N-31	N1356346.40 E 622150.83	Dark Brown Medium Fine SP-SM Sand with Silt	-	10	Non-Plastic	Non-Plastic
N-32	N1356362.03 E 622250.47	Light Brown with Traces of Hard Pan Medium Fine SM Silty Sand	-	18	Non-Plastic	Non-Plastic
N-33	N1356377.65 E 622324.71	Dark Orange and Brown Medium Fine SP-SM Sand with Silt	-	11	Non-Plastic	Non-Plastic

dc (WO# N/S)

Project No.: 0110.1100558.0000

Report No.: 970751.1
Date: June 22, 2012

Sample No.	Sample Location	Soil Description	Moisture Content (%)	Percent Passing No. 200 Wash	Atterberg Limits	
					Liquid Limit	Plasticity Index
N-34	N1356399.12 E622426.30	Light Brown Medium Fine SP-SM Sand with Silt	-	12	Non-Plastic	Non-Plastic
N-35	N1356406.93 E 622506.40	Dark Brown with Tan Medium Fine SP-SM Sand with Silt	-	8	Non-Plastic	Non-Plastic
N-36	N1356420.60 E 622582.60	Brown Medium Fine SP Sand	-	4	Non-Plastic	Non-Plastic
N-37	N1356432.32 E 622654.88	Dark Gray Brown Medium Fine SP-SM Sand with Silt	-	9	Non-Plastic	Non-Plastic
N-38	N1356594.38 E 621887.08	Dark Brown Medium Fine SP-SM Sand with Silt	-	9	Non-Plastic	Non-Plastic
N-39	N1356615.86 E 621959.37	Light Brown Medium Fine SM Silty Sand	-	17	Non-Plastic	Non-Plastic
N-40	N1356633.43 E 622019.93	Brown Medium Fine SP-SM Sand with Silt	-	7	Non-Plastic	Non-Plastic
N-41	N1356658.82 E 622101.99	Dark Brown Medium Fine SP Sand	-	5	Non-Plastic	Non-Plastic
N-42	N1356682.25 E 622184.04	Dark Brown Medium Fine SP Sand	-	0.3	Non-Plastic	Non-Plastic
N-43	N1356701.78 E 622264.15	Light Brown Medium Fine SP Sand	-	1.0	Non-Plastic	Non-Plastic
N-44	N1356725.21 E 622348.15	Dark Brown Medium Fine Sand SP Sand	-	0.2	Non-Plastic	Non-Plastic
N-45	N1356766.21 E 622445.84	Light Brown Medium Fine SP Sand	-	0.2	Non-Plastic	Non-Plastic
N-46	N1356803.00 E 622519.00	Brown Medium Fine SP Sand	-	1.0	Non-Plastic	Non-Plastic

dc (WO# N/S)

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Project No.: 0110.1100684.0001
Report No. 955840.1
Date: April 9, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Phase 2 Partial Closure, Lab Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Date Tested: 4-3-12 **Tested By:** L. Fernandez

Date Sampled: 3-28-12 **Sample No.:** N-1

Technician: Client

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	98
No. 60	86
No. 100	34
No. 200	6.9

Moisture Content 6.9 %	AASHTO Soil Classification A-3

dc(W.O. No. N/S)

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Project No.: 0110.1100684.0001
Report No. 955842.1
Date: April 9, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Phase 2 Partial Closure, Lab Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Date Tested: 4-3-12 **Tested By:** L. Fernandez

Date Sampled: 3-28-12 **Sample No.:** N-2

Technician: Client

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	98
No. 60	86
No. 100	35
No. 200	5.5

Moisture Content 5.5 %	AASHTO Soil Classification A-3

dc(W.O. No. N/S)

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Project No.: 0110.1100684.0001
Report No. 955845.1
Date: April 9, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Phase 2 Partial Closure, Lab Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Date Tested: 4-3-12 **Tested By:** L. Fernandez

Date Sampled: 3-28-12 **Sample No.:** N-3

Technician: Client

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	99
No. 60	86
No. 100	34
No. 200	3.8

Moisture Content 3.8 %	AASHTO Soil Classification A-3

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Project No.: 0110.1100684.0001
Report No. 955848.1
Date: April 9, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Phase 2 Partial Closure, Lab Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Date Tested: 4-3-12 **Tested By:** L. Fernandez

Date Sampled: 3-28-12 **Sample No.:** N-4

Technician: Client

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	98
No. 60	86
No. 100	34
No. 200	6.6

Moisture Content 6.6 %	AASHTO Soil Classification A-3

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Project No.: 0110.1100684.0001
Report No. 955850.1
Date: April 9, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Phase 2 Partial Closure, Lab Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Date Tested: 4-3-12 **Tested By:** L. Fernandez

Date Sampled: 3-28-12 **Sample No.:** N-5

Technician: Client

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	98
No. 60	85
No. 100	35
No. 200	4.7

Moisture Content 4.7 %	AASHTO Soil Classification A-3

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Project No.: 0110.1100684.0001
Report No. 955855.1
Date: April 9, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Phase 2 Partial Closure, Lab Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Date Tested: 4-3-12 **Tested By:** L. Fernandez

Date Sampled: 3-28-12 **Sample No.:** N-6

Technician: Client

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	98
No. 60	85
No. 100	35
No. 200	5.2

Moisture Content 5.2 %	AASHTO Soil Classification A-3

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Project No.: 0110.1100684.0001
Report No. 955856.1
Date: April 9, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Phase 2 Partial Closure, Lab Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Date Tested: 4-3-12 **Tested By:** L. Fernandez

Date Sampled: 3-28-12 **Sample No.:** N-7

Technician: Client

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	98
No. 60	84
No. 100	34
No. 200	5.0

Moisture Content 5.0 %	AASHTO Soil Classification A-3

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Project No.: 0110.1100684.0001
Report No. 955857.1
Date: April 8, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Phase 2 Partial Closure, Lab Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Date Tested: 4-3-12 **Tested By:** L. Fernandez

Date Sampled: 3-28-12 **Sample No.:** N-8

Technician: Client

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	98
No. 60	85
No. 100	36
No. 200	5.2

Moisture Content 5.2 %	AASHTO Soil Classification A-3

dc(W.O. No. N/S)

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Project No.: 0110.1100684.0001
Report No. 955858.1
Date: April 9, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Phase 2 Partial Closure, Lab Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Date Tested: 4-3-12 **Tested By:** L. Fernandez

Date Sampled: 3-28-12 **Sample No.:** N-9

Technician: Client

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	98
No. 60	86
No. 100	36
No. 200	4.8

Moisture Content 4.8 %	AASHTO Soil Classification A-3

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Project No.: 0110.1100558.0000
Report No. 970798.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356754.50, E622537.66

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-10

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	91
No. 60	55
No. 100	13
No. 200	5

Sample Classification: Brown Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 970801.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356699.82, E622445.84

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-11

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	85
No. 60	60
No. 100	11
No. 200	4

Sample Classification: Dark Brown with Hard Pad Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 970803.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356658.82.,E622602.13

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-12

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	92
No. 60	60
No. 100	37
No. 200	7

Sample Classification: Light Brown to Tan Medium Fine SP-SM Sand with Silt

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 970805.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356656.87,E622451.70

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-13

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	91
No. 60	43
No. 100	20
No. 200	7

Sample Classification: Light Brown Medium Fine SP-SM Sand with Silts

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 970806.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356541.66, E 622574.78

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-14

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	90
No. 60	40
No. 100	14
No. 200	5

Sample Classification: Brown to Light Brown Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 970807.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356481.13, E 622625.58

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-15

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	93
No. 60	54
No. 100	12
No. 200	4

Sample Classification: Light Brown Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971103.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356666.63, E622328.62

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-16

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	88
No. 60	56
No. 100	11
No. 200	3

Sample Classification: Light Brown Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971105.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356574.86, E622334.48

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-17

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	94
No. 60	36
No. 100	7
No. 200	3

Sample Classification: Light Brown to Tan Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971106.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356629.53, E622225.07

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-18

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	93
No. 60	46
No. 100	9
No. 200	3

Sample Classification: Light Brown to Tan Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971108.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356543.62, E622246.56

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-19

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	94
No. 60	46
No. 100	10
No. 200	3

Sample Classification: Light Brown Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971109.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356578.76, E622225.07

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-20

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	90
No. 60	53
No. 100	15
No. 200	6

Sample Classification: Dark Brown Medium Fine SP -SM Sand with Silt

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971110.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356582.67, E622141.06

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-21

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	88
No. 60	47
No. 100	9
No. 200	4

Sample Classification: Light Brown Medium Fine SP -SM Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971111.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356524.09, E622144.97

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-22

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	89
No. 60	44
No. 100	9
No. 200	3

Sample Classification: Light Brown to Brown Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971113.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356582.67, E622055.10

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-23

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	90
No. 60	40
No. 100	10
No. 200	5

Sample Classification: Brown Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971115.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356453.80, E622328.62

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-24

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	74
No. 60	41
No. 100	8
No. 200	3

Sample Classification: Brown to Dark Brown Medium Fine Sand with Traces of Hard Pan.

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971117.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356438.18, E622203.58

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-25

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	88
No. 60	55
No. 100	18
No. 200	6

Sample Classification: Brown with Traces of hard pan medium fine SP-SM sand with silt

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971129.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356453.80, E622125.43

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-26

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	90
No. 60	59
No. 100	18
No. 200	7

Sample Classification: Brown medium fine SP-SM sand with silt

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971144.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356424.51, E622100.03

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-27

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	90
No. 60	60
No. 100	19
No. 200	7

Sample Classification: Brown medium fine SP-SM sand with silt

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971145.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356512.37, E621937.88

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-28

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	93
No. 60	73
No. 100	45
No. 200	14

Sample Classification: Dark brown with traces of hard pan medium fine SM silty sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971146.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356321.02, E621986.72

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-29

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	91
No. 60	61
No. 100	23
No. 200	8

Sample Classification: brown medium fine SP-SM sand with silt

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Project No.: 0110.1100558.0000
Report No. 971148.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356332.74, E622070.73

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-30

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	91
No. 60	62
No. 100	24
No. 200	8

Sample Classification: brown medium fine SP-SM sand with silt

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971149.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356346.40, E622150.83

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-31

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	89
No. 60	65
No. 100	32
No. 200	10

Sample Classification: dark brown medium fine SP-SM sand with silt

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Project No.: 0110.1100558.0000
Report No. 971151.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356362.03, E622250.47

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-32

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	95
No. 60	81
No. 100	62
No. 200	18

Sample Classification: light brown with traces of hard pan medium fine sand SM silty sand

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Project No.: 0110.1100558.0000
Report No. 971154.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356377.65, E622324.71

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-33

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	91
No. 60	68
No. 100	39
No. 200	11

Sample Classification: dark orange and brown medium fine SP-SM sand with silt

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971156.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356399.12, E622426.30

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-34

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	94
No. 60	72
No. 100	43
No. 200	12

Sample Classification: light brown medium fine SP-SM sand with silt

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971157.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356406.93, E622506.40

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-35

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	90
No. 60	67
No. 100	37
No. 200	8

Sample Classification: dark brown with tan medium fine SP-SM sand with silt

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971159.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356420.60, E622582.60

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-36

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	89
No. 60	47
No. 100	8
No. 200	4

Sample Classification: brown medium fine SP sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971160.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356432.32, E622654.88

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-37

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	89
No. 60	55
No. 100	25
No. 200	9

Sample Classification: Dark Gray Brown Medium Fine SP-SM Sand with Silt

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971162.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356594.38, E621887.08

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-38

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	90
No. 60	62
No. 100	35
No. 200	9

Sample Classification: Dark Brown Medium Fine SP-SM Sand with Silt

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971163.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356615.86, E621959.37

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-39

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	96
No. 60	78
No. 100	58
No. 200	17

Sample Classification: Light Brown Medium Fine SM Silty Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971165.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356633.43, E622019.93

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-40

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	91
No. 60	57
No. 100	24
No. 200	7

Sample Classification: Brown Medium Fine SP-SM Sand with Silt

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971166.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356658.82, E622101.99

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-41

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	89
No. 60	52
No. 100	13
No. 200	5

Sample Classification: Dark Brown Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971168.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356682.25, E622184.04

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-42

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	88
No. 60	32
No. 100	3
No. 200	0.3

Sample Classification: Dark Brown Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971170.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356701.78, E622264.15

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-43

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	84
No. 60	30
No. 100	11
No. 200	1

Sample Classification: Light Brown Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971172.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356725.21, E622348.15

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-44

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	86
No. 60	30
No. 100	7
No. 200	0.2

Sample Classification: Dark Brown Medium Fine Sand SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971173.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356766.21, E622445.84

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-45

Sieve Size	Percent Passing
¾ In.	100
No. 4	100
No. 10	100
No. 40	90
No. 60	20
No. 100	3
No. 200	0.2

Sample Classification: Light Brown Medium Fine SP Sand

dc(W.O. No. N/S)

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Project No.: 0110.1100558.0000
Report No. 971174.1
Date: June 22, 2012

REPORT ON SIEVE ANALYSIS

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Location: N1356803.00, E622519.00

Technician: Client

Date Tested: 6-8-12

Tested By: L. Fernandez, B. Jones

Date Sampled: 5-30-12

Sample No.: N-46

Sieve Size	Percent Passing
¾ in.	100
No. 4	100
No. 10	100
No. 40	90
No. 60	43
No. 100	6
No. 200	1

Sample Classification: Brown Medium Fine SP Sand

dc(W.O. No. N/S)

Standard Proctor Analysis

UNIVERSAL ENGINEERING SCIENCES

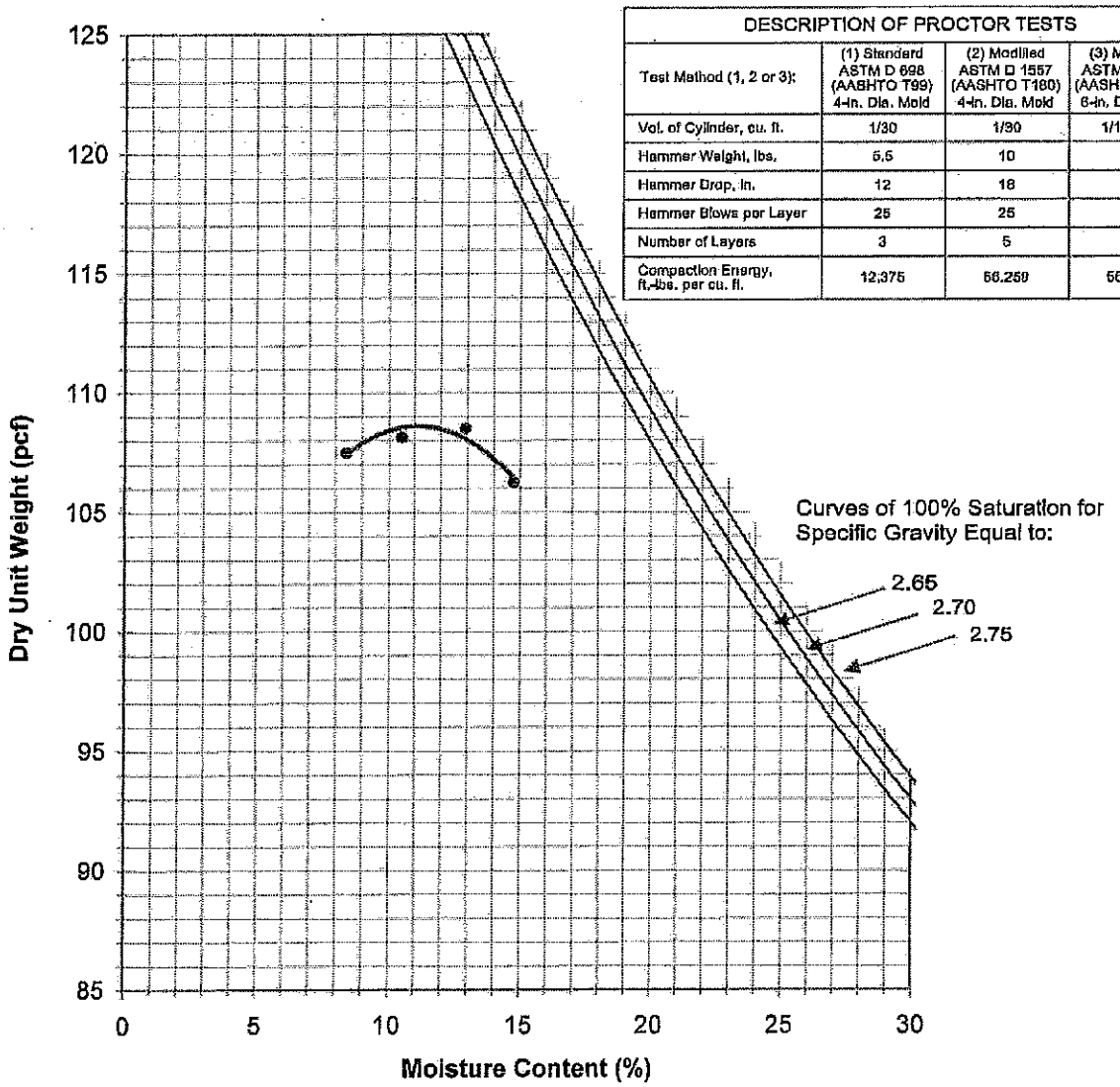
Project No.: 0110.1100684.0001
Work Order No.: 0
Report No.: 952372
Date: April 9, 2012

Client: Weaver Boos Consultants SE LLC
Project: JED Landfill phase 2 Partial Closure
Sample Location: BS-2
Intended Use: Fill
Sample Description: Dark Brown Sand w/ Silt
Sampled By: Client
Date Sampled: March 8, 2012

Tested By: HV
Date Tested: March 13, 2012
Plotted By: Software Package
Date Plotted: April 9, 2012

SUMMARY OF TEST RESULTS

Lab Number:	12-P286	
Test Method:	AASHTO T-99	(2)
Maximum Dry Density, pcf:	**109.0**	
Optimum Moisture, %:	**11.0**	
Passing No. 4 Sieve, %:	100	
Passing No. 200 Sieve, %:	6.6	



DESCRIPTION OF PROCTOR TESTS			
Test Method (1, 2 or 3):	(1) Standard ASTM D 698 (AASHTO T99) 4-in. Dia. Mold	(2) Modified ASTM D 1557 (AASHTO T180) 4-in. Dia. Mold	(3) Modified ASTM D 1557 (AASHTO T180) 6-in. Dia. Mold
Vol. of Cylinder, cu. ft.	1/30	1/30	1/13.333
Hammer Weight, lbs.	5.5	10	10
Hammer Drop, in.	12	18	18
Hammer Blows per Layer	25	25	56
Number of Layers	3	5	5
Compaction Energy, ft.-lbs. per cu. ft.	12,375	56,250	56,250

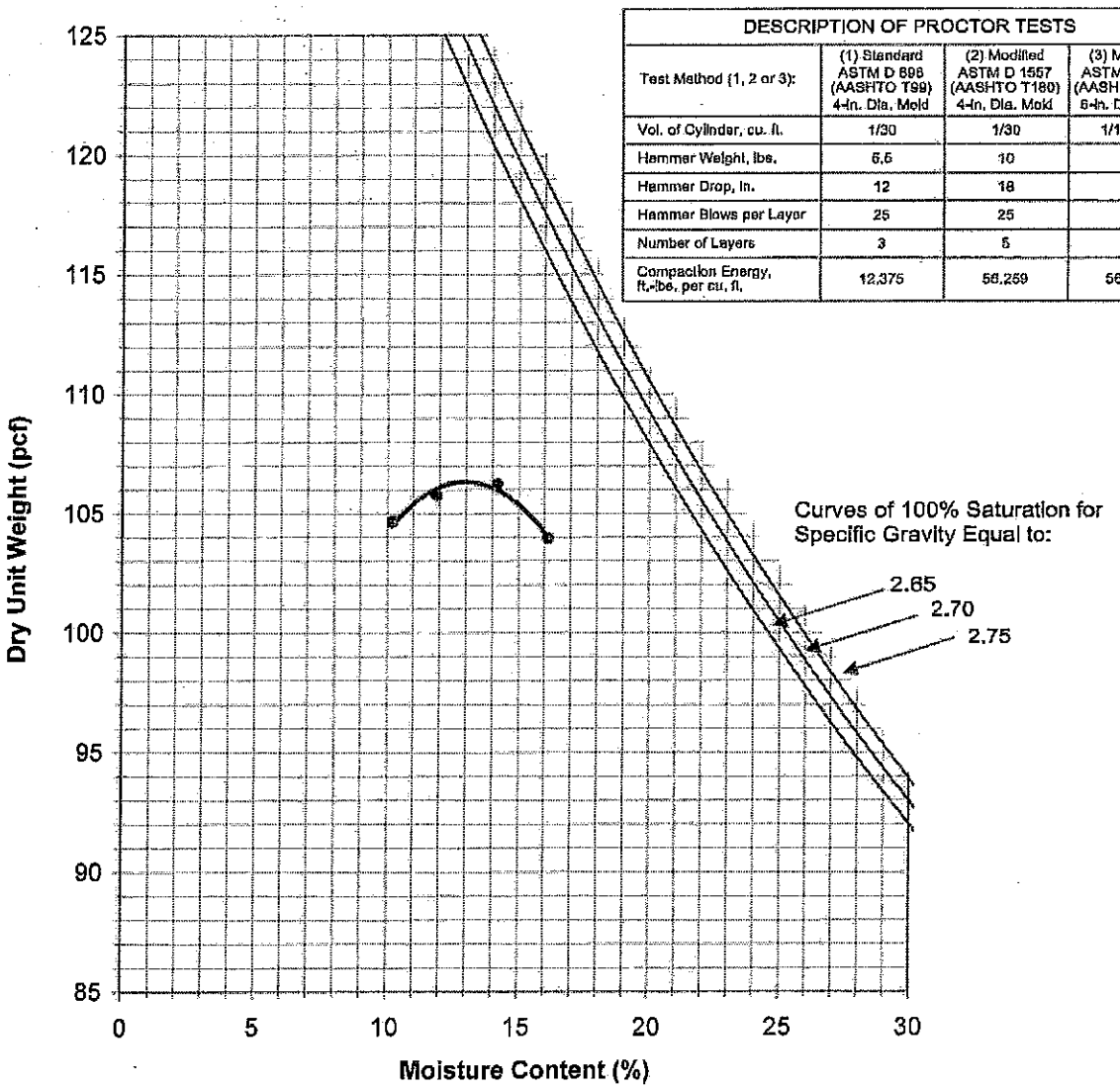
Sampled according to AASHTO T 002.

Project No.:	0110.1100684.0001
Work Order No.:	0
Report No.:	952373
Date:	April 9, 2012

Client:	Weaver Boos Consultants SE LLC		
Project:	JED Landfill Ph 2 Partial Closure		
Sample Location:	BS-3		
Intended Use:	Fill	Tested By:	HV
Sample Description:	Burgundy Sand w/ Silt	Date Tested:	March 13, 2012
Sampled By:	Client	Plotted By:	Software Package
Date Sampled:	March 8, 2012	Date Plotted:	April 9, 2012

SUMMARY OF TEST RESULTS

Lab Number:	12-P287	
Test Method:	AASHTO T-99	(2)
Maximum Dry Density, pcf:	**106.0**	
Optimum Moisture, %:	**13.0**	
Passing No. 4 Sieve, %:	100	
Passing No. 200 Sieve, %:	7	



DESCRIPTION OF PROCTOR TESTS			
Test Method (1, 2 or 3):	(1) Standard ASTM D 698 (AASHTO T99) 4-in. Dia. Mold	(2) Modified ASTM D 1557 (AASHTO T180) 4-in. Dia. Mold	(3) Modified ASTM D 1557 (AASHTO T180) 6-in. Dia. Mold
Vol. of Cylinder, cu. ft.	1/30	1/30	1/13.333
Hammer Weight, lbs.	5.5	10	10
Hammer Drop, in.	12	18	18
Hammer Blows per Layer	25	25	56
Number of Layers	3	5	5
Compaction Energy, ft.-lbs. per cu. ft.	12,375	56,259	56,259

Sampled according to AASHTO T 002.

UNIVERSAL ENGINEERING SCIENCES

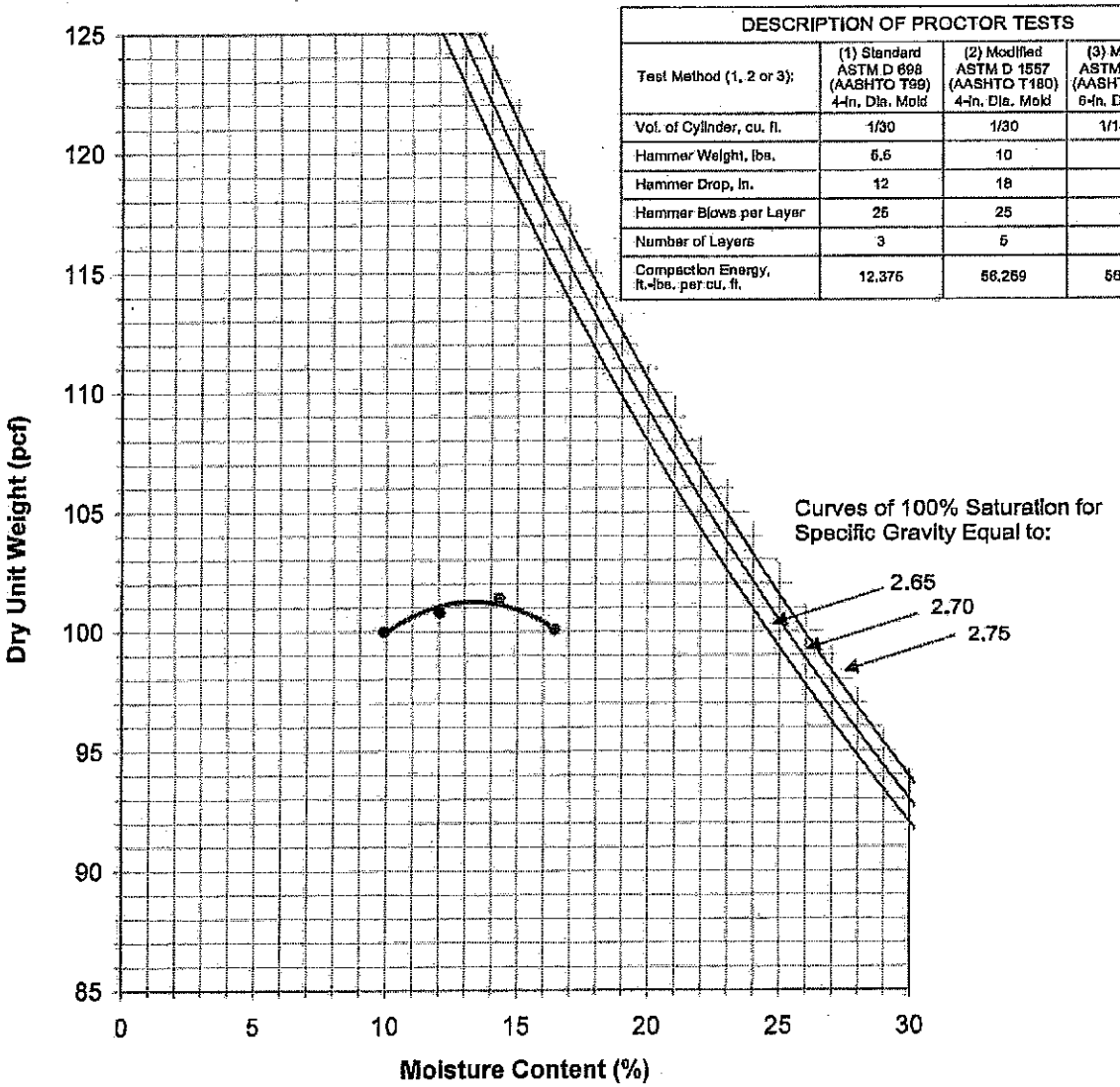
Project No.:	0110.1100684.0001
Work Order No.:	9057038
Report No.:	952369
Date:	April 9, 2012

Client:	Weaver Boos Consultants SE LLC		
Project:	JED Landfill, Phase 2 Partial Closure		
Sample Location:	BS-1		
Intended Use:	Fill	Tested By:	HV
Sample Description:	Tan Sand	Date Tested:	March 13, 2012
Sampled By:	Client	Plotted By:	Software Package
Date Sampled:	March 8, 2012	Date Plotted:	April 9, 2012

SUMMARY OF TEST RESULTS

Lab Number:	12-P288	
Test Method:	AASHTO T-99	(2)
Maximum Dry Density, pcf:	**101.0**	
Optimum Moisture, %:	**13.0**	
Passing No. 4 Sieve, %:	100	
Passing No. 200 Sieve, %:	2.2	

DESCRIPTION OF PROCTOR TESTS			
Test Method (1, 2 or 3):	(1) Standard ASTM D 698 (AASHTO T99) 4-in. Dia. Mold	(2) Modified ASTM D 1557 (AASHTO T180) 4-in. Dia. Mold	(3) Modified ASTM D 1557 (AASHTO T180) 6-in. Dia. Mold
Vol. of Cylinder, cu. ft.	1/30	1/30	1/13.333
Hammer Weight, lbs.	5.5	10	10
Hammer Drop, in.	12	18	18
Hammer Blows per Layer	25	25	56
Number of Layers	3	5	5
Compaction Energy, ft.-lbs. per cu. ft.	12,375	56,259	56,259



Sampled according to AASHTO T 002.

UNIVERSAL ENGINEERING SCIENCES

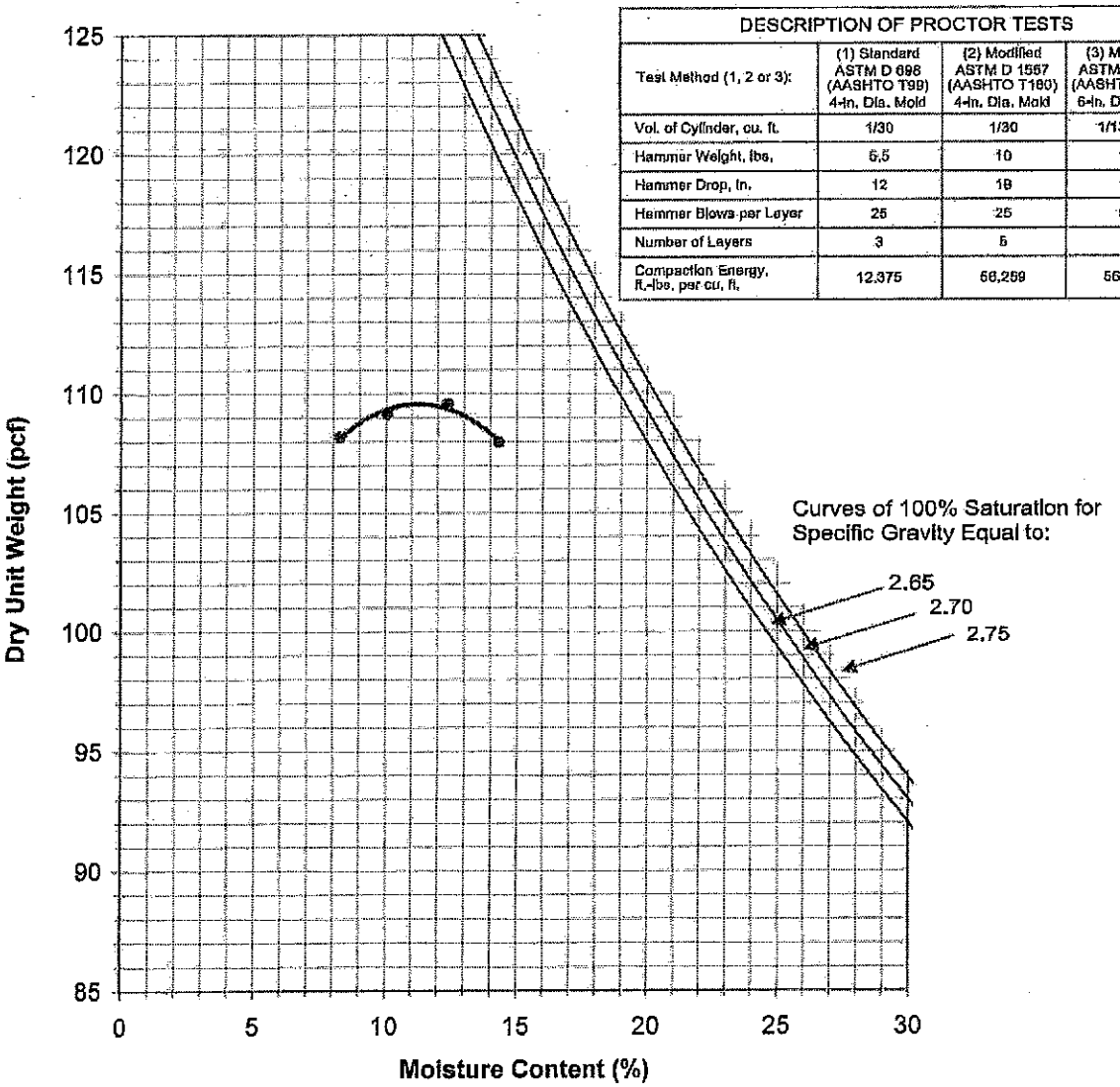
Project No.: 0110.1100684.0001
Work Order No.: 0
Report No.: 952374
Date: April 9, 2012

Client: Weaver Boos Consultants SE LLC
Project: JED Landfill Phase 2 Partial Closure
Sample Location: BS-7
Intended Use: Fill
Sample Description: Brown Sand w/ Silt
Sampled By: Client
Date Sampled: March 8, 2012

Tested By: HV
Date Tested: March 13, 2012
Plotted By: Software Package
Date Plotted: April 9, 2012

SUMMARY OF TEST RESULTS

Lab Number:	12-P289	
Test Method:	AASHTO T-99	(2)
Maximum Dry Density, pcf:	**110.0**	
Optimum Moisture, %:	**11.0**	
Passing No. 4 Sieve, %:	100	
Passing No. 200 Sieve, %:	8.3	



DESCRIPTION OF PROCTOR TESTS

Test Method (1, 2 or 3):	(1) Standard ASTM D 698 (AASHTO T99) 4-in. Dia. Mold	(2) Modified ASTM D 1557 (AASHTO T180) 4-in. Dia. Mold	(3) Modified ASTM D 1557 (AASHTO T180) 6-in. Dia. Mold
Vol. of Cylinder, cu. ft.	1/30	1/30	1/13.333
Hammer Weight, lbs.	5.5	10	10
Hammer Drop, in.	12	18	18
Hammer Blows per Layer	25	25	56
Number of Layers	3	5	5
Compaction Energy, ft.-lbs. per cu. ft.	12,375	56,259	56,259

Sampled according to AASHTO T 002.

UNIVERSAL ENGINEERING SCIENCES

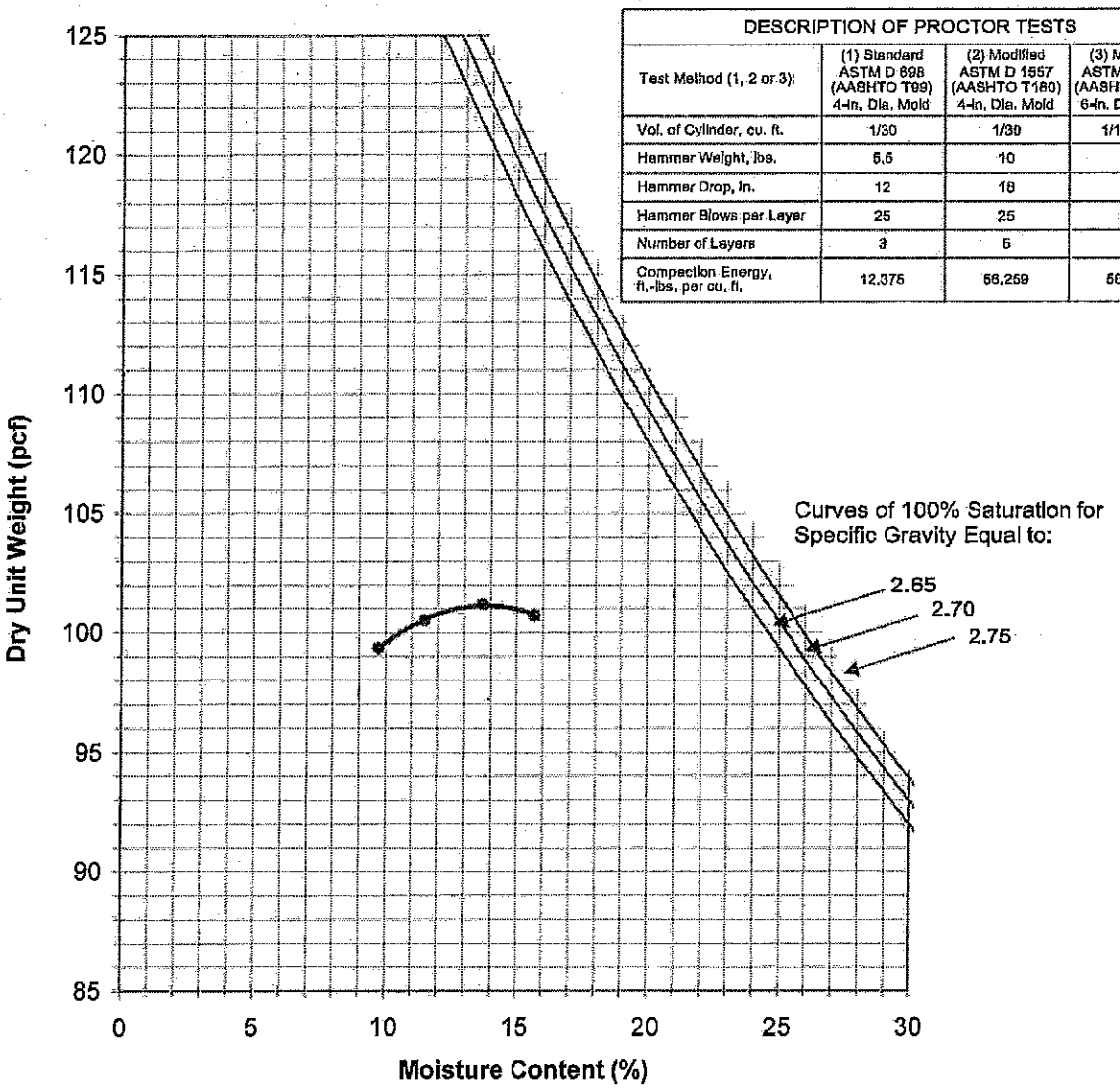
Project No.: 0110.1100684.0001
Work Order No.: 9067038
Report No.: 952371
Date: April 9, 2012

Client: Weaver Boos Consultants SE ,LLC
Project: JED Landfill Phase 2, Partial Closure
Sample Location: BS-4
Intended Use: Native
Sample Description: Dark Brown Sand w/ Silt
Sampled By: Client
Date Sampled: March 8, 2012

Tested By: HV
Date Tested: March 12, 2012
Plotted By: Software Package
Date Plotted: April 9, 2012

SUMMARY OF TEST RESULTS

Lab Number:	12-P259	
Test Method:	AASHTO T-99	(2)
Maximum Dry Density, pcf:	**101.0**	
Optimum Moisture, %:	**14.0**	
Passing No. 4 Sieve, %:	100	
Passing No. 200 Sieve, %:	5.2	



DESCRIPTION OF PROCTOR TESTS

Test Method (1, 2 or 3):	(1) Standard ASTM D 698 (AASHTO T99) 4-in. Dia. Mold	(2) Modified ASTM D 1557 (AASHTO T180) 4-in. Dia. Mold	(3) Modified ASTM D 1557 (AASHTO T180) 6-in. Dia. Mold
Vol. of Cylinder, cu. ft.	1/30	1/30	1/13.333
Hammer Weight, lbs.	5.5	10	10
Hammer Drop, in.	12	18	18
Hammer Blows per Layer	25	25	56
Number of Layers	3	5	5
Compaction Energy, ft.-lbs. per cu. ft.	12,375	56,259	56,259

Sampled according to AASHTO T 002.

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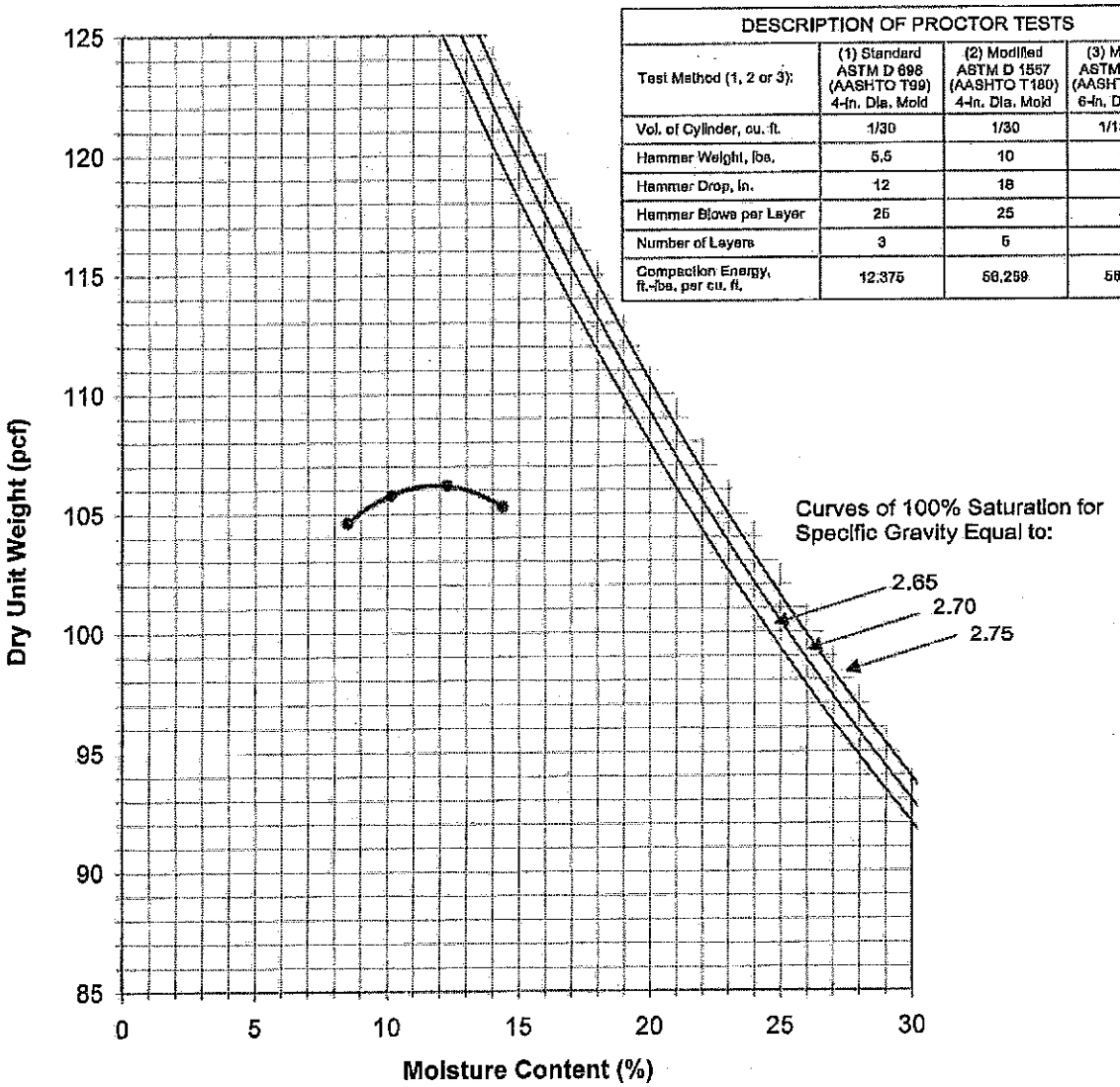
Project No.: 0110.1100558.0000
Work Order No.: BS-11
Report No.: 971176
Date: June 25, 2012

Client: Weaver Boos
Project: JED Landfill Partial Closure Phase 1
Sample Location: N 1356415.57 E 622726.05 (BS-11)
Intended Use: Native
Sample Description: Sand
Sampled By: Client
Date Sampled: May 30, 2012

Tested By: HV
Date Tested: June 5, 2012
Plotted By: Software Package
Date Plotted: June 25, 2012

SUMMARY OF TEST RESULTS

Lab Number:	12-P655	
Test Method:	ASTM D698	(1)
Maximum Dry Density, pcf:	**106.2**	
Optimum Moisture, %:	**11.9**	
Passing No. 4 Sieve, %:	100	
Passing No. 200 Sieve, %:	3.9	



DESCRIPTION OF PROCTOR TESTS

Test Method (1, 2 or 3):	(1) Standard ASTM D 698 (AASHTO T99) 4-in. Dia. Mold	(2) Modified ASTM D 1557 (AASHTO T180) 4-in. Dia. Mold	(3) Modified ASTM D 1557 (AASHTO T180) 6-in. Dia. Mold
Vol. of Cylinder, cu. ft.	1/30	1/30	1/13.333
Hammer Weight, lbs.	5.5	10	10
Hammer Drop, in.	12	18	18
Hammer Blows per Layer	25	25	56
Number of Layers	3	5	5
Compaction Energy, ft.-lbs. per cu. ft.	12,375	56,250	56,250

Sampled according to AASHTO T 002.

UNIVERSAL ENGINEERING SCIENCES

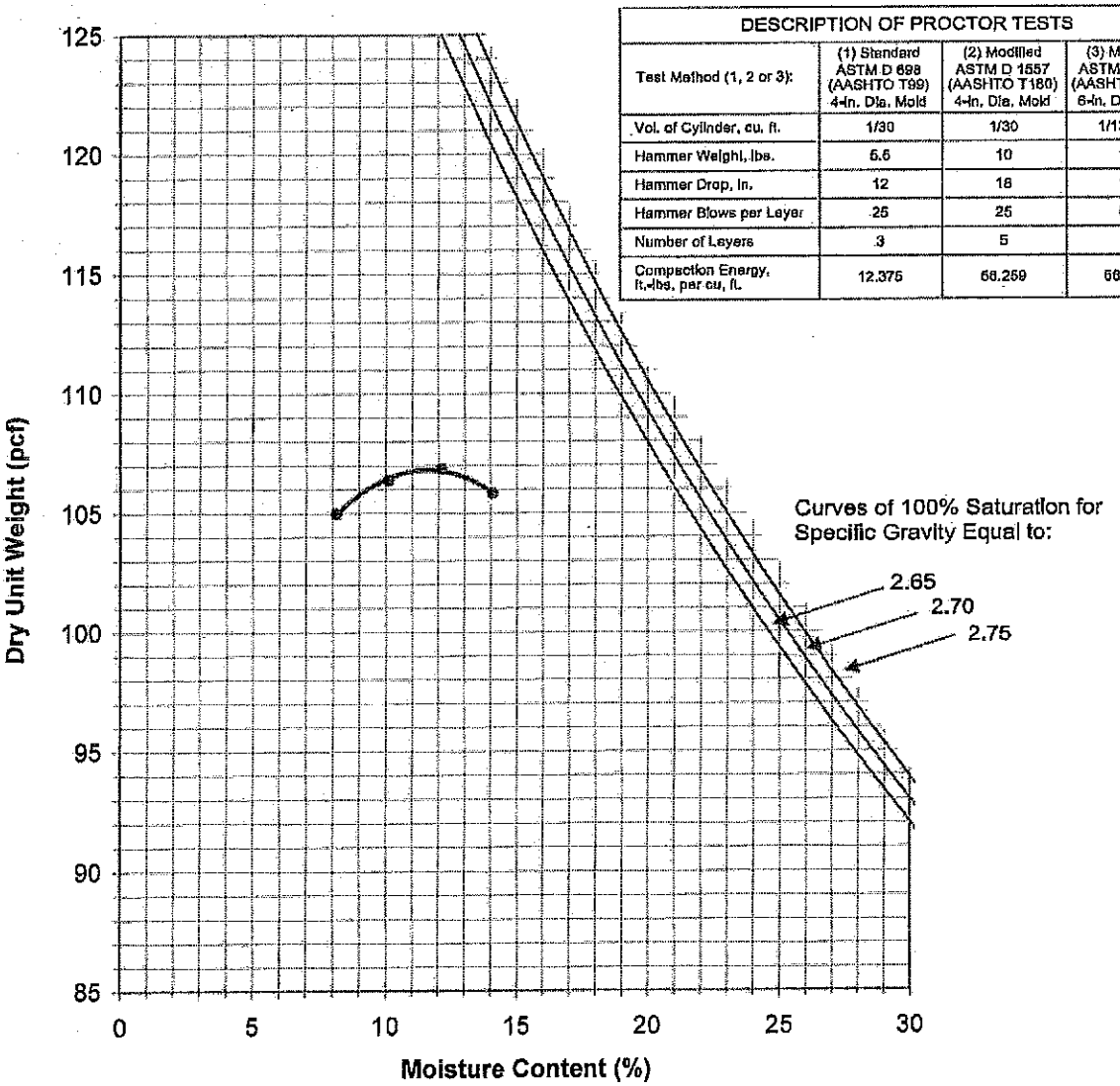
Project No.: 0110.1100558.0000
Work Order No.: BS-9
Report No.: 971181
Date: June 25, 2012

Client: Weaver Boos
Project: JED Landfill Partial Closure Phase 1
Sample Location: N 1356677.76 E 622237.53 (BS-9)
Intended Use: Native
Sample Description: Sand W/ Silt
Sampled By: Client
Date Sampled: May 30, 2012

Tested By: HV
Date Tested: June 4, 2012
Plotted By: Software Package
Date Plotted: June 25, 2012

SUMMARY OF TEST RESULTS

Lab Number:	12-P656	
Test Method:	ASTM D698	(1)
Maximum Dry Density, pcf:	**106.8**	
Optimum Moisture, %:	**11.6**	
Passing No. 4 Sieve, %:	100	
Passing No. 200 Sieve, %:	8.2	



DESCRIPTION OF PROCTOR TESTS

Test Method (1, 2 or 3):	(1) Standard ASTM D 698 (AASHTO T99) 4-in. Dia. Mold	(2) Modified ASTM D 1557 (AASHTO T180) 4-in. Dia. Mold	(3) Modified ASTM D 1557 (AASHTO T180) 6-in. Dia. Mold
Vol. of Cylinder, cu. ft.	1/30	1/30	1/13.333
Hammer Weight, lbs.	5.5	10	10
Hammer Drop, in.	12	18	18
Hammer Blows per Layer	25	25	56
Number of Layers	3	5	5
Compaction Energy, ft.-lbs. per cu. ft.	12.375	56.259	56.259

Sampled according to AASHTO T 002.

UNIVERSAL ENGINEERING SCIENCES

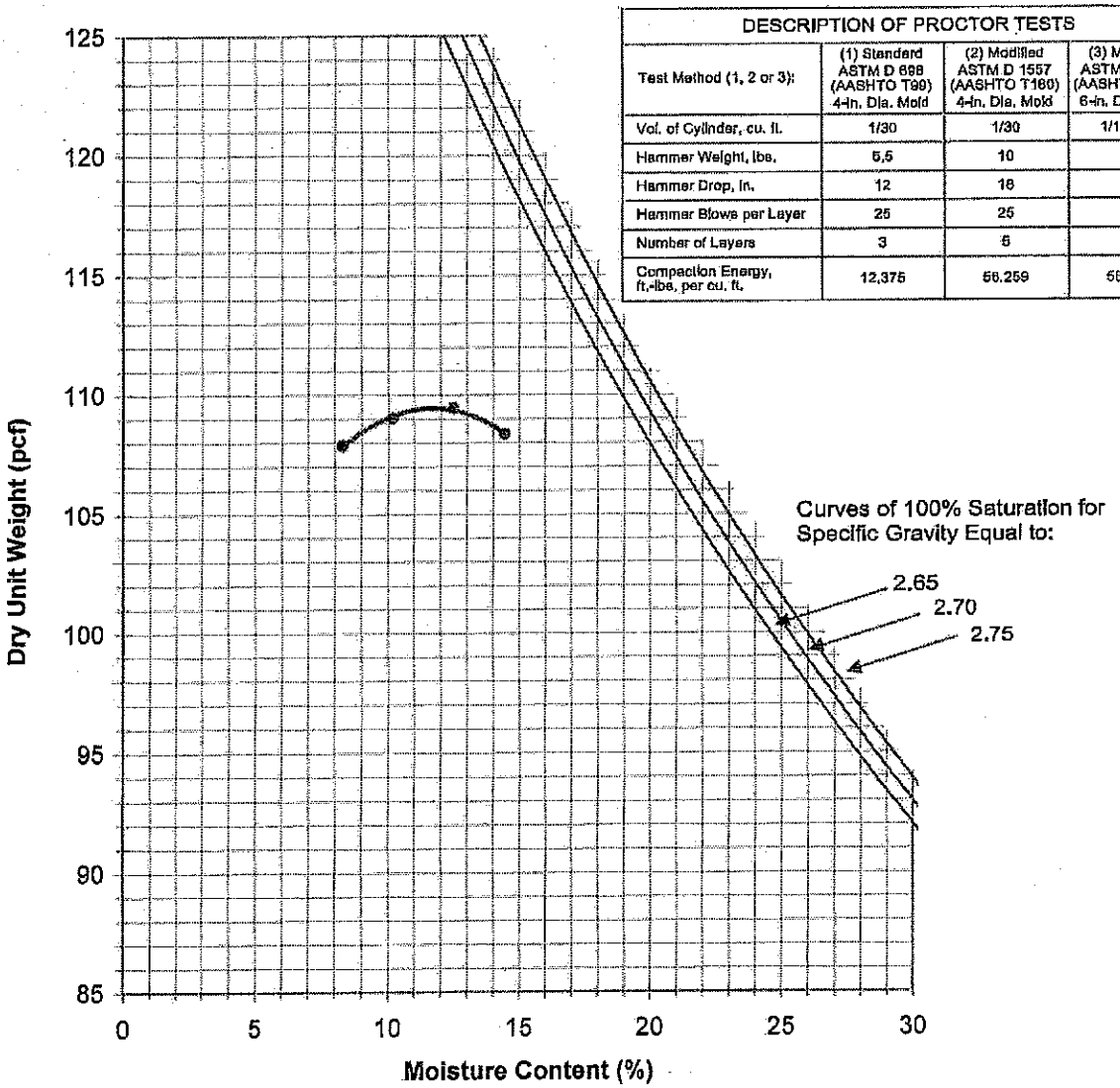
Project No.: 0110.1100558.0000
Work Order No.: BS-10
Report No.: 971178
Date: June 25, 2012

Client: Weaver Boos
Project: JED Landfill Partial Closure Phase 1
Sample Location: N 1356387.45 E 622278.73 (BS-10)
Intended Use: Native
Sample Description: Sand W/ Silt
Sampled By: Client
Date Sampled: May 30, 2012

Tested By: HV
Date Tested: June 4, 2012
Plotted By: Software Package
Date Plotted: June 25, 2012

SUMMARY OF TEST RESULTS

Lab Number:	12-P657	
Test Method:	ASTM D698	(1)
Maximum Dry Density, pcf:	**109.4**	
Optimum Moisture, %:	**11.7**	
Passing No. 4 Sieve, %:	100	
Passing No. 200 Sieve, %:	7.4	



DESCRIPTION OF PROCTOR TESTS			
Test Method (1, 2 or 3):	(1) Standard ASTM D 698 (AASHTO T99) 4-in. Dia. Mold	(2) Modified ASTM D 1557 (AASHTO T180) 4-in. Dia. Mold	(3) Modified ASTM D 1557 (AASHTO T180) 6-in. Dia. Mold
Vol. of Cylinder, cu. ft.	1/30	1/30	1/13.333
Hammer Weight, lbs.	5.5	10	10
Hammer Drop, in.	12	18	18
Hammer Blows per Layer	25	25	56
Number of Layers	3	5	5
Compaction Energy, ft.-lbs. per cu. ft.	12,375	56,259	56,259

Sampled according to AASHTO T 002.

UNIVERSAL ENGINEERING SCIENCES

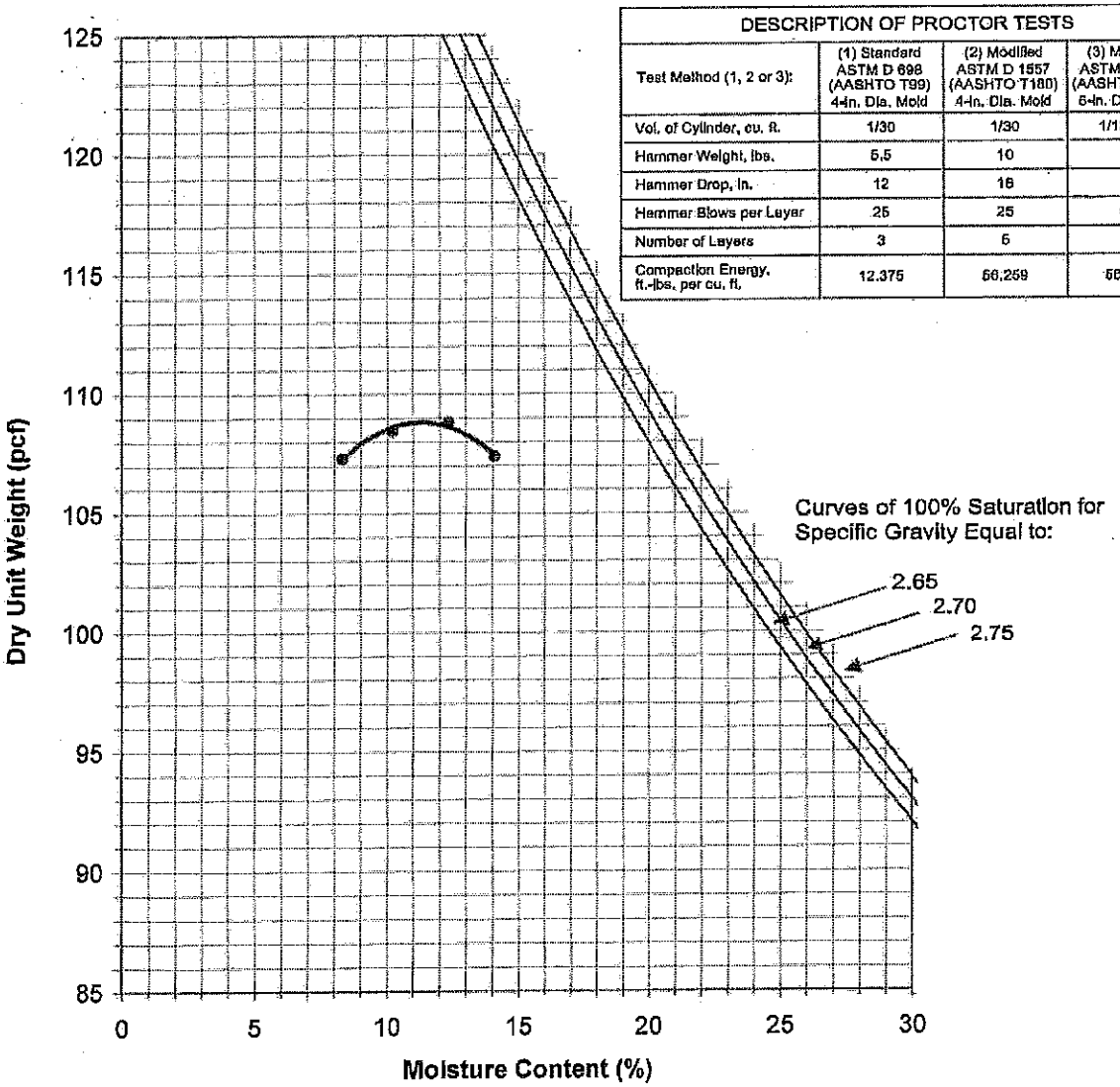
Project No.: 0110.1100558.0000
Work Order No.: BS-8
Report No.: 971183
Date: June 25, 2012

Client: Weaver Boos
Project: JED Landfill Partial Closure Phase 1
Sample Location: N 1356447.00 E 621960.00 (BS-8)
Intended Use: Native
Sample Description: Sand W/ Silt
Sampled By: Client
Date Sampled: May 30, 2012

Tested By: HV
Date Tested: June 4, 2012
Plotted By: Software Package
Date Plotted: June 25, 2012

SUMMARY OF TEST RESULTS

Lab Number:	12-P658	
Test Method:	ASTM D698	(1)
Maximum Dry Density, pcf:	**108.8**	
Optimum Moisture, %:	**11.3**	
Passing No. 4 Sieve, %:	100	
Passing No. 200 Sieve, %:	6.3	



DESCRIPTION OF PROCTOR TESTS			
Test Method (1, 2 or 3):	(1) Standard ASTM D 698 (AASHTO T99) 4-in. Dia. Mold	(2) Modified ASTM D 1557 (AASHTO T180) 4-in. Dia. Mold	(3) Modified ASTM D 1557 (AASHTO T180) 6-in. Dia. Mold
Vol. of Cylinder, cu. ft.	1/30	1/30	1/13.333
Hammer Weight, lbs.	5.5	10	10
Hammer Drop, in.	12	18	18
Hammer Blows per Layer	25	25	56
Number of Layers	3	5	5
Compaction Energy, ft.-lbs. per cu. ft.	12,375	56,259	56,259

Sampled according to AASHTO T 002.

Hydraulic Conductivity Analysis

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Project No.: 0110.1100684.0001
Report No.: 955829.1
Date: April 9, 2012

REPORT ON CONSTANT HEAD PERMEABILITY (ASTM D-2434) (AASHTO T-215)

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Phase 2 Partial Closure, Lab Testing, 1501 Omni Way, St. Cloud, Osceola County, Florida

Date Tested: 4-2-12 **Tested By:** L. Fernandez

Date Sampled: 3-28-12 **Sample By:** Client

TEST RESULTS

Sample No.	Location	Soil Description	Permeability	
			cm/sec	ft/day
N-1	N-1356758 E-622517 (76-52)	Dark Brown Fine Sand	0.00333 3	9.4
N-2	N-1356693 E-622507 (El. 79.20)	Dark Brown Fine Sand	0.00197	5.6
N-3	N-1356610 E-622426 (El. 80.1)	Tan White Fine Sand	0.00210	5.9
N-4	N-1356644 E-622273 (El. 73.1)	Dark Brown Sand with Traces of Tan Sand	0.00097	2.7
N-5	N-136541 E-622159 (El. 77.80)	Brown Fine Sand	0.00283	8.0
N-6		Brown Fine Sand	0.00304	8.6
N-7		Brown Tan Fine Sand	0.00680	19.3
N-8		Dark Brown Fine Sand	0.00018	0.5
N-9		Brown Tan Fine Sand	0.00217	6.2

dc (WO# N/S)

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Project No.: 0110.1100558.0000
Report No.: 970785.1
Date: June 22, 2012

REPORT ON CONSTANT HEAD PERMEABILITY (ASTM D-2434) (AASHTO T-215)

Client: Weaver Boos Consultants, SE, LLC
Attn: Jeffrey Schaffer
365 Citrus Tower Boulevard, Ste 110
Clermont, Florida 34711

Project: JED Landfill, Cell 8 CQA Soil Testing (Construction), Osceola County, FL

Date Tested: 6-7-12 **Tested By:** L. Fernandez, B. Jones

Date Sampled: 5-30-12 **Sample By:** Client

TEST RESULTS

Sample No.	Location	Soil Description	Permeability	
			cm/sec	ft/day
N-10	N1356754.50 E622537.66	Brown Medium Fine SP Sand	0.00493	14.0
N-11	N1356699.82 E622445.84	Dark Brown with Hard Pad Medium Fine SP Sand	0.00365	10.3
N-12	N1356658.82 E622602.13	Light Brown to Tan Medium Fine SP-SM Sand with Silt	0.00360	10.2
N-13	N1356656.87 E622451.70	Light Brown Medium Fine SP-SM Sand with Silts	0.00326	9.3
N-14	N1356541.66 E 622574.78	Brown to Light Brown Medium Fine SP Sand	0.00314	8.9
N-15	N1356481.13 E 622625.58	Light Brown Medium Fine SP Sand	0.00641	18.2
N-16	N1356666.63 E 622328.62	Light Brown to Brown Medium Fine SP Sand	0.00480	13.6
N-17	N1356574.86 E 622334.48	Light Brown to Tan Medium Fine SP Sand	0.01117	31.7

dc (WO# N/S)

Sample No.	Location	Soil Description	Permeability	
			cm/sec	ft/day
N-18	N1356629.53 E 622225.07	Light Brown to Tan Medium Fine SP Sand	0.00557	15.8
N-19	N1356543.62 E622246.56	Light Brown Medium Fine SP Sand	0.00684	19.4
N-20	N1356578.76 E 622225.07	Dark Brown Medium Fine Sand SP-SM Sand with Silt	0.00434	12.3
N-21	N1356582.67 E 622141.06	Light Brown Medium Fine SP Sand	0.00613	17.4
N-22	N1356524.09 E 622144.97	Light Brown to Brown Medium Fine SP Sand	0.00116	3.3
N-23	N1356582.67 E 622055.10	Brown Medium Fine SP Sand	0.00342	9.7
N-24	N1356453.80 E 622328.62	Brown to Dark Brown Medium Fine Sand with Traces of Hard Pan	0.00230	6.5
N-25	N1356438.18 E 622203.58	Brown with Traces of Hard Pan Medium Fine SP-SM Sand with Silt	0.00438	12.4
N-26	N1356453.80 E 622125.43	Brown Medium Fine SP-SM Sand with Silt	0.00078	2.2
N-27	N1356424.51 E 622100.03	Brown Medium Fine SP-SM Sand with Silt	0.00014	0.4
N-28	N1356512.37 E 621937.88	Dark Brown with Traces of Hard Pan Medium Fine SM Silty Sand	0.00148	4.2
N-29	N1356321.02 E 621986.72	Brown Medium Fine SP-SM Sand with Silt	0.00036	1.0
N-30	N1356332.74 E 622070.73	Brown Medium Fine SP-SM Sand with Silt	0.00066	1.9
N-31	N1356346.40 E 622150.83	Dark Brown Medium Fine SP-SM Sand with Silt	0.00325	9.2
N-32	N1356362.03 E 622250.47	Light Brown with Traces of Hard Pan Medium Fine SM Silty Sand	0.00084	2.4
N-33	N1356377.65 E 622324.71	Dark Orange and Brown Medium Fine SP-SM Sand with Silt	0.00212	6.0
N-34	N1356399.12 E622426.30	Light Brown Medium Fine SP-SM Sand with Silt	0.00112	3.2

Sample No.	Location	Soil Description	Permeability	
			cm/sec	ft/day
N-35	N1356406.93 E 622506.40	Dark Brown with Tan Medium Fine SP-SM Sand with Silt	0.00042	1.2
N-36	N1356420.60 E 622582.60	Brown Medium Fine SP Sand	0.00018	0.5
N-37	N1356432.32 E 622654.88	Dark Gray Brown Medium Fine SP-SM Sand with Silt	0.00190	5.4
N-38	N1356594.38 E 621887.08	Dark Brown Medium Fine SP-SM Sand with Silt	0.00054	1.5
N-39	N1356615.86 E 621959.37	Light Brown Medium Fine SM Silty Sand	0.00156	4.4
N-40	N1356633.43 E 622019.93	Brown Medium Fine SP-SM Sand with Silt	0.00238	6.7
N-41	N1356658.82 E 622101.99	Dark Brown Medium Fine SP Sand	0.00035	1.0
N-42	N1356682.25 E 622184.04	Dark Brown Medium Fine SP Sand	0.00078	2.2
N-43	N1356701.78 E 622264.15	Light Brown Medium Fine SP Sand	0.00195	5.5
N-44	N1356725.21 E 622348.15	Dark Brown Medium Fine Sand SP Sand	0.00267	7.6
N-45	N1356766.21 E 622445.84	Light Brown Medium Fine SP Sand	0.00045	1.3
N-46	N1356803.00 E 622519.00	Brown Medium Fine SP Sand	0.00062	1.8

Appendix E

Soil Moisture Density Testing

General Fill Field Compaction Summary
General Fill Sand Cone Testing Summary
Protective Cover Soil Field Compaction Summary
Protective Cover Soil Sand Cone Testing Summary

General Fill Field Compaction Summary

Field Compaction Summary - General Fill

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
1	03/19/12	1356263	624416	1	12-P289	11.0	110.0	19.2	97.8	88.9	P	
2	03/19/12	1356204	624456	1	12-P289	11.0	110.0	18.5	95.0	86.4	P	
3	03/19/12	1356333	624430	1	12-P289	11.0	110.0	20.8	93.3	84.8	F	
4	03/19/12	1356360	624403	1	12-P289	11.0	110.0	21.4	92.1	83.7	F	
5	03/20/12	1356333	624430	1	12-P289	11.0	110.0	13.8	99.3	90.3	P	Retest
6	03/20/12	1356360	624403	1	12-P289	11.0	110.0	12.4	101.6	92.4	P	Retest
7	03/20/12	135198	624391	1	12-P289	11.0	110.0	12.9	102.2	92.9	P	
8	03/20/12	135262	624398	1	12-P289	11.0	110.0	9.5	98.7	89.7	P	
9	03/20/12	135349	624394	1	12-P289	11.0	110.0	9.2	98.8	89.8	P	
10	03/20/12	135330	624435	1	12-P289	11.0	110.0	11.6	93.5	85.0	P	
11	03/20/12	135404	624454	1	12-P289	11.0	110.0	8.4	95.3	86.6	P	
12	03/20/12	135437	624392	1	12-P289	11.0	110.0	9.8	95.2	86.5	P	
13	03/20/12	135489	624389	1	12-P289	11.0	110.0	8.0	101.9	92.6	P	
14	03/20/12	1356622	624458	1	12-P289	11.0	110.0	6.1	102.1	92.8	P	
15	03/20/12	1356814	624474	1	12-P289	11.0	110.0	6.8	104.5	95.0	P	
16	03/20/12	1356952	624467	1	12-P289	11.0	110.0	11.3	101.3	92.1	P	
17	03/20/12	1357128	624436	1	12-P289	11.0	110.0	12.1	99.7	90.6	P	
18	03/20/12	1357013	624377	1	12-P289	11.0	110.0	8.7	103.9	94.5	P	
19	03/20/12	1356912	624391	1	12-P289	11.0	110.0	11.2	97.5	88.6	P	
20	03/20/12	1356821	624388	1	12-P289	11.0	110.0	7.3	106.3	96.6	P	
21	03/20/12	1356699	624393	1	12-P289	11.0	110.0	8.3	102.7	93.4	P	

Field Compaction Summary - General Fill

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
22	03/20/12	1356573	624427	1	12-P289	11.0	110.0	10.9	101.2	92.0	P	
23	03/20/12	1356369	624421	1	12-P289	11.0	110.0	13.7	97.8	88.9	P	
24	03/28/12	1356173	624347	1	12-P289	11.0	110.0	9.2	98.2	89.3	P	
25	03/28/12	1356404	624328	1	12-P289	11.0	110.0	13.9	95.4	86.7	P	
26	03/28/12	1356543	624543	1	12-P289	11.0	110.0	7.9	102.6	93.3	P	
27	03/28/12	1356648	624326	1	12-P289	11.0	110.0	15.9	96.8	88.0	P	
28	03/28/12	1356957	624322	1	12-P289	11.0	110.0	13.3	103.5	94.1	P	
29	03/28/12	1357076	624320	1	12-P289	11.0	110.0	16.2	94.1	85.5	P	
30	03/28/12	1357207	624315	1	12-P289	11.0	110.0	12.3	101.8	92.5	P	
31	03/28/12	1357070	624273	1	12-P289	11.0	110.0	8.4	104.8	95.3	P	
32	03/28/12	1356220	624275	1	12-P289	11.0	110.0	12.6	97.4	88.5	P	
33	03/28/12	1356337	624264	1	12-P289	11.0	110.0	9.4	101.0	91.8	P	
34	03/28/12	1356460	624284	1	12-P289	11.0	110.0	10.3	99.1	90.1	P	
35	03/28/12	1356570	624248	1	12-P289	11.0	110.0	7.8	107.3	97.5	P	
36	03/28/12	1356735	624242	1	12-P289	11.0	110.0	13.8	97.3	88.5	P	
37	03/28/12	1356832	624251	1	12-P289	11.0	110.0	10.6	99.8	90.7	P	
38	03/31/12	1357050	624340	1	12-P289	11.0	110.0	9.8	101.0	91.8	P	
39	03/31/12	1357050	624250	1	12-P289	11.0	110.0	12.6	100.4	91.3	P	
40	03/31/12	1357150	624250	1	12-P289	11.0	110.0	13.4	101.7	92.5	P	
41	03/31/12	1357250	624250	1	12-P289	11.0	110.0	10.4	104.0	94.5	P	
42	03/31/12	1357350	624250	1	12-P289	11.0	110.0	10.4	105.9	96.3	P	

Field Compaction Summary - General Fill

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
43	03/31/12	135350	624350	1	12-P289	11.0	110.0	12.5	107.6	97.8	P	
44	03/31/12	1357275	624350	1	12-P289	11.0	110.0	11.5	102.6	93.3	P	
45	03/31/12	1357250	624350	1	12-P289	11.0	110.0	11.6	104.6	95.1	P	
46	03/31/12	1357150	624350	1	12-P289	11.0	110.0	11.1	104.7	95.2	P	
47	03/31/12	1357150	624400	1	12-P289	11.0	110.0	10.2	105.9	96.3	P	
48	03/31/12	1357250	624415	1	12-P289	11.0	110.0	11.0	98.2	89.3	P	
49	03/31/12	1357350	624415	1	12-P289	11.0	110.0	14.8	101.3	92.1	P	
50	03/31/12	1357350	624475	1	12-P289	11.0	110.0	14.1	101.0	91.8	P	
51	03/31/12	1357275	624475	1	12-P289	11.0	110.0	9.7	97.2	88.4	P	
52	03/31/12	1357200	624475	1	12-P289	11.0	110.0	7.9	101.8	92.5	P	
53	03/31/12	1357125	624475	1	12-P289	11.0	110.0	6.0	98.8	89.8	P	
54	04/03/12	1357150	624530	1	12-P289	11.0	110.0	9.2	97.7	88.8	P	
55	04/03/12	1357125	624630	1	12-P289	11.0	110.0	9.4	96.6	87.8	P	
56	04/03/12	1357050	624730	1	12-P289	11.0	110.0	8.8	94.8	86.2	P	
57	04/03/12	1357125	624730	1	12-P289	11.0	110.0	9.5	100.6	91.5	P	
58	04/03/12	1357175	624650	1	12-P289	11.0	110.0	11.9	96.4	87.6	P	
59	04/03/12	1357225	624550	1	12-P289	11.0	110.0	12.5	97.8	88.9	P	
60	04/03/12	1357325	624580	1	12-P289	11.0	110.0	10.7	102.0	92.7	P	
61	04/03/12	1357275	624680	1	12-P289	11.0	110.0	12.3	97.8	88.9	P	
62	04/03/12	1357225	624780	1	12-P289	11.0	110.0	14.8	98.0	89.1	P	
63	04/07/12	1357150	624780	1	12-P289	11.0	110.0	8.0	98.4	89.5	P	

Field Compaction Summary - General Fill

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
64	04/07/12	1357150	624850	1	12-P289	11.0	110.0	8.8	95.0	86.4	P	
65	04/07/12	1357100	624900	1	12-P289	11.0	110.0	7.0	97.9	89.0	P	
66	04/07/12	1357025	624825	1	12-P289	11.0	110.0	6.5	93.6	85.1	P	
67	04/07/12	1357100	624800	1	12-P289	11.0	110.0	9.8	99.2	90.2	P	
68	04/07/12	1356975	624730	1	12-P289	11.0	110.0	10.9	97.3	88.5	P	
69	04/07/12	1356900	624730	1	12-P289	11.0	110.0	11.0	97.4	88.5	P	
70	04/07/12	1356925	624830	1	12-P289	11.0	110.0	8.0	99.4	90.4	P	
71	04/07/12	1356950	624925	1	12-P289	11.0	110.0	8.6	95.8	87.1	P	
72	04/07/12	1356850	624935	1	12-P289	11.0	110.0	8.3	98.8	89.8	P	
73	04/07/12	1356850	624850	1	12-P289	11.0	110.0	8.6	101.1	91.9	P	
74	04/07/12	1356850	624830	1	12-P289	11.0	110.0	8.4	104.2	94.7	P	
75	04/07/12	1356800	624750	1	12-P289	11.0	110.0	11.0	95.3	86.6	P	
76	04/07/12	1356700	624830	1	12-P289	11.0	110.0	8.3	101.6	92.4	P	
77	04/07/12	1356675	624925	1	12-P289	11.0	110.0	10.6	97.8	88.9	P	
78	04/07/12	1356650	925000	1	12-P289	11.0	110.0	9.0	102.6	93.3	P	
79	04/07/12	1356650	625025	1	12-P289	11.0	110.0	9.3	101.9	92.6	P	
80	04/07/12	1356575	625075	1	12-P289	11.0	110.0	8.8	103.2	93.8	P	
81	04/07/12	1356500	625075	1	12-P289	11.0	110.0	10.1	101.0	91.8	P	
82	04/07/12	1356500	625025	1	12-P289	11.0	110.0	8.2	95.8	87.1	P	
83	04/07/12	1356550	624975	1	12-P289	11.0	110.0	8.5	94.1	85.5	P	
84	04/07/12	1356650	924950	1	12-P289	11.0	110.0	7.0	95.6	86.9	P	

Field Compaction Summary - General Fill

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
85	04/07/12	1356650	624850	1	12-P289	11.0	110.0	10.3	94.9	86.3	P	
86	04/07/12	1356550	624850	1	12-P289	11.0	110.0	10.9	94.2	85.6	P	
87	04/07/12	1356475	624925	1	12-P289	11.0	110.0	7.9	95.4	86.7	P	
88	04/07/12	1356475	624850	1	12-P289	11.0	110.0	8.5	94.5	85.9	P	
89	04/10/12	1356200	625075	1	12-P289	11.0	110.0	6.6	94.4	85.8	P	
90	04/10/12	1356300	625075	1	12-P289	11.0	110.0	6.1	93.8	85.3	P	
91	04/10/12	1356375	625075	1	12-P289	11.0	110.0	8.2	94.5	85.9	P	
92	04/10/12	1356450	625075	1	12-P289	11.0	110.0	7.4	97.9	89.0	P	
93	04/10/12	1356450	625025	1	12-P289	11.0	110.0	8.8	93.8	85.3	P	
94	04/10/12	1356375	625025	1	12-P289	11.0	110.0	5.2	94.1	85.5	P	
95	04/10/12	1356300	625025	1	12-P289	11.0	110.0	8.6	96.2	87.5	P	
96	04/10/12	1356200	625025	1	12-P289	11.0	110.0	8.2	97.8	88.9	P	
97	04/10/12	1356200	624900	1	12-P289	11.0	110.0	8.3	94.9	86.3	P	
98	04/10/12	1356300	624900	1	12-P289	11.0	110.0	7.8	95.8	87.1	P	
99	04/10/12	1356375	624900	1	12-P289	11.0	110.0	8.6	98.9	89.9	P	
100	04/10/12	1356450	624925	1	12-P289	11.0	110.0	7.2	99.5	90.5	P	
101	04/10/12	1356450	625850	1	12-P289	11.0	110.0	9.6	95.0	86.4	P	
102	04/10/12	1356375	625850	1	12-P289	11.0	110.0	8.2	98.6	89.6	P	
103	04/10/12	1356300	625850	1	12-P289	11.0	110.0	7.0	97.8	88.9	P	
104	04/10/12	1356200	625850	1	12-P289	11.0	110.0	10.5	95.1	86.5	P	
105	04/10/12	1356225	625800	1	12-P289	11.0	110.0	8.7	99.4	90.4	P	

Field Compaction Summary - Anchor Trench

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
1	04/05/12	1356753	624754	1	12-P289	11.0	110.0	12.5	97.8	88.9	P	
2	04/11/12	1356607	625000	1	12-P289	11.0	110.0	12.0	100.7	91.5	P	
3	04/11/12	1356600	624900	1	12-P289	11.0	110.0	12.3	97.3	88.5	P	
4	04/18/12	1356961	624468	1	12-P289	11.0	110.0	12.0	98.0	89.1	P	
5	05/07/12	1356200	624537	1	12-P289	11.0	110.0	11.8	97.6	88.7	P	
6	05/07/12	1356300	624517	1	12-P289	11.0	110.0	10.5	99.1	90.1	P	
7	05/07/12	1356400	624503	1	12-P289	11.0	110.0	11.5	102.9	93.5	P	
8	05/07/12	1356500	624500	1	12-P289	11.0	110.0	11.7	99.8	90.7	P	
9	05/07/12	1356600	624500	1	12-P289	11.0	110.0	13.0	98.9	89.9	P	
10	05/07/12	1356700	624500	1	12-P289	11.0	110.0	12.7	98.6	89.6	P	
11	05/07/12	1356800	624500	1	12-P289	11.0	110.0	12.5	97.8	88.9	P	
12	05/07/12	1356900	624500	1	12-P289	11.0	110.0	12.0	100.7	91.5	P	
13	05/07/12	1357000	624500	1	12-P289	11.0	110.0	11.7	101.2	92.0	P	
14	05/07/12	1357053	624570	1	12-P289	11.0	110.0	13.3	99.8	90.7	P	
15	05/07/12	1357002	624660	1	12-P289	11.0	110.0	14.5	97.1	88.3	P	
16	05/19/12	1356898	524710	1	12-P289	11.0	110.0	10.3	99.9	90.8	P	
17	05/19/12	1356796	624743	1	12-P289	11.0	110.0	9.7	100.1	91.0	P	
18	06/06/12	1356690	624722	1	12-P289	11.0	110.0	12.9	97.6	88.7	P	
19	06/06/12	1356587	624804	1	12-P289	11.0	110.0	12.3	97.1	88.3	P	
20	06/06/12	1356495	624831	1	12-P289	11.0	110.0	12.0	98.0	89.1	P	
21	06/18/12	1356395	624835	1	12-P289	11.0	110.0	11.7	103.1	93.7	P	

Field Compaction Summary - Anchor Trench

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
22	06/18/12	1356295	624825	1	12-P289	11.0	110.0	14.9	99.9	90.8	P	
23	06/18/12	1356198	624808	1	12-P289	11.0	110.0	13.3	104.8	95.3	P	

General Fill Sand Cone Testing Summary

J.E.D. Solid Waste Management Facility
2012 partial closure of Phase 1
Sand Cone Field Density Tests - General Fill

Test Number	SC-1	SC-2	SC-3	SC-4	SC-5
Nuclear Density Test Number	10	38	52	79	99
Date	3/20/2012	3/28/2012	3/31/2012	4/7/2012	04/10/12
Lift	1	1	1	1	1
HOLE VOLUME					
a. Sand Density	93.57	93.57	93.57	93.57	93.57
b. Wt. of Sand & Jar (Before)	14.21	13.94	13.65	13.65	14.13
c. Wt. of Sand & Jar (After)	2.24	2.81	1.87	1.77	2.91
d. Wt. of Sand in Hole and Cone (b-c)	11.97	11.13	11.78	11.88	11.22
e. Wt. of Sand in Cone	3.83	3.83	3.83	3.83	3.83
f. Wt. of Sand in Hole (d-e)	8.14	7.30	7.95	8.05	7.39
g. Volume of Hole (f/a)	0.087	0.078	0.085	0.086	0.079
MOISTURE CONTENT					
h. Pan Number	1	1	1	1	1
i. Wt. of Wet Soil + Pan	297.92	291.43	455.76	376.61	329.34
j. Wt. of Dry Soil + Pan	265.82	256.83	421.26	342.11	304.14
k. Wt. of Pan	0.53	0.53	0.53	0.53	0.53
l. Wt. of Water (i-j)	32.10	34.60	34.50	34.50	25.20
m. Wt. of Dry Soil (j-k)	265.29	256.30	420.73	341.58	303.61
n. Moisture Content (100 x l/m)	12.1	13.5	8.2	10.1	8.3
DENSITY DATA					
o. Wt. of Wet Soil + Container	7.92	7.56	7.98	8.44	7.43
p. Wt. of Container	0.53	0.53	0.53	0.53	0.53
q. Wt. of Wet Soil (o-p)	7.39	7.03	7.45	7.91	6.90
r. Wet Density (q/g)	84.9	90.1	87.6	91.9	87.3
s. Dry Density r/(1+ n/100)	75.8	79.4	81.0	83.5	80.6
t. Percent Compaction	86.1	89.1	90.9	93.7	90.5

Protective Cover Soil Field Compaction Summary

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
1	04/12/12	1356200	624230	1	12-P289	11.0	110.0	11.5	99.1	90.1	P	
2	04/12/12	1356250	624230	1	12-P289	11.0	110.0	12.0	97.3	88.5	P	
3	04/12/12	1356300	624230	1	12-P289	11.0	110.0	12.9	99.7	90.6	P	
4	04/12/12	1356200	624230	2	12-P289	11.0	110.0	14.6	96.2	87.5	P	
5	04/12/12	1356250	624230	2	12-P289	11.0	110.0	14.1	98.4	89.5	P	
6	04/12/12	1356300	624230	2	12-P289	11.0	110.0	13.6	100.0	90.9	P	
7	04/12/12	1356200	624230	3	12-P289	11.0	110.0	13.9	96.9	88.1	P	
8	04/12/12	1356250	624230	3	12-P289	11.0	110.0	13.7	99.9	90.8	P	
9	04/12/12	1356300	624230	3	12-P289	11.0	110.0	14.2	95.8	87.1	P	
10	04/12/12	1356200	624230	4	12-P289	11.0	110.0	13.9	98.4	89.5	P	
11	04/12/12	1356250	624230	4	12-P289	11.0	110.0	14.0	101.4	92.2	P	
12	04/12/12	1356300	624230	4	12-P289	11.0	110.0	14.2	98.7	89.7	P	
13	04/12/12	1356200	624230	5	12-P289	11.0	110.0	15.8	99.0	90.0	P	
14	04/12/12	1356250	624230	5	12-P289	11.0	110.0	16.0	94.9	86.3	P	
15	04/12/12	1356300	624230	5	12-P289	11.0	110.0	17.5	97.3	88.5	P	
16	04/12/12	1356200	624230	6	12-P289	11.0	110.0	15.2	99.6	90.5	P	
17	04/12/12	1356250	624230	6	12-P289	11.0	110.0	13.2	102.4	93.1	P	
18	04/12/12	1356300	624230	6	12-P289	11.0	110.0	13.0	97.2	88.4	P	
19	04/16/12	1356400	624230	1	12-P289	11.0	110.0	10.9	98.7	89.7	P	
20	04/16/12	1356400	624230	2	12-P289	11.0	110.0	11.8	96.8	88.0	P	
21	04/16/12	1356375	624230	3	12-P289	11.0	110.0	13.8	95.1	86.5	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
22	04/16/12	1356425	624230	4	12-P289	11.0	110.0	16.1	98.6	89.6	P	
23	04/16/12	1356400	624230	5	12-P289	11.0	110.0	11.8	105.7	96.1	P	
24	04/16/12	1356375	624230	6	12-P289	11.0	110.0	11.9	103.6	94.2	P	
25	04/16/12	1356200	624300	1	12-P289	11.0	110.0	11.5	97.0	88.2	P	
26	04/16/12	1356200	624400	1	12-P289	11.0	110.0	10.1	99.7	90.6	P	
27	04/16/12	1356200	624500	1	12-P289	11.0	110.0	14.5	99.7	90.6	P	
28	04/16/12	1356300	624500	1	12-P289	11.0	110.0	15.4	95.9	87.2	P	
29	04/16/12	1356400	624500	1	12-P289	11.0	110.0	13.6	103.0	93.6	P	
30	04/16/12	1356400	624400	1	12-P289	11.0	110.0	13.2	105.2	95.6	P	
31	04/16/12	1356300	624400	1	12-P289	11.0	110.0	12.3	104.1	94.6	P	
32	04/16/12	1356300	624300	1	12-P289	11.0	110.0	13.3	102.6	93.3	P	
33	04/16/12	1356400	624300	1	12-P289	11.0	110.0	10.9	98.9	89.9	P	
34	04/19/12	1356450	624230	1	12-P289	11.0	110.0	12.1	97.9	89.0	P	
35	04/19/12	1356550	624230	1	12-P289	11.0	110.0	11.6	102.0	92.7	P	
36	04/19/12	1356625	624230	1	12-P289	11.0	110.0	10.9	97.4	88.5	P	
37	04/19/12	1356450	624230	2	12-P289	11.0	110.0	13.7	100.4	91.3	P	
38	04/19/12	1356550	624230	2	12-P289	11.0	110.0	13.2	98.8	89.8	P	
39	04/19/12	1356625	624230	2	12-P289	11.0	110.0	12.5	101.9	92.6	P	
40	04/19/12	1356450	624230	3	12-P289	11.0	110.0	12.9	100.4	91.3	P	
41	04/19/12	1356525	624230	3	12-P289	11.0	110.0	12.0	96.3	87.5	P	
42	04/19/12	1356600	624230	3	12-P289	11.0	110.0	11.5	98.0	89.1	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
43	04/19/12	1356475	624230	4	12-P289	11.0	110.0	11.0	100.4	91.3	P	
44	04/19/12	1356550	624230	4	12-P289	11.0	110.0	9.9	105.2	95.6	P	
45	04/19/12	1356625	624230	4	12-P289	11.0	110.0	13.7	98.7	89.7	P	
46	04/23/12	1356500	624275	1	12-P289	11.0	110.0	12.8	96.9	88.1	P	
47	04/23/12	1356500	624375	1	12-P289	11.0	110.0	14.1	98.5	89.5	P	
48	04/23/12	1356500	624475	1	12-P289	11.0	110.0	11.7	99.9	90.8	P	
49	04/23/12	1356600	624475	1	12-P289	11.0	110.0	13.7	97.2	88.4	P	
50	04/23/12	1356600	624375	1	12-P289	11.0	110.0	13.9	100.9	91.7	P	
51	04/23/12	1356600	624275	1	12-P289	11.0	110.0	12.7	102.6	93.3	P	
52	04/23/12	1356700	624275	1	12-P289	11.0	110.0	14.8	97.4	88.5	P	
53	04/23/12	1356700	624375	1	12-P289	11.0	110.0	13.9	97.1	88.3	P	
54	04/23/12	1356700	624475	1	12-P289	11.0	110.0	11.7	98.9	89.9	P	
55	04/24/12	1356199	624167	1	12-P289	11.0	110.0	12.5	95.6	86.9	P	
56	04/24/12	1356300	624197	1	12-P289	11.0	110.0	14.6	95.8	87.1	P	
57	04/24/12	1356347	624126	1	12-P289	11.0	110.0	13.7	98.9	89.9	P	
58	04/24/12	1356400	624197	1	12-P289	11.0	110.0	13.8	100.4	91.3	P	
59	04/24/12	1356523	624139	1	12-P289	11.0	110.0	11.9	99.1	90.1	P	
60	04/24/12	1356600	624194	1	12-P289	11.0	110.0	12.7	98.2	89.3	P	
61	04/24/12	1356701	624150	1	12-P289	11.0	110.0	14.9	95.6	86.9	P	
62	04/24/12	1356800	624194	1	12-P289	11.0	110.0	14.5	96.3	87.5	P	
63	04/28/12	1356847	624150	1	12-P289	11.0	110.0	14.6	96.5	87.7	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
64	04/28/12	1356922	624211	1	12-P289	11.0	110.0	13.9	95.8	87.1	P	
65	04/28/12	1356977	624132	1	12-P289	11.0	110.0	13.5	97.1	88.3	P	
66	04/28/12	1356801	624255	1	12-P289	11.0	110.0	13.3	97.8	88.9	P	
67	04/28/12	1356901	624256	1	12-P289	11.0	110.0	12.9	98.0	89.1	P	
68	04/28/12	1357001	624256	1	12-P289	11.0	110.0	13.1	98.2	89.3	P	
69	04/28/12	1356800	624233	2	12-P289	11.0	110.0	14.0	97.6	88.7	P	
70	04/28/12	1356909	624237	2	12-P289	11.0	110.0	13.9	98.9	89.9	P	
71	04/28/12	1356736	624240	3	12-P289	11.0	110.0	14.0	99.1	90.1	P	
72	04/28/12	1356849	624246	3	12-P289	11.0	110.0	13.0	99.0	90.0	P	
73	04/28/12	1356959	624248	3	12-P289	11.0	110.0	12.9	98.9	89.9	P	
74	04/28/12	1356800	624243	4	12-P289	11.0	110.0	12.7	97.4	88.5	P	
75	04/28/12	1356904	624245	4	12-P289	11.0	110.0	13.0	97.6	88.7	P	
76	04/28/12	1357000	624248	4	12-P289	11.0	110.0	13.7	96.8	88.0	P	
77	04/28/12	1356743	624244	5	12-P289	11.0	110.0	13.3	98.2	89.3	P	
78	04/28/12	1356876	624245	5	12-P289	11.0	110.0	14.1	96.9	88.1	P	
79	04/28/12	1356965	624243	5	12-P289	11.0	110.0	12.9	100.7	91.5	P	
80	04/28/12	1356792	624245	6	12-P289	11.0	110.0	12.9	96.5	87.7	P	
81	04/28/12	1356928	624244	6	12-P289	11.0	110.0	13.1	98.9	89.9	P	
82	04/28/12	1357018	624241	6	12-P289	11.0	110.0	13.9	96.0	87.3	P	
83	05/05/12	1357100	624166	1	12-P289	11.0	110.0	11.7	100.9	91.7	P	
84	05/05/12	1357200	624196	1	12-P289	11.0	110.0	12.1	101.5	92.3	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
85	05/05/12	1357300	624135	1	12-P289	11.0	110.0	14.5	98.9	89.9	P	
86	05/05/12	1357101	624255	1	12-P289	11.0	110.0	13.5	98.7	89.7	P	
87	05/05/12	1357222	624255	1	12-P289	11.0	110.0	13.0	99.0	90.0	P	
88	05/05/12	1357337	624254	1	12-P289	11.0	110.0	14.1	96.7	87.9	P	
89	05/05/12	1357367	624323	1	12-P289	11.0	110.0	13.9	96.9	88.1	P	
90	05/05/12	1357346	624400	1	12-P289	11.0	110.0	12.7	97.1	88.3	P	
91	05/05/12	1356800	624324	1	12-P289	11.0	110.0	12.5	98.7	89.7	P	
92	05/05/12	1356800	624406	1	12-P289	11.0	110.0	12.9	98.5	89.5	P	
93	05/05/12	1356900	624400	1	12-P289	11.0	110.0	14.1	96.3	87.5	P	
94	05/05/12	1356900	624324	1	12-P289	11.0	110.0	13.5	97.5	88.6	P	
95	05/05/12	1357000	624321	1	12-P289	11.0	110.0	13.0	100.1	91.0	P	
96	05/05/12	1357000	624400	1	12-P289	11.0	110.0	10.7	102.4	93.1	P	
97	05/05/12	1357091	624400	1	12-P289	11.0	110.0	11.3	99.3	90.3	P	
98	05/05/12	1357092	624318	1	12-P289	11.0	110.0	12.7	98.7	89.7	P	
99	05/05/12	1357212	624300	1	12-P289	11.0	110.0	13.3	97.4	88.5	P	
100	05/05/12	1357162	624448	1	12-P289	11.0	110.0	12.5	98.7	89.7	P	
101	05/05/12	1357346	624400	1	12-P289	11.0	110.0	12.7	98.0	89.1	P	
102	05/05/12	1357212	624382	1	12-P289	11.0	110.0	11.5	99.3	90.3	P	
103	05/05/12	1357293	624331	1	12-P289	11.0	110.0	11.0	99.4	90.4	P	
104	05/05/12	1356787	624368	2	12-P289	11.0	110.0	11.1	99.6	90.5	P	
105	05/05/12	1356891	624366	2	12-P289	11.0	110.0	10.8	99.8	90.7	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
106	05/05/12	1357000	624365	2	12-P289	11.0	110.0	13.5	98.5	89.5	P	
107	05/05/12	1357092	624364	2	12-P289	11.0	110.0	13.7	97.6	88.7	P	
108	05/05/12	1357191	624362	2	12-P289	11.0	110.0	14.0	97.4	88.5	P	
109	05/05/12	1357225	624433	2	12-P289	11.0	110.0	13.9	97.8	88.9	P	
110	05/05/12	1356791	624500	2	12-P289	11.0	110.0	12.0	99.0	90.0	P	
111	05/05/12	1356897	624500	2	12-P289	11.0	110.0	11.7	99.0	90.0	P	
112	05/05/12	1357000	624500	2	12-P289	11.0	110.0	11.3	100.1	91.0	P	
113	05/05/12	1357057	624533	2	12-P289	11.0	110.0	14.1	98.7	89.7	P	
114	05/05/12	1357071	624225	2	12-P289	11.0	110.0	12.5	101.3	92.1	P	
115	05/05/12	1357166	624230	2	12-P289	11.0	110.0	12.7	101.1	91.9	P	
116	05/05/12	1357248	624230	2	12-P289	11.0	110.0	12.3	99.3	90.3	P	
117	05/05/12	1357359	624267	2	12-P289	11.0	110.0	11.9	100.9	91.7	P	
118	05/05/12	1357368	624349	2	12-P289	11.0	110.0	15.1	96.4	87.6	P	
119	05/05/12	1357059	624231	3	12-P289	11.0	110.0	16.0	96.9	88.1	P	
120	05/05/12	1357196	624222	3	12-P289	11.0	110.0	13.3	100.4	91.3	P	
121	05/05/12	1357291	624223	3	12-P289	11.0	110.0	16.7	95.4	86.7	P	
122	05/05/12	1357378	624267	3	12-P289	11.0	110.0	14.8	96.7	87.9	P	
123	05/05/12	1357365	624380	3	12-P289	11.0	110.0	15.0	96.6	87.8	P	
124	05/05/12	1356768	624344	3	12-P289	11.0	110.0	13.9	95.7	87.0	P	
125	05/05/12	1356859	624344	3	12-P289	11.0	110.0	13.9	96.7	87.9	P	
126	05/05/12	1356965	624344	3	12-P289	11.0	110.0	13.1	96.9	88.1	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
127	05/05/12	1357049	624344	3	12-P289	11.0	110.0	14.3	96.9	88.1	P	
128	05/05/12	1357145	624344	3	12-P289	11.0	110.0	13.3	98.2	89.3	P	
129	05/05/12	1357233	624389	3	12-P289	11.0	110.0	12.9	98.0	89.1	P	
130	05/10/12	1357400	624197	1	12-P289	11.0	110.0	10.7	99.1	90.1	P	
131	05/10/12	1357433	624251	1	12-P289	11.0	110.0	12.9	98.9	89.9	P	
132	05/10/12	1357437	624350	1	12-P289	11.0	110.0	13.5	96.4	87.6	P	
133	05/10/12	1357294	624422	1	12-P289	11.0	110.0	13.0	98.2	89.3	P	
134	05/10/12	1357280	624500	1	12-P289	11.0	110.0	12.3	96.3	87.5	P	
135	05/10/12	1357067	624578	1	12-P289	11.0	110.0	12.1	98.0	89.1	P	
136	05/10/12	1357228	624600	1	12-P289	11.0	110.0	13.1	97.8	88.9	P	
137	05/10/12	1357238	624644	1	12-P289	11.0	110.0	11.7	99.3	90.3	P	
138	05/10/12	1357169	624647	1	12-P289	11.0	110.0	11.9	99.8	90.7	P	
139	05/10/12	1357111	624705	1	12-P289	11.0	110.0	12.9	95.6	86.9	P	
140	05/10/12	1357222	624733	1	12-P289	11.0	110.0	13.9	95.8	87.1	P	
141	05/11/12	1357344	624494	2	12-P289	11.0	110.0	14.3	94.9	86.3	P	
142	05/11/12	1357230	624449	2	12-P289	11.0	110.0	11.0	99.1	90.1	P	
143	05/11/12	1357294	624600	2	12-P289	11.0	110.0	11.3	99.3	90.3	P	
144	05/11/12	1357191	624621	2	12-P289	11.0	110.0	12.0	98.5	89.5	P	
145	05/11/12	1357228	624413	3	12-P289	11.0	110.0	11.9	98.7	89.7	P	
146	05/11/12	1357338	624438	3	12-P289	11.0	110.0	12.7	98.7	89.7	P	
147	05/11/12	1357207	624511	3	12-P289	11.0	110.0	11.7	99.3	90.3	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
148	05/11/12	1357317	624533	3	12-P289	11.0	110.0	11.3	99.8	90.7	P	
149	05/11/12	1357159	624615	3	12-P289	11.0	110.0	12.3	98.2	89.3	P	
150	05/11/12	1357264	624645	3	12-P289	11.0	110.0	13.3	96.3	87.5	P	
151	05/12/12	1357029	624257	4	12-P289	11.0	110.0	13.9	96.7	87.9	P	
152	05/12/12	1357100	624266	4	12-P289	11.0	110.0	12.1	98.9	89.9	P	
153	05/12/12	1357203	624258	4	12-P289	11.0	110.0	11.7	100.7	91.5	P	
154	05/12/12	1357314	624266	4	12-P289	11.0	110.0	11.3	100.9	91.7	P	
155	05/12/12	1357331	624324	4	12-P289	11.0	110.0	12.5	100.0	90.9	P	
156	05/12/12	1357370	624415	4	12-P289	11.0	110.0	11.6	100.9	91.7	P	
157	05/12/12	1357352	624522	4	12-P289	11.0	110.0	9.6	102.3	93.0	P	
158	05/12/12	1357304	624611	4	12-P289	11.0	110.0	10.1	102.3	93.0	P	
159	05/12/12	1357100	624239	5	12-P289	11.0	110.0	11.0	99.6	90.5	P	
160	05/12/12	1357219	624246	5	12-P289	11.0	110.0	12.5	96.4	87.6	P	
161	05/12/12	1357341	624234	5	12-P289	11.0	110.0	12.7	96.9	88.1	P	
162	05/12/12	1357339	624345	5	12-P289	11.0	110.0	12.3	97.1	88.3	P	
163	05/12/12	1357336	624461	5	12-P289	11.0	110.0	13.5	97.4	88.5	P	
164	05/12/12	1357315	624527	5	12-P289	11.0	110.0	12.5	98.7	89.7	P	
165	05/12/12	1357273	624626	5	12-P289	11.0	110.0	11.7	98.9	89.9	P	
166	05/12/12	1357228	624716	5	12-P289	11.0	110.0	10.1	99.3	90.3	P	
167	05/11/12	1357059	624261	6	12-P289	11.0	110.0	12.7	98.9	89.9	P	
168	05/11/12	1357304	624611	6	12-P289	11.0	110.0	11.1	101.2	92.0	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
169	05/11/12	1357294	624250	6	12-P289	11.0	110.0	11.3	101.2	92.0	P	
170	05/11/12	1357348	624307	6	12-P289	11.0	110.0	9.7	99.8	90.7	P	
171	05/11/12	1357347	624419	6	12-P289	11.0	110.0	10.3	100.8	91.6	P	
172	05/11/12	1357343	624517	6	12-P289	11.0	110.0	12.9	98.9	89.9	P	
173	05/11/12	1357308	624605	6	12-P289	11.0	110.0	13.1	98.2	89.3	P	
174	05/11/12	1357255	624728	6	12-P289	11.0	110.0	10.9	100.1	91.0	P	
175	05/11/12	1357064	624214	7	12-P289	11.0	110.0	9.7	101.2	92.0	P	
176	05/11/12	1357190	624217	7	12-P289	11.0	110.0	9.7	103.1	93.7	P	
177	05/11/12	1357327	624226	7	12-P289	11.0	110.0	13.1	95.2	86.5	P	
178	05/11/12	1357385	624324	7	12-P289	11.0	110.0	14.0	96.0	87.3	P	
179	05/11/12	1357370	624443	7	12-P289	11.0	110.0	13.3	97.8	88.9	P	
180	05/11/12	1357364	624521	7	12-P289	11.0	110.0	12.9	96.0	87.3	P	
181	05/11/12	1357322	624621	7	12-P289	11.0	110.0	13.1	96.3	87.5	P	
182	05/11/12	1357120	624213	8	12-P289	11.0	110.0	12.6	96.0	87.3	P	
183	05/11/12	1357258	624224	8	12-P289	11.0	110.0	14.5	97.6	88.7	P	
184	05/11/12	1357379	624254	8	12-P289	11.0	110.0	13.9	97.8	88.9	P	
185	05/11/12	1357377	624370	8	12-P289	11.0	110.0	9.0	102.6	93.3	P	
186	05/11/12	1357361	624477	8	12-P289	11.0	110.0	10.7	99.1	90.1	P	
187	05/11/12	1357324	624567	8	12-P289	11.0	110.0	10.3	100.9	91.7	P	
188	05/15/12	1357270	624634	2	12-P289	11.0	110.0	8.3	101.2	92.0	P	
189	05/15/12	1357235	624703	2	12-P289	11.0	110.0	8.7	99.8	90.7	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
190	05/15/12	1357131	624680	2	12-P289	11.0	110.0	8.9	100.7	91.5	P	
191	05/15/12	1357197	624799	1	12-P289	11.0	110.0	9.3	99.1	90.1	P	
192	05/15/12	1357207	624774	2	12-P289	11.0	110.0	10.5	98.9	89.9	P	
193	05/15/12	1357109	624724	3	12-P289	11.0	110.0	10.9	100.0	90.9	P	
194	05/15/12	1357240	624731	3	12-P289	11.0	110.0	9.9	100.4	91.3	P	
195	05/15/12	1357189	624794	3	12-P289	11.0	110.0	9.3	100.7	91.5	P	
196	05/15/12	1357053	624664	1	12-P289	11.0	110.0	12.7	97.8	88.9	P	
197	05/15/12	1357184	624677	1	12-P289	11.0	110.0	12.5	98.0	89.1	P	
198	05/19/12	1356962	624715	1	12-P289	11.0	110.0	8.9	101.2	92.0	P	
199	05/19/12	1357054	624749	1	12-P289	11.0	110.0	9.3	100.9	91.7	P	
200	05/19/12	1357099	624875	1	12-P289	11.0	110.0	9.7	100.4	91.3	P	
201	05/19/12	1357405	624443	1	12-P289	11.0	110.0	12.3	97.8	88.9	P	
202	05/19/12	1357419	624512	1	12-P289	11.0	110.0	14.7	96.5	87.7	P	
203	05/19/12	1357344	624600	1	12-P289	11.0	110.0	12.7	98.2	89.3	P	
204	05/19/12	1357288	624751	1	12-P289	11.0	110.0	12.5	97.4	88.5	P	
205	05/20/12	1357031	624767	2	12-P289	11.0	110.0	13.0	98.0	89.1	P	
206	05/20/12	1357144	624900	2	12-P289	11.0	110.0	10.5	99.6	90.5	P	
207	05/20/12	1357026	624942	2	12-P289	11.0	110.0	10.3	99.6	90.5	P	
208	05/20/12	1357086	624785	3	12-P289	11.0	110.0	9.8	100.4	91.3	P	
209	05/20/12	1356993	624814	3	12-P289	11.0	110.0	9.5	100.9	91.7	P	
210	05/20/12	1357165	624866	3	12-P289	11.0	110.0	10.0	100.0	90.9	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
211	05/20/12	1357086	624887	3	12-P289	11.0	110.0	9.1	100.9	91.7	P	
212	05/20/12	1357248	624771	4	12-P289	11.0	110.0	8.9	101.0	91.8	P	
213	05/20/12	1357170	624908	4	12-P289	11.0	110.0	13.3	96.0	87.3	P	
214	05/20/12	1357044	624943	4	12-P289	11.0	110.0	12.7	98.9	89.9	P	
215	05/20/12	1357225	624831	5	12-P289	11.0	110.0	12.5	98.9	89.9	P	
216	05/20/12	1357075	624889	5	12-P289	11.0	110.0	11.9	97.4	88.5	P	
217	05/20/12	1357170	624836	6	12-P289	11.0	110.0	14.1	97.5	88.6	P	
218	05/20/12	1357096	624927	6	12-P289	11.0	110.0	13.1	98.0	89.1	P	
219	05/20/12	1357237	624786	7	12-P289	11.0	110.0	12.1	98.0	89.1	P	
220	05/20/12	1357158	624904	7	12-P289	11.0	110.0	12.7	97.1	88.3	P	
221	05/20/12	1357008	624942	7	12-P289	11.0	110.0	9.3	100.9	91.7	P	
222	05/20/12	1357302	624684	8	12-P289	11.0	110.0	8.7	101.3	92.1	P	
223	05/20/12	1357231	624820	8	12-P289	11.0	110.0	10.0	99.8	90.7	P	
224	05/20/12	1357103	624931	8	12-P289	11.0	110.0	9.9	98.9	89.9	P	
225	05/21/12	1357231	624900	1	12-P289	11.0	110.0	8.9	98.9	89.9	P	
226	05/21/12	1357100	624982	1	12-P289	11.0	110.0	9.3	100.4	91.3	P	
227	05/21/12	1357269	624720	9	12-P289	11.0	110.0	9.7	99.6	90.5	P	
228	05/21/12	1357198	624891	9	12-P289	11.0	110.0	9.3	99.7	90.6	P	
229	05/21/12	1357067	624931	9	12-P289	11.0	110.0	11.7	97.8	88.9	P	
230	05/21/12	1357211	624847	10	12-P289	11.0	110.0	11.9	98.0	89.1	P	
231	05/21/12	1357087	624933	10	12-P289	11.0	110.0	10.3	99.3	90.3	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
232	05/29/12	1356866	624801	1	12-P289	11.0	110.0	9.5	99.3	90.3	P	
233	05/29/12	1356799	624797	1	12-P289	11.0	110.0	9.7	98.7	89.7	P	
234	05/29/12	1356971	624852	1	12-P289	11.0	110.0	10.8	97.4	88.5	P	
235	05/29/12	1356865	624861	1	12-P289	11.0	110.0	11.1	97.6	88.7	P	
236	05/29/12	1356795	624997	1	12-P289	11.0	110.0	10.7	98.7	89.7	P	
237	05/29/12	1356900	624836	2	12-P289	11.0	110.0	12.3	98.9	89.9	P	
238	05/29/12	1356877	625000	2	12-P289	11.0	110.0	10.1	99.3	90.3	P	
239	05/29/12	1356772	625011	2	12-P289	11.0	110.0	9.7	99.9	90.8	P	
240	05/29/12	1356891	624851	3	12-P289	11.0	110.0	13.0	96.7	87.9	P	
241	05/29/12	1356920	624943	3	12-P289	11.0	110.0	12.5	97.4	88.5	P	
242	05/29/12	1356814	624970	3	12-P289	11.0	110.0	12.0	97.9	89.0	P	
243	05/29/12	1356903	624985	4	12-P289	11.0	110.0	12.7	97.1	88.3	P	
244	05/29/12	1356800	625018	4	12-P289	11.0	110.0	14.5	96.7	87.9	P	
245	05/31/12	1356952	625043	1	12-P289	11.0	110.0	12.3	98.5	89.5	P	
246	05/31/12	1356733	625088	1	12-P289	11.0	110.0	10.1	99.3	90.3	P	
247	05/31/12	1356989	624916	5	12-P289	11.0	110.0	10.7	99.6	90.5	P	
248	05/31/12	1356860	624956	5	12-P289	11.0	110.0	11.9	97.8	88.9	P	
249	05/31/12	1356991	624957	6	12-P289	11.0	110.0	11.3	98.2	89.3	P	
250	05/31/12	1356863	625008	6	12-P289	11.0	110.0	12.7	97.6	88.7	P	
251	05/31/12	1356886	624987	7	12-P289	11.0	110.0	11.3	98.5	89.5	P	
252	05/31/12	1356778	625033	7	12-P289	11.0	110.0	9.0	100.9	91.7	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
253	05/31/12	1356924	624981	8	12-P289	11.0	110.0	8.9	100.2	91.1	P	
254	05/31/12	1356806	625024	8	12-P289	11.0	110.0	11.3	98.9	89.9	P	
255	06/05/12	1356701	624900	1	12-P289	11.0	110.0	10.7	99.8	90.7	P	
256	06/05/12	1356600	624843	1	12-P289	11.0	110.0	9.9	99.6	90.5	P	
257	06/05/12	1356731	624887	1	12-P289	11.0	110.0	8.3	101.2	92.0	P	
258	06/05/12	1356642	624970	1	12-P289	11.0	110.0	8.9	100.9	91.7	P	
259	06/05/12	1356645	625032	1	12-P289	11.0	110.0	10.7	98.9	89.9	P	
260	06/05/12	1356701	624900	2	12-P289	11.0	110.0	10.5	99.6	90.5	P	
261	06/05/12	1356633	624948	2	12-P289	11.0	110.0	9.3	99.8	90.7	P	
262	06/05/12	1356688	625012	2	12-P289	11.0	110.0	11.1	98.5	89.5	P	
263	06/05/12	1356731	624887	3	12-P289	11.0	110.0	12.5	98.9	89.9	P	
264	06/05/12	1356604	624943	3	12-P289	11.0	110.0	11.5	98.2	89.3	P	
265	06/05/12	1356704	625012	3	12-P289	11.0	110.0	10.3	100.4	91.3	P	
266	06/05/12	1356673	625076	4	12-P289	11.0	110.0	10.1	100.4	91.3	P	
267	06/05/12	1356749	625010	5	12-P289	11.0	110.0	11.3	99.9	90.8	P	
268	06/05/12	1356662	625027	5	12-P289	11.0	110.0	11.5	99.6	90.5	P	
269	06/05/12	1356718	625053	6	12-P289	11.0	110.0	13.0	97.8	88.9	P	
270	06/05/12	1356964	624966	9	12-P289	11.0	110.0	8.7	100.9	91.7	P	
271	06/05/12	1356847	625008	9	12-P289	11.0	110.0	8.1	101.2	92.0	P	
272	06/05/12	1356731	625046	9	12-P289	11.0	110.0	10.0	100.0	90.9	P	
273	06/05/12	1356917	624980	10	12-P289	11.0	110.0	9.9	100.7	91.5	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
274	06/05/12	1356769	625034	10	12-P289	11.0	110.0	10.5	100.8	91.6	P	
275	06/11/12	1356500	624926	1	12-P289	11.0	110.0	11.5	98.5	89.5	P	
276	06/11/12	1356459	624864	1	12-P289	11.0	110.0	10.3	99.0	90.0	P	
277	06/11/12	1356531	625017	1	12-P289	11.0	110.0	12.7	96.5	87.7	P	
278	06/11/12	1356565	625075	1	12-P289	11.0	110.0	12.1	97.8	88.9	P	
279	06/11/12	1356610	625129	1	12-P289	11.0	110.0	11.7	98.0	89.1	P	
280	06/11/12	1356600	625056	2	12-P289	11.0	110.0	9.9	100.4	91.3	P	
281	06/11/12	1356506	625086	2	12-P289	11.0	110.0	10.0	99.1	90.1	P	
282	06/11/12	1356499	624983	2	12-P289	11.0	110.0	11.7	98.5	89.5	P	
283	06/12/12	1356501	624962	3	12-P289	11.0	110.0	11.3	98.2	89.3	P	
284	06/12/12	1356582	625057	3	12-P289	11.0	110.0	13.1	97.6	88.7	P	
285	06/12/12	1356526	625084	4	12-P289	11.0	110.0	13.7	97.5	88.6	P	
286	06/12/12	1356586	625081	5	12-P289	11.0	110.0	13.1	96.9	88.1	P	
287	06/12/12	1356601	625094	6	12-P289	11.0	110.0	10.5	98.9	89.9	P	
288	06/12/12	1356654	625080	7	12-P289	11.0	110.0	10.3	99.8	90.7	P	
289	06/12/12	1356538	625108	7	12-P289	11.0	110.0	8.9	100.4	91.3	P	
290	06/12/12	1356694	625063	8	12-P289	11.0	110.0	10.1	99.8	90.7	P	
291	06/12/12	1356575	625112	8	12-P289	11.0	110.0	10.5	99.0	90.0	P	
292	06/16/12	1356593	625096	9	12-P289	11.0	110.0	11.9	109.0	99.1	P	
293	06/16/12	1356636	625085	10	12-P289	11.0	110.0	12.9	104.8	95.3	P	
294	06/18/12	1356363	624852	1	12-P289	11.0	110.0	13.8	102.2	92.9	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
295	06/18/12	1356244	624848	1	12-P289	11.0	110.0	8.1	104.5	95.0	P	
296	06/18/12	1356390	624923	1	12-P289	11.0	110.0	9.9	103.7	94.3	P	
297	06/18/12	1356400	625020	1	12-P289	11.0	110.0	12.7	105.4	95.8	P	
298	06/18/12	1356377	625092	1	12-P289	11.0	110.0	9.0	105.6	96.0	P	
299	06/18/12	1356420	625160	1	12-P289	11.0	110.0	13.1	104.6	95.1	P	
300	06/18/12	1356263	625145	1	12-P289	11.0	110.0	13.3	104.2	94.7	P	
301	06/18/12	1356264	625087	1	12-P289	11.0	110.0	10.9	104.4	94.9	P	
302	06/18/12	1356390	624986	2	12-P289	11.0	110.0	8.5	104.6	95.1	P	
303	06/18/12	1356369	625075	2	12-P289	11.0	110.0	13.1	104.6	95.1	P	
304	06/18/12	1356251	625122	2	12-P289	11.0	110.0	14.0	102.5	93.2	P	
305	06/18/12	1356376	624993	3	12-P289	11.0	110.0	12.9	102.3	93.0	P	
306	06/18/12	1356476	625100	3	12-P289	11.0	110.0	13.3	102.0	92.7	P	
307	06/18/12	1356388	625130	3	12-P289	11.0	110.0	10.5	104.4	94.9	P	
308	06/18/12	1356415	625130	4	12-P289	11.0	110.0	10.9	104.2	94.7	P	
309	06/18/12	1356445	625122	5	12-P289	11.0	110.0	9.3	104.8	95.3	P	
310	06/18/12	1356408	625109	6	12-P289	11.0	110.0	9.7	104.6	95.1	P	
311	06/18/12	1356415	625116	7	12-P289	11.0	110.0	13.1	103.1	93.7	P	
312	06/18/12	1356431	625129	8	12-P289	11.0	110.0	10.8	104.0	94.5	P	
313	06/22/12	1356256	624949	1	12-P289	11.0	110.0	12.7	100.9	91.7	P	
314	06/22/12	1356260	625040	1	12-P289	11.0	110.0	11.3	102.6	93.3	P	
315	06/22/12	1356257	624988	2	12-P289	11.0	110.0	9.1	103.1	93.7	P	

Field Compaction Summary - Protective Cover

Weaver Boos Consultants

Project Name: JED Landfill Partial Closure Phase 1

Compaction Equipment: D-6 Dozer

Project Number: 3804-352-17-00

Density Testing Equipment: Troxler 3440

Project Specification: 85 % Compaction (Standard/Modified) N/A Moisture Window

Test No.	Date	Location North	Location East	Lift No. or Elev.	Material ID	Opt. Moisture Content (%)	Lab. Max Dry Density (PCF)	In-place Moisture Content (%)	In-place Dry Density (PCF)	Percent Compaction (%)	P/F	Comments
316	06/22/12	1356215	624979	3	12-P289	11.0	110.0	14.6	98.9	89.9	P	
317	06/22/12	1356216	625117	3	12-P289	11.0	110.0	13.9	99.8	90.7	P	
318	06/22/12	1356275	625124	4	12-P289	11.0	110.0	12.3	100.4	91.3	P	
319	06/22/12	1356313	625119	5	12-P289	11.0	110.0	10.3	100.9	91.7	P	
320	06/22/12	1356243	625101	6	12-P289	11.0	110.0	13.5	99.7	90.6	P	

Protective Cover Soil Sand Cone Testing Summary

J.E.D. Solid Waste Management Facility
2012 partial closure of Phase 1
Sand Cone Field Density Tests - Protective Cover

Test Number	SC-1	SC-2	SC-3	SC-4	SC-5
Nuclear Density Test Number	13	44	65	93	111
Date	4/12/2012	4/19/2012	4/28/2012	5/5/2012	05/05/12
Lift	1	1	1	1	1
HOLE VOLUME					
a. Sand Density	93.57	93.57	93.57	93.57	93.57
b. Wt. of Sand & Jar (Before)	14.21	13.94	13.65	13.65	14.13
c. Wt. of Sand & Jar (After)	2.71	2.91	2.24	1.77	2.35
d. Wt. of Sand in Hole and Cone (b-c)	11.50	11.03	11.41	11.88	11.78
e. Wt. of Sand in Cone	3.83	3.83	3.83	3.83	3.83
f. Wt. of Sand in Hole (d-e)	7.67	7.20	7.58	8.05	7.95
g. Volume of Hole (f/a)	0.082	0.077	0.081	0.086	0.085
MOISTURE CONTENT					
h. Pan Number	1	1	1	1	1
i. Wt. of Wet Soil + Pan	263.48	387.88	306.68	266.57	256.92
j. Wt. of Dry Soil + Pan	229.98	349.18	272.18	232.07	231.72
k. Wt. of Pan	0.53	0.53	0.53	0.53	0.53
l. Wt. of Water (i-j)	33.50	38.70	34.50	34.50	25.20
m. Wt. of Dry Soil (j-k)	229.45	348.65	271.65	231.54	231.19
n. Moisture Content (100 x l/m)	14.6	11.1	12.7	14.9	10.9
DENSITY DATA					
o. Wt. of Wet Soil + Container	7.97	7.82	7.66	8.24	8.13
p. Wt. of Container	0.53	0.53	0.53	0.53	0.53
q. Wt. of Wet Soil (o-p)	7.44	7.29	7.13	7.71	7.60
r. Wet Density (q/g)	90.8	94.6	88.0	89.7	89.4
s. Dry Density r/(1+ n/100)	79.2	85.2	78.1	78.1	80.6
t. Percent Compaction	90.0	95.6	87.6	87.6	90.5

J.E.D. Solid Waste Management Facility
2012 partial closure of Phase 1
Sand Cone Field Density Tests - Protective Cover

Test Number	SC-6	SC-7	SC-8	SC-9	SC-10
Nuclear Density Test Number	135	157	188	204	230
Date	05/10/12	05/12/12	05/15/12	05/19/12	05/21/12
Lift	1	1	1	1	1
HOLE VOLUME					
a. Sand Density	93.57	93.57	93.57	93.57	93.57
b. Wt. of Sand & Jar (Before)	13.82	13.56	14.50	14.50	14.50
c. Wt. of Sand & Jar (After)	2.60	2.43	2.72	2.81	4.21
d. Wt. of Sand in Hole and Cone (b-c)	11.22	11.13	11.78	11.69	10.29
e. Wt. of Sand in Cone	3.83	3.83	3.83	3.83	3.83
f. Wt. of Sand in Hole (d-e)	7.39	7.30	7.95	7.86	6.46
g. Volume of Hole (f/a)	0.079	0.078	0.085	0.084	0.069
MOISTURE CONTENT					
h. Pan Number	1	1	1	1	1
i. Wt. of Wet Soil + Pan	298.47	384.75	359.12	260.40	302.03
j. Wt. of Dry Soil + Pan	262.57	354.65	330.42	230.30	268.53
k. Wt. of Pan	0.53	0.53	0.53	0.53	0.53
l. Wt. of Water (i-j)	35.90	30.10	28.70	30.10	33.50
m. Wt. of Dry Soil (j-k)	262.04	354.12	329.89	229.77	268.00
n. Moisture Content (100 x l/m)	13.7	8.5	8.7	13.1	12.5
DENSITY DATA					
o. Wt. of Wet Soil + Container	8.27	7.12	7.69	7.93	6.66
p. Wt. of Container	0.53	0.53	0.53	0.53	0.53
q. Wt. of Wet Soil (o-p)	7.74	6.59	7.16	7.40	6.13
r. Wet Density (q/g)	98.0	84.5	84.3	88.1	88.8
s. Dry Density r/(1+ n/100)	86.2	77.9	77.5	77.9	78.9
t. Percent Compaction	96.7	88.5	88.1	88.5	89.7

J.E.D. Solid Waste Management Facility
2012 partial closure of Phase 1
Sand Cone Field Density Tests - Protective Cover

Test Number	SC-11	SC-12	SC-13
Nuclear Density Test Number	258	280	317
Date	06/05/12	06/11/12	06/22/12
Lift	1	1	1
HOLE VOLUME			
a. Sand Density	93.57	93.57	93.57
b. Wt. of Sand & Jar (Before)	14.50	14.50	14.50
c. Wt. of Sand & Jar (After)	3.65	2.34	2.90
d. Wt. of Sand in Hole and Cone (b-c)	10.85	12.16	11.60
e. Wt. of Sand in Cone	3.83	3.83	3.83
f. Wt. of Sand in Hole (d-e)	7.02	8.33	7.77
g. Volume of Hole (f/a)	0.075	0.089	0.083
MOISTURE CONTENT			
h. Pan Number	1	1	1
i. Wt. of Wet Soil + Pan	372.19	326.47	287.96
j. Wt. of Dry Soil + Pan	341.19	296.57	251.56
k. Wt. of Pan	0.53	0.53	0.53
l. Wt. of Water (i-j)	31.00	29.90	36.40
m. Wt. of Dry Soil (j-k)	340.66	296.04	251.03
n. Moisture Content (100 x l/m)	9.1	10.1	14.5
DENSITY DATA			
o. Wt. of Wet Soil + Container	7.18	8.50	8.18
p. Wt. of Container	0.53	0.53	0.53
q. Wt. of Wet Soil (o-p)	6.65	7.97	7.65
r. Wet Density (q/g)	88.7	89.5	92.2
s. Dry Density r/(1+ n/100)	81.3	81.3	80.5
t. Percent Compaction	92.4	92.4	91.5

Appendix F

Geosynthetics Quality Control Quality Assurance Testing

Geomembrane

Geomembrane Roll Summary
Geomembrane Quality Control Test Data
Geomembrane Resin Certificates
Geomembrane QA Test Data

Double-Sided Geocomposite

Double-Sided Geocomposite Roll Summary
Double-Sided Geocomposite Quality Control Test Data
Geocomposite QA Test Data

Geomembrane

Geomembrane Roll Summary
Geomembrane Quality Control Test Data
Geomembrane Resin Certificates
Geomembrane QA Test Data

Geomembrane Roll Summary

J.E.D. Solid Waste Management Facility
Partial Closure of Phase I

GEOMEMBRANE ROLL SUMMARY

ROLL #	ROLL #
312220.09	404222 .12
312226.09	404323 .12
403758 .12	404324 .12
403759 .12	404325 .12
403760 .12	404326 .12
403761 .12	404327 .12
403762 .12	404328 .12
403763 .12	404329 .12
403764 .12	404330 .12
403765 .12	207633 .12
403766 .12	207634 .12
404101 .12	207635 .12
404102 .12	207636 .12
404103 .12	207637 .12
404104 .12	207638 .12
404105 .12	207639 .12
404106 .12	207640 .12
404107 .12	207641 .12
404108 .12	207742 .12
404109 .12	207743 .12
404110 .12	207744 .12
404111 .12	207745 .12
404212 .12	207746 .12
404213 .12	207747 .12
404214 .12	207748 .12
404215 .12	207749 .12
404216 .12	207750 .12
404217 .12	207751 .12
404218 .12	207752 .12
404219 .12	207753 .12
404220 .12	207754 .12
404221 .12	445559.11

Geomembrane Quality Control Test Data

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ROLL # **312220-09** Lot #: **CXF810180** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH	
	MIN:	1.05	mm	41	mil
	MAX:	1.22	mm	48	mil
	AVE:	1.13	mm	44	mil

Thickness.....	1.0	mm	40 mil
Length.....	192.1	m	630.2 feet
Width.....	7.00	m;	23.0 feet

Asperity GRI GM12: 31 mil
ODD # : TOP EVEN #: BOTTOM

OIT(Standard) ASTM D3895 minutes 165

					TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc			.937
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min			.35
Carbon Black Content ASTM D4218	Range	%			2.35
Carbon Black Dispersion ASTM D5596	Category				10 In Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	28	N/mm	158 ppi	3,559 psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%			493.8
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%			.06
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	175.9	N		39.543 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	367.9	N		82.717 lbs
Puncture Resistance ASTM D4833 (Modified)	Load	438.3	N		98.534 lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs			CERTIFIED

Customer: **Waste Services, Inc.**
PO: **2009 Partial CL Jed Solid Waste Facility**
Destination **St. Cloud, FL**

Date: 3-18-09

Signature: [signature]
Quality Control Department

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ROLL # **312226-09** Lot #: **CXF810180** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH	
	MIN:	0.99	mm	39	mil
	MAX:	1.14	mm	45	mil
Asperity GRI GM12: 33 mil	AVE:	1.05	mm	41	mil
ODD # : TOP EVEN #: BOTTOM					

Thickness.....	1.0	mm	40 mil
Length.....	192.1	m	630.2 feet
Width.....	7.00	m;	23.0 feet

OIT(Standard) ASTM D3895 minutes 165

					TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc			.937
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min			.35
Carbon Black Content ASTM D4218	Range	%			2.35
Carbon Black Dispersion ASTM D5596	Category				10 In Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26 N/mm	147 ppi	3,560	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%		496.0	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%		.06	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	182.1 N		40.936	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	365.2 N		82.095	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	409.9 N		92.163	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs		CERTIFIED	

Customer: **Waste Services, Inc.**
PO: **2009 Partial CL Jed Solid Waste Facility**
Destination **St. Cloud, FL**

Date: 3-18-09

Signature: [signature]
Quality Control Department

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ROLL # **403758-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.01	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.24	mm	49	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/37 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes 163		

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.936	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.32	
Carbon Black Content ASTM D4218	Range		%			2.26	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	149	ppi	3,501	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			527.2	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	179.4	N			40.342	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	399.8	N			89.888	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	410.2	N			92.212	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	38.071	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/22/2012**
Signature
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ROLL # **403759-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.01	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.16	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/37 mil TOP / BOTTOM	AVE:	1.09	mm	43	mil	OIT(Standard) ASTM D3895 minutes	163	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.936	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.32	
Carbon Black Content ASTM D4218	Range		%			2.26	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	150	ppi	3,501	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			527.2	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	179.4	N			40.342	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	399.8	N			89.888	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	410.2	N			92.212	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	38.071	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/22/2012**
Signature: St Palmer
Quality Control Department

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ROLL # **403760-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.98	mm	39	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.18	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/37 mil TOP / BOTTOM	AVE:	1.07	mm	42	mil	OIT(Standard) ASTM D3895 minutes 163		

								TEST RESULTS	
Specific Gravity ASTM D792	Density			g/cc				.936	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g			g/10 min				.32	
Carbon Black Content ASTM D4218	Range			%				2.28	
Carbon Black Dispersion ASTM D5596	Category							10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	29	N/mm		165	ppi		3,926	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break			%				541.7	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change			%				-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	161.8	N					36.385	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	400.8	N					90.119	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	422.2	N					94.930	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs						CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance					Label		38.071	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/22/2012**
Signature
Quality Control Department

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ROLL # **403761-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.98	mm	39	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.18	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/38 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	163	

				TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc		.936
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min		.32
Carbon Black Content ASTM D4218	Range	%		2.28
Carbon Black Dispersion ASTM D5596	Category			10 in Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	29 N/mm	167 ppi	3,926 psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%		541.7
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%		-.75
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	161.8 N		36.385 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	400.8 N		90.119 lbs
Puncture Resistance ASTM D4833 (Modified)	Load	422.2 N		94.930 lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs		CERTIFIED
Smooth Edge Testing ASTM D1004	Average Tear Resistance		Label	38.071 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/22/2012**
Signature.....
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ROLL # **403762-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.98	mm	39	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.21	mm	48	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 29/35 mil TOP / BOTTOM	AVE:	1.09	mm	43	mil	OIT(Standard) ASTM D3895 minutes	163	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.936	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.32	
Carbon Black Content ASTM D4218	Range		%			2.28	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	30	N/mm	168	ppi	3,926	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			541.7	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	161.8	N			36.385	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	400.8	N			90.119	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	422.2	N			94.930	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	38.071	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **403763-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.02	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.19	mm	47	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/36 mil TOP / BOTTOM	AVE:	1.10	mm	43	mil	OIT(Standard) ASTM D3895 minutes 163		

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.935	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.32	
Carbon Black Content ASTM D4218	Range		%			2.29	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	151	ppi	3,488	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			533.8	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	161.1	N			36.227	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	423.5	N			95.214	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	410.2	N			92.214	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	37.036	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/22/2012**
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ROLL # **403764-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.04	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.17	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/33 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	163	

						TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc				.935
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190ºC /2160 g	g/10 min				.32
Carbon Black Content ASTM D4218	Range	%				2.29
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	148	ppi	3,488 psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%				533.8
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%				-.75
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	161.1	N			36.227 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	423.5	N			95.214 lbs
Puncture Resistance ASTM D4833 (Modified)	Load	410.2	N			92.214 lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED
Smooth Edge Testing ASTM D1004	Average Tear Resistance			Label		37.036 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **403765-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH	
	MIN:	1.00	mm	39	mil
	MAX:	1.27	mm	50	mil
Asperity ASTM D7466: 28/35 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil

Thickness.....	1.0 mm	40 mil	
Length.....	216.411 m	710.0 feet	
Width.....	7.01 m;	23.0 feet	
OIT(Standard) ASTM D3895 minutes	163		

			TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc	.935
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min	.32
Carbon Black Content ASTM D4218	Range	%	2.29
Carbon Black Dispersion ASTM D5596	Category		10 In Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26 N/mm 148 ppi	3,488 psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%	533.8
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%	-.75
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	161.1 N	36.227 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	423.5 N	95.214 lbs
Puncture Resistance ASTM D4833 (Modified)	Load	410.2 N	92.214 lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs	CERTIFIED
Smooth Edge Testing ASTM D1004	Average Tear Resistance	Label	37.036 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/22/2012**
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ROLL # **403766-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.00	mm	39	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.18	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/33 mil TOP / BOTTOM	AVE:	1.09	mm	43	mil	OIT(Standard) ASTM D3895 minutes 163		

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.934	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.32	
Carbon Black Content ASTM D4218	Range		%			2.27	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	27	N/mm	155	ppi	3,618	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			543.6	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	175.7	N			39.512	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	407.2	N			91.541	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	408.9	N			91.936	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	38.733	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404101-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH	
	MIN:	1.02	mm	40	mil
	MAX:	1.16	mm	46	mil
Asperity ASTM D7466: 28/34 mil TOP / BOTTOM	AVE:	1.09	mm	43	mil

Thickness.....	1.0 mm	40 mil
Length.....	216.411 m	710.0 feet
Width.....	7.01 m;	23.0 feet

OIT(Standard) ASTM D3895 minutes 163

						TEST RESULTS	
Specific Gravity ASTM D792	Density	g/cc				.934	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min				.32	
Carbon Black Content ASTM D4218	Range	%				2.27	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	27	N/mm	155	ppi	3,618	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%				543.6	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%				-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	175.7	N			39.512	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	407.2	N			91.541	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	408.9	N			91.936	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	

Smooth Edge Testing ASTM D1004 Average Tear Resistance Label 38.733 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404102-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH					
	MIN:	0.99	mm	39	mil	Thickness.....	1.0	mm	40 mil
	MAX:	1.20	mm	47	mil	Length.....	216.411	m	710.0 feet
Asperity ASTM D7466: 27/36 mil TOP / BOTTOM	AVE:	1.06	mm	42	mil	Width.....	7.01	m;	23.0 feet

OIT(Standard) ASTM D3895 minutes **163**

						TEST RESULTS	
Specific Gravity ASTM D792	Density	g/cc				.934	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min				.32	
Carbon Black Content ASTM D4218	Range	%				2.27	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	151	ppi	3,618	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%				543.6	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%				-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	175.7	N			39.512	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	407.2	N			91.541	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	408.9	N			91.936	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance			Label		38.733	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404103-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.97	mm	38	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.28	mm	50	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/34 mil TOP / BOTTOM	AVE:	1.10	mm	43	mil	OIT(Standard) ASTM D3895 minutes 163		

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.934	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.32	
Carbon Black Content ASTM D4218	Range		%			2.24	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	146	ppi	3,373	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			525.4	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	167.9	N			37.753	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	375.9	N			84.515	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	433.5	N			97.464	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	39.737	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404104-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.02	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.19	mm	47	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/36 mil TOP / BOTTOM	AVE:	1.09	mm	43	mil	OIT(Standard) ASTM D3895 minutes	163	

				TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc		.934
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min		.32
Carbon Black Content ASTM D4218	Range	%		2.24
Carbon Black Dispersion ASTM D5596	Category			10 In Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25 N/mm	145 ppi	3,373 psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%		525.4
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%		-.75
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	167.9 N		37.753 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	375.9 N		84.515 lbs
Puncture Resistance ASTM D4833 (Modified)	Load	433.5 N		97.464 lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs		CERTIFIED
Smooth Edge Testing ASTM D1004	Average Tear Resistance		Label	39.737 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404105-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.98	mm	39	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.17	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/35 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes 163		

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.934	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.32	
Carbon Black Content ASTM D4218	Range		%			2.24	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm	143	ppi	3,373	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			525.4	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	167.9	N			37.753	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	375.9	N			84.515	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	433.5	N			97.464	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	39.737	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404106-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH	
	MIN:	1.03	mm	41	mil
	MAX:	1.18	mm	46	mil
Asperity ASTM D7466: 27/36 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil

Thickness.....	1.0 mm	40 mil
Length.....	216.411 m	710.0 feet
Width.....	7.01 m;	23.0 feet
OIT(Standard) ASTM D3895 minutes	163	

						TEST RESULTS	
Specific Gravity ASTM D792	Density	g/cc				.932	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min				.32	
Carbon Black Content ASTM D4218	Range	%				2.19	
Carbon Black Dispersion ASTM D5596	Category					10 in Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm	140	ppi	3,292	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%				511.4	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%				-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	144.2	N			32.428	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	372.5	N			83.753	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	431.8	N			97.085	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance			Label		35.153	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404107-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.01	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.19	mm	47	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/36 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	163	

								TEST RESULTS	
Specific Gravity ASTM D792	Density			g/cc				.932	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g			g/10 min				.32	
Carbon Black Content ASTM D4218	Range			%				2.19	
Carbon Black Dispersion ASTM D5596	Category							10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm		140	ppi		3,292	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break			%				511.4	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change			%				-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	144.2	N					32.428	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	372.5	N					83.753	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	431.8	N					97.085	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs					CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance					Label		35.153	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/23/2012**
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ROLL # **404108-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH	
	MIN:	0.99	mm	39	mil
	MAX:	1.18	mm	46	mil
Asperity ASTM D7466: 27/36 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil

Thickness.....	1.0 mm	40 mil
Length.....	216.411 m	710.0 feet
Width.....	7.01 m;	23.0 feet

OIT(Standard) ASTM D3895 minutes 163

						TEST RESULTS	
Specific Gravity ASTM D792	Density	g/cc				.932	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190ºC /2160 g	g/10 min				.32	
Carbon Black Content ASTM D4218	Range	%				2.19	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm	140	ppi	3,292	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%				511.4	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%				-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	144.2	N			32.428	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	372.5	N			83.753	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	431.8	N			97.085	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance			Label		35.153	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404109-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH	
	MIN:	1.03	mm	41	mil
	MAX:	1.19	mm	47	mil
Asperity ASTM D7466: 27/36 mil TOP / BOTTOM	AVE:	1.10	mm	43	mil

Thickness.....	1.0 mm	40 mil	
Length.....	216.411 m	710.0 feet	
Width.....	7.01 m;	23.0 feet	
OIT(Standard) ASTM D3895 minutes	163		

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.934	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190ºC /2160 g		g/10 min			.32	
Carbon Black Content ASTM D4218	Range		%			2.29	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	146	ppi	3,380	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			502.5	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	150.0	N			33.717	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	399.5	N			89.806	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	460.5	N			103.52	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance			Label		37.299	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/23/2012**
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ROLL # **404110-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.96	mm	38	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.17	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/36 mil TOP / BOTTOM	AVE:	1.07	mm	42	mil	OIT(Standard) ASTM D3895 minutes 163		

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.934	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.32	
Carbon Black Content ASTM D4218	Range		%			2.29	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm	142	ppi	3,380	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			502.5	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	150.0	N			33.717	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	399.5	N			89.806	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	460.5	N			103.52	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	37.299	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404111-12** Lot #: **CAK810240** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.96	mm	38	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.20	mm	47	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/37 mil TOP / BOTTOM	AVE:	1.05	mm	41	mil	OIT(Standard) ASTM D3895 minutes	163	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.934	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.32	
Carbon Black Content ASTM D4218	Range		%			2.29	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	24	N/mm	140	ppi	3,380	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			502.5	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.75	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	150.0	N			33.717	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	399.5	N			89.806	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	460.5	N			103.52	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	37.299	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/23/2012**

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ROLL # **404212-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.96	mm	38	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.15	mm	45	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/36 mil TOP / BOTTOM	AVE:	1.05	mm	41	mil	OIT(Standard) ASTM D3895 minutes 175		

								TEST RESULTS	
Specific Gravity ASTM D792	Density			g/cc				.935	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g			g/10 min				.35	
Carbon Black Content ASTM D4218	Range			%				2.24	
Carbon Black Dispersion ASTM D5596	Category							10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm		140	ppi		3,393	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break			%				530.9	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change			%				-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	160.4	N					36.065	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	395.6	N					88.935	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	406.8	N					91.456	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs						CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance					Label		35.731	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/24/2012**
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ROLL # **404213-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.92	mm	36	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.13	mm	44	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/37 mil TOP / BOTTOM	AVE:	1.06	mm	42	mil	OIT(Standard) ASTM D3895 minutes	175	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.935	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.35	
Carbon Black Content ASTM D4218	Range		%			2.24	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm	142	ppi	3,393	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			530.9	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	160.4	N			36.065	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	395.6	N			88.935	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	406.8	N			91.456	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	35.731	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/24/2012**
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ROLL # **404214-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH	
	MIN:	1.02	mm	40	mil
	MAX:	1.15	mm	45	mil
Asperity ASTM D7466: 26/33 mil TOP / BOTTOM	AVE:	1.09	mm	43	mil

Thickness.....	1.0 mm	40 mil
Length.....	216.411 m	710.0 feet
Width.....	7.01 m;	23.0 feet

OIT(Standard) ASTM D3895 minutes **175**

						TEST RESULTS	
Specific Gravity ASTM D792	Density	g/cc				.935	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min				.35	
Carbon Black Content ASTM D4218	Range	%				2.24	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm	146	ppi	3,393	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%				530.9	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%				-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	160.4	N			36.065	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	395.6	N			88.935	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	406.8	N			91.456	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	

Smooth Edge Testing ASTM D1004 Average Tear Resistance Label 35.731 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/24/2012**
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ROLL # **404215-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.98	mm	39	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.18	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/38 mil TOP / BOTTOM	AVE:	1.06	mm	42	mil	OIT(Standard) ASTM D3895 minutes	175	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.936	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.35	
Carbon Black Content ASTM D4218	Range		%			2.35	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	27	N/mm	156	ppi	3,743	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			537.2	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	166.4	N			37.403	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	404.0	N			90.831	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	460.1	N			103.43	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	37.746	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/24/2012**
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ROLL # **404216-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.99	mm	39	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.19	mm	47	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/36 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	175	

								TEST RESULTS	
Specific Gravity ASTM D792	Density			g/cc				.936	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g			g/10 min				.35	
Carbon Black Content ASTM D4218	Range			%				2.35	
Carbon Black Dispersion ASTM D5596	Category							10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	28	N/mm			159	ppi	3,743	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break			%				537.2	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change			%				-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	166.4	N					37.403	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	404.0	N					90.831	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	460.1	N					103.43	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs					CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance					Label		37.746	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/24/2012**
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ROLL # **404217-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.02	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.29	mm	51	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 26/35 mil TOP / BOTTOM	AVE:	1.10	mm	43	mil	OIT(Standard) ASTM D3895 minutes	175	

						TEST RESULTS
Specific Gravity ASTM D792	Density		g/cc			.936
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.35
Carbon Black Content ASTM D4218	Range		%			2.35
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	28	N/mm	162	ppi	3,743 psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			537.2
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.90
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	166.4	N			37.403 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	404.0	N			90.831 lbs
Puncture Resistance ASTM D4833 (Modified)	Load	460.1	N			103.43 lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED

Smooth Edge Testing ASTM D1004 Average Tear Resistance Label 37.746 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404218-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.01	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.22	mm	48	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/33 mil TOP / BOTTOM	AVE:	1.07	mm	42	mil	OIT(Standard) ASTM D3895 minutes	175	

				TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc		.935
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190ºC /2160 g	g/10 min		.35
Carbon Black Content ASTM D4218	Range	%		2.34
Carbon Black Dispersion ASTM D5596	Category			10 In Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25 N/mm	145 ppi	3,442 psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%		531.8
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%		-.90
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	148.3 N		33.335 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	410.4 N		92.257 lbs
Puncture Resistance ASTM D4833 (Modified)	Load	413.3 N		92.92 lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs		CERTIFIED

Smooth Edge Testing ASTM D1004 Average Tear Resistance Label 33.335 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404219-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.02	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.20	mm	47	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/30 mil TOP / BOTTOM	AVE:	1.07	mm	42	mil	OIT(Standard) ASTM D3895 minutes	175	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.935	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.35	
Carbon Black Content ASTM D4218	Range		%			2.34	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm	145	ppi	3,442	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			531.8	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	148.3	N			33.335	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	410.4	N			92.257	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	413.3	N			92.92	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	33.335	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404220-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.97	mm	38	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.19	mm	47	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 26/37 mil TOP / BOTTOM	AVE:	1.06	mm	42	mil	OIT(Standard) ASTM D3895 minutes 175		

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.935	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.35	
Carbon Black Content ASTM D4218	Range		%			2.34	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm	144	ppi	3,442	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			531.8	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	148.3	N			33.335	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	410.4	N			92.257	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	413.3	N			92.92	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	33.335	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/24/2012**
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ROLL # **404221-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.94	mm	37	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.19	mm	47	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/37 mil TOP / BOTTOM	AVE:	1.06	mm	42	mil	OIT(Standard) ASTM D3895 minutes	175	

								TEST RESULTS	
Specific Gravity ASTM D792	Density			g/cc				.935	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g			g/10 min				.35	
Carbon Black Content ASTM D4218	Range			%				2.22	
Carbon Black Dispersion ASTM D5596	Category							10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm		148	ppi		3,544	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break			%				540.9	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change			%				-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	161.2	N					36.231	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	362.5	N					81.503	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	433.0	N					97.35	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs						CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance						Label	35.483	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/24/2012**
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ROLL # **404222-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.98	mm	39	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.18	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/34 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	175	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.935	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.35	
Carbon Black Content ASTM D4218	Range		%			2.22	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	151	ppi	3,544	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			540.9	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	161.2	N			36.231	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	362.5	N			81.503	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	433.0	N			97.35	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	35.483	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/24/2012**

Signature: H. Palmer

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ROLL # **404323-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.92	mm	36	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.22	mm	48	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/34 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	175	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.935	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.35	
Carbon Black Content ASTM D4218	Range		%			2.22	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	151	ppi	3,544	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			540.9	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	161.2	N			36.231	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	362.5	N			81.503	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	433.0	N			97.35	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	35.483	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/25/2012**
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ROLL # **404324-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.94	mm	37	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.18	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 26/36 mil TOP / BOTTOM	AVE:	1.05	mm	41	mil	OIT(Standard) ASTM D3895 minutes	175	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.934	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.35	
Carbon Black Content ASTM D4218	Range		%			2.22	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm	145	ppi	3,509	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			550.4	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	159.8	N			35.925	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	386.0	N			86.791	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	443.6	N			99.73	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	37.686	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404325-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.01	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.17	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/35 mil TOP / BOTTOM	AVE:	1.10	mm	43	mil	OIT(Standard) ASTM D3895 minutes	175	

				TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc		.934
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min		.35
Carbon Black Content ASTM D4218	Range	%		2.22
Carbon Black Dispersion ASTM D5596	Category			10 In Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	27 N/mm	152 ppi	3,509 psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%		550.4
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%		-.90
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	159.8 N		35.925 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	386.0 N		86.791 lbs
Puncture Resistance ASTM D4833 (Modified)	Load	443.6 N		99.73 lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs		CERTIFIED
Smooth Edge Testing ASTM D1004	Average Tear Resistance		Label	37.686 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/25/2012**
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ROLL # **404326-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.99	mm	39	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.24	mm	49	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/36 mil TOP / BOTTOM	AVE:	1.12	mm	44	mil	OIT(Standard) ASTM D3895 minutes	175	

								TEST RESULTS	
Specific Gravity ASTM D792	Density			g/cc				.934	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g			g/10 min				.35	
Carbon Black Content ASTM D4218	Range			%				2.22	
Carbon Black Dispersion ASTM D5596	Category							10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	27	N/mm			155	ppi	3,509	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break			%				550.4	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change			%				-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	159.8	N					35.925	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	386.0	N					86.791	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	443.6	N					99.73	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs					CERTIFIED	

Smooth Edge Testing ASTM D1004 Average Tear Resistance Label 37.686 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: 1/25/2012

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ROLL # **404327-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.95	mm	37	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.26	mm	50	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/36 mil TOP / BOTTOM	AVE:	1.07	mm	42	mil	OIT(Standard) ASTM D3895 minutes	175	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.936	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.35	
Carbon Black Content ASTM D4218	Range		%			2.12	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	151	ppi	3,581	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			567.3	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	149.9	N			33.704	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	417.7	N			93.897	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	425.3	N			95.608	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	37.337	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **404328-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.04	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.16	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 28/37 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	175	

								TEST RESULTS	
Specific Gravity ASTM D792	Density			g/cc				.936	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190ºC /2160 g			g/10 min				.35	
Carbon Black Content ASTM D4218	Range			%				2.12	
Carbon Black Dispersion ASTM D5596	Category							10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	27	N/mm			152	ppi	3,581	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break			%				567.3	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change			%				-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	149.9	N					33.704	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	417.7	N					93.897	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	425.3	N					95.608	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs						CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance					Label		37.337	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/25/2012**
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ROLL # **404329-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH	
	MIN:	**0.98**	mm	**39**	mil
	MAX:	**1.23**	mm	**48**	mil
Asperity ASTM D7466: **27/35** mil TOP / BOTTOM	AVE:	**1.09**	mm	**43**	mil

Thickness.....	**1.0 mm**	**40 mil**
Length.....	**216.411** m	**710.0** feet
Width.....	**7.01** m;	**23.0** feet

OIT(Standard) ASTM D3895 minutes **175**

				TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc		**.936**
MFI ASTM D1238 COND. E GRADE: **7104**	Melt Flow Index 190°C /2160 g	g/10 min		**.35**
Carbon Black Content ASTM D4218	Range	%		**2.12**
Carbon Black Dispersion ASTM D5596	Category			**10 In Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	**27** N/mm	**154** ppi	**3,581** psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%		**567.3**
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%		**-.90**
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	**149.9** N		**33.704** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	**417.7** N		**93.897** lbs
Puncture Resistance ASTM D4833 (Modified)	Load	**425.3** N		**95.608** lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs		**CERTIFIED**
Smooth Edge Testing ASTM D1004	Average Tear Resistance		Label	**37.337** lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/25/2012**
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ROLL # **404330-12** Lot #: **CAM810720** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.97	mm	38	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.33	mm	52	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/36 mil TOP / BOTTOM	AVE:	1.10	mm	43	mil	OIT(Standard) ASTM D3895 minutes 175		

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.936	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.35	
Carbon Black Content ASTM D4218	Range		%			2.12	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	27	N/mm	155	ppi	3,581	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			567.3	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.90	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	149.9	N			33.704	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	417.7	N			93.897	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	425.3	N			95.608	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	37.337	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **1/25/2012**
Signature: H Holmes
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ROLL # **207633-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.01	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.10	mm	43	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 31/34 mil TOP / BOTTOM	AVE:	1.05	mm	41	mil	OIT(Standard) ASTM D3895 minutes	170	

			TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc	.933
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min	.30
Carbon Black Content ASTM D4218	Range	%	2.36
Carbon Black Dispersion ASTM D5596	Category		10 In Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25 N/mm 141 ppi	3,401 psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%	518.8
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%	-.58
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	164.4 N	36.950 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	391.3 N	87.977 lbs
Puncture Resistance ASTM D4833 (Modified)	Load	445.1 N	100.07 lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs	CERTIFIED
Smooth Edge Testing ASTM D1004	Average Tear Resistance	Label	35.329 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **207634-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.04	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.20	mm	47	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 31/33 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	170	

			TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc	.933
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min	.30
Carbon Black Content ASTM D4218	Range	%	2.36
Carbon Black Dispersion ASTM D5596	Category		10 In Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25 N/mm 145 ppi	3,401 psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%	518.8
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%	-.58
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	164.4 N	36.950 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	391.3 N	87.977 lbs
Puncture Resistance ASTM D4833 (Modified)	Load	445.1 N	100.07 lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs	CERTIFIED
Smooth Edge Testing ASTM D1004	Average Tear Resistance	Label	35.329 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **2/18/2012**
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ROLL # **207635-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.02	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.10	mm	43	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 29/35 mil TOP / BOTTOM	AVE:	1.05	mm	41	mil	OIT(Standard) ASTM D3895 minutes	170	

				TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc		.933
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min		.30
Carbon Black Content ASTM D4218	Range	%		2.35
Carbon Black Dispersion ASTM D5596	Category			10 In Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25 N/mm	141 ppi	3,401 psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%		518.8
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%		-.58
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	164.4 N		36.950 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	391.3 N		87.977 lbs
Puncture Resistance ASTM D4833 (Modified)	Load	445.1 N		100.07 lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs		CERTIFIED
Smooth Edge Testing ASTM D1004	Average Tear Resistance		Label	35.329 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **2/18/2012**
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ROLL # **207636-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.03	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.22	mm	48	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 32/34 mil TOP / BOTTOM	AVE:	1.09	mm	43	mil	OIT(Standard) ASTM D3895 minutes	170	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.35	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	146	ppi	3,401	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			518.8	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	164.4	N			36.950	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	391.3	N			87.977	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	445.1	N			100.07	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	35.329	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **2/18/2012**
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ROLL # **207637-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.01	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.09	mm	43	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 31/35 mil TOP / BOTTOM	AVE:	1.05	mm	41	mil	OIT(Standard) ASTM D3895 minutes	170	

				TEST RESULTS
Specific Gravity ASTM D792	Density	g/cc		.933
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g	g/10 min		.30
Carbon Black Content ASTM D4218	Range	%		2.31
Carbon Black Dispersion ASTM D5596	Category			10 In Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	23 N/mm	129 ppi	3,115 psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break	%		523.0
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change	%		-.58
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	164.4 N		36.950 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	391.3 N		87.977 lbs
Puncture Resistance ASTM D4833 (Modified)	Load	445.1 N		100.07 lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs		CERTIFIED
Smooth Edge Testing ASTM D1004	Average Tear Resistance		Label	29.255 lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **207638-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.03	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.12	mm	44	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 32/35 mil TOP / BOTTOM	AVE:	1.07	mm	42	mil	OIT(Standard) ASTM D3895 minutes	170	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.31	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	23	N/mm	131	ppi	3,115	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			523.0	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	164.4	N			36.950	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	391.3	N			87.977	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	445.1	N			100.07	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	29.255	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **207639-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.04	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.15	mm	45	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 31/34 mil TOP / BOTTOM	AVE:	1.09	mm	43	mil	OIT(Standard) ASTM D3895 minutes 170		

								TEST RESULTS	
Specific Gravity ASTM D792	Density			g/cc				.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g			g/10 min				.30	
Carbon Black Content ASTM D4218	Range			%				2.31	
Carbon Black Dispersion ASTM D5596	Category							10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	23	N/mm			134	ppi	3,115	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break			%				523.0	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change			%				-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	164.4	N					36.950	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	391.3	N					87.977	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	445.1	N					100.07	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs					CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance					Label		29.255	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **207640-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.95	mm	37	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.17	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 27/32 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	170	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.34	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	23	N/mm	132	ppi	3,115	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			523.0	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	164.4	N			36.950	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	391.3	N			87.977	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	445.1	N			100.07	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	29.255	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **207641-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.04	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.19	mm	47	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 31/33 mil TOP / BOTTOM	AVE:	1.09	mm	43	mil	OIT(Standard) ASTM D3895 minutes	170	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190ºC /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.34	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	23	N/mm	134	ppi	3,115	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			523.0	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	164.4	N			36.950	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	391.3	N			87.977	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	445.1	N			100.07	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	29.255	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **2/18/2012**

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ROLL # **207742-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.01	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.12	mm	44	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 30/34 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	170	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.32	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	23	N/mm	133	ppi	3,125	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			498.7	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	153.5	N			34.506	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	373.6	N			84.004	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	438.1	N			98.489	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	35.605	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **207743-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.03	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.17	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 32/35 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	170	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.32	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	23	N/mm	133	ppi	3,125	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			498.7	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	153.5	N			34.506	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	373.6	N			84.004	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	438.1	N			98.489	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500 hrs				CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	35.605	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **207744-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	0.93	mm	37	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.13	mm	44	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 32/33 mil TOP / BOTTOM	AVE:	1.07	mm	42	mil	OIT(Standard) ASTM D3895 minutes 170		

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.32	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	23	N/mm	132	ppi	3,125	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			498.7	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	153.5	N			34.506	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	373.6	N			84.004	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	438.1	N			98.489	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	35.605	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **207745-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.01	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.17	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 32/34 mil TOP / BOTTOM	AVE:	1.09	mm	43	mil	OIT(Standard) ASTM D3895 minutes	170	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.32	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	23	N/mm	134	ppi	3,125	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			498.7	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	153.5	N			34.506	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	373.6	N			84.004	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	438.1	N			98.489	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	35.605	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **2/19/2012**
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ROLL # **207746-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.04	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.25	mm	49	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 31/35 mil TOP / BOTTOM	AVE:	1.11	mm	44	mil	OIT(Standard) ASTM D3895 minutes 170		

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.32	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	24	N/mm	137	ppi	3,125	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			498.7	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	153.5	N			34.506	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	373.6	N			84.004	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	438.1	N			98.489	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	35.605	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

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ROLL # **207747-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.04	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.16	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 32/35 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	170	

								TEST RESULTS	
Specific Gravity ASTM D792	Density			g/cc				.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190ºC /2160 g			g/10 min				.30	
Carbon Black Content ASTM D4218	Range			%				2.27	
Carbon Black Dispersion ASTM D5596	Category							10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm			146	ppi	3,432	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break			%				516.3	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change			%				-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	153.5	N					34.506	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	373.6	N					84.004	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	438.1	N					98.489	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs					CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance					Label		36.732	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **2/19/2012**

Signature: H Palmer

Quality Control Department

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ROLL # **207748-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.01	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.16	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 32/34 mil TOP / BOTTOM	AVE:	1.07	mm	42	mil	OIT(Standard) ASTM D3895 minutes 170		

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.27	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm	145	ppi	3,432	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			516.3	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	153.5	N			34.506	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	373.6	N			84.004	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	438.1	N			98.489	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	36.732	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **2/19/2012**
Signature
Quality Control Department

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ROLL # **207749-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.01	mm	40	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.18	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 33/36 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	170	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.21	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	146	ppi	3,432	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			516.3	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	153.5	N			34.506	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	373.6	N			84.004	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	438.1	N			98.489	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	36.732	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: 2/19/2012
Signature
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ROLL # **207750-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.03	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.14	mm	45	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 32/34 mil TOP / BOTTOM	AVE:	1.08	mm	43	mil	OIT(Standard) ASTM D3895 minutes	170	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.21	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	26	N/mm	146	ppi	3,432	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			516.3	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	153.5	N			34.506	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	373.6	N			84.004	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	438.1	N			98.489	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	36.732	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **2/19/2012**
Signature
Quality Control Department

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ROLL # **207751-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.03	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.11	mm	44	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 32/34 mil TOP / BOTTOM	AVE:	1.06	mm	42	mil	OIT(Standard) ASTM D3895 minutes	170	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.21	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	25	N/mm	143	ppi	3,432	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			516.3	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	153.5	N			34.506	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	373.6	N			84.004	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	438.1	N			98.489	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	36.732	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **2/19/2012**
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ROLL # **207752-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.04	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.14	mm	45	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 30/34 mil TOP / BOTTOM	AVE:	1.07	mm	42	mil	OIT(Standard) ASTM D3895 minutes	170	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g		g/10 min			.30	
Carbon Black Content ASTM D4218	Range		%			2.20	
Carbon Black Dispersion ASTM D5596	Category					10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	24	N/mm	136	ppi	3,230	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break		%			513.4	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	160.7	N			36.137	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	374.3	N			84.141	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	447.7	N			100.64	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance				Label	36.327	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **2/19/2012**
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ROLL # **207753-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.05	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.13	mm	44	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 30/35 mil TOP / BOTTOM	AVE:	1.07	mm	42	mil	OIT(Standard) ASTM D3895 minutes	170	

								TEST RESULTS	
Specific Gravity ASTM D792	Density			g/cc				.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g			g/10 min				.30	
Carbon Black Content ASTM D4218	Range			%				2.20	
Carbon Black Dispersion ASTM D5596	Category							10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	24	N/mm			136	ppi	3,230	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break			%				513.4	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change			%				-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	160.7	N					36.137	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	374.3	N					84.141	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	447.7	N					100.64	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs					CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance					Label		36.327	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **2/19/2012**
Signature
Quality Control Department

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ROLL # **207754-12** Lot #: **CCA810120** **Liner Type: MICROSPIKE™ LLDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.0 mm	40 mil
	MIN:	1.03	mm	41	mil	Length.....	216.411 m	710.0 feet
	MAX:	1.18	mm	46	mil	Width.....	7.01 m;	23.0 feet
Asperity ASTM D7466: 32/33 mil TOP / BOTTOM	AVE:	1.09	mm	43	mil	OIT(Standard) ASTM D3895 minutes	170	

								TEST RESULTS	
Specific Gravity ASTM D792	Density			g/cc				.933	
MFI ASTM D1238 COND. E GRADE: 7104	Melt Flow Index 190°C /2160 g			g/10 min				.30	
Carbon Black Content ASTM D4218	Range			%				2.20	
Carbon Black Dispersion ASTM D5596	Category							10 In Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Break	24	N/mm			139	ppi	3,230	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Break			%				513.4	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change			%				-.58	
Tear Resistance ASTM D-1004 (Modified)	Average Tear Resistance	160.7	N					36.137	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	374.3	N					84.141	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	447.7	N					100.64	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs					CERTIFIED	
Smooth Edge Testing ASTM D1004	Average Tear Resistance					Label		36.327	lbs

Customer: **Waste Services, Inc.**
PO: **JED PARTIAL** **JED LF Partial Closure**
Destination **St Cloud, FL**

Date: **2/19/2012**
Signature
Quality Control Department

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GEOMEMBRANE TEST RESULTS

TRI Client: Agru America
Project:GRI GM17 compliance 2010

Material: AGRU 40 mil Microspike LLDPE Geomembrane
Roll #: 319110.10 (Chevron 7104 LLDPE resin lot CAA810800)
TRI Log #: E2341-52-07

PARAMETER	TEST REPLICATE NUMBER 1	2	3	4	5	6	7	8	9	10	MEAN	STD. DEV.	PROJ. SPEC.
Multi-axial Tensile (ASTM D 5617)													
Test Method A: Centerpoint Deflection Versus Pressure													
Thickness (mils)	43	43	40								42	2	
Maximum Stress (psi)	1765	1558	1643								1655	104	
% Elongation @ Rupture (%)	76.9	76.3	81.6								78.3	2.9	30 min
Failure Description	H-CAT N-EF	MDT N-EF	MDT N-EF										

MDT	A tear in the machine direction.
TDT	A tear in the transverse direction.
H	Circular or elliptical hole in the specimen.
H-CAT	Circular or elliptical hole in an area where the material has significantly necked down or thinned. The large thinned area resembles a pupil of a cat eye.
N-EF	No edge failure

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.

GeosyntheticTesting.com
9063 Bee Caves Road / Austin, TX 78733 / 512 263 2101 / fax: 512 263 2558

Chevron Phillips Chemical Company LP

Rex L. Bobsein, Ph.D., Polyethylene Materials and Applications Development
Room 109 PTC ■ Bartlesville, OK 74004■
918-661-0089 ■ bobserl@cpchem.com ■ Fax: 918-662-2550 ■ www.cpchem.com

April 20, 2011

Grant Palmer
Agru America
500 Garrison Road
Georgetown, SC 29440

Dear Grant:

This letter is to report the results of oven-aging and UV-aging tests (according to GRI-GM13 and GRI-GM17) on Agru America sheet samples that you provided to me in 2010. These tests were performed by CPChem's Evaluation Laboratory in Bartlesville, OK. The tests were completed March 2011.

The GRI-GM13 (HDPE) and GRI-GM17 (LLDPE) durability tests were done according to the following procedures.

Test	Exposure	Method
HP-OIT	150°C, 500 psi oxygen	D5885
Oven Aging	90 days, 85°C	D5721
UV Aging	1600 UV hrs (Conditions were 20 hours UVA-340 at 75°C followed by 4 hrs dark with condensation at 60°C. Irradiance was 0.72 W/m^2 at 340nm.)	GRI-GM11

Oven-Aging Results

Sample	Initial HP-OIT (min.)	HP-OIT Value after Oven Aging (min.)	% HP-OIT Retained	GRI-GM13 or GRI-GM17 % Retained Requirement
40 mil LLDPE Roll # 446445-10 from Marlex® 7104 Polyethylene Lot # CAH811660	589	533	91	60
60 mil HDPE Roll # 447214-10 from Marlex® K307 Polyethylene Lot # 82-0-0993	1029	863	84	80

UV-Aging Results

Sample	Initial HP-OIT (min.)	HP-OIT Value after UV Aging (min.)	% HP-OIT Retained	GRI-GM13 or GRI-GM17 % Retained Requirement
40 mil LLDPE Roll # 446445-10 from Marlex® 7104 Polyethylene Lot # CAH811660	589	452	77	35
60 mil HDPE Roll # 447214-10 from Marlex® K307 Polyethylene Lot # 82-0-0993	1029	868	84	50

According to these test results, the durability requirements are met.

If you have any questions, please call me at 918-661-0089.

Sincerely,

Rex L. Bobsein

Rex L. Bobsein, Ph.D.
Polyethylene Materials and Applications Development

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quality certificate

ROLL # **445559-11** Lot #: **7111245** **Liner Type: MICROSPIKE™ HDPE**

Measurement ASTM D5994 (Modified)		METRIC		ENGLISH		Thickness.....	1.5 mm	60 mil
	MIN:	1.39	mm	55	mil	Length.....	153.926 m	505.0 feet
	MAX:	1.57	mm	62	mil	Width.....	7.00 m;	23.0 feet
Asperity ASTM D7466: 25/34 mil TOP / BOTTOM	AVE:	1.50	mm	59	mil	OIT(Standard) ASTM D3895 minutes	191	

						TEST RESULTS	
Specific Gravity ASTM D792	Density		g/cc			.945	
MFI ASTM D1238 COND. E GRADE: K307	Melt Flow Index 190°C /2160 g		g/10 min			.24	
Carbon Black Content ASTM D4218	Range		%			2.42	
Carbon Black Dispersion ASTM D5596	Category					10 in Cat 1	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Yield	26	N/mm (kN/m)	149	ppi	2,527	psi
	Average Strength @ Break	33	N/mm (kN/m)	189	ppi	3,199	psi
Elongation ASTM D6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield	Average Elongation @ Yield		%			15.03	
Lo = 2.0" Break	Average Elongation @ Break		%			537.7	
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional change		%			0.19	
Tear Resistance ASTM D1004 (Modified)	Average Tear Resistance	261.6	N			58.823	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	453.1	N			101.85	lbs
Puncture Resistance ASTM D4833 (Modified)	Load	627.7	N			141.11	lbs
ESCR ASTM D1693	Minimum Hrs w/o Failures	1500	hrs			CERTIFIED	
Notched Constant Tensile Load ASTM D5397	pass / fail @ 30%	300	hrs			ONGOING	

Customer: **Waste Services, Inc.**
PO: **to be given Sun Country Materials Cell 3**
Destination **Balm, FL**

Date: **11/11/11**

Signature: H. Palmer

Quality Control Department

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Geomembrane Resin Certificates

Chevron Phillips Chemical Company LP

CoA Date: 06/05/2008

Certificate of Analysis

Shipped To: AGRU AMERICA INC
500 GARRISON RD
GEORGETOWN SC 29440
USA

Recipient: PALMER
Fax:

CPC Delivery #: 87668535
PO #: 004793
Weight: 184300 LB
Ship Date: 06/05/2008
Package: BULK
Mode: Hopper Car
Car #: PSPX006976
Seal No: 477517

Product: PE 7104 BULK

Cust # .

Lot Number: CXF810180

Property	Test Method	Value	Unit
Melt Index	ST-103	0.35	g/10mi
HLMI	ST-122	16.13	g/10mi
ellet Count	ST-905	41	pel/g
Production date		20080604	
Density	ST-292	0.918	g/cm3

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

Kay F. Donaldson
Quality Control Supervisor

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

CoA Date: 11/11/2010

Certificate of Analysis

Shipped To: AGRU AMERICA INC
500 GARRISON RD
GEORGETOWN SC 29440
USA

Recipient: PALMER
Fax:

CPC Delivery #: 88162040
PO #: 5677
Weight: 189600 LB
Ship Date: 11/11/2010
Package: BULK
Mode: Hopper Car
Car #: NAHX610355
Seal No: 506697

Product: PE 7104 BULK

Lot Number: CAK810240

Property	Test Method	Value	Unit
Melt Index	ASTM D1238	0.32	g/10mi
HLMI	ASTM D1238	13.62	g/10mi
Pellet Count	ST-905	31	pel/g
Production date		20101004	
Density	D1505 or D4883	0.919	g/cm3

GUNTHER NIERDERM @ AGRU

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.

Kevin Ayres
Quality Control Supervisor

For CoA questions contact Customer Service Representative at +1-832-813-4782

CoA Date: 11/13/2010

Certificate of Analysis

Shipped To: AGRU AMERICA INC
500 GARRISON RD
GEORGETOWN SC 29440
USA

Recipient: PALMER
Fax:

CPC Delivery #: 88163202
PO #: 5677
Weight: 189300 LB
Ship Date: 11/13/2010
Package: BULK
Mode: Hopper Car
Car #: CHVX890381
Seal No: 500738

Product: PE 7104 BULK

Lot Number: CAM810720

Property	Test Method	Value	Unit
Melt Index	ASTM D1238	0.35	g/10mi
HLMI	ASTM D1238	14.79	g/10mi
Pellet Count	ST-905	30	pel/g
Production date		20101112	
Density	D1505 or D4883	0.918	g/cm3

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

Kevin Ayres
Quality Control Supervisor

For CoA questions contact Customer Service Representative at +1-832-813-4782

CoA Date: 01/15/2012

Certificate of Analysis

Shipped To: AGRU AMERICA INC
500 GARRISON RD
GEORGETOWN SC 29440
USA

Recipient: PALMER
Fax:

Delivery #: 88397440
PO #: 6410
Weight: 183850 LB
Ship Date: 01/15/2012
Package: BULK
Mode: Hopper Car
Car #: CHVX890411
Seal No: 523365

Product: PE 7104 BULK

Lot Number: CCA810120

Property	Test Method	Value	Unit
Melt Index	ASTM D1238	0.30	g/10mi
HLMI	ASTM D1238	8.89	g/10mi
Pellet Count	ST-905	31	pel/g
Production date		20120103	
Density	D1505 or D4883	0.919	g/cm3

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

Kevin Ayres
Quality Control Supervisor

For CoA questions contact Customer Service Representative at +1-832-813-4806

CoA Date: 10/25/2011

Certificate of Analysis

Shipped To: AGRU AMERICA INC
500 GARRISON RD
GEORGETOWN SC 29440
USA

Recipient: PALMER
Fax:

Delivery #: 88354087
PO #: 5847
Weight: 187500 LB
Ship Date: 10/25/2011
Package: BULK
Mode: Hopper Car
Car #: CEFX053991
Seal No: 281165

Product:
MARLEX POLYETHYLENE K307 BULK

Lot Number: 7111245

Property	Test Method	Value	Unit
Melt Index	ASTM D1238	0.24	g/10mi
HLMI Flow Rate	ASTM D1238	21	g/10mi
Density	D1505 or D4883	0.937	g/cm3
Pellet Count	P02.08.03	30	pel/g
Production Date		09/25/2011	

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.

Troy Griffin
Quality Systems Coordinator

For CoA questions contact Customer Service Representative at +1-832-813-4806

Geomembrane QA Test Data

GEOMEMBRANE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED Partial Closure 2012

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 403758.12
TRI Log #: E2362-87-10

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	41	43	43	45	48	43	44	45	43	44	2	40 nom avg
											41	<< min	36 min avg
Density (ASTM D 1505)													
Density (g/cm3)	0.935	0.935	0.935								0.935	0.000	0.940 max
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.22	2.20									2.21	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
Rating - 2nd field view	1	1	1	1	1								1 in cat 1, 2, 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	102	90	90	87	87						91	6	
TD Yield Strength (ppi)	105	93	98	90	93						96	6	
MD Break Strength (ppi)	192	159	165	141	165						164	18	60 min
TD Break Strength (ppi)	151	139	144	130	131						139	9	60 min
MD Yield Elongation (%)	25	24	24	23	24						24	1	
TD Yield Elongation (%)	17	21	17	16	16						17	2	
MD Break Elongation (%)	473	506	473	478	494						485	15	250 min
TD Break Elongation (%)	530	544	564	526	541						541	15	250 min

MD Machine Direction TD Transverse Direction

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GEOMEMBRANE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED Partial Closure 2012

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 403764.12
TRI Log #: E2362-87-10

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)	47	44	44	44	45	45	45	43	44	44	45	1	40 nom avg
											43	<< min	36 min avg
Density (ASTM D 1505)													
Density (g/cm3)	0.933	0.933	0.933								0.933	0.000	0.940 max
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.30	2.32									2.31	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 o
Rating - 2nd field view	1	1	1	1	1								1 in cat 1, 2, 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	89	81	85	83	91						86	4	
TD Yield Strength (ppi)	91	101	87	86	89						91	6	
MD Break Strength (ppi)	182	130	172	150	179						163	22	60 min
TD Break Strength (ppi)	141	162	119	147	135						141	16	60 min
MD Yield Elongation (%)	32	31	31	28	28						30	2	
TD Yield Elongation (%)	17	19	17	18	19						18	1	
MD Break Elongation (%)	441	445	486	509	446						466	30	250 min
TD Break Elongation (%)	545	593	499	601	546						557	41	250 min

MD Machine Direction TD Transverse Direction

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GEOMEMBRANE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED Partial Closure 2012

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 404104.12
TRI Log #: E2362-87-10

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)	45	44	42	43	42	47	44	43	44	41	44	2	40 nom avg
											41	<< min	36 min avg
Density (ASTM D 1505)													
Density (g/cm3)	0.934	0.934	0.934								0.934	0.000	0.940 max
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.29	2.27									2.28	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
Rating - 2nd field view	1	1	1	1	1								1 in cat 1, 2, 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	78	85	86	81	91						84	5	
TD Yield Strength (ppi)	86	95	101	85	86						91	7	
MD Break Strength (ppi)	143	132	192	152	185						161	26	60 min
TD Break Strength (ppi)	153	153	159	137	147						150	8	60 min
MD Yield Elongation (%)	28	28	28	28	28						28	0	
TD Yield Elongation (%)	18	17	17	19	19						18	1	
MD Break Elongation (%)	484	471	475	510	486						485	15	250 min
TD Break Elongation (%)	600	599	583	556	573						582	18	250 min

MD Machine Direction TD Transverse Direction

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GEOMEMBRANE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED Partial Closure 2012

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 404110.12
TRI Log #: E2362-87-10

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)	43	44	43	42	44	47	43	45	45	43	44	1	40 nom avg
											42	<< min	36 min avg
Density (ASTM D 1505)													
Density (g/cm3)	0.934	0.934	0.934								0.934	0.000	0.940 max
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.29	2.28									2.29	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 o
Rating - 2nd field view	1	1	1	1	1								1 in cat 1, 2, 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	82	95	82	84	83						85	6	
TD Yield Strength (ppi)	86	92	85	101	81						89	8	
MD Break Strength (ppi)	143	202	137	143	168						159	27	60 min
TD Break Strength (ppi)	134	133	143	151	126						137	10	60 min
MD Yield Elongation (%)	37	37	28	28	28						32	5	
TD Yield Elongation (%)	18	18	18	18	18						18	0	
MD Break Elongation (%)	491	505	483	514	485						496	13	250 min
TD Break Elongation (%)	558	543	576	565	554						559	13	250 min

MD Machine Direction TD Transverse Direction

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GEOMEMBRANE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED Partial Closure 2012

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 404216.12
TRI Log #: E2362-87-10

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)	46	44	45	44	42	47	45	44	45	43	45	1	40 nom avg
											42	<< min	36 min avg
Density (ASTM D 1505)													
Density (g/cm3)	0.935	0.935	0.935								0.935	0.000	0.940 max
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.37	2.36									2.37	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
Rating - 2nd field view	1	1	1	1	1								1 in cat 1, 2, 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	87	85	86	90	101						90	7	
TD Yield Strength (ppi)	84	91	102	93	86						91	7	
MD Break Strength (ppi)	140	168	134	168	173						157	18	60 min
TD Break Strength (ppi)	145	127	166	139	120						139	18	60 min
MD Yield Elongation (%)	27	27	27	27	27						27	0	
TD Yield Elongation (%)	22	19	17	19	22						20	2	
MD Break Elongation (%)	488	476	495	486	446						478	19	250 min
TD Break Elongation (%)	571	521	596	548	495						546	40	250 min

MD Machine Direction TD Transverse Direction

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GEOMEMBRANE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED Partial Closure 2012

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 404222.12
TRI Log #: E2362-87-10

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)	47	45	45	44	45	46	46	44	44	45	45	1	40 nom avg
											44	<< min	36 min avg
Density (ASTM D 1505)													
Density (g/cm3)	0.933	0.933	0.933								0.933	0.000	0.940 max
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.04	2.01									2.03	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
Rating - 2nd field view	1	1	1	1	1								1 in cat 1, 2, 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	85	81	86	95	85						86	5	
TD Yield Strength (ppi)	88	90	85	84	106						91	9	
MD Break Strength (ppi)	176	143	177	186	161						169	17	60 min
TD Break Strength (ppi)	145	145	140	141	175						149	15	60 min
MD Yield Elongation (%)	32	32	32	32	32						32	0	
TD Yield Elongation (%)	19	18	19	19	18						19	1	
MD Break Elongation (%)	464	506	490	471	548						496	33	250 min
TD Break Elongation (%)	558	594	563	575	618						581	25	250 min

MD Machine Direction TD Transverse Direction

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GEOMEMBRANE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED Partial Closure 2012

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 404328.12
TRI Log #: E2362-87-10 228

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)	46	45	45	44	41	47	44	42	43	44	44	2	40 nom avg
											41	<< min	36 min avg
Density (ASTM D 1505)													
Density (g/cm3)	0.933	0.934	0.934								0.934	0.001	0.940 max
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.17	2.09									2.13	0.06	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
Rating - 2nd field view	1	1	1	1	1								1 in cat 1, 2, 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	85	83	82	87	89						85	3	
TD Yield Strength (ppi)	91	88	98	99	112						98	9	
MD Break Strength (ppi)	170	159	144	180	191						169	18	60 min
TD Break Strength (ppi)	125	136	144	137	150						138	9	60 min
MD Yield Elongation (%)	25	24	24	24	24						24	0	
TD Yield Elongation (%)	18	18	18	18	18						18	0	
MD Break Elongation (%)	445	451	495	473	461						465	20	250 min
TD Break Elongation (%)	525	548	561	548	528						542	15	250 min

MD Machine Direction TD Transverse Direction

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GEOMEMBRANE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED Partial Closure 2012

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 207636.12
TRI Log #: E2362-89-02

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)	45	43	45	42	43	41	43	45	42	46	44	2	40 nom avg
											41	<< min	36 min avg
Density (ASTM D 1505)													
Density (g/cm3)	0.937	0.937	0.937								0.937	0.000	0.940 max
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.36	2.35									2.36	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 c
Rating - 2nd field view	1	1	1	1	1								1 in cat 1, 2, 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	90	88	89	86	92						89	2	
TD Yield Strength (ppi)	96	89	94	91	97						93	3	
MD Break Strength (ppi)	177	145	152	165	177						163	14	60 min
TD Break Strength (ppi)	127	136	128	128	144						133	7	60 min
MD Yield Elongation (%)	37	37	37	37	37						37	0	
TD Yield Elongation (%)	20	20	20	20	20						20	0	
MD Break Elongation (%)	469	483	501	465	469						477	15	250 min
TD Break Elongation (%)	501	566	518	509	573						533	34	250 min

MD Machine Direction TD Transverse Direction

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GEOMEMBRANE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED Partial Closure 2012

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 207742.12
TRI Log #: E2362-89-02

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)	44	43	42	44	43	42	44	45	44	41	43	1	40 nom avg
											41	<< min	36 min avg
Density (ASTM D 1505)													
Density (g/cm3)	0.937	0.937	0.937								0.937	0.000	0.940 max
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.21	2.20									2.21	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 c
Rating - 2nd field view	1	1	1	1	1								1 in cat 1, 2, 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	82	84	84	88	89						85	3	
TD Yield Strength (ppi)	89	89	91	92	90						90	1	
MD Break Strength (ppi)	147	155	169	163	154						158	9	60 min
TD Break Strength (ppi)	108	117	128	120	119						118	7	60 min
MD Yield Elongation (%)	22	22	22	22	22						22	0	
TD Yield Elongation (%)	19	19	19	19	19						19	0	
MD Break Elongation (%)	495	468	446	444	449						460	22	250 min
TD Break Elongation (%)	470	486	545	504	514						504	28	250 min

MD Machine Direction TD Transverse Direction

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GEOMEMBRANE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED Partial Closure 2012

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 207749.12
TRI Log #: E2362-89-02

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)	43	44	43	46	43	44	45	45	47	46	45	1	40 nom avg
											43	<< min	36 min avg
Density (ASTM D 1505)													
Density (g/cm3)	0.936	0.936	0.936								0.936	0.000	0.940 max
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.31	2.29									2.30	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 c
Rating - 2nd field view	1	1	1	1	1								1 in cat 1, 2, 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	85	85	86	88	90						87	2	
TD Yield Strength (ppi)	89	92	91	96	94						92	3	
MD Break Strength (ppi)	172	179	166	145	176						168	14	60 min
TD Break Strength (ppi)	111	130	110	147	129						125	15	60 min
MD Yield Elongation (%)	45	45	34	27	27						36	9	
TD Yield Elongation (%)	22	22	22	22	22						22	0	
MD Break Elongation (%)	476	468	464	514	446						474	25	250 min
TD Break Elongation (%)	429	524	471	573	536						507	57	250 min

MD Machine Direction TD Transverse Direction

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GEOMEMBRANE TEST RESULTS

TRI Client: Geosyntec Consultants
Project: Phase 1 Partial Closure, J.E.D. Solid Waste Management Facility

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 312221.09
TRI Log #: E2324-92-09

2009 PROJECT

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)	46	41	40	48	43	45	45	38	49	42	44	4	40 avg
											38	<< min	36 min
Density (ASTM D 1505)													
Density (g/cm3)	0.931	0.931	0.931								0.931	0.000	NA
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.44	2.44									2.44	0.00	2 - 3%
Carbon Black Dispersion (ASTM D 5596)													
Rating - 1st field view	1	1	1	1	1								9 Cat 1, 2
Rating - 2nd field view	1	1	1	1	1								1 Cat 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	72	74	71	82	84						77	6	
TD Yield Strength (ppi)	72	80	76	90	87						81	7	
MD Break Strength (ppi)	142	138	147	190	163						156	21	60 min
TD Break Strength (ppi)	125	130	125	130	138						130	5	60 min
MD Yield Elongation (%)	21	21	21	21	21						21	0	12 min
TD Yield Elongation (%)	18	18	18	18	18						18	0	12 min
MD Break Elongation (%)	510	483	505	519	504						504	13	250 min
TD Break Elongation (%)	536	541	550	513	540						536	14	250 min

MD Machine Direction TD Transverse Direction NA Not Available

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2009 PROJECT

GEOMEMBRANE TEST RESULTS

TRI Client: Geosyntec Consultants
Project: Phase 1 Partial Closure, J.E.D. Solid Waste Management Facility

Material: Agru 40 mil Microspike LLDPE Geomembrane
Sample Identification: 312228.09
TRI Log #: E2324-93-05

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	46	44	47	42	43	41	48	47	42	45	3	40 avg
											41	<< min	36 min
Density (ASTM D 1505)													
Density (g/cm3)	0.931	0.931	0.931								0.931	0.000	NA
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.44	2.42									2.43	0.01	2 - 3%
Carbon Black Dispersion (ASTM D 5596)													
Rating - 1st field view	1	2	1	1	1								9 Cat 1, 2
Rating - 2nd field view	1	1	1	1	1								1 Cat 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	77	75	83	74	73						76	4	
TD Yield Strength (ppi)	72	76	84	74	74						76	5	
MD Break Strength (ppi)	145	131	158	137	155						145	11	60 min
TD Break Strength (ppi)	121	120	136	122	116						123	8	60 min
MD Yield Elongation (%)	21	21	21	21	21						21	0	12 min
TD Yield Elongation (%)	17	17	17	17	17						17	0	12 min
MD Break Elongation (%)	480	451	491	529	446						480	33	250 min
TD Break Elongation (%)	510	494	526	516	518						513	12	250 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.

GeosyntheticTesting.com
9063 Bee Caves Road / Austin, TX 78733 / 512 263 2101 / fax: 512 263 2558

GEOMEMBRANE TEST RESULTS

TRI Client: Geosyntec
Project: Sun Country Landfill Cell 3

Material: Agru 60 mil Microspike HDPE Geomembrane
Sample Identification: 445454.11
TRI Log #: E2362-23-07

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)	63	62	64	62	61	64	63	63	63	62	63	1	60 nom.
											61	<< min	57 min avg
													51 low ind
Density (ASTM D 1505)													
Density (g/cm3)	0.945	0.945	0.945								0.945	0.000	0.940 min
Carbon Black Content (ASTM D 4218)													
% Carbon Black	2.42	2.42									2.42	0.00	2.0-3.0%
Carbon Black Dispersion (ASTM D 5596)													
Rating - 1st field view	1	1	1	1	1								9 in cat 1 or 2
Rating - 2nd field view	1	1	1	1	1								1 in cat 3
Tensile Properties (ASTM D 6693, 2 ipm strain rate)													
MD Yield Strength (ppi)	155	157	166	167	164						162	5	126 min
TD Yield Strength (ppi)	163	170	175	168	174						170	5	126 min
MD Break Strength (ppi)	238	225	232	192	220						221	18	90 min
TD Break Strength (ppi)	207	204	185	174	193						193	14	90 min
MD Yield Elongation (%)	24	24	24	20	22						23	2	12 min
TD Yield Elongation (%)	15	15	17	15	16						16	1	12 min
MD Break Elongation (%)	485	484	504	458	469						480	18	100 min
TD Break Elongation (%)	598	583	525	495	541						548	42	100 min

MD Machine Direction TD Transverse Direction NA Not Available

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Double-Sided Geocomposite

Double-Sided Geocomposite Roll Summary

Double-Sided Geocomposite Quality Control Test Data

Geocomposite QA Test Data

Double-Sided Geocomposite Roll Summary

J.E.D. Solid Waste Management Facility
Partial Closure of Phase I

GEOCOMPOSITE ROLL SUMMARY

ROLL #	ROLL #	ROLL #	ROLL #	ROLL #	ROLL #
46941010001	46941010049	46941010097	46941010145	46941010193	46941010241
46941010002	46941010050	46941010098	46941010146	46941010194	46941010242
46941010003	46941010051	46941010099	46941010147	46941010195	46941010243
46941010004	46941010052	46941010100	46941010148	46941010196	46941010244
46941010005	46941010053	46941010101	46941010149	46941010197	46941010245
46941010006	46941010054	46941010102	46941010150	46941010198	46941010246
46941010007	46941010055	46941010103	46941010151	46941010199	46941010247
46941010008	46941010056	46941010104	46941010152	46941010200	46941010248
46941010009	46941010057	46941010105	46941010153	46941010201	46941010249
46941010010	46941010058	46941010106	46941010154	46941010202	46941010250
46941010011	46941010059	46941010107	46941010155	46941010203	
46941010012	46941010060	46941010108	46941010156	46941010204	
46941010013	46941010061	46941010109	46941010157	46941010205	
46941010014	46941010062	46941010110	46941010158	46941010206	
46941010015	46941010063	46941010111	46941010159	46941010207	
46941010016	46941010064	46941010112	46941010160	46941010208	
46941010017	46941010065	46941010113	46941010161	46941010209	
46941010018	46941010066	46941010114	46941010162	46941010210	
46941010019	46941010067	46941010115	46941010163	46941010211	
46941010020	46941010068	46941010116	46941010164	46941010212	
46941010021	46941010069	46941010117	46941010165	46941010213	
46941010022	46941010070	46941010118	46941010166	46941010214	
46941010023	46941010071	46941010119	46941010167	46941010215	
46941010024	46941010072	46941010120	46941010168	46941010216	
46941010025	46941010073	46941010121	46941010169	46941010217	
46941010026	46941010074	46941010122	46941010170	46941010218	
46941010027	46941010075	46941010123	46941010171	46941010219	
46941010028	46941010076	46941010124	46941010172	46941010220	
46941010029	46941010077	46941010125	46941010173	46941010221	
46941010030	46941010078	46941010126	46941010174	46941010222	
46941010031	46941010079	46941010127	46941010175	46941010223	
46941010032	46941010080	46941010128	46941010176	46941010224	
46941010033	46941010081	46941010129	46941010177	46941010225	
46941010034	46941010082	46941010130	46941010178	46941010226	
46941010035	46941010083	46941010131	46941010179	46941010227	
46941010036	46941010084	46941010132	46941010180	46941010228	
46941010037	46941010085	46941010133	46941010181	46941010229	
46941010038	46941010086	46941010134	46941010182	46941010230	
46941010039	46941010087	46941010135	46941010183	46941010231	
46941010040	46941010088	46941010136	46941010184	46941010232	
46941010041	46941010089	46941010137	46941010185	46941010233	
46941010042	46941010090	46941010138	46941010186	46941010234	
46941010043	46941010091	46941010139	46941010187	46941010235	
46941010044	46941010092	46941010140	46941010188	46941010236	
46941010045	46941010093	46941010141	46941010189	46941010237	
46941010046	46941010094	46941010142	46941010190	46941010238	
46941010047	46941010095	46941010143	46941010191	46941010239	
46941010048	46941010096	46941010144	46941010192	46941010240	

Double-Sided Geocomposite Quality Control Test Data

SKAPS

March 12, 2012
IESI / Progressive Waste Solutions
1099 Miller Drive
Altamonte Springs, FL 32701

Ref. : JED Partial Closure Phase 1, FL
Customer P.O. # JED Partial Closure 2012
Product : TN 270-2-8

We certify that the TN 270-2-8 drainage geocomposite, meets the project requirements as stated in the specifications. The properties listed in this section are:

Property	Test Method	Unit	Required Value	Qualifier
Geonet[4]				
Mass per Unit Area	ASTM D 5261	lbs/ft^2	0.197	Minimum
Thickness	ASTM D 5199	mil	200	Minimum
Carbon Black	ASTM D 4218	%	2.0 - 3.0	Range
Tensile Strength	ASTM D 5035	lbs/in	75	Minimum
Melt Flow	ASTM D 1238[3]	g/10 min	1.0	Maximum
Density	ASTM D 1505	g/cm^3	0.93	Minimum
Composite				
Ply Adhesion	ASTM D 7005	lb/in	1.0	MARV[6]
Transmissivity[1]	ASTM D 4716	m^2/sec	6.1×10^{-4}	MARV
Transmissivity[2]	ASTM D 4716	m^2/sec	1.0×10^{-4}	MARV
Geotextile[4&5]				
Fabric Weight	ASTM D 5261	oz/yd^2	8.0	MARV
Grab Strength	ASTM D 4632	lbs	200	MARV
Tear Strength	ASTM D 4533	lbs	75	MARV
CBR Puncture	ASTM D 6241	lbs	500	MARV
Permittivity	ASTM D 4491	sec^{-1}	0.50	MARV
AOS	ASTM D 4751	US Sieve	80	MARV
UV Resistance	ASTM D 4355	%/hrs	70/500	MARV

Notes:

1 Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.02 and a confining pressure of 500 psf between textured liners after 24 hours.

2 Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.02 and a confining pressure of 15,000 psf between textured liners after 100 hours.

3 Condition 190/2.16

4 Geotextile and Geonet properties are prior to lamination.

5 Geotextile data is provided by the supplier.

6 MARV is statistically defined as mean minus two standard deviations and it is the value which is exceeded by 97.5% of all the test data.

Sincerely,

Nilay Patel

Nilay Patel
QA Manager

APPROVED 5 QA

571 Industrial Parkway, Commerce, GA 30529 Ph : 706-336-7000 Fax : 706-336-7007 Email : info@skaps.com

SKAPS

Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

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)
			Side A	Side B	Minimum	Average	
1	46941010001	46941010001 - N	4694.239	4694.243	1.27	3.10	
2	46941010002	46941010002 - N	4694.239	4694.243			
3	46941010003	46941010003 - N	4694.239	4694.243			
4	46941010004	46941010004 - N	4694.239	4694.243			
5	46941010005	46941010005 - N	4694.239	4694.243			
6	46941010006	46941010006 - N	4694.239	4694.243			
7	46941010007	46941010007 - N	4694.269	4694.245			
8	46941010008	46941010008 - N	4694.269	4694.245			
9	46941010009	46941010009 - N	4694.269	4694.245			
10	46941010010	46941010010 - N	4694.269	4694.245			
11	46941010011	46941010011 - N	4694.269	4694.245			
12	46941010012	46941010012 - N	4694.269	4694.245			
13	46941010013	46941010013 - N	4694.255	4694.212			
14	46941010014	46941010014 - N	4694.255	4694.212			
15	46941010015	46941010015 - N	4694.255	4694.212	1.95	3.78	
16	46941010016	46941010016 - N	4694.255	4694.212			
17	46941010017	46941010017 - N	4694.255	4694.212			
18	46941010018	46941010018 - N	4694.255	4694.212			
19	46941010019	46941010019 - N	4694.228	4694.232			
20	46941010020	46941010020 - N	4694.228	4694.232			
21	46941010021	46941010021 - N	4694.228	4694.232			
22	46941010022	46941010022 - N	4694.228	4694.232			
23	46941010023	46941010023 - N	4694.228	4694.232			
24	46941010024	46941010024 - N	4694.228	4694.232			
25	46941010025	46941010025 - N	4694.268	4694.227			
26	46941010026	46941010026 - N	4694.268	4694.227			
27	46941010027	46941010027 - N	4694.268	4694.227			

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SKAPS

Product : TN 270-2-8
Project : JED Partial Closure Phase 1, FL

We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Mass Per Unit Area (lb/ft^2)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m^2/sec)
46941010001 - N	UTCX050977	0.9563	0.252	264	2.35	96	
46941010002 - N	UTCX050977	0.9563					
46941010003 - N	UTCX050977	0.9563					
46941010004 - N	UTCX050977	0.9563					
46941010005 - N	UTCX050977	0.9563					
46941010006 - N	UTCX050977	0.9563					
46941010007 - N	UTCX050977	0.9563					
46941010008 - N	UTCX050977	0.9563					
46941010009 - N	UTCX050977	0.9563					
46941010010 - N	UTCX050977	0.9563					
46941010011 - N	UTCX050977	0.9563					
46941010012 - N	UTCX050977	0.9563					
46941010013 - N	UTCX050977	0.9563					
46941010014 - N	UTCX050977	0.9563					
46941010015 - N	UTCX050977	0.9563	0.253	274	2.64	93	
46941010016 - N	UTCX050977	0.9563					
46941010017 - N	UTCX050977	0.9563					
46941010018 - N	UTCX050977	0.9563					
46941010019 - N	UTCX050977	0.9563					
46941010020 - N	UTCX050977	0.9563					
46941010021 - N	UTCX050977	0.9563					
46941010022 - N	UTCX050977	0.9563					
46941010023 - N	UTCX050977	0.9563					
46941010024 - N	UTCX050977	0.9563					
46941010025 - N	UTCX050977	0.9563					
46941010026 - N	UTCX050977	0.9563					
46941010027 - N	UTCX050977	0.9563					

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SKAPS

Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

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)
			Side A	Side B	Minimum	Average	
28	46941010028	46941010028 - N	4694.268	4694.227			
29	46941010029	46941010029 - N	4694.268	4694.227			
30	46941010030	46941010030 - N	4694.268	4694.227	1.29	2.29	
31	46941010031	46941010031 - N	4694.237	4694.274			
32	46941010032	46941010032 - N	4694.237	4694.274			
33	46941010033	46941010033 - N	4694.237	4694.274			
34	46941010034	46941010034 - N	4694.237	4694.274			
35	46941010035	46941010035 - N	4694.237	4694.274			
36	46941010036	46941010036 - N	4694.237	4694.274			
37	46941010037	46941010037 - N	4694.253	4694.206			
38	46941010038	46941010038 - N	4694.253	4694.206			
39	46941010039	46941010039 - N	4694.253	4694.206			
40	46941010040	46941010040 - N	4694.253	4694.206			
41	46941010041	46941010041 - N	4694.253	4694.206			
42	46941010042	46941010042 - N	4694.253	4694.206			
43	46941010043	46941010043 - N	4694.249	4694.203			
44	46941010044	46941010044 - N	4694.249	4694.203			
45	46941010045	46941010045 - N	4694.249	4694.203	1.41	3.24	
46	46941010046	46941010046 - N	4694.249	4694.203			
47	46941010047	46941010047 - N	4694.249	4694.203			
48	46941010048	46941010048 - N	4694.249	4694.203			
49	46941010049	46941010049 - N	4694.277	4694.252			
50	46941010050	46941010050 - N	4694.277	4694.252			
51	46941010051	46941010051 - N	4694.277	4694.252			
52	46941010052	46941010052 - N	4694.277	4694.252			
53	46941010053	46941010053 - N	4694.277	4694.252			
54	46941010054	46941010054 - N	4694.277	4694.252			

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SKAPS

Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Mass Per Unit Area (lb/ft^2)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m^2/sec)
46941010028 - N	UTCX050977	0.9563					
46941010029 - N	UTCX050977	0.9563					
46941010030 - N	UTCX050977	0.9563	0.256	270	2.32	95	
46941010031 - N	UTCX050977	0.9563					
46941010032 - N	UTCX050977	0.9563					
46941010033 - N	UTCX050977	0.9563					
46941010034 - N	UTCX050977	0.9563					
46941010035 - N	UTCX050977	0.9563					
46941010036 - N	UTCX050977	0.9563					
46941010037 - N	UTCX050977	0.9563					
46941010038 - N	UTCX050977	0.9563					
46941010039 - N	UTCX050977	0.9563					
46941010040 - N	UTCX050977	0.9563					
46941010041 - N	UTCX050977	0.9563					
46941010042 - N	UTCX050977	0.9563					
46941010043 - N	UTCX050977	0.9563					
46941010044 - N	UTCX050977	0.9563					
46941010045 - N	UTCX050977	0.9563	0.257	265	2.49	90	
46941010046 - N	UTCX050977	0.9563					
46941010047 - N	UTCX050977	0.9563					
46941010048 - N	UTCX050977	0.9563					
46941010049 - N	UTCX050977	0.9563					
46941010050 - N	UTCX050977	0.9563					
46941010051 - N	UTCX050977	0.9563					
46941010052 - N	UTCX050977	0.9563					
46941010053 - N	UTCX050977	0.9563					
46941010054 - N	UTCX050977	0.9563					

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SKAPS

Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

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)
			Side A	Side B	Minimum	Average	
55	46941010055	46941010055 - N	4694.278	4694.248			
56	46941010056	46941010056 - N	4694.278	4694.248			
57	46941010057	46941010057 - N	4694.278	4694.248			
58	46941010058	46941010058 - N	4694.278	4694.248			
59	46941010059	46941010059 - N	4694.278	4694.248			
60	46941010060	46941010060 - N	4694.278	4694.248	1.48	4.14	
61	46941010061	46941010061 - N	4694.283	4694.257			
62	46941010062	46941010062 - N	4694.283	4694.257			
63	46941010063	46941010063 - N	4694.283	4694.257			
64	46941010064	46941010064 - N	4694.283	4694.257			
65	46941010065	46941010065 - N	4694.283	4694.257			
66	46941010066	46941010066 - N	4694.283	4694.257			
67	46941010067	46941010067 - N	4694.271	4694.276			
68	46941010068	46941010068 - N	4694.271	4694.276			
69	46941010069	46941010069 - N	4694.271	4694.276			
70	46941010070	46941010070 - N	4694.271	4694.276			
71	46941010071	46941010071 - N	4694.271	4694.276			
72	46941010072	46941010072 - N	4694.271	4694.276			
73	46941010073	46941010073 - N	4694.202	4694.208			
74	46941010074	46941010074 - N	4694.202	4694.208			
75	46941010075	46941010075 - N	4694.202	4694.208	1.26	3.09	
76	46941010076	46941010076 - N	4694.202	4694.208			
77	46941010077	46941010077 - N	4694.202	4694.208			
78	46941010078	46941010078 - N	4694.202	4694.208			
79	46941010079	46941010079 - N	4694.209	4694.201			
80	46941010080	46941010080 - N	4694.209	4694.201			
81	46941010081	46941010081 - N	4694.209	4694.201			

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SKAPS

Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Mass Per Unit Area (lb/ft^2)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m^2/sec)
46941010055 - N	UTCX050977	0.9563					
46941010056 - N	UTCX050977	0.9563					
46941010057 - N	UTCX050977	0.9563					
46941010058 - N	UTCX050977	0.9563					
46941010059 - N	UTCX050977	0.9563					
46941010060 - N	UTCX050977	0.9563	0.258	269	2.61	91	
46941010061 - N	UTCX050977	0.9563					
46941010062 - N	UTCX050977	0.9563					
46941010063 - N	UTCX050977	0.9563					
46941010064 - N	UTCX050977	0.9563					
46941010065 - N	UTCX050977	0.9563					
46941010066 - N	UTCX050977	0.9563					
46941010067 - N	UTCX050977	0.9563					
46941010068 - N	UTCX050977	0.9563					
46941010069 - N	UTCX050977	0.9563					
46941010070 - N	UTCX050977	0.9563					
46941010071 - N	UTCX050977	0.9563					
46941010072 - N	UTCX050977	0.9563					
46941010073 - N	UTCX050977	0.9563					
46941010074 - N	UTCX050977	0.9563					
46941010075 - N	UTCX050977	0.9563	0.255	272	2.34	92	
46941010076 - N	UTCX050977	0.9563					
46941010077 - N	UTCX050977	0.9563					
46941010078 - N	UTCX050977	0.9563					
46941010079 - N	UTCX050977	0.9563					
46941010080 - N	UTCX050977	0.9563					
46941010081 - N	UTCX050977	0.9563					

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Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

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)
			Side A	Side B	Minimum	Average	
82	46941010082	46941010082 - N	4694.209	4694.201			
83	46941010083	46941010083 - N	4694.209	4694.201			
84	46941010084	46941010084 - N	4694.209	4694.201			
85	46941010085	46941010085 - N	4694.219	4694.240			
86	46941010086	46941010086 - N	4694.219	4694.240			
87	46941010087	46941010087 - N	4694.219	4694.240			
88	46941010088	46941010088 - N	4694.219	4694.240			
89	46941010089	46941010089 - N	4694.219	4694.240			
90	46941010090	46941010090 - N	4694.219	4694.240	2.02	3.85	
91	46941010091	46941010091 - N	4694.261	4694.235			
92	46941010092	46941010092 - N	4694.261	4694.235			
93	46941010093	46941010093 - N	4694.261	4694.235			
94	46941010094	46941010094 - N	4694.261	4694.235			
95	46941010095	46941010095 - N	4694.261	4694.235			
96	46941010096	46941010096 - N	4694.261	4694.235			
97	46941010097	46941010097 - N	4694.234	4694.256			
98	46941010098	46941010098 - N	4694.234	4694.256			
99	46941010099	46941010099 - N	4694.234	4694.256			
100	46941010100	46941010100 - N	4694.234	4694.256			
101	46941010101	46941010101 - N	4694.234	4694.256			
102	46941010102	46941010102 - N	4694.234	4694.256			
103	46941010103	46941010103 - N	4694.224	4694.211			
104	46941010104	46941010104 - N	4694.224	4694.211			
105	46941010105	46941010105 - N	4694.224	4694.211	1.65	3.48	
106	46941010106	46941010106 - N	4694.224	4694.211			
107	46941010107	46941010107 - N	4694.224	4694.211			
108	46941010108	46941010108 - N	4694.224	4694.211			

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Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Mass Per Unit Area (lb/ft^2)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m^2/sec)
46941010082 - N	UTCX050977	0.9563					
46941010083 - N	UTCX050977	0.9563					
46941010084 - N	UTCX050977	0.9563					
46941010085 - N	UTCX050977	0.9563					
46941010086 - N	UTCX050977	0.9563					
46941010087 - N	UTCX050977	0.9563					
46941010088 - N	UTCX050977	0.9563					
46941010089 - N	UTCX050977	0.9563					
46941010090 - N	UTCX050977	0.9563	0.251	266	2.32	94	
46941010091 - N	UTCX050977	0.9563					
46941010092 - N	UTCX050977	0.9563					
46941010093 - N	UTCX050977	0.9563					
46941010094 - N	UTCX050977	0.9563					
46941010095 - N	UTCX050977	0.9563					
46941010096 - N	UTCX050977	0.9563					
46941010097 - N	UTCX050977	0.9563					
46941010098 - N	UTCX050977	0.9563					
46941010099 - N	UTCX050977	0.9563					
46941010100 - N	UTCX050977	0.9563					
46941010101 - N	UTCX050977	0.9563					
46941010102 - N	UTCX050977	0.9563					
46941010103 - N	UTCX050977	0.9563					
46941010104 - N	UTCX050977	0.9563					
46941010105 - N	UTCX050977	0.9563	0.254	267	2.34	90	
46941010106 - N	UTCX050977	0.9563					
46941010107 - N	UTCX050977	0.9563					
46941010108 - N	UTCX050977	0.9563					

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Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

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)
			Side A	Side B	Minimum	Average	
109	46941010109	46941010109 - N	4694.242	4694.217			
110	46941010110	46941010110 - N	4694.242	4694.217			
111	46941010111	46941010111 - N	4694.242	4694.217			
112	46941010112	46941010112 - N	4694.242	4694.217			
113	46941010113	46941010113 - N	4694.242	4694.217			
114	46941010114	46941010114 - N	4694.242	4694.217			
115	46941010115	46941010115 - N	4694.270	4694.265			
116	46941010116	46941010116 - N	4694.270	4694.265			
117	46941010117	46941010117 - N	4694.270	4694.265			
118	46941010118	46941010118 - N	4694.270	4694.265			
119	46941010119	46941010119 - N	4694.270	4694.265			
120	46941010120	46941010120 - N	4694.270	4694.265	1.36	4.02	
121	46941010121	46941010121 - N	4694.259	4694.250			
122	46941010122	46941010122 - N	4694.259	4694.250			
123	46941010123	46941010123 - N	4694.259	4694.250			
124	46941010124	46941010124 - N	4694.259	4694.250			
125	46941010125	46941010125 - N	4694.259	4694.250			
126	46941010126	46941010126 - N	4694.259	4694.250			
127	46941010127	46941010127 - N	4694.214	4694.220			
128	46941010128	46941010128 - N	4694.214	4694.220			
129	46941010129	46941010129 - N	4694.214	4694.220			
130	46941010130	46941010130 - N	4694.214	4694.220			
131	46941010131	46941010131 - N	4694.214	4694.220			
132	46941010132	46941010132 - N	4694.214	4694.220			
133	46941010133	46941010133 - N	4694.207	4694.267			
134	46941010134	46941010134 - N	4694.207	4694.267			
135	46941010135	46941010135 - N	4694.207	4694.267	1.32	2.32	

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Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Mass Per Unit Area (lb/ft^2)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m^2/sec)
46941010109 - N	UTCX050977	0.9563					
46941010110 - N	UTCX050977	0.9563					
46941010111 - N	UTCX050977	0.9563					
46941010112 - N	UTCX050977	0.9563					
46941010113 - N	UTCX050977	0.9563					
46941010114 - N	UTCX050977	0.9563					
46941010115 - N	UTCX050977	0.9563					
46941010116 - N	UTCX050977	0.9563					
46941010117 - N	UTCX050977	0.9563					
46941010118 - N	UTCX050977	0.9563					
46941010119 - N	UTCX050977	0.9563					
46941010120 - N	UTCX050977	0.9563	0.259	277	2.49	96	
46941010121 - N	UTCX050977	0.9563					
46941010122 - N	UTCX050977	0.9563					
46941010123 - N	UTCX050977	0.9563					
46941010124 - N	UTCX050977	0.9563					
46941010125 - N	UTCX050977	0.9563					
46941010126 - N	UTCX050977	0.9563					
46941010127 - N	UTCX050977	0.9563					
46941010128 - N	UTCX050977	0.9563					
46941010129 - N	UTCX050977	0.9563					
46941010130 - N	UTCX050977	0.9563					
46941010131 - N	UTCX050977	0.9563					
46941010132 - N	UTCX050977	0.9563					
46941010133 - N	UTCX050977	0.9563					
46941010134 - N	UTCX050977	0.9563					
46941010135 - N	UTCX050977	0.9563	0.250	276	2.35	92	

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Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

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)
			Side A	Side B	Minimum	Average	
136	46941010136	46941010136 - N	4694.207	4694.267			
137	46941010137	46941010137 - N	4694.207	4694.267			
138	46941010138	46941010138 - N	4694.207	4694.267			
139	46941010139	46941010139 - N	4694.251	4694.204			
140	46941010140	46941010140 - N	4694.251	4694.204			
141	46941010141	46941010141 - N	4694.251	4694.204			
142	46941010142	46941010142 - N	4694.251	4694.204			
143	46941010143	46941010143 - N	4694.251	4694.204			
144	46941010144	46941010144 - N	4694.251	4694.204			
145	46941010145	46941010145 - N	4694.213	4694.221			
146	46941010146	46941010146 - N	4694.213	4694.221			
147	46941010147	46941010147 - N	4694.213	4694.221			
148	46941010148	46941010148 - N	4694.213	4694.221			
149	46941010149	46941010149 - N	4694.213	4694.221			
150	46941010150	46941010150 - N	4694.213	4694.221	1.47	3.30	
151	46941010151	46941010151 - N	4694.233	4694.229			
152	46941010152	46941010152 - N	4694.233	4694.229			
153	46941010153	46941010153 - N	4694.233	4694.229			
154	46941010154	46941010154 - N	4694.233	4694.229			
155	46941010155	46941010155 - N	4694.233	4694.229			
156	46941010156	46941010156 - N	4694.233	4694.229			
157	46941010157	46941010157 - N	4694.215	4694.218			
158	46941010158	46941010158 - N	4694.215	4694.218			
159	46941010159	46941010159 - N	4694.215	4694.218			
160	46941010160	46941010160 - N	4694.215	4694.218			
161	46941010161	46941010161 - N	4694.215	4694.218			
162	46941010162	46941010162 - N	4694.215	4694.218			

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Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Mass Per Unit Area (lb/ft^2)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m^2/sec)
46941010136 - N	UTCX050977	0.9563					
46941010137 - N	UTCX050977	0.9563					
46941010138 - N	UTCX050977	0.9563					
46941010139 - N	UTCX050977	0.9563					
46941010140 - N	UTCX050977	0.9563					
46941010141 - N	UTCX050977	0.9563					
46941010142 - N	UTCX050977	0.9563					
46941010143 - N	UTCX050977	0.9563					
46941010144 - N	UTCX050977	0.9563					
46941010145 - N	UTCX050977	0.9563					
46941010146 - N	UTCX050977	0.9563					
46941010147 - N	UTCX050977	0.9563					
46941010148 - N	UTCX050977	0.9563					
46941010149 - N	UTCX050977	0.9563					
46941010150 - N	UTCX050977	0.9563	0.254	273	2.55	93	
46941010151 - N	UTCX050977	0.9563					
46941010152 - N	UTCX050977	0.9563					
46941010153 - N	UTCX050977	0.9563					
46941010154 - N	UTCX050977	0.9563					
46941010155 - N	UTCX050977	0.9563					
46941010156 - N	UTCX050977	0.9563					
46941010157 - N	UTCX050977	0.9563					
46941010158 - N	UTCX050977	0.9563					
46941010159 - N	UTCX050977	0.9563					
46941010160 - N	UTCX050977	0.9563					
46941010161 - N	UTCX050977	0.9563					
46941010162 - N	UTCX050977	0.9563					

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Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

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)
			Side A	Side B	Minimum	Average	
163	46941010163	46941010163 - N	4694.280	4694.260			
164	46941010164	46941010164 - N	4694.280	4694.260			
165	46941010165	46941010165 - N	4694.280	4694.260	1.81	2.81	
166	46941010166	46941010166 - N	4694.280	4694.260			
167	46941010167	46941010167 - N	4694.280	4694.260			
168	46941010168	46941010168 - N	4694.280	4694.260			
169	46941010169	46941010169 - N	4694.205	4694.241			
170	46941010170	46941010170 - N	4694.205	4694.241			
171	46941010171	46941010171 - N	4694.205	4694.241			
172	46941010172	46941010172 - N	4694.205	4694.241			
173	46941010173	46941010173 - N	4694.205	4694.241			
174	46941010174	46941010174 - N	4694.205	4694.241			
175	46941010175	46941010175 - N	4694.281	4694.263			
176	46941010176	46941010176 - N	4694.281	4694.263			
177	46941010177	46941010177 - N	4694.281	4694.263			
178	46941010178	46941010178 - N	4694.281	4694.263			
179	46941010179	46941010179 - N	4694.281	4694.263			
180	46941010180	46941010180 - N	4694.281	4694.263	1.97	2.97	
181	46941010181	46941010181 - N	4694.254	4694.216			
182	46941010182	46941010182 - N	4694.254	4694.216			
183	46941010183	46941010183 - N	4694.254	4694.216			
184	46941010184	46941010184 - N	4694.254	4694.216			
185	46941010185	46941010185 - N	4694.254	4694.216			
186	46941010186	46941010186 - N	4694.254	4694.216			
187	46941010187	46941010187 - N	4694.236	4694.273			
188	46941010188	46941010188 - N	4694.236	4694.273			
189	46941010189	46941010189 - N	4694.236	4694.273			

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Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Mass Per Unit Area (lb/ft^2)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m^2/sec)
46941010163 - N	UTCX050977	0.9563					
46941010164 - N	UTCX050977	0.9563					
46941010165 - N	UTCX050977	0.9563	0.259	268	2.45	95	
46941010166 - N	UTCX050977	0.9563					
46941010167 - N	UTCX050977	0.9563					
46941010168 - N	UTCX050977	0.9563					
46941010169 - N	UTCX050977	0.9563					
46941010170 - N	UTCX050977	0.9563					
46941010171 - N	UTCX050977	0.9563					
46941010172 - N	UTCX050977	0.9563					
46941010173 - N	UTCX050977	0.9563					
46941010174 - N	UTCX050977	0.9563					
46941010175 - N	UTCX050977	0.9563					
46941010176 - N	UTCX050977	0.9563					
46941010177 - N	UTCX050977	0.9563					
46941010178 - N	UTCX050977	0.9563					
46941010179 - N	UTCX050977	0.9563					
46941010180 - N	UTCX050977	0.9563	0.257	263	2.61	91	
46941010181 - N	UTCX050977	0.9563					
46941010182 - N	UTCX050977	0.9563					
46941010183 - N	UTCX050977	0.9563					
46941010184 - N	UTCX050977	0.9563					
46941010185 - N	UTCX050977	0.9563					
46941010186 - N	UTCX050977	0.9563					
46941010187 - N	UTCX050977	0.9563					
46941010188 - N	UTCX050977	0.9563					
46941010189 - N	UTCX050977	0.9563					

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Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

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)
			Side A	Side B	Minimum	Average	
190	46941010190	46941010190 - N	4694.236	4694.273			
191	46941010191	46941010191 - N	4694.236	4694.273			
192	46941010192	46941010192 - N	4694.236	4694.273			
193	46941010193	46941010193 - N	4694.279	4694.266			
194	46941010194	46941010194 - N	4694.279	4694.266			
195	46941010195	46941010195 - N	4694.279	4694.266	1.49	3.32	
196	46941010196	46941010196 - N	4694.279	4694.266			
197	46941010197	46941010197 - N	4694.279	4694.266			
198	46941010198	46941010198 - N	4694.279	4694.266			
199	46941010199	46941010199 - N	4694.262	4694.244			
200	46941010200	46941010200 - N	4694.262	4694.244			
201	46941010201	46941010201 - N	4694.262	4694.244			
202	46941010202	46941010202 - N	4694.262	4694.244			
203	46941010203	46941010203 - N	4694.262	4694.244			
204	46941010204	46941010204 - N	4694.262	4694.244			
205	46941010205	46941010205 - N	4694.272	4694.222			
206	46941010206	46941010206 - N	4694.272	4694.222			
207	46941010207	46941010207 - N	4694.272	4694.222			
208	46941010208	46941010208 - N	4694.272	4694.222			
209	46941010209	46941010209 - N	4694.272	4694.222			
210	46941010210	46941010210 - N	4694.272	4694.222	1.40	2.40	
211	46941010211	46941010211 - N	4694.226	4694.223			
212	46941010212	46941010212 - N	4694.226	4694.223			
213	46941010213	46941010213 - N	4694.226	4694.223			
214	46941010214	46941010214 - N	4694.226	4694.223			
215	46941010215	46941010215 - N	4694.226	4694.223			
216	46941010216	46941010216 - N	4694.226	4694.223			

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Product : TN 270-2-8
Project : JED Partial Closure Phase 1, FL

We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Mass Per Unit Area (lb/ft^2)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m^2/sec)
46941010190 - N	UTCX050977	0.9563					
46941010191 - N	UTCX050977	0.9563					
46941010192 - N	UTCX050977	0.9563					
46941010193 - N	UTCX050977	0.9563					
46941010194 - N	UTCX050977	0.9563					
46941010195 - N	UTCX050977	0.9563	0.252	271	2.57	94	
46941010196 - N	UTCX050977	0.9563					
46941010197 - N	UTCX050977	0.9563					
46941010198 - N	UTCX050977	0.9563					
46941010199 - N	UTCX050977	0.9563					
46941010200 - N	UTCX050977	0.9563					
46941010201 - N	UTCX050977	0.9563					
46941010202 - N	UTCX050977	0.9563					
46941010203 - N	UTCX050977	0.9563					
46941010204 - N	UTCX050977	0.9563					
46941010205 - N	UTCX050977	0.9563					
46941010206 - N	UTCX050977	0.9563					
46941010207 - N	UTCX050977	0.9563					
46941010208 - N	UTCX050977	0.9563					
46941010209 - N	UTCX050977	0.9563					
46941010210 - N	UTCX050977	0.9563	0.251	278	2.43	96	
46941010211 - N	UTCX050977	0.9563					
46941010212 - N	UTCX050977	0.9563					
46941010213 - N	UTCX050977	0.9563					
46941010214 - N	UTCX050977	0.9563					
46941010215 - N	UTCX050977	0.9563					
46941010216 - N	UTCX050977	0.9563					

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SKAPS

Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

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)
			Side A	Side B	Minimum	Average	
217	46941010217	46941010217 - N	4694.264	4694.225			
218	46941010218	46941010218 - N	4694.264	4694.225			
219	46941010219	46941010219 - N	4694.264	4694.225			
220	46941010220	46941010220 - N	4694.264	4694.225			
221	46941010221	46941010221 - N	4694.264	4694.225			
222	46941010222	46941010222 - N	4694.264	4694.225			
223	46941010223	46941010223 - N	4694.246	4694.230			
224	46941010224	46941010224 - N	4694.246	4694.230			
225	46941010225	46941010225 - N	4694.246	4694.230	1.51	2.51	
226	46941010226	46941010226 - N	4694.246	4694.230			
227	46941010227	46941010227 - N	4694.246	4694.230			
228	46941010228	46941010228 - N	4694.246	4694.230			
229	46941010229	46941010229 - N	4694.231	4694.238			
230	46941010230	46941010230 - N	4694.231	4694.238			
231	46941010231	46941010231 - N	4694.231	4694.238			
232	46941010232	46941010232 - N	4694.231	4694.238			
233	46941010233	46941010233 - N	4694.231	4694.238			
234	46941010234	46941010234 - N	4694.231	4694.238			
235	46941010235	46941010235 - N	4694.247	4694.284			
236	46941010236	46941010236 - N	4694.247	4694.284			
237	46941010237	46941010237 - N	4694.247	4694.284			
238	46941010238	46941010238 - N	4694.247	4694.284			
239	46941010239	46941010239 - N	4694.247	4694.284			
240	46941010240	46941010240 - N	4694.247	4694.284	1.63	2.63	
241	46941010241	46941010241 - N	4694.258	4694.210			
242	46941010242	46941010242 - N	4694.258	4694.210			
243	46941010243	46941010243 - N	4694.258	4694.210			

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SKAPS

Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Mass Per Unit Area (lb/ft^2)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m^2/sec)
46941010217 - N	UTCX050977	0.9563					
46941010218 - N	UTCX050977	0.9563					
46941010219 - N	UTCX050977	0.9563					
46941010220 - N	UTCX050977	0.9563					
46941010221 - N	UTCX050977	0.9563					
46941010222 - N	UTCX050977	0.9563					
46941010223 - N	UTCX050977	0.9563					
46941010224 - N	UTCX050977	0.9563					
46941010225 - N	UTCX050977	0.9563	0.250	275	2.54	93	
46941010226 - N	UTCX050977	0.9563					
46941010227 - N	UTCX050977	0.9563					
46941010228 - N	UTCX050977	0.9563					
46941010229 - N	UTCX050977	0.9563					
46941010230 - N	UTCX050977	0.9563					
46941010231 - N	UTCX050977	0.9563					
46941010232 - N	UTCX050977	0.9563					
46941010233 - N	UTCX050977	0.9563					
46941010234 - N	UTCX050977	0.9563					
46941010235 - N	UTCX050977	0.9563					
46941010236 - N	UTCX050977	0.9563					
46941010237 - N	UTCX050977	0.9563					
46941010238 - N	UTCX050977	0.9563					
46941010239 - N	UTCX050977	0.9563					
46941010240 - N	UTCX050977	0.9563	0.258	264	2.27	95	
46941010241 - N	UTCX050977	0.9563					
46941010242 - N	UTCX050977	0.9563					
46941010243 - N	UTCX050977	0.9563					

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SKAPS

Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

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)
			Side A	Side B	Minimum	Average	
244	46941010244	46941010244 - N	4694.258	4694.210			
245	46941010245	46941010245 - N	4694.258	4694.210			
246	46941010246	46941010246 - N	4694.258	4694.210			
247	46941010247	46941010247 - N	4694.275	4694.282			
248	46941010248	46941010248 - N	4694.275	4694.282			
249	46941010249	46941010249 - N	4694.275	4694.282			
250	46941010250	46941010250 - N	4694.275	4694.282			

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SKAPS

Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Mass Per Unit Area (lb/ft^2)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m^2/sec)
46941010244 - N	UTCX050977	0.9563					
46941010245 - N	UTCX050977	0.9563					
46941010246 - N	UTCX050977	0.9563					
46941010247 - N	UTCX050977	0.9563					
46941010248 - N	UTCX050977	0.9563					
46941010249 - N	UTCX050977	0.9563					
46941010250 - N	UTCX050977	0.9563					

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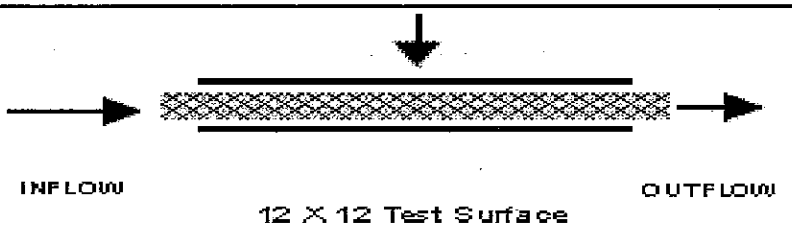
ASTM D 4716

Client:	IESI / Progressive Waste Solutions	**Job #**	4694
Project:	JED Partial Closure Phase 1, FL		
Product:	TN 270-2-8		

Test Configuration:



Test Information:

Boundary Conditions:	Textured Liner Geocomposite Textured Liner	**Normal Load:**	500
		Gradient:	0.02
		Seating Time:	24 hours
		Flow Direction:	MD

Test Results:

Roll No.	Pressure, psf	Gradient	Transmissivity, m^2/sec
			24 hours
46941010001	500	0.02	1.14×10^{-3}
46941010035			1.18×10^{-3}
46941010070			1.11×10^{-3}
46941010105			1.09×10^{-3}
46941010140			1.16×10^{-3}
46941010175			1.07×10^{-3}
46941010210			1.08×10^{-3}
46941010245			1.2×10^{-3}

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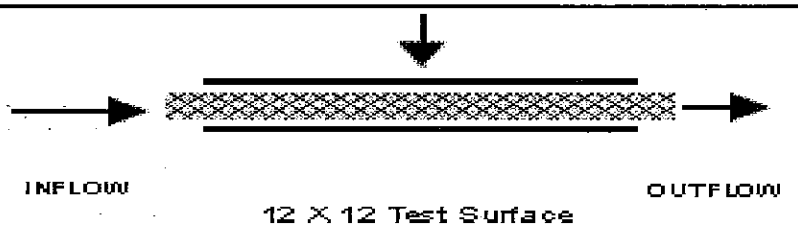
ASTM D 4716

Client:	IESI / Progressive Waste Solutions	**Job #**	4694
Project:	JED Partial Closure Phase 1, FL		
Product:	TN 270-2-8		

Test Configuration:



Test Information:

Boundary Conditions:	Textured Liner Geocomposite Textured Liner	**Normal Load:**	15000
		Gradient:	0.02
		Seating Time:	100 hours
		Flow Direction:	MD

Test Results:

Roll No.	Pressure, psf	Gradient	Transmissivity, m^2/sec
			100 hours
46941010001	15000	0.02	4.19×10^{-4}
46941010035			4.31×10^{-4}
46941010070			4.22×10^{-4}
46941010105			4.33×10^{-4}
46941010140			4.39×10^{-4}
46941010175			4.18×10^{-4}
46941010210			4.38×10^{-4}
46941010245			4.29×10^{-4}

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POLYETHYLENE RESIN CERTIFICATION

Customer Name : IESI / Progressive Waste Solutions
Project Name : JED Partial Closure Phase 1, FL
Geocomposite Manufacturer : SKAPS Industries
Geocomposite Production Plant : Commerce, GA
Geocomposite Brand Name : TN 270-2-8

We, the Geonet Manufacturer, hereby certify the following for the material delivered to the above referenced project:

Resin Supplier	Resin Production Plant	Resin Brand Name	Resin Lot Number	Property	Test Method	Units	Resin Supplier Value	Tested Value*
Osterman and Company	Chevron, TX	HDPE	UTCX050977	Density	ASTM D1505	gm / cc	0.952	0.9515
				Melt flow Index	ASTM D1238[a]	gm / 10 min	0.32	0.34

(a) Condition 190/2.16
* Data from SKAPS Quality Control

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SKAPS

Product : **TN 270-2-8**
Project : **JED Partial Closure Phase 1, FL**

We, the Geocomposite Manufacturer, hereby certify the following for the material delivered to the above referenced project :

GEOCOMP ROLL#	FABRIC ROLL#	WEIGHT oz/sq yd	MD TENSILE lbs.	XMD TENSILE lbs.	MD TRAP lbs.	XMD TRAP lbs.	CBR PUNCTURE lbs.	AOS us sieve	PERM-ITY sec^{-1}
46941010001	4694.239	8.30	229	235	104	116	678	80	1.35
	4694.243	8.45	233	245	100	110	657	80	1.35
46941010035	4694.237	8.30	229	235	104	116	678	80	1.35
	4694.274	8.50	227	243	96	103	670	80	1.39
46941010070	4694.271	8.50	227	243	96	103	670	80	1.39
	4694.276	8.53	225	238	96	103	670	80	1.39
46941010105	4694.224	8.17	230	231	97	119	654	80	1.35
	4694.211	8.14	234	244	95	118	686	80	1.35
46941010140	4694.251	8.41	228	233	99	107	655	80	1.39
	4694.204	8.56	231	232	101	105	696	80	1.35
46941010175	4694.281	8.52	228	240	98	104	685	80	1.39
	4694.263	8.40	231	241	105	113	700	80	1.39
46941010210	4694.272	8.50	227	243	96	103	670	80	1.39
	4694.222	8.17	230	231	97	119	654	80	1.35
46941010245	4694.258	8.29	229	239	99	107	655	80	1.39
	4694.210	8.14	234	244	95	118	686	80	1.35

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Geocomposite QA Test Data

GEOCOMPOSITE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: WSI - JED Landfill Cell 8

Material: SKAPS TN 270-2-8 Double Sided Geocomposite
Sample Identification: 0046941010003
TRI Log #: E2360-90-02

PARAMETER	TEST REPLICATE NUMBER 1	2	3	4	5	6	7	8	9	10	MEAN	STD. DEV.

Hydraulic Transmissivity (ASTM D 4716)

Direction Tested: Machine Direction

Normal Load (psf):	500
Hydraulic Gradient:	0.33
Test Length (in)	12
Test Width (in)	12

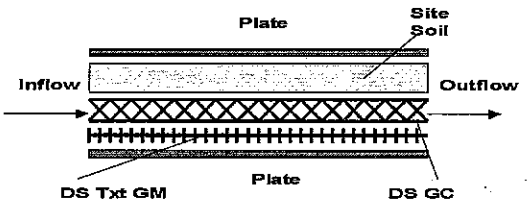

Plate / Site Soil / GC Sample / Agru 40 mil. MSLLGM / Plate

Seal Time (hours)		Specimen	1			MEAN	STD. DEV.
	Volume (cc)		715	698	719		
	Time (s)		8:50	8:27	8:56		
24	Flow Rate (GPM/ft width)		1.33	1.34	1.33	1.33	0.00
	Transmissivity (m^2/s)		7.97E-04	8.00E-04	7.96E-04	7.97E-04	1.97E-06
	Test Temp (C)			22.0			
	Temp. Corr. Factor			0.953			

Peel Strength (ASTM D 7005)

	1	2	3	4	5	MEAN	STD. DEV.
A - MD Average Peel Strength (ppi)	5.7	4.9	3.7	4.8	5.3	4.9	0.7
A - MD Average Peel Strength (g/in)	2588	2225	1680	2179	2406	2216	340
B - MD Average Peel Strength (ppi)	3.6	2.5	2.3	3.5	3.1	3.0	0.6
B - MD Average Peel Strength (g/in)	1634	1135	1044	1589	1407	1362	265

Note: A and B represent a randomly assigned top and bottom of the sample

MD Machine Direction

GeosyntheticTesting.com
9063 Bee Caves Road / Austin, TX 78733 / 512 263 2101 / fax: 512 263 2558

GEOCOMPOSITE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: WSI - JED Landfill Cell 8

Material: SKAPS TN 270-2-8 Double Sided Geocomposite
Sample Identification: 0046941010086
TRI Log #: E2360-90-02

PARAMETER	TEST REPLICATE NUMBER 1	2	3	4	5	6	7	8	9	10	MEAN	STD. DEV.

Hydraulic Transmissivity (ASTM D 4716)

Direction Tested: Machine Direction

Normal Load (psf):	500
Hydraulic Gradient:	0.33
Test Length (in)	12
Test Width (in)	12

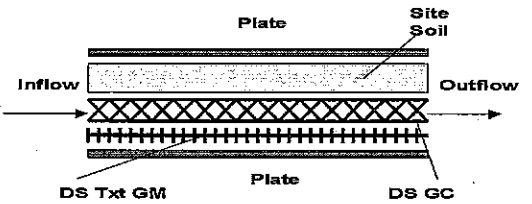

Plate / Site Soil / GC Sample / Agru 40 mil. MSLLGM / Plate

Seat Time (hours)	Specimen	1			MEAN	STD. DEV.
	Volume (cc)	562	570	565		
	Time (s)	8.35	8.47	8.46		
24	Flow Rate (GPM/ft width)	1.07	1.07	1.06	1.06	0.00
	Transmissivity (m^2/s)	6.38E-04	6.38E-04	6.33E-04	6.36E-04	2.82E-06
	Test Temp (C)		22.0			
	Temp. Corr. Factor		0.953			

Peel Strength (ASTM D 7005)

	1	2	3	4	5	MEAN	STD. DEV.
A - MD Average Peel Strength (ppi)	4.0	4.1	4.5	3.7	3.9	4.0	0.3
A - MD Average Peel Strength (g/in)	1816	1861	2043	1680	1771	1834	135
B - MD Average Peel Strength (ppi)	2.9	2.4	3.0	1.4	2.9	2.5	0.7
B - MD Average Peel Strength (g/in)	1317	1090	1362	636	1317	1144	304

Note: A and B represent a randomly assigned top and bottom of the sample

MD Machine Direction

GeosyntheticTesting.com
9063 Bee Caves Road / Austin, TX 78733 / 512 263 2101 / fax 512 263 2558

GEOCOMPOSITE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: WSI - JED Landfill Cell 8

Material: SKAPS TN 270-2-8 Double Sided Geocomposite
Sample Identification: 0046941010159
TRI Log #: E2360-90-02

Hydraulic Transmissivity (ASTM D 4716)

Direction Tested: Machine Direction

Normal Load (psf):	500
Hydraulic Gradient:	0.33
Test Length (in)	12
Test Width (in)	12

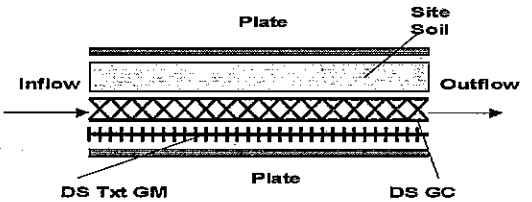

Plate / Site Soil / GC Sample / Agru 40 mil. MSLLGM / Plate

Seat Time (hours)		Specimen 1			MEAN	STD. DEV.
	Volume (cc)	749	744	759		
	Time (s)	8.43	8.35	8.47		
24	Flow Rate (GPM/ft width)	1.41	1.41	1.42	1.41	0.01
	Transmissivity (m^2/s)	8.42E-04	8.44E-04	8.49E-04	8.45E-04	3.67E-06
	Test Temp (C)		22.0			
	Temp. Corr. Factor		0.953			

Peel Strength (ASTM D 7005)

	1	2	3	4	5	MEAN	STD. DEV.
A - MD Average Peel Strength (ppi)	4.1	4.1	3.4	2.5	3.4	3.5	0.7
A - MD Average Peel Strength (g/in)	1861	1861	1544	1135	1544	1589	299
B - MD Average Peel Strength (ppi)	2.6	2.5	2.4	2.8	2.3	2.5	0.2
B - MD Average Peel Strength (g/in)	1180	1135	1090	1271	1044	1144	87

Note: A and B represent a randomly assigned top and bottom of the sample

MD Machine Direction

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GEOCOMPOSITE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: WSI - JED Landfill Cell 8

Material: SKAPS TN 270-2-8 Double Sided Geocomposite
Sample Identification: 0046941010227
TRI Log #: E2360-90-02

Hydraulic Transmissivity (ASTM D 4716)

Direction Tested: Machine Direction

Normal Load (psf):	500
Hydraulic Gradient:	0.33
Test Length (in)	12
Test Width (in)	12

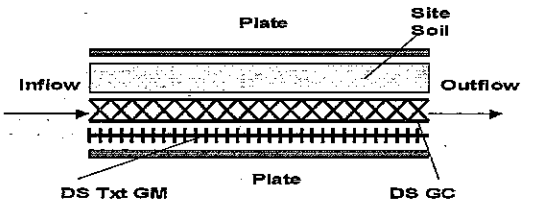

Plate / Site Soil / GC Sample / Agru 40 mil. MSLLGM / Plate

Seat Time (hours)		Specimen 1			MEAN	STD. DEV.
	Volume (cc)	764	774	760		
	Time (s)	8.36	8.40	8.30		
24	Flow Rate (GPM/ft width)	1.45	1.46	1.45	1.45	0.01
	Transmissivity (m^2/s)	8.66E-04	8.73E-04	8.67E-04	8.69E-04	3.74E-06
	Test Temp (C)		22.0			
	Temp. Corr. Factor		0.953			

Peel Strength (ASTM D 7005)

PARAMETER	TEST REPLICATE NUMBER 1	2	3	4	5	MEAN	STD. DEV.
A - MD Average Peel Strength (ppi)	3.6	5.2	4.2	2.9	2.8	3.7	1.0
A - MD Average Peel Strength (g/in)	1634	2361	1907	1317	1271	1698	451
B - MD Average Peel Strength (ppi)	2.5	1.8	2.5	1.7	2.1	2.1	0.4
B - MD Average Peel Strength (g/in)	1135	817	1135	772	953	962	171

Note: A and B represent a randomly assigned top and bottom of the sample

MD Machine Direction

GeosyntheticTesting.com
9063 Bee Caves Road / Austin, TX 78733 / 512 263 2101 / fax: 512 263 2558

GEOCOMPOSITE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED 2012 Partial Closure

Material: SKAPS TN 270-2-8 Double Sided Geocomposite
Sample Identification: 0046941010003
TRI Log #: E2360-90-03

PARAMETER	TEST REPLICATE NUMBER 1	2	3	4	5	6	7	8	9	10	MEAN	STD. DEV.
Mass/Unit Area (ASTM D 5261)												
5" diameter circle (grams)	3.66	3.65	3.63	3.83	3.44	3.61	3.84	3.35	3.35	2.98	3.53	0.26
Mass/Unit Area (oz/sq.yd)	8.51	8.49	8.44	8.91	8.00	8.40	8.93	7.79	7.79	6.93	8.22	0.61
Grab Tensile Properties (ASTM D 4632)												
MD - Tensile Strength (lbs)	245	280	245	305	255	245	296	237	272	219	260	27
TD - Tensile Strength (lbs)	317	295	299	293	264	272	310	260	343	293	295	25
MD - Elong. @ Max. Load (%)	78	85	79	88	82	79	87	81	81	77	82	4
TD - Elong. @ Max. Load (%)	103	105	119	96	113	107	107	118	115	117	110	8
Trapezoidal Tear (ASTM D 4533)												
MD - Tear Strength (lbs)	106	116	99	121	105	95	105	121	105	93	107	10
TD - Tear Strength (lbs)	138	131	130	117	119	154	156	118	132	130	132	14
Apparent Opening Size (ASTM D 4751)												
Opening Size Diameter (mm)	0.075	0.075	0.075	0.075	0.075						0.075	0.000
Sieve No.	200	200	200	200	200						200	

Falling Head Permittivity (ASTM D 4491, 9-in Upper Standpipe; 2 in opening)

Water Temp. (C):	21
Correction Factor:	0.976

Test Specimen No. >:	1					2				
Thickness (mils)	101	101	101	101	101	99	99	99	99	99
Time (s)	15.7	15.5	15.5	15.8	15.6	15.9	15.7	15.9	15.8	15.7
Specimen Permittivity (s-1)	1.81	1.83	1.83	1.80	1.82	1.78	1.81	1.78	1.80	1.81
Specimen Permittivity @20°C (sec-1)	1.76	1.79	1.79	1.75	1.77	1.74	1.76	1.74	1.75	1.76
Specimen Flow rate (GPM/ft2)	132	134	134	131	133	130	132	130	131	132
Specimen Permeability (cm/s)	0.45	0.46	0.46	0.45	0.46	0.44	0.44	0.44	0.44	0.44

Test Specimen No. >:	3					4				
Thickness (mils)	102	102	102	102	102	91	91	91	91	91
Time (s)	15.9	16.1	16.2	15.9	16.1	13.4	13.6	13.6	13.8	13.5
Permittivity (s-1)	1.78	1.76	1.75	1.78	1.76	2.12	2.09	2.09	2.06	2.10
Specimen Permittivity @20°C (sec-1)	1.74	1.72	1.71	1.74	1.72	2.07	2.04	2.04	2.01	2.05
Specimen Flow rate (GPM/ft2)	130	129	128	130	129	155	152	152	150	153
Specimen Permeability (cm/s)	0.45	0.45	0.44	0.45	0.45	0.48	0.47	0.47	0.46	0.47

TEMPERATURE CORRECTED VALUES		
	Permittivity (s-1)	1.82
	Flow rate (GPM/ft2)	136
	Permeability (cm/s)	0.45

MD Machine Direction TD Transverse Direction NA Not Available

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GEOCOMPOSITE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED 2012 Partial Closure

Material: SKAPS TN 270-2-8 Double Sided Geocomposite
Sample Identification: 0046941010086
TRI Log #: E2360-90-03

PARAMETER	TEST REPLICATE NUMBER 1	2	3	4	5	6	7	8	9	10	MEAN	STD. DEV.
Mass/Unit Area (ASTM D 5261)												
5" diameter circle (grams)	3.64	3.94	3.55	3.66	4.03	3.47	3.85	3.44	3.96	3.76	3.73	0.21
Mass/Unit Area (oz/sq.yd)	8.47	9.16	8.26	8.51	9.37	8.07	8.96	8.00	9.21	8.75	8.68	0.49
Grab Tensile Properties (ASTM D 4632)												
MD - Tensile Strength (lbs)	229	306	260	266	309	242	299	227	298	264	270	31
TD - Tensile Strength (lbs)	268	350	228	317	332	281	327	262	308	312	298	37
MD - Elong. @ Max. Load (%)	79	85	91	85	97	81	88	83	89	89	87	5
TD - Elong. @ Max. Load (%)	95	101	117	111	103	104	107	116	110	107	107	7
Trapezoidal Tear (ASTM D 4533)												
MD - Tear Strength (lbs)	86	109	85	116	111	126	115	99	93	131	107	16
TD - Tear Strength (lbs)	125	146	132	104	119	117	135	133	135	121	127	12
Apparent Opening Size (ASTM D 4751)												
Opening Size Diameter (mm)	0.075	0.075	0.075	0.075	0.075						0.075	0.000
Sieve No.	200	200	200	200	200						200	

Falling Head Permittivity (ASTM D 4491, 9-in Upper Standpipe; 2 in opening)

Water Temp. (C):	21									
Correction Factor:	0.976									
Test Speciemn No. >:	1					2				
Thickness (mils)	98	98	98	98	98	107	107	107	107	107
Time (s)	14.8	14.8	14.6	14.5	14.8	16.8	17.2	16.9	17.1	16.8
Specimen Permittivity (s-1)	1.92	1.92	1.94	1.96	1.92	1.69	1.65	1.68	1.66	1.69
Specimen Permittivity @20°C (sec-1)	1.87	1.87	1.90	1.91	1.87	1.65	1.61	1.64	1.62	1.65
Specimen Flow rate (GPM/ft2)	140	140	142	143	140	123	120	123	121	123
Specimen Permeability (cm/s)	0.47	0.47	0.47	0.48	0.47	0.45	0.44	0.45	0.44	0.45
Test Speciemn No. >:	3					4				
Thickness (mils)	92	92	92	92	92	100	100	100	100	100
Time (s)	12.7	12.2	12.6	12.6	12.7	15.3	15.3	15.5	15.3	15.3
Permittivity (s-1)	2.23	2.33	2.25	2.25	2.23	1.85	1.85	1.83	1.85	1.85
Specimen Permittivity @20°C (sec-1)	2.18	2.27	2.20	2.20	2.18	1.81	1.81	1.79	1.81	1.81
Specimen Flow rate (GPM/ft2)	163	170	164	164	163	135	135	134	135	135
Specimen Permeability (cm/s)	0.51	0.53	0.51	0.51	0.51	0.46	0.46	0.45	0.46	0.46

TEMPERATURE CORRECTED VALUES		
	Permittivity (s-1)	1.88
	Flow rate (GPM/ft2)	141
	Permeability (cm/s)	0.47

MD Machine Direction TD Transverse Direction NA Not Available

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GEOCOMPOSITE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED 2012 Partial Closure

Material: SKAPS TN 270-2-8 Double Sided Geocomposite
Sample Identification: 0046941010159
TRI Log #: E2360-90-03

PARAMETER	TEST REPLICATE NUMBER										MEAN	STD. DEV.
	1	2	3	4	5	6	7	8	9	10		
Mass/Unit Area (ASTM D 5261)												
5" diameter circle (grams)	3.75	4.25	4.07	3.77	3.48	3.59	3.69	3.53	3.88	3.85	3.79	0.24
Mass/Unit Area (oz/sq.yd)	8.72	9.89	9.47	8.77	8.09	8.35	8.58	8.21	9.02	8.96	8.81	0.56
Grab Tensile Properties (ASTM D 4632)												
MD - Tensile Strength (lbs)	257	282	254	275	246	250	251	297	294	266	267	19
TD - Tensile Strength (lbs)	271	336	272	317	305	327	288	284	326	344	307	27
MD - Elong. @ Max. Load (%)	83	79	75	81	81	81	79	85	79	77	80	3
TD - Elong. @ Max. Load (%)	106	101	110	109	98	101	92	117	109	105	105	7
Trapezoidal Tear (ASTM D 4533)												
MD - Tear Strength (lbs)	90	120	90	114	95	95	110	94	109	109	102	11
TD - Tear Strength (lbs)	134	113	120	108	117	92	144	122	132	111	119	15

MD Machine Direction TD Transverse Direction NA Not Available

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GEOCOMPOSITE TEST RESULTS

TRI Client: Weaver Boos Consultants
Project: JED 2012 Partial Closure

Material: SKAPS TN 270-2-8 Double Sided Geocomposite
Sample Identification: 0046941010227
TRI Log #: E2360-90-03

PARAMETER	TEST REPLICATE NUMBER 1	2	3	4	5	6	7	8	9	10	MEAN	STD. DEV.
Mass/Unit Area (ASTM D 5261)												
5" diameter circle (grams)	3.97	3.86	3.87	3.71	3.80	4.17	3.92	3.21	4.01	3.69	3.82	0.26
Mass/Unit Area (oz/sq.yd)	9.23	8.98	9.00	8.63	8.84	9.70	9.12	7.47	9.33	8.58	8.89	0.60
Grab Tensile Properties (ASTM D 4632)												
MD - Tensile Strength (lbs)	229	238	269	257	250	238	280	223	264	283	253	21
TD - Tensile Strength (lbs)	306	235	257	302	308	318	327	253	294	352	295	36
MD - Elong. @ Max. Load (%)	76	74	85	79	82	80	87	79	77	83	80	4
TD - Elong. @ Max. Load (%)	95	101	109	97	110	105	102	119	101	103	104	7
Trapezoidal Tear (ASTM D 4533)												
MD - Tear Strength (lbs)	119	116	125	110	79	129	114	113	85	86	108	18
TD - Tear Strength (lbs)	116	121	100	138	126	127	128	137	130	126	125	11

MD Machine Direction TD Transverse Direction NA Not Available

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Appendix G

Interface Friction Testing

TRI/ENVIRONMENTAL, INC.
A Texas Research International Company

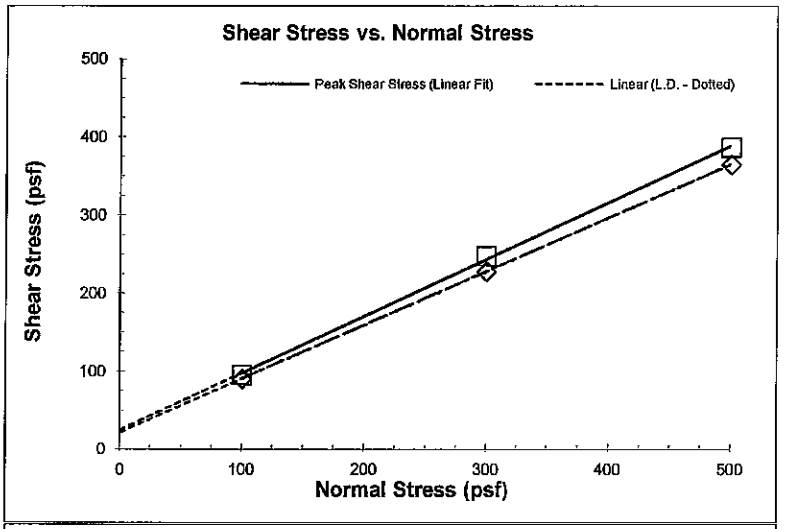
Interface Friction Test Report

Client: **Weaver Boos**
Project: **JED Partial Closure**
Test Date: 03/26/12-03/29/12

TRI Log#: E2357-96-05
Test Method: ASTM D 5321

John M. Allen, P.E., 03/29/2012
Quality Review/Date

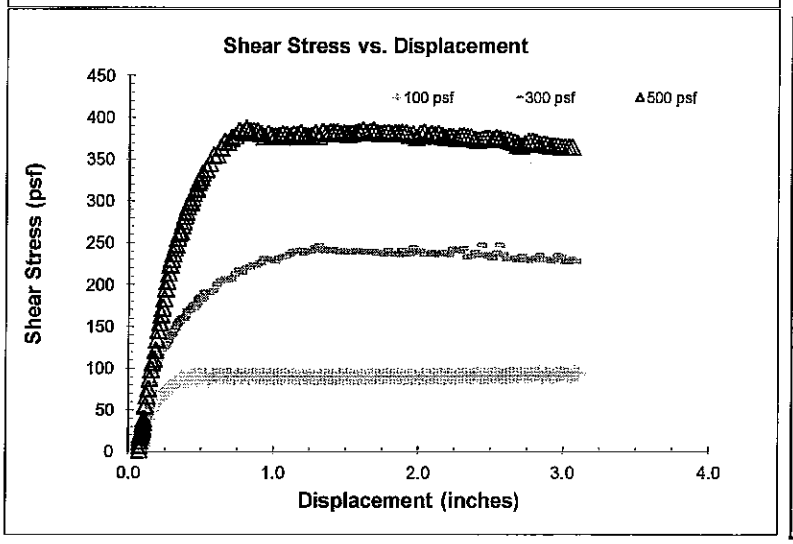
Tested Interface: Cap Protective Soil vs. Skaps TN250-2-8 Double-sided Geocomposite (46941010003) vs. Agru 40 mil LLDPE Microspike Geomembrane (403758.12) vs. Intermediate Cover Soil



Test Results

	Peak	Large Displacement (@ 3.0 in.)
Friction Angle (degrees):	36.1	34.5
Y-intercept or Adhesion (psf):	24	21

Shearing occurred at the interface.



Test Conditions

Upper Box &	Cap Protective Soil remolded at 93.5 pcf at 11.0% moisture content
Floating	Skaps TN270-2-8 double-sided geocomposite
Floating	Agru 40 mil LLDPE Microspike geomembrane (shiny side down)
Lower Box	Intermediate Cover Soil remolded at 93.5 pcf at 11.0% moisture content

Box Dimensions: 12"x12"x4"

Interface Conditioning: Interface loading applied for a minimum of 24 hours prior to shear.

Test Condition: Wet

Shearing Rate: 0.04 inches/minute

Test Data

Specimen No.	1	2	3
Bearing Slide Resistance (lbs)	9	11	13
Normal Stress (psf)	100	300	500
Corrected Peak Shear Stress (psf)	95	248	387
Corrected Large Displacement Shear Stress (psf)	90	228	365
Peak Secant Angle (degrees)	43.6	39.6	37.7
Large Displacement Secant Angle (degrees)	42.0	37.2	36.1
Asperity (mils), shiny side	38.6	39.4	38.8

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Appendix H

Geomembrane Liner Documentation & Testing

Certificate of Soil Surface Acceptance
Trial Weld Summary
Panel Placement Summary
Panel Seaming Summary
Non-Destructive Test Summary
Repair Summary

Certificate of Soil Surface Acceptance

COMANCO

COMANCO ENVIRONMENTAL CORPORATION

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO ENVIRONMENTAL CORPORATION

PROJECT NAME: WSL JED PROJECT NO: 03125284

LOCATION: PARTIAL CLOCURE

AREA ACCEPTED: East Side slope

PANEL NUMBERS: 1-8

GRADE ACCEPTANCE: INSPECTOR:

GENERAL CONTRACTOR: Comanco Env. Corporation

OWNER: WSL JED LANDFILL

AUTHORIZED REPRESENTATIVE:

The undersigned, Comanco ,certifies that he/she is a representative of COMANCO Environmental Corporation authorized to execute this certificate, that he/she has visually inspected the subgrade surface described above on Comanco and found the surface to be acceptable for installation of the geomembrane.

This certification is based on observation of the surface of the subgrade only. No subsurface inspections or test have been performed and COMANCO Environmental Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO ENVIRONMENTAL

Signature	Title	DATE
[signature]	Supt	03-29-2012

OWNER REPRESENTATIVE

Signature	Title	DATE
[signature]	Const. Mngr	3-29-12

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COMANCO

COMANCO ENVIRONMENTAL CORPORATION

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO ENVIRONMENTAL CORPORATION

PROJECT NAME: WSL JED PROJECT NO: 03125284

LOCATION: PARTIAL CLOCURE

AREA ACCEPTED: East-side slope

PANEL NUMBERS: 9-30

GRADE ACCEPTANCE: INSPECTOR: Comanco Env Corporation

GENERAL CONTRACTOR: ~~WSL JED~~ Comanco Env. Corporation

OWNER: WSL JED Land fill

AUTHORIZED REPRESENTATIVE:

The undersigned, Comanco, certifies that he/she is a representative of COMANCO Environmental Corporation authorized to execute this certificate, that he/she has visually inspected the subgrade surface described above on Comanco and found the surface to be acceptable for installation of the geomembrane.

This certification is based on observation of the surface of the subgrade only. No subsurface inspections or test have been performed and COMANCO Environmental Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO ENVIRONMENTAL

Signature	Title	DATE
[signature]	Supt	3-30-12

OWNER REPRESENTATIVE

Signature	Title	DATE
[signature]	Const Mngr.	3-30-12

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COMANCO

COMANCO ENVIRONMENTAL CORPORATION

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO ENVIRONMENTAL CORPORATION

PROJECT NAME: WSL JED PROJECT NO: 03125284

LOCATION: PARTIAL CLOCURE

AREA ACCEPTED: East-side Slope

PANEL NUMBERS: 31-40

GRADE ACCEPTANCE: INSPECTOR:

GENERAL CONTRACTOR: comanco

OWNER: WSL JED Landfill

AUTHORIZED REPRESENTATIVE:

The undersigned, Comanco, certifies that he/she is a representative of COMANCO Environmental Corporation authorized to execute this certificate, that he/she has visually inspected the subgrade surface described above on Comanco and found the surface to be acceptable for installation of the geomembrane.

This certification is based on observation of the surface of the subgrade only. No subsurface inspections or test have been performed and COMANCO Environmental Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO ENVIRONMENTAL

Signature	Title	DATE
	Supt	3-31-12

OWNER REPRESENTATIVE

Signature	Title	DATE
	Const. Mngr	3-31-12

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COMANCO

COMANCO ENVIRONMENTAL CORPORATION

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO ENVIRONMENTAL CORPORATION

PROJECT NAME: WSL JED PROJECT NO: 03125284

LOCATION: PARTIAL CLOCURE

AREA ACCEPTED: East Side slope

PANEL NUMBERS: 44-55

GRADE ACCEPTANCE: INSPECTOR:

GENERAL CONTRACTOR: Comanco

OWNER: WSL JED landfill

AUTHORIZED REPRESENTATIVE:

The undersigned, Comanco ,certifies that he/she is a representative of COMANCO Environmental Corporation authorized to execute this certificate, that he/she has visually inspected the subgrade surface described above on Comanco and found the surface to be acceptable for installation of the geomembrane.

This certification is based on observation of the surface of the subgrade only. No subsurface inspections or test have been performed and COMANCO Environmental Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO ENVIRONMENTAL

Signature	Title	DATE
	QC	4-4-12

OWNER REPRESENTATIVE

Signature	Title	DATE
Jon Wolff	Const Mgr	4-4-12

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COMANCO

COMANCO ENVIRONMENTAL CORPORATION

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO ENVIRONMENTAL CORPORATION

PROJECT NAME: WSL JED PROJECT NO: 03125284

LOCATION: PARTIAL CLOCURE

AREA ACCEPTED: East and North slope

PANEL NUMBERS: 56-72

GRADE ACCEPTANCE: INSPECTOR:

GENERAL CONTRACTOR: comanco

OWNER: WSL JED Landfill

AUTHORIZED REPRESENTATIVE:

The undersigned, comanco ,certifies that he/she is a representative of COMANCO Environmental Corporation authorized to execute this certificate, that he/she has visually inspected the subgrade surface described above on comanco and found the surface to be acceptable for installation of the geomembrane.

This certification is based on observation of the surface of the subgrade only. No subsurface inspections or test have been performed and COMANCO Environmental Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO ENVIRONMENTAL

Signature	Title	DATE
	QC	4/5/12

OWNER REPRESENTATIVE

Signature	Title	DATE
Jon Wolf	Const. Mngr	4-5-12

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COMANCO

COMANCO ENVIRONMENTAL CORPORATION

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO ENVIRONMENTAL CORPORATION

PROJECT NAME: WSL JED PROJECT NO: 03125284

LOCATION: PARTIAL CLOCURE

AREA ACCEPTED: North Slope

PANEL NUMBERS: 73-90

GRADE ACCEPTANCE: INSPECTOR:

GENERAL CONTRACTOR: Comaco

OWNER: WSL Jed Landfill

AUTHORIZED REPRESENTATIVE:

The undersigned, Comanco ,certifies that he/she is a representative of COMANCO Environmental Corporation authorized to execute this certificate, that he/she has visually inspected the subgrade surface described above on Comanco and found the surface to be acceptable for installation of the geomembrane.

This certification is based on observation of the surface of the subgrade only. No subsurface inspections or test have been performed and COMANCO Environmental Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO ENVIRONMENTAL

Signature	Title	DATE
	QC	4-6-12

OWNER REPRESENTATIVE

Signature	Title	DATE
Jim Wolff	Const, Mngr	4-6-12

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COMANCO

COMANCO ENVIRONMENTAL CORPORATION

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO ENVIRONMENTAL CORPORATION

PROJECT NAME: WSL JED PROJECT NO: 03125284

LOCATION: North slope PARTIAL CLOCURE

AREA ACCEPTED:

PANEL NUMBERS: 91-98

GRADE ACCEPTANCE: INSPECTOR:

GENERAL CONTRACTOR: COMANCO

OWNER: WSJED Landfill

AUTHORIZED REPRESENTATIVE:

The undersigned, COMANCO ,certifies that he/she is a representative of COMANCO Environmental Corporation authorized to execute this certificate, that he/she has visually inspected the subgrade surface described above on COMANCO and found the surface to be acceptable for installation of the geomembrane.

This certification is based on observation of the surface of the subgrade only. No subsurface inspections or test have been performed and COMANCO Environmental Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO ENVIRONMENTAL

Signature	Title	DATE
	QC	4/7/12

OWNER REPRESENTATIVE

Signature	Title	DATE
Jim Walp	Const. Mngr.	4-7-12

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COMANCO

COMANCO ENVIRONMENTAL CORPORATION

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO ENVIRONMENTAL CORPORATION

PROJECT NAME: WSL JED PROJECT NO: 03125284

LOCATION: PARTIAL CLOCURE

AREA ACCEPTED: North

PANEL NUMBERS: 99-122

GRADE ACCEPTANCE: INSPECTOR:

GENERAL CONTRACTOR: Comanco

OWNER: WSL JED Landfill

AUTHORIZED REPRESENTATIVE:

The undersigned, Comanco ,certifies that he/she is a representative of COMANCO Environmental Corporation authorized to execute this certificate, that he/she has visually inspected the subgrade surface described above on Comanco and found the surface to be acceptable for installation of the geomembrane.

This certification is based on observation of the surface of the subgrade only. No subsurface inspections or test have been performed and COMANCO Environmental Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO ENVIRONMENTAL

Signature	Title	DATE
		4-9-12

OWNER REPRESENTATIVE

Signature	Title	DATE
Jim Walpe	Const. Mngr	4-9-12

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COMANCO

COMANCO ENVIRONMENTAL CORPORATION

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO ENVIRONMENTAL CORPORATION

PROJECT NAME: WSL JED PROJECT NO: 03125284

LOCATION: PARTIAL CLOCURE

AREA ACCEPTED: North-West slope

PANEL NUMBERS: 123-139

GRADE ACCEPTANCE: INSPECTOR:

GENERAL CONTRACTOR: Comanco

OWNER: WSLJED Landfill

AUTHORIZED REPRESENTATIVE:

The undersigned, Comanco, certifies that he/she is a representative of COMANCO Environmental Corporation authorized to execute this certificate, that he/she has visually inspected the subgrade surface described above on Comanco and found the surface to be acceptable for installation of the geomembrane.

This certification is based on observation of the surface of the subgrade only. No subsurface inspections or test have been performed and COMANCO Environmental Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO ENVIRONMENTAL

Signature	Title	DATE
	QC	4-11-12

OWNER REPRESENTATIVE

Signature	Title	DATE
	Constr Mngr	4-11-12

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COMANCO

COMANCO ENVIRONMENTAL CORPORATION

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO ENVIRONMENTAL CORPORATION

PROJECT NAME: WSL JED PROJECT NO: 03125284

LOCATION: PARTIAL CLOCURE

AREA ACCEPTED: West slope

PANEL NUMBERS: 145-146

GRADE ACCEPTANCE: INSPECTOR:

GENERAL CONTRACTOR: Comanco

OWNER: WSL JED Landfill

AUTHORIZED REPRESENTATIVE:

The undersigned, Comanco ,certifies that he/she is a representative of COMANCO Environmental Corporation authorized to execute this certificate, that he/she has visually inspected the subgrade surface described above on Comanco and found the surface to be acceptable for installation of the geomembrane.

This certification is based on observation of the surface of the subgrade only. No subsurface inspections or test have been performed and COMANCO Environmental Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO ENVIRONMENTAL

Signature	Title	DATE
	QC	4-12-12

OWNER REPRESENTATIVE

Signature	Title	DATE
Jim Walle	Const. Mngr	4-12-12

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COMANCO

COMANCO ENVIRONMENTAL CORPORATION

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO ENVIRONMENTAL CORPORATION

PROJECT NAME: WSL JED PROJECT NO: 03125284

LOCATION: PARTIAL CLOCURE

AREA ACCEPTED:

PANEL NUMBERS: 147-161

GRADE ACCEPTANCE: INSPECTOR:

GENERAL CONTRACTOR: Comanco

OWNER: WSL JED Landfill

AUTHORIZED REPRESENTATIVE:

The undersigned, Comanco ,certifies that he/she is a representative of COMANCO Environmental Corporation authorized to execute this certificate, that he/she has visually inspected the subgrade surface described above on Comanco and found the surface to be acceptable for installation of the geomembrane.

This certification is based on observation of the surface of the subgrade only. No subsurface inspections or test have been performed and COMANCO Environmental Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO ENVIRONMENTAL

Signature	Title	DATE
		4-14-12

OWNER REPRESENTATIVE

Signature	Title	DATE
Jim Waffa	Const. Mngr.	4-14-12

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COMANCO

COMANCO ENVIRONMENTAL CORPORATION

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO ENVIRONMENTAL CORPORATION

PROJECT NAME: WSL JED PROJECT NO: 03125284

LOCATION: PARTIAL CLOCURE

AREA ACCEPTED:

PANEL NUMBERS: 162-172

GRADE ACCEPTANCE: INSPECTOR:

GENERAL CONTRACTOR: Comanco

OWNER: WSL JED Landfill

AUTHORIZED REPRESENTATIVE:

The undersigned, Comanco, certifies that he/she is a representative of COMANCO Environmental Corporation authorized to execute this certificate, that he/she has visually inspected the subgrade surface described above on Comanco and found the surface to be acceptable for installation of the geomembrane.

This certification is based on observation of the surface of the subgrade only. No subsurface inspections or test have been performed and COMANCO Environmental Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO ENVIRONMENTAL

Signature	Title	DATE
		4-16-12

OWNER REPRESENTATIVE

Signature	Title	DATE
	Const. Mngr.	4-16-12

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COMANCO®

CERTIFICATE OF SUBGRADE SURFACE ACCEPTANCE

INSTALLER: COMANCO CORPORATION

PROJECT NAME: WSI JED Partial Closure Liner PROJECT NO.: 03125248

LOCATION: St. Cloud, FL 34773

AREA ACCEPTED: Top of final Cover

PANEL NUMBERS: P.173 – P.231 GRADE ACCEPTANCE: INSPECTOR: _____

GENERAL CONTRACTOR: WSI

OWNER: WSI – JED

AUTHORIZED REPRESENTATIVE: _____

The undersigned, _____, certifies the he/she is a representative of COMANCO Corporation authourized to execute this certificate, that he/she has visually inspected the subgrade surface above on _____ and found the surface to be acceptable for the installation of the membrane. This certification is based on observation of the surface of the subgrade only. No subsurface inspections or tests have been performed and COMANCO Corporation makes no representations or warranties regarding conditions which may exist below the surface of the subgrade.

AUTHORIZED REPRESENTATIVE OF COMANCO CORPORATION:

SIGNATURE	TITLE	DATE
[signature]	Supt.	7-13-12

AUTHORIZED REPRESENTATIVE OF EARTHWORK CONTRACTOR:

SIGNATURE	TITLE	DATE

OWNER'S REPRESENTATIVE:

SIGNATURE	TITLE	DATE
[signature]	Const. Mgr.	7-13-12

Trial Weld Summary

Trial Weld Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

Project Number: 3804-352-17-00

Wolfe / Arthur

40 mil LLDPE

Project Specifications

Material	Weld Method	Peel	Shear
40 mil.	Fusion	50	60
40 mil.	Extrusion	44	60

Test No.	Date	Time	Amb. Temp. (°F)	Welder I.D.	Machine Number	Temp. Setting/ Speed	Weld (Fus/ Ext)	PEEL (ppi)				SHEAR (ppi)		Test Result (P/F)	Comments
								Outside Weld		Inside Weld					
								1	2	1	2	1	2		
1	3/29/12	1:30 PM	80	FG	42	770/12	FUS	76	77	75	78	83	85	P	
2	3/29/12	1:32 PM	80	CG	40	800/8	FUS	78	79	80	81	85	86	P	
3	3/29/12	1:33 PM	80	CG	40	800/8	FUS	71	73	71	73	74	75	P	
4	3/29/12	1:32 PM	80	FG	42	770/12	FUS	72	73	71	74	70	71	P	
5	3/30/12	8:05 AM	63	FG	42	790/12	FUS	82	88	83	84	88	90	P	
6	3/30/12	8:07 AM	63	CG	40	800/8	FUS	86	88	82	84	90	97	P	
7	3/30/12	8:05 AM	63	CG	40	800/8	FUS	83	87	76	77	80	81	P	
8	3/30/12	8:03 AM	63	FG	42	790/12	FUS	81	82	83	85	85	87	P	
9	3/30/12	1:00 PM	82	FG	42	790/13	FUS	70	72	73	73	74	76	P	
10	3/30/12	1:03 PM	82	FG	42	790/13	FUS	68	69	73	75	70	76	P	
11	3/30/12	1:05 PM	82	CG	40	800/8	FUS	74	75	74	74	77	79	P	
12	3/30/12	3:00 PM	83	CG	40	800/8	FUS	73	74	71	75	84	85	P	
13	3/31/12	7:50 AM	65	FG	42	840/13	FUS	84	87	83	84	87	91	P	
14	3/31/12	7:52 AM	65	HM	13	800/13	FUS	86	94	86	90	99	106	P	
15	3/31/12	7:55 AM	65	HM	13	800/13	FUS	87	88	86	87	85	86	P	
16	3/31/12	7:50 AM	65	CG	40	800/13	FUS	86	87	82	84	91	94	P	
17	3/31/12	11:51 AM	81	HM	61	400/270	EXT	74	77	-	-	76	79	P	

Trial Weld Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

Project Number: 3804-352-17-00

Wolfe / Arthur

40 mil LLDPE

Project Specifications

Material	Weld Method	Peel	Shear
40 mil.	Fusion	50	60
40 mil.	Extrusion	44	60

Test No.	Date	Time	Amb. Temp. (°F)	Welder I.D.	Machine Number	Temp. Setting/ Speed	Weld (Fus/ Ext)	PEEL (ppi)				SHEAR (ppi)		Test Result (P/F)	Comments
								Outside Weld		Inside Weld					
								1	2	1	2	1	2		
18	4/2/12	10:28 AM	82	CG	20	380/440	EXT	78	74	-	-	78	75	P	
19	4/2/12	10:30 AM	82	HM	61	400/210	EXT	74	79	-	-	72	76	P	
20	4/2/12	11:15 AM	84	FG	42	800/12	FUS	82	73	81	72	78	76	P	
21	4/3/12	7:50 AM	76	CG	20	380/440	EXT	70	73	-	-	79	79	P	
22	4/3/12	7:50 AM	76	HM	61	400/210	EXT	67	70	-	-	73	74	P	
23	4/3/12	10:30 AM	82	VM	13	780/12	FUS	77	73	75	70	74	72	P	
24	4/3/12	11:57 AM	88	CG	20	380/440	EXT	63	62	-	-	65	63	P	
25	4/3/12	11:57 AM	88	HM	61	440/270	EXT	78	76	-	-	78	76	P	
26	4/4/12	9:10 AM	70	CG	40	800/12	FUS	81	82	82	83	82	86	P	
27	4/4/12	9:15 AM	70	CG	40	800/12	FUS	76	79	76	78	83	86	P	
28	4/4/12	9:10 AM	70	FG	42	820/12	FUS	85	87	75	79	85	85	P	
29	4/4/12	9:13 AM	70	FG	42	820/12	FUS	76	80	78	80	81	86	P	
30	4/4/12	1:14 PM	88	CG	40	800/13	FUS	73	75	76	77	77	78	P	
31	4/4/12	1:18 PM	88	CG	40	800/13	FUS	70	75	71	73	67	69	P	
32	4/4/12	1:16 PM	88	FG	42	820/13	FUS	65	67	66	66	66	66	P	
33	4/4/12	2:23 PM	88	FG	42	820/13	FUS	66	69	67	70	66	68	P	
34	4/5/12	12:32 PM	83	CG	40	800/12	FUS	86	81	85	85	87	84	P	

Trial Weld Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

Project Number: 3804-352-17-00

Wolfe / Arthur

40 mil LLDPE

Project Specifications

Material	Weld Method	Peel	Shear
40 mil.	Fusion	50	60
40 mil.	Extrusion	44	60

Test No.	Date	Time	Amb. Temp. (°F)	Welder I.D.	Machine Number	Temp. Setting/ Speed	Weld (Fus/ Ext)	PEEL (ppi)				SHEAR (ppi)		Test Result (P/F)	Comments
								Outside Weld		Inside Weld					
								1	2	1	2	1	2		
35	4/5/12	12:25 PM	83	CG	40	800/12	FUS	76	77	76	75	80	76	P	
36	4/5/12	12:25 PM	83	FG	42	820/12	FUS	82	83	80	84	88	85	P	
37	4/5/12	12:27 PM	83	FG	42	820/12	FUS	69	70	70	72	77	78	P	
38	4/6/12	7:50 AM	70	CG	40	800/12	FUS	85	87	86	88	96	91	P	
39	4/6/12	7:58 AM	70	CG	40	800/12	FUS	84	84	83	85	83	86	P	
40	4/6/12	7:51 AM	70	FG	42	820/11.5	FUS	83	85	86	91	95	97	P	
41	4/6/12	7:55 AM	70	FG	42	820/11.5	FUS	81	85	84	85	78	81	P	
42	4/6/12	10:12 AM	74	HM	13	800/12	FUS	83	78	85	82	92	95	P	
43	4/6/12	11:22 AM	77	HM	13	800/12	FUS	75	77	78	79	83	84	P	
44	4/6/12	1:38 PM	82	CG	20	440/380	EXT	71	75	-	-	69	72	P	
45	4/6/12	1:35 PM	82	HM	61	400/220	EXT	71	72	-	-	74	75	P	
46	4/7/12	8:07 AM	65	CG	40	800/12	FUS	87	88	85	89	92	95	P	
47	4/7/12	8:00 AM	65	CG	40	800/12	FUS	77	78	73	74	81	82	P	
48	4/7/12	8:00 AM	65	FG	42	820/11.5	FUS	85	86	82	85	98	101	P	
49	4/7/12	8:05 AM	65	FG	42	820/11.5	FUS	86	88	85	88	92	101	P	
50	4/7/12	8:09 AM	65	HM	13	800/12	FUS	83	85	83	86	93	97	P	
51	4/7/12	8:07 AM	65	HM	13	800/12	FUS	80	81	78	80	90	93	P	

Trial Weld Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

Project Number: 3804-352-17-00

Wolfe / Arthur

40 mil LLDPE

Project Specifications

Material	Weld Method	Peel	Shear
40 mil.	Fusion	50	60
40 mil.	Extrusion	44	60

Test No.	Date	Time	Amb. Temp. (°F)	Welder I.D.	Machine Number	Temp. Setting/ Speed	Weld (Fus/ Ext)	PEEL (ppi)				SHEAR (ppi)		Test Result (P/F)	Comments
								Outside Weld		Inside Weld					
								1	2	1	2	1	2		
52	4/7/12	9:14 AM	70	CG	101	800/9	FUS	81	82	85	86	84	92	P	
53	4/7/12	9:16 AM	70	CG	101	800/9	FUS	87	87	83	84	92	96	P	
54	4/9/12	9:16 AM	67	HM	61	400/220	EXT	75	76	-	-	74	78	P	
55	4/9/12	10:28 AM	68	CG	13	800/12	FUS	76	78	77	79	86	86	P	
56	4/9/12	10:31 AM	68	CG	13	800/13	FUS	77	79	78	82	77	82	P	
57	4/9/12	10:15 AM	68	FG	42	820/12	FUS	75	78	77	78	82	84	P	
58	4/9/12	10:17 AM	68	FG	42	820/12	FUS	73	74	74	75	72	74	P	
59	4/9/12	3:00 PM	80	FG	42	820/12	FUS	67	69	68	69	70	70	P	
60	4/9/12	3:02 PM	80	FG	42	820/12	FUS	73	74	76	76	79	78	P	
61	4/9/12	3:28 PM	80	CG	13	800/12	FUS	73	73	72	71	73	75	P	
62	4/9/12	3:27 PM	80	CG	13	800/12	FUS	73	74	75	77	79	80	P	
63	4/9/12	2:00 PM	80	HM	61	440/220	EXT	72	75	-	-	79	81	P	
64	4/10/12	8:00 AM	64	HM	61	400/220	EXT	74	77	-	-	81	82	P	
65	4/10/12	12:30 PM	82	FG	42	780/13	FUS	69	73	72	75	81	87	P	
66	4/10/12	1:19 PM	82	HM	61	400/220	EXT	68	63	-	-	68	71	P	
67	4/11/12	8:22 AM	70	FG	42	820/13	FUS	80	84	83	85	86	89	P	
68	4/11/12	8:22 AM	70	FG	42	820/13	FUS	84	86	90	84	93	94	P	

Trial Weld Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

Project Number: 3804-352-17-00

Wolfe / Arthur

40 mil LLDPE

Project Specifications

Material	Weld Method	Peel	Shear
40 mil.	Fusion	50	60
40 mil.	Extrusion	44	60

Test No.	Date	Time	Amb. Temp. (°F)	Welder I.D.	Machine Number	Temp. Setting/ Speed	Weld (Fus/ Ext)	PEEL (ppi)				SHEAR (ppi)		Test Result (P/F)	Comments
								Outside Weld		Inside Weld					
								1	2	1	2	1	2		
69	4/11/12	8:22 AM	70	CG	13	800/13	FUS	87	85	96	85	83	86	P	
70	4/11/12	8:18 AM	70	CG	13	800/13	FUS	86	92	97	87	89	93	P	
71	4/11/12	1:11 PM	82	CG	13	800/13	FUS	73	77	77	79	79	83	P	
72	4/11/12	1:10 PM	82	FG	42	800/14	FUS	73	76	73	73	79	80	P	
73	4/11/12	1:08 PM	82	CG	13	800/13	FUS	73	76	76	77	80	83	P	
74	4/12/12	1:47 PM	78	HM	13	800/12	FUS	72	71	76	72	81	82	P	
75	4/12/12	1:49 PM	78	HM	13	800/12	FUS	68	67	67	63	69	68	P	
76	4/13/12	8:18 AM	63	HM	61	400/220	EXT	74	76	-	-	79	80	P	
77	4/13/12	1:10 PM	80	HM	61	400/220	EXT	64	64	-	-	67	68	P	
78	4/13/12	2:10 PM	80	CG	70	420/380	EXT	64	62	-	-	69	73	P	
79	4/14/12	8:20 AM	68	FG	42	830/12	FUS	87	82	87	81	93	94	P	
80	4/14/12	8:23 AM	68	FG	42	830/12	FUS	82	80	83	80	89	87	P	
81	4/14/12	8:20 AM	68	CG	13	800/13	FUS	81	85	83	84	95	91	P	
82	4/14/12	8:24 AM	68	CG	13	800/13	FUS	81	78	76	77	80	80	P	
83	4/14/12	9:00 AM	70	HM	1	800/13	FUS	86	93	87	94	91	91	P	
84	4/14/12	9:02 AM	70	HM	1	800/13	FUS	81	83	83	86	83	85	P	
85	4/16/12	9:55 AM	70	FG	42	830/12	FUS	82	84	81	85	83	84	P	

Trial Weld Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

Project Number: 3804-352-17-00

Wolfe / Arthur

40 mil LLDPE

Project Specifications

Material	Weld Method	Peel	Shear
40 mil.	Fusion	50	60
40 mil.	Extrusion	44	60

Test No.	Date	Time	Amb. Temp. (°F)	Welder I.D.	Machine Number	Temp. Setting/ Speed	Weld (Fus/ Ext)	PEEL (ppi)				SHEAR (ppi)		Test Result (P/F)	Comments
								Outside Weld		Inside Weld					
								1	2	1	2	1	2		
86	4/16/12	9:57 AM	70	FG	42	830/12	FUS	81	84	79	82	84	88	P	
87	4/16/12	9:57 AM	70	CG	55	800/13	FUS	83	88	80	83	84	87	P	
88	4/16/12	9:59 AM	70	CG	55	800/13	FUS	71	77	73	77	85	87	P	
89	4/17/12	8:19 AM	67	HM	61	400/220	EXT	74	74	-	-	79	80	P	
90	4/17/12	8:17 AM	67	CG	70	420/380	EXT	70	72	-	-	77	77	P	
91	4/17/12	8:35 AM	68	FG	42	820/12	FUS	77	78	78	79	81	82	P	
92	4/17/12	1:05 PM	78	HM	61	400/220	EXT	67	66	-	-	78	80	P	
93	4/17/12	2:00PM	78	CG	70	420/380	EXT	70	76	-	-	82	83	P	
94	4/17/12	1:06 PM	78	FG	42	820/12	FUS	76	78	76	76	81	85	P	
95	4/18/12	7:45 AM	64	HM	61	400/220	EXT	78	80	-	-	84	84	P	
96	4/18/12	10:45 AM	72	FG	42	820/12	FUS	72	73	72	73	77	78	P	
97	4/18/12	12:50 AM	81	HM	61	400/220	FUS	62	64	87	94	81	82	P	
98	4/18/12	4:00 PM	82	CG	70	420/380	EXT	65	67	-	-	78	79	P	
99	4/19/12	8:00 AM	73	VM	54	480/275	EXT	73	74	-	-	80	81	P	
100	4/19/12	7:49 AM	73	HM	61	400/220	EXT	80	83	-	-	76	79	P	
101	4/19/12	7:57 AM	74	CG	70	420/380	EXT	72	74	-	-	73	76	P	
102	4/19/12	1:00 PM	82	VM	54	480/275	EXT	60	61	-	-	70	73	P	

Trial Weld Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

Project Number: 3804-352-17-00

Wolfe / Arthur

40 mil LLDPE

Project Specifications

Material	Weld Method	Peel	Shear
40 mil.	Fusion	50	60
40 mil.	Extrusion	44	60

Test No.	Date	Time	Amb. Temp. (°F)	Welder I.D.	Machine Number	Temp. Setting/ Speed	Weld (Fus/ Ext)	PEEL (ppi)				SHEAR (ppi)		Test Result (P/F)	Comments
								Outside Weld		Inside Weld					
								1	2	1	2	1	2		
103	4/19/12	1:00 PM	82	HM	61	400/220	EXT	72	79	-	-	76	87	P	
104	4/19/12	12:57 PM	82	CG	70	480/275	EXT	70	76	-	-	71	72	P	
105	4/20/12	7:40 AM	70	CG	70	420/380	EXT	78	79	-	-	85	84	P	
106	4/20/12	2:00 PM	80	CG	70	420/380	EXT	79	82	-	-	86	85	P	
107	4/24/12	7:45 AM	51	CG	70	420/380	EXT	80	84	-	-	85	86	P	
108	4/24/12	12:57 PM	65	CG	70	420/380	EXT	82	77	-	-	74	79	P	
109	4/25/12	10:10 AM	72	CG	42	800/11	EXT	86	87	85	85	84	88	P	
110	4/25/12	2:45 PM	78	CG	70	420/380	EXT	72	75	-	-	78	80	P	
111	4/26/12	7:50 AM	61	CG	70	420/380	EXT	86	85	-	-	87	87	P	
112	4/26/12	12:57 PM	82	CG	70	420/380	EXT	80	87	-	-	86	73	P	
113	4/27/12	7:40 AM	64	CG	70	420/380	EXT	78	78	-	-	88	83	P	
114	4/27/12	8:09 AM	74	HM	61	400/220	EXT	82	85	-	-	84	89	P	
115	4/27/12	12:57 PM	83	CG	70	420/380	EXT	69	70	-	-	71	78	P	
116	4/27/12	1:05 PM	74	HM	61	400/220	EXT	87	84	-	-	84	90	P	
117	5/2/12	8:00 AM	70	CG	70	480/275	EXT	70	76	-	-	71	72	P	
118	5/2/12	8:05 AM	70	HM	61	400/220	EXT	62	64	-	-	81	82	P	
119	7/5/12	11:20AM	96	VM	47	750/50	FUS	75	75	70	70	74	78	P	

Trial Weld Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

Project Number: 3804-352-17-00

Wolfe / Arthur

40 mil LLDPE

Project Specifications

Material	Weld Method	Peel	Shear
40 mil.	Fusion	50	60
40 mil.	Extrusion	44	60

Test No.	Date	Time	Amb. Temp. (°F)	Welder I.D.	Machine Number	Temp. Setting/ Speed	Weld (Fus/ Ext)	PEEL (ppi)				SHEAR (ppi)		Test Result (P/F)	Comments
								Outside Weld		Inside Weld					
								1	2	1	2	1	2		
120	7/5/12	11:40AM	96	VM	47	750/45	FUS	63	65	65	65	65	66	P	
121	7/5/12	12:00PM	96	VR	52	750/12	FUS	68	68	67	72	71	71	P	
122	7/5/12	12:10PM	96	VM	43	750/14	FUS	72	72	74	77	76	78	P	
123	7/5/12	12:20PM	96	VR	52	750/12	FUS	75	75	68	70	77	77	P	
124	7/5/12	1:30PM	95	VM	43	750/13	FUS	70	69	73	77	78	75	P	
125	7/6/12	9:06AM	88	RA	25	440/300	EXT	69	71	-	-	76	78	P	
126	7/6/12	10:18AM	92	HP	47	750/13	FUS	68	69	67	74	80	81	P	
127	7/6/12	9:26AM	93	SR	43	700/60	FUS	71	72	73	74	83	85	P	
128	7/6/12	9:15AM	94	VR	52	720/13	FUS	71	74	70	72	83	85	P	
129	7/6/12	2:00PM	95	VR	52	720/13	FUS	66	68	69	67	80	85	P	
130	7/6/12	2:10PM	95	VR	52	720/13	FUS	65	66	71	65	81	83	P	
131	7/6/12	2:17PM	96	SR	43	700/60	FUS	61	59	69	68	85	81	P	
132	7/6/12	2:25PM	96	HP	47	750/13	FUS	59	62	67	65	83	85	P	
133	7/7/12	8:50AM	92	VR	24	440/300	EXT	66	59	69	69	86	83	P	
134	7/7/12	1:05PM	92	RA	25	440/300	EXT	70	71	-	-	75	78	P	
135	7/7/12	1:00PM	92	VR	24	440/300	EXT	70	74	-	-	88	83	P	
136	7/9/12	10:30AM	92	VR	52	750/19.5	FUS	75	75	70	70	74	78	P	

Trial Weld Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

Project Number: 3804-352-17-00

Wolfe / Arthur

40 mil LLDPE

Project Specifications

Material	Weld Method	Peel	Shear
40 mil.	Fusion	50	60
40 mil.	Extrusion	44	60

Test No.	Date	Time	Amb. Temp. (°F)	Welder I.D.	Machine Number	Temp. Setting/ Speed	Weld (Fus/ Ext)	PEEL (ppi)				SHEAR (ppi)		Test Result (P/F)	Comments
								Outside Weld		Inside Weld					
								1	2	1	2	1	2		
137	7/9/12	3:00PM	92	VR	52	750/19.5	FUS	75	75	68	70	77	77	P	
138	7/10/12	8:30AM	78	RA	24	440/300	EXT	62	79	-	-	80	83	P	
139	7/10/12	9:15AM	82	FG	47	850/12	FUS	100	103	112	113	135	136	P	
140	7/10/12	9:16AM	82	FG	47	850/12	FUS	117	119	118	120	118	120	P	
141	7/10/12	8:30AM	82	JG	28	450/443	EXT	71	75	-	-	82	83	P	
142	7/10/12	8:40AM	83	MM	8	420/415	EXT	63	65	-	-	81	82	P	
143	7/10/12	10:00AM	85	SM	25	450/280	EXT	61	63	-	-	84	86	P	
144	7/11/12	8:40AM	85	RA	24	400/290	EXT	66	67	-	-	86	87	P	
145	7/11/12	9:50AM	87	CG	25	440/380	EXT	69	72	-	-	87	87	P	
146	7/11/12	3:50PM	90	CG	25	440/380	EXT	73	74	-	-	83	86	P	
147	7/11/12	4:00PM	90	RA	24	440/300	EXT	87	81	-	–	80	81	P	
148	7/12/12	8:10AM	78	RA	24	440/300	EXT	81	83	-	-	88	89	P	
149	7/12/12	8:00AM	78	CG	25	440/380	EXT	130	132	-	-	139	140	P	
150	7/12/12	10:30AM	82	FG	47	800/12	FUS	71	73	70	74	83	83	P	
151	7/12/12	1:11PM	83	CG	25	440/380	EXT	70	71	-	-	88	90	P	
152	7/12/12	1:00PM	85	RA	24	440/300	EXT	73	76	-	-	88	90	P	
153	7/13/12	8:30AM	77	CG	25	440/380	EXT	77	75	-	-	89	89	P	

Panel Placement Summary

Panel Placement Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Panel Number	Date	Time	Roll Number	Thickness	Length (Feet)	Width (Feet)	Area (Sq. Ft.)	Comments
1	3/29/12	11:45 AM	207742-12	40-mil. LL	348	19	6,612	
2	3/29/12	12:45 AM	207742-12	40-mil. LL	344	22.5	7,740	
3	3/29/12	1:20 PM	404219-12	40-mil. LL	340	22.5	7,650	
4	3/29/12	1:40 PM	404219-12	40-mil. LL	336	22.5	7,560	
5	3/29/12	2:10 PM	207638-12	40-mil. LL	332	22.5	7,470	
6	3/29/12	2:20 PM	207638-12	40-mil. LL	328	22.5	7,380	
7	3/29/12	2:45 PM	404324-12	40-mil. LL	324	22.5	7,290	
8	3/29/12	3:25 PM	404324-12	40-mil. LL	320	22.5	7,200	
9	3/30/12	8:20 AM	207750-12	40-mil. LL	316	22.5	7,110	
10	3/30/12	8:40 AM	207750-12	40-mil. LL	310	22.5	6,975	
11	3/30/12	8:55 AM	404325-12	40-mil. LL	304	22.5	6,840	
12	3/30/12	9:25 AM	404325-12	40-mil. LL	287	22.5	6,457.5	
13	3/30/12	10:05 AM	207753-12	40-mil. LL	287	22.5	6,457.5	
14	3/30/12	10:30 AM	207753-12	40-mil. LL	288	22.5	6,480	
15	3/30/12	10:50 AM	207749-12	40-mil. LL	288	22.5	6,480	
16	3/30/12	11:20 AM	207749-12	40-mil. LL	288	22.5	6,480	
17	3/30/12	11:30 AM	207749-12	40-mil. LL	124	22.5	2,790	
18	3/30/12	1:15 PM	207752-12	40-mil. LL	164	22.5	3,690	
19	3/30/12	1:30 PM	207752-12	40-mil. LL	288	22.5	6,480	
20	3/30/12	1:45 PM	207752-12	40-mil. LL	253	22.5	5,692.5	
21	3/30/12	2:05 PM	207748-12	40-mil. LL	35	22.5	787.5	
22	3/30/12	2:15 PM	207748-12	40-mil. LL	288	22.5	6,480	

Panel Placement Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Panel Number	Date	Time	Roll Number	Thickness	Length (Feet)	Width (Feet)	Area (Sq. Ft.)	Comments
23	3/30/12	2:35 PM	207748-12	40-mil. LL	288	22.5	6,480	
24	3/30/12	2:45 PM	207748-12	40-mil. LL	93	22.5	2,092.5	
25	3/30/12	2:55 PM	207640-12	40-mil. LL	195	22.5	4,387.5	
26	3/30/12	3:15 PM	207640-12	40-mil. LL	288	22.5	6,480	
27	3/30/12	3:45 PM	207640-12	40-mil. LL	212	22.5	4,770	
28	3/30/12	4:00 PM	207634-12	40-mil. LL	76	22.5	1,710	
29	3/30/12	4:10 PM	207634-12	40-mil. LL	288	22.5	6,480	
30	3/30/12	4:45 PM	207634-12	40-mil. LL	288	22.5	6,480	
31	3/31/12	8:10 AM	207639-12	40-mil. LL	288	22.5	6,480	
32	3/31/12	8:25 AM	207639-12	40-mil. LL	288	22.5	6,480	
33	3/31/12	8:30 AM	207639-12	40-mil. LL	110	22.5	2,475	
34	3/31/12	8:40 AM	207641-12	40-mil. LL	178	22.5	4,005	
35	3/31/12	8:55 AM	207641-12	40-mil. LL	288	22.5	6,480	
36	3/31/12	9:10 AM	207744-12	40-mil. LL	56	22.5	1,260	
37	3/31/12	9:20 AM	207641-12	40-mil. LL	232	22.5	5,220	
38	3/31/12	9:35 AM	207744-12	40-mil. LL	288	22.5	6,480	
39	3/31/12	10:10 AM	207744-12	40-mil. LL	288	22.5	6,480	
40	3/31/12	10:35 AM	404326-12	40-mil. LL	288	22.5	6,480	
41	4/4/12	9:05 AM	404326-12	40-mil. LL	288	22.5	6,480	
42	4/4/12	9:15 AM	404326-12	40-mil. LL	120	22.5	2,700	
43	4/4/12	9:25 AM	207746-12	40-mil. LL	168	22.5	3,780	
44	4/4/12	9:35 AM	207746-12	40-mil. LL	288	22.5	6,480	

Panel Placement Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Panel Number	Date	Time	Roll Number	Thickness	Length (Feet)	Width (Feet)	Area (Sq. Ft.)	Comments
45	4/4/12	9:50 AM	207746-12	40-mil. LL	230	22.5	5,175	
46	4/4/12	10:20 AM	207747-12	40-mil. LL	58	22.5	1,305	
47	4/4/12	10:30 AM	207747-12	40-mil. LL	288	22.5	6,480	
48	4/4/12	10:55 AM	207747-12	40-mil. LL	288	22.5	6,480	
49	4/4/12	11:25 AM	207635-12	40-mil. LL	288	22.5	6,480	
50	4/4/12	2:35 PM	207635-12	40-mil. LL	286	22.5	6,435	
51	4/4/12	2:55 PM	207635-12	40-mil. LL	126	22.5	2,835	
52	4/4/12	4:30 PM	404217-12	40-mil. LL	143	22.5	3,217.5	
53	4/4/12	4:50 PM	404217-12	40-mil. LL	246	22.5	5,535	
54	4/4/12	5:05 PM	404217-12	40-mil. LL	226	22.5	5,085	
55	4/4/12	5:30 PM	404217-12	40-mil. LL	35	22.5	787.5	
56	4/5/12	12:00 PM	207633-12	40-mil. LL	173	22.5	3,893	
57	4/5/12	12:20 PM	207633-12	40-mil. LL	187	22.5	4,208	
58	4/5/12	12:35 PM	207633-12	40-mil. LL	168	22.5	3,780	
59	4/5/12	12:50 PM	207633-12	40-mil. LL	118	22.5	2,655	
60	4/5/12	1:00 PM	207743-12	40-mil. LL	30	22.5	675	
61	4/5/12	1:10 PM	207743-12	40-mil. LL	120	22.5	2,700	
62	4/5/12	1:20 PM	207743-12	40-mil. LL	102	22.5	2,295	
63	4/5/12	1:30 PM	207743-12	40-mil. LL	78	22.5	1,755	
64	4/5/12	1:35 PM	207743-12	40-mil. LL	55	22.5	1,238	
65	4/5/12	1:40 PM	207743-12	40-mil. LL	33	22.5	743	
66	4/5/12	1:42 PM	207743-12	40-mil. LL	12	8	96	

Panel Placement Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Panel Number	Date	Time	Roll Number	Thickness	Length (Feet)	Width (Feet)	Area (Sq. Ft.)	Comments
67	4/5/12	1:45 PM	207743-12	40-mil. LL	12	8	96	
68	4/5/12	3:15 PM	207743-12	40-mil. LL	31	22.5	698	
69	4/5/12	3:35 PM	404217 .12	40-mil. LL	49	22.5	1,102	
70	4/5/12	3:50 PM	404323 .12	40-mil. LL	72	22.5	1,620	
71	4/5/12	4:05 PM	207747-12	40-mil. LL	57	22.5	1,283	
72	4/5/12	4:25 PM	404324-12	40-mil. LL	38	22.5	855	
73	4/6/12	7:45 AM	403759-12	40-mil. LL	114	22.5	2,565	
74	4/6/12	7:50 AM	207753-12	40-mil. LL	102	22.5	2,295	
75	4/6/12	7:55 AM	403759-12	40-mil. LL	36	22.5	810	
76	4/6/12	8:02 AM	403759-12	40-mil. LL	157	22.5	3,533	
77	4/6/12	8:10 AM	403759-12	40-mil. LL	177	22.5	3,983	
78	4/6/12	8:20 AM	403759-12	40-mil. LL	113	22.5	2,543	
79	4/6/12	8:35 AM	207751-12	40-mil. LL	92	22.5	2,070	
80	4/6/12	8:50 AM	207751-12	40-mil. LL	235	22.5	5,288	
81	4/6/12	8:52 AM	403759-12	40-mil. LL	8	9	72	
82	4/6/12	9:05 AM	207751-12	40-mil. LL	257	22.5	5,783	
83	4/6/12	9:15 AM	207751-12	40-mil. LL	41	13	533	
84	4/6/12	9:30 AM	207751-12	40-mil. LL	60	13	780	
85	4/6/12	9:35 AM	207638-12	40-mil. LL	22	20	440	
86	4/6/12	9:50 AM	207750-12	40-mil. LL	68	22.5	1,530	
87	4/6/12	10:15 AM	404323-12	40-mil. LL	49	22.5	1,103	
88	4/6/12	10:25 AM	404323-12	40-mil. LL	164	22.5	3,690	

Panel Placement Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

Project Number: 3804-352-17-00

QA/QC Monitor: Wolfe / Arthur

Material ID: 40 mil. LLDPE

Panel Number	Date	Time	Roll Number	Thickness	Length (Feet)	Width (Feet)	Area (Sq. Ft.)	Comments
89	4/6/12	11:00 AM	404323-12	40-mil. LL	210	22.5	4,725	
90	4/6/12	11:15 AM	404323-12	40-mil. LL	200	22.5	4,500	
91	4/7/12	7:25 AM	207744-12	40-mil. LL	60	22.5	1,350	
92	4/7/12	7:45 AM	207636-12	40-mil. LL	274	22.5	6,165	
93	4/7/12	8:05 AM	207636-12	40-mil. LL	282	22.5	6,345	
94	4/7/12	8:45 AM	207636-12	40-mil. LL	128	22.5	2,880	
95	4/7/12	8:55 AM	403760-12	40-mil. LL	161	22.5	3,623	
96	4/7/12	9:02 AM	403760-12	40-mil. LL	290	22.5	6,525	
97	4/7/12	9:15 AM	403760-12	40-mil. LL	252	22.5	5,670	
98	4/7/12	9:35 AM	404104-12	40-mil. LL	38	22.5	855	
99	4/9/12	9:01 AM	404104-12	40-mil. LL	290	22.5	6,525	
100	4/9/12	9:10 AM	404104-12	40-mil. LL	290	22.5	6,525	
101	4/9/12	9:20 AM	404104-12	40-mil. LL	68	22.5	1,530	
102	4/9/12	9:25 AM	207745-12	40-mil. LL	222	22.5	4,995	
103	4/9/12	9:35 AM	207745-12	40-mil. LL	290	22.5	6,525	
104	4/9/12	9:40 AM	207745-12	40-mil. LL	182	22.5	4,095	
105	4/9/12	9:50 AM	207637-12	40-mil. LL	110	22.5	2,475	
106	4/9/12	10:00 AM	207637-12	40-mil. LL	294	22.5	6,615	
107	4/9/12	10:10 AM	207637-12	40-mil. LL	210	22.5	4,725	
108	4/9/12	10:15 AM	207637-12	40-mil. LL	76	22.5	1,710	
109	4/9/12	10:40 AM	403758-12	40-mil. LL	60	22.5	1,350	
110	4/9/12	10:45 AM	403758-12	40-mil. LL	44	22.5	990	

Panel Placement Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Panel Number	Date	Time	Roll Number	Thickness	Length (Feet)	Width (Feet)	Area (Sq. Ft.)	Comments
111	4/9/12	10:55 AM	403758-12	40-mil. LL	33	22.5	743	
112	4/9/12	11:05 AM	403758-12	40-mil. LL	95	22.5	2,138	
113	4/9/12	11:20 AM	403758-12	40-mil. LL	130	22.5	2,925	
114	4/9/12	2:00 PM	403758-12	40-mil. LL	196	22.5	4,410	
115	4/9/12	2:05 PM	403758-12	40-mil. LL	61	22.5	1,373	
116	4/9/12	2:35 PM	404108-12	40-mil. LL	188	22.5	4,230	
117	4/9/12	2:55 PM	404108-12	40-mil. LL	284	22.5	6,390	
118	4/9/12	3:15 PM	404108-12	40-mil. LL	207	22.5	4,658	
119	4/9/12	3:25 PM	403763-12	40-mil. LL	77	22.5	1,733	
120	4/9/12	3:35 PM	403763-12	40-mil. LL	284	22.5	6,390	
121	4/9/12	4:00 PM	403763-12	40-mil. LL	286	22.5	6,435	
122	4/9/12	4:40 PM	404212-12	40-mil. LL	288	22.5	6,480	
123	4/11/12	7:50 AM	404212-12	40-mil. LL	292	22.5	6,570	
124	4/11/12	8:05 AM	404212-12	40-mil. LL	114	22.5	2,565	
125	4/11/12	8:16 AM	404213-12	40-mil. LL	176	22.5	3,960	
126	4/11/12	8:25 AM	404213-12	40-mil. LL	292	22.5	6,570	
127	4/11/12	8:40 AM	404213-12	40-mil. LL	234	22.5	5,265	
128	4/11/12	8:50 AM	404215-12	40-mil. LL	58	22.5	1,305	
129	4/11/12	8:55 AM	404215-12	40-mil. LL	292	22.5	6,570	
130	4/11/12	9:05 AM	404215-12	40-mil. LL	292	22.5	6,570	
131	4/11/12	9:20 AM	404215-12	40-mil. LL	56	22.5	1,260	
132	4/11/12	9:34 AM	404214-12	40-mil. LL	236	22.5	5,310	

Panel Placement Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Panel Number	Date	Time	Roll Number	Thickness	Length (Feet)	Width (Feet)	Area (Sq. Ft.)	Comments
133	4/11/12	9:45 AM	404214-12	40-mil. LL	291	22.5	6,548	
134	4/11/12	10:00 AM	404214-12	40-mil. LL	162	22.5	3,645	
135	4/11/12	10:13 AM	404103-12	40-mil. LL	129	22.5	2,903	
136	4/11/12	10:37 AM	404103-12	40-mil. LL	291	22.5	6,548	
137	4/11/12	11:00 AM	404103-12	40-mil. LL	291	22.5	6,548	
138	4/11/12	11:10 AM	404327-12	40-mil. LL	291	22.5	6,548	
139	4/11/12	11:20 AM	404327-12	40-mil. LL	291	22.5	6,548	
140	4/12/12	1:15 PM	404327-12	40-mil. LL	107	22.5	2,408	
141	4/12/12	1:20 PM	403761-12	40-mil. LL	184	22.5	4,140	
142	4/12/12	1:25 PM	403761-12	40-mil. LL	291	22.5	6,548	
143	4/12/12	1:40 PM	403761-12	40-mil. LL	235	22.5	5,288	
144	4/12/12	1:50 PM	404107-12	40-mil. LL	56	22.5	1,260	
145	4/12/12	1:53 PM	404107-12	40-mil. LL	291	22.5	6,548	
146	4/12/12	2:00 PM	404107-12	40-mil. LL	291	22.5	6,548	
147	4/14/12	7:50 AM	403766-12	40-mil. LL	291	22.5	6,548	
148	4/14/12	8:00 AM	403766-12	40-mil. LL	291	22.5	6,548	
149	4/14/12	8:10 AM	403766-12	40-mil. LL	113	22.5	2,543	
150	4/14/12	8:20 AM	404111-12	40-mil. LL	179	22.5	4,028	
151	4/14/12	8:30 AM	404101-12	40-mil. LL	147	8	1,176	
152	4/14/12	8:45 AM	404111-12	40-mil. LL	192	8	4,320	
153	4/14/12	9:15 AM	404111-12	40-mil. LL	209	8	4,703	
154	4/14/12	9:22 AM	404221-12	40-mil. LL	92	8	2,070	

Panel Placement Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Panel Number	Date	Time	Roll Number	Thickness	Length (Feet)	Width (Feet)	Area (Sq. Ft.)	Comments
155	4/14/12	9:30 AM	404221-12	40-mil. LL	298	8	6,705	
156	4/14/12	9:40 AM	404221-12	40-mil. LL	306	8	6,885	
157	4/14/12	10:00 AM	404220-12	40-mil. LL	8	10	80	
158	4/14/12	10:10 AM	404220-12	40-mil. LL	317	10	4,883	
159	4/14/12	10:20 AM	404220-12	40-mil. LL	322	10	7,245	
160	4/14/12	10:45 AM	404218-12	40-mil. LL	349	22.5	7,853	
161	4/14/12	11:00 AM	404218-12	40-mil. LL	344	22.5	7,740	
162	4/16/12	9:45 AM	404110-12	40-mil. LL	339	22.5	7,628	
163	4/16/12	10:00 AM	404110-12	40-mil. LL	334	22.5	7,515	
164	4/16/12	10:15 AM	404106-12	40-mil. LL	329	22.5	7,403	
165	4/16/12	11:00 AM	404106-12	40-mil. LL	14	7	98	
166	4/16/12	11:10 AM	404222-12	40-mil. LL	130	15	2,250	
167	4/16/12	11:20 AM	404106-12	40-mil. LL	91	11	1,001	
168	4/16/12	11:38 AM	404105-12	40-mil. LL	313	22.5	7,290	
169	4/16/12	11:45 AM	404105-12	40-mil. LL	312	22.5	7,178	
170	4/16/12	11:50 AM	404106-12	40-mil. LL	48	13	624	
171	4/16/12	11:55 AM	404106-12	40-mil. LL	75	14	1,050	
172	4/16/12	12:50 PM	404106-12	40-mil. LL	54	5	270	
173	7/5/12	9:15 AM	404222-12	40-mil. LL	538	19	10,222	
174	7/5/12	9:30 AM	403764-12	40-mil. LL	366	22.5	8,235	
175	7/5/12	9:22 AM	404101-12	40-mil. LL	166	22.5	3,735	
176	7/5/12	AM	404101-12	40-mil. LL	15	22.5	338	

Panel Placement Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Panel Number	Date	Time	Roll Number	Thickness	Length (Feet)	Width (Feet)	Area (Sq. Ft.)	Comments
177	7/5/12	AM	404101-12	40-mil. LL	316	22.5	7,110	
178	7/5/12	10:15 AM	404328-12	40-mil. LL	171	22.5	3,848	
179	7/5/12	10:32 AM	404328-12	40-mil. LL	508	22.5	11,430	
180	7/5/12	1:45 PM	404216-12	40-mil. LL	485	22.5	11,183	
181	7/5/12	1:45 PM	404216-12	40-mil. LL	25	22.5	563	
182	7/5/12	1:50 PM	403762-12	40-mil. LL	269	22.5	6,053	
183	7/5/12	1:55 PM	404109-12	40-mil. LL	191	22.5	4,298	
184	7/5/12	2:00 PM	404109-12	40-mil. LL	247	22.5	5,558	
185	7/5/12	2:05 PM	404109-12	40-mil. LL	19	22.5	428	
186	7/5/12	2:30 PM	404109-12	40-mil. LL	155	22.5	3,488	
187	7/5/12	2:20 PM	207633-12	40-mil. LL	61	22.5	1,373	
188	7/5/12	2:40 PM	207743-13	40-mil. LL	185	22.5	4,163	
189	7/5/12	2:45 PM	403764 .12	40-mil. LL	47	22.5	1,058	
190	7/5/12	2:50 PM	207743-12	40-mil. LL	120	22.5	2,700	
191	7/6/12	7:55 AM	403765-12	40-mil. LL	231	22.5	5,198	
192	7/6/12	8:30 AM	403765-12	40-mil. LL	236	22.5	5,310	
193	7/6/12	8:35 AM	403765-12	40-mil. LL	249	22.5	5,603	
194	7/6/12	10:45 AM	403762-12	40-mil. LL	160	22.5	3,600	
195	7/6/12	10:50 AM	403762-12	40-mil. LL	250	22.5	5,625	
196	7/6/12	11:30 AM	404102-12	40-mil. LL	68	22.5	1,530	
197	7/6/12	11:20 AM	403764-12	40-mil. LL	247	22.5	5,558	
198	7/6/12	11:15 AM	403764-12	40-mil. LL	45	22.5	1,013	

Panel Placement Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Panel Number	Date	Time	Roll Number	Thickness	Length (Feet)	Width (Feet)	Area (Sq. Ft.)	Comments
199	7/6/12	11:40 AM	404102-12	40-mil. LL	386	22.5	8,685	
200	7/6/12	11:45 AM	404102-12	40-mil. LL	256	22.5	5,760	
201	7/6/12	12:50 PM	404329-12	40-mil. LL	120	22.5	2,700	
202	7/6/12	1:05 PM	404329-12	40-mil. LL	372	22.5	8,370	
203	7/6/12	1:20 PM	404329-12	40-mil. LL	210	22.5	4,725	
204	7/6/12	1:25 PM	404330-12	40-mil. LL	160	22.5	3,600	
205	7/6/12	1:40 PM	404330-12	40-mil. LL	360	22.5	8,100	
206	7/6/12	2:10 PM	404216-12	40-mil. LL	199	22.5	4,478	
207	7/6/12	2:05 PM	404330-12	40-mil. LL	167	22.5	3,758	
208	7/6/12	2:20 PM	404105-12	40-mil. LL	82	22.5	1,845	
209	7/6/12	3:15 PM	403759-12	40-mil. LL	110	22.5	2,475	
210	7/6/12	4:30 PM	207634-12	40-mil. LL	50	23.5	1,175	
211	7/6/12	4:45 PM	404109-12	40-mil. LL	70	23.5	1,645	
212	7/6/12	4:50 PM	312226	40-mil. LL	545	22.5	12,263	
213	7/6/12	5:00 PM	404222-12	40-mil. LL	30	19	570	
214	7/6/12	5:10 PM	207754-12	40-mil. LL	517	22.5	11,633	
215	7/6/12	5:15 PM	312220	40-mil. LL	260	22.5	5,850	
216	7/6/12	5:25 PM	207754-12	40-mil. LL	173	22.5	3,893	
217	7/6/12	5:35 PM	404108-12	40-mil. LL	26	19	494	
218	7/6/12	5:40 PM	312220	40-mil. LL	177	22.5	3,983	
219	7/9/12	9:00AM	312220	40-mil. LL	160	15	2,400	
220	7/9/12	9:10AM	312226	40-mil. LL	17	8	136	

Panel Placement Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Panel Number	Date	Time	Roll Number	Thickness	Length (Feet)	Width (Feet)	Area (Sq. Ft.)	Comments
221	7/9/12	9:15AM	312226	40-mil. LL	90	15	1,350	
222	7/9/12	12:00PM	312226	40-mil. LL	40	22.5	900	
223	7/9/12	1:45PM	404106-12	40-mil. LL	94	22.5	2,115	
224	7/9/12	2:00PM	404111-12	40-mil. LL	132	22.5	2,970	
225	7/9/12	2:10PM	312226	40-mil. LL	15	12	180	
226	7/9/12	2:20PM	207754-12	40-mil. LL	10	15	150	
227	7/9/12	2:25PM	404325-12	40-mil. LL	121	22.5	2,723	
228	7/10/12	9:20AM	445559-60	60MIL	68	22.5	1,530	
229	7/10/12	9:25AM	445559-60	60MIL	90	22.5	2,025	
230	7/10/12	10:30AM	445559-60	60MIL	89	22.5	2,003	
231	7/10/12	11:00AM	445559-60	60MIL	61	18	1,098	
							971,792	

Panel Seaming Summary

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
1 / 2	3/29/12	294	FG	FUS	42	770/12	2:31 PM	81	DS-1	
2 / 3	3/29/12	342	CG	FUS	40	800/8	2:34 PM	81		
1 / 2	3/29/12	52	CG	FUS	40	800/8	3:08 PM	82		
3 / 4	3/29/12	294	FG	FUS	42	770/12	3:25 PM	81		
3 / 4	3/29/12	44	CG	FUS	40	800/8	3:36 PM	82	DS-2	
4 / 5	3/29/12	334	CG	FUS	40	800/8	3:42 PM	82		
5 / 6	3/29/12	294	FG	FUS	42	770/12	4:02 PM	82	DS-3	
6 / 7	3/29/12	326	CG	FUS	40	800/8	4:18 PM	82	DS-4	
7 / 8	3/29/12	295	FG	FUS	42	770/12	4:30 PM	82		
7 / 8	3/29/12	27	CG	FUS	40	800/8	4:57 PM	81		
5 / 6	3/29/12	36	CG	FUS	40	800/8	5:03 PM	80		
8 / 9	3/30/12	318	FG	FUS	42	790/12	8:30 AM	64	DS-5	
9 / 10	3/30/12	314	CG	FUS	40	800/8	8:47 AM	64	DS-6	
10 / 11	3/30/12	310	FG	FUS	42	790/12	9:15 AM	69		
11 / 12	3/30/12	287	CG	FUS	40	800/8	9:41 AM	69		
12 / 13	3/30/12	287	FG	FUS	42	790/12	10:19 AM	75	DS-7	
13 / 14	3/30/12	287	CG	FUS	40	800/8	10:38 AM	77	DS-8	
14 / 15	3/30/12	287	FG	FUS	42	790/12	11:15 AM	80		
15 / 16	3/30/12	287	CG	FUS	40	800/8	11:27 AM	80		
16 / 18	3/30/12	161	FG	FUS	42	790/13	1:34 PM	82	DS-9	
18 / 19	3/30/12	161	CG	FUS	40	800/8	1:40 PM	82		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
17 / 18	3/30/12	23	FG	FUS	42	790/13	1:54 PM	83		
16 / 17	3/30/12	126	FG	FUS	42	790/13	1:56 PM	83		
17 / 19	3/30/12	126	CG	FUS	40	800/8	2:00 PM	83	DS-10	
19 / 20	3/30/12	256	FG	FUS	42	790/13	2:26 PM	83		
20 / 22	3/30/12	256	CG	FUS	40	800/8	2:28 PM	83		
21 / 22	3/30/12	35	CG	FUS	40	800/8	2:50 PM	83		
20 / 21	3/30/12	23	FG	FUS	42	790/13	2:52 PM	83	DS-11	
19 / 21	3/30/12	35	FG	FUS	42	790/13	2:57 PM	83		
23 / 25	3/30/12	195	CG	FUS	40	800/8	3:17 PM	80	DS-12	
22 / 23	3/30/12	287	FG	FUS	42	790/13	3:17 PM	80		
24 / 25	3/30/12	23	CG	FUS	40	800/8	3:33 PM	80		
24 / 26	3/30/12	92	FG	FUS	42	790/13	3:58 PM	79		
23 / 24	3/30/12	92	CG	FUS	40	800/8	4:00 PM	79		
25 / 26	3/30/12	195	FG	FUS	42	790/13	4:06 PM	79	DS-13	
26 / 27	3/30/12	215	CG	FUS	40	800/8	4:16 PM	79		
27 / 28	3/30/12	23	CG	FUS	40	800/8	4:19 PM	79		
26 / 28	3/30/12	72	CG	FUS	40	800/8	4:22 PM	79	DS-14	
28 / 29	3/30/12	72	FG	FUS	42	790/13	4:31 PM	79		
29 / 30	3/30/12	287	CG	FUS	40	800/8	4:35 PM	79	DS-15	
27 / 29	3/30/12	215	FG	FUS	42	790/13	4:37 PM	79		
33 / 35	3/31/12	113	FG	FUS	42	840/13	7:05 AM	68		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
30 / 31	3/31/12	288	CG	FUS	40	800/13	8:20 AM	66		
31 / 32	3/31/12	288	FG	FUS	42	840/13	8:29 AM	66		
33 / 34	3/31/12	23	HM	FUS	13	800/13	8:50 AM	67		
32 / 33	3/31/12	113	CG	FUS	40	800/13	8:52 AM	68		
32 / 34	3/31/12	175	CG	FUS	40	800/13	9:04 AM	68		
34 / 35	3/31/12	175	FG	FUS	42	840/13	9:14 AM	68	DS-16	
35 / 37	3/31/12	232	CG	FUS	40	800/13	9:33 AM	69	DS-17	
36 / 37	3/31/12	23	HM	FUS	13	800/13	9:36 AM	69		
35 / 36	3/31/12	56	CG	FUS	40	800/13	10:00 AM	70		
36 / 38	3/31/12	56	FG	FUS	42	840/13	10:01 AM	70		
37 / 38	3/31/12	232	FG	FUS	42	840/13	10:06 AM	71		
38 / 39	3/31/12	288	CG	FUS	40	800/13	10:12 AM	71	DS-19	
39 / 40	3/31/12	288	FG	FUS	42	840/13	10:45 AM	75	DS-18	
5 / WTI	4/2/12	23	FG	FUS	42	800/12	11:30 AM	77		
6 / WTI	4/2/12	22	FG	FUS	42	800/12	11:34 AM	77		
7 / WTI	4/2/12	23	FG	FUS	42	800/12	11:36 AM	77		
8 / WTI	4/2/12	22	FG	FUS	42	800/12	11:38 AM	78		
9 / WTI	4/2/12	23	FG	FUS	42	800/12	11:40 AM	78		
10 / WTI	4/2/12	22	FG	FUS	42	800/12	11:47 AM	78		
11 / WTI	4/2/12	23	FG	FUS	42	800/12	1:27 PM	84		
12 / WTI	4/2/12	22	FG	FUS	42	800/12	1:29 PM	84		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
13 / WTI	4/2/12	23	FG	FUS	42	800/12	1:33 PM	85		
14 / WTI	4/2/12	22	FG	FUS	42	800/12	1:37 PM	85		
20 / WTI	4/2/12	23	FG	FUS	42	800/12	1:43 PM	85		
19 / WTI	4/2/12	22	FG	FUS	42	800/12	2:00 PM	86		
17 / WTI	4/2/12	23	FG	FUS	42	800/12	2:05 PM	86		
16 / WTI	4/2/12	23	FG	FUS	42	800/12	2:09 PM	86		
15 / WTI	4/2/12	22	FG	FUS	42	800/12	2:13 PM	86		
22 / WTI	4/2/12	23	FG	FUS	42	800/12	2:32 PM	86		
23 / WTI	4/2/12	22	FG	FUS	42	800/12	2:34 PM	86	DS-20	
24 / WTI	4/2/12	23	FG	FUS	42	800/12	2:35 PM	86		
26 / WTI	4/2/12	22	FG	FUS	42	800/12	2:44 PM	86		
27 / WTI	4/2/12	23	FG	FUS	42	800/12	2:46 PM	86		
29 / WTI	4/2/12	22	FG	FUS	42	800/12	2:48 PM	86		
30 / WTI	4/2/12	23	FG	FUS	42	800/12	2:50 PM	86		
31 / WTI	4/2/12	22	FG	FUS	42	800/12	2:52 PM	86		
32 / WTI	4/2/12	23	FG	FUS	42	800/12	2:55 PM	86		
33 / WTI	4/2/12	22	FG	FUS	42	800/12	2:58 PM	86		
35 / WTI	4/2/12	23	FG	FUS	42	800/12	3:00 PM	86		
36 / WTI	4/2/12	22	FG	FUS	42	800/12	3:11 PM	86		
38 / WTI	4/2/12	23	FG	FUS	42	800/12	3:22 PM	86		
39 / WTI	4/2/12	22	FG	FUS	42	800/12	3:24 PM	86		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
40 / WTI	4/2/12	17	FG	FUS	42	800/12	3:25 PM	86		
R12 / R21	4/3/12	4	VM	FUS	13	780/12	10:37 AM	77		
1 / WTI	4/3/12	19	VM	FUS	13	780/12	11:26 AM	79		
2 / WTI	4/3/12	23	VM	FUS	13	780/12	11:27 AM	79		
3 / WTI	4/3/12	22	VM	FUS	13	780/12	11:29 AM	79		
4 / WTI	4/3/12	23	VM	FUS	13	780/12	11:30 AM	80		
41 / 43	4/4/12	168	FG	FUS	42	820/12	9:38 AM	70		
40 / 41	4/4/12	288	CG	FUS	40	800/12	9:42 AM	70		
42 / 43	4/4/12	23	FG	FUS	42	820/12	10:00 AM	72		
41 / 42	4/4/12	120	FG	FUS	42	820/12	10:05 AM	72	DS-22	
42 / 44	4/4/12	120	CG	FUS	40	800/12	10:33 AM	72		
44 / 45	4/4/12	232	FG	FUS	42	820/12	10:33 AM	72		
43 / 44	4/4/12	168	CG	FUS	40	800/12	10:46 AM	73	DS-23	
45 / 46	4/4/12	23	FG	FUS	42	820/12	10:53 AM	73		
44 / 46	4/4/12	56	FG	FUS	42	820/12	10:56 AM	73		
45 / 47	4/4/12	232	CG	FUS	40	800/12	11:30 AM	74		
47 / 48	4/4/12	288	FG	FUS	42	820/12	11:30 AM	74	DS-24	
46 / 47	4/4/12	56	CG	FUS	40	800/12	11:48 AM	74		
48 / 49	4/4/12	288	FG	FUS	42	820/13	1:20 PM	88		
49 / 50	4/4/12	288	FG	FUS	42	820/13	3:00 PM	89	DS-25	
50 / 51	4/4/12	126	CG	FUS	40	800/13	3:51 PM	89	DS-26	

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
51 / 52	4/4/12	23	CG	FUS	40	800/13	4:38 PM	89		
50 / 52	4/4/12	149	CG	FUS	40	800/13	4:44 PM	89		
51 / 53	4/4/12	126	FG	FUS	42	820/13	5:05 PM	89		
52 / 53	4/4/12	131	FG	FUS	42	820/13	5:16 PM	89		
53 / 54	4/4/12	237	CG	FUS	40	800/13	5:17 PM	89	DS-28	
54 / 55	4/4/12	42	FG	FUS	42	820/13	5:40 PM	89	DS-27	
54 / 56	4/5/12	175	FG	FUS	42	820/12	12:28 PM	85		
56 / 57	4/5/12	172	CG	FUS	40	800/12	12:43 PM	85		
55 / 56	4/5/12	23	FG	FUS	42	820/12	12:53 PM	85		
55 / 57	4/5/12	22	CG	FUS	40	800/12	1:00 PM	85		
59 / 60	4/5/12	23	FG	FUS	42	820/12	1:07 PM	85		
58 / 60	4/5/12	30	CG	FUS	40	800/12	1:13 PM	85		
57 / 58	4/5/12	178	FG	FUS	42	820/12	1:13 PM	85		
58 / 59	4/5/12	128	CG	FUS	40	800/12	1:17 PM	85	DS-30	
61 / 62	4/5/12	110	CG	FUS	40	800/12	1:33 PM	85		
60 / 61	4/5/12	30	FG	FUS	42	820/12	1:34 PM	85		
59 / 61	4/5/12	108	FG	FUS	42	820/12	1:37 PM	85	DS-29	
62 / 63	4/5/12	92	CG	FUS	40	800/12	1:48 PM	86		
63 / 64	4/5/12	67	FG	FUS	42	820/12	1:50 PM	85		
65 / 66	4/5/12	21	CG	FUS	40	800/12	3:11 PM	87		
64 / 65	4/5/12	44	FG	FUS	42	820/12	3:15 PM	87		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
65 / 68	4/5/12	29	CG	FUS	40	800/12	3:44 PM	87		
68 / 69	4/5/12	41	CG	FUS	40	800/12	3:54 PM	87		
67 / 68	4/5/12	18	FG	FUS	42	820/12	3:54 PM	87		
66 / 67	4/5/12	20	FG	FUS	42	820/12	3:59 PM	87		
64 / 69	4/5/12	26	CG	FUS	40	800/12	4:04 PM	87		
69 / 70	4/5/12	60	FG	FUS	42	820/12	4:05 PM	87		
64 / 70	4/5/12	7	CG	FUS	40	800/12	4:15 PM	87		
63 / 70	4/5/12	21	CG	FUS	40	800/12	4:15 PM	87		
63 / 71	4/5/12	11	CG	FUS	40	800/12	4:20 PM	87		
62 / 71	4/5/12	20	CG	FUS	40	800/12	4:20 PM	87	DS-31	
71 / 72	4/5/12	23	FG	FUS	42	820/12	4:33 PM	87		
70 / 72	4/5/12	38	FG	FUS	42	820/12	4:35 PM	87		
70 / 71	4/5/12	47	FG	FUS	42	820/12	4:38 PM	87	DS-32	
74 / 75	4/6/12	23	CG	FUS	40	800/12	8:06 AM	71		
78 / 80	4/6/12	169	CG	FUS	40	800/12	8:12 AM	72		
73 / 75	4/6/12	34	CG	FUS	40	800/12	8:14 AM	71		
72 / 73	4/6/12	39	FG	FUS	42	820/11.5	8:14 AM	71		
73 / 74	4/6/12	92	CG	FUS	40	800/12	8:18 AM	72		
71 / 73	4/6/12	66	FG	FUS	42	820/11.5	8:18 AM	71		
76 / 77	4/6/12	167	CG	FUS	40	800/12	8:31 AM	72	DS-34	
75 / 76	4/6/12	35	FG	FUS	42	820/11.5	8:32 AM	72		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
74 / 76	4/6/12	110	FG	FUS	42	820/11.5	8:36 AM	72		
78 / 79	4/6/12	23	FG	FUS	42	820/11.5	9:05 AM	72		
77 / 78	4/6/12	168	FG	FUS	42	820/11.5	9:12 AM	72	DS-33	
79 / 80	4/6/12	104	CG	FUS	40	800/12	9:21 AM	73		
77 / 79	4/6/12	66	FG	FUS	42	820/11.5	9:22 AM	73		
77 / 81	4/6/12	14	FG	FUS	42	820/11.5	9:32 AM	73		
80 / 82	4/6/12	243	CG	FUS	40	800/12	9:35 AM	73	DS-36	
79 / 81	4/6/12	15	FG	FUS	42	820/11.5	9:36 AM	73		
84 / 85	4/6/12	23	FG	FUS	42	820/11.5	10:00 AM	74		
85 / 86	4/6/12	20	CG	FUS	40	800/12	10:06 AM	74		
84 / 86	4/6/12	46	CG	FUS	40	800/12	10:08 AM	77		
83 / 85	4/6/12	20	FG	FUS	42	820/11.5	10:12 AM	74		
83 / 84	4/6/12	54	FG	FUS	42	820/11.5	10:14 AM	74		
86 / 87	4/6/12	23	CG	FUS	40	800/12	10:20 AM	74		
62 / 73	4/6/12	13	HM	FUS	13	800/12	10:40 AM	74		
61 / 73	4/6/12	17	HM	FUS	13	800/12	10:41 AM	74		
61 / 74	4/6/12	14	HM	FUS	13	800/12	10:43 AM	74		
59 / 74	4/6/12	16	HM	FUS	13	800/12	10:44 AM	74		
59 / 76	4/6/12	16	HM	FUS	13	800/12	10:45 AM	74		
58 / 76	4/6/12	13	HM	FUS	13	800/12	10:47 AM	74		
58 / 77	4/6/12	14	HM	FUS	13	800/12	10:48 AM	74		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
58 / 81	4/6/12	3	HM	FUS	13	800/12	10:49 AM	74		
57 / 81	4/6/12	15	HM	FUS	13	800/12	10:50 AM	74		
57 / 79	4/6/12	13	HM	FUS	13	800/12	10:52 AM	74		
55 / 79	4/6/12	12	HM	FUS	13	800/12	10:54 AM	74		
55 / 80	4/6/12	10	HM	FUS	13	800/12	10:55 AM	74		
54 / 80	4/6/12	22	HM	FUS	13	800/12	10:56 AM	74		
54 / 82	4/6/12	10	HM	FUS	13	800/12	10:58 AM	74		
53 / 82	4/6/12	21	HM	FUS	13	800/12	11:00 AM	74		
82 / 83	4/6/12	73	FG	FUS	42	820/11.5	11:06 AM	77		
84 / 87	4/6/12	27	CG	FUS	40	800/12	11:11 AM	77		
82 / 84	4/6/12	25	FG	FUS	42	820/11.5	11:15 AM	77		
82 / 87	4/6/12	53	FG	FUS	42	820/11.5	11:21 AM	77		
86 / 88	4/6/12	70	CG	FUS	40	800/12	11:35 AM	77		
87 / 88	4/6/12	70	CG	FUS	40	800/12	11:40 AM	77		
88 / 89	4/6/12	190	FG	FUS	42	820/11.5	11:41 AM	77	DS-35	
89 / 90	4/6/12	200	HM	FUS	13	800/12	11:45 AM	77	DS-38	
82 / 88	4/6/12	49	CG	FUS	40	800/12	11:58 AM	77		
82 / 89	4/6/12	54	CG	FUS	40	800/12	12:07 PM	77	DS-37	
90 / 91	4/7/12	23	CG	FUS	40	800/12	8:16 AM	65		
89 / 91	4/7/12	37	CG	FUS	40	800/12	8:23 AM	65		
53 / 91	4/7/12	7	CG	FUS	40	800/12	8:27 AM	65		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
52 / 91	4/7/12	10	CG	FUS	40	800/12	8:29 AM	66		
92 / 93	4/7/12	278	FG	FUS	42	820/11.5	8:33 AM	66		
90 / 92	4/7/12	190	HM	FUS	13	800/12	8:39 AM	66		
91 / 92	4/7/12	68	HM	FUS	13	800/12	8:58 AM	67		
93 / 95	4/7/12	161	FG	FUS	42	820/11.5	9:06 AM	67	DS-39	
95 / 96	4/7/12	161	HM	FUS	13	800/12	9:15 AM	68	DS-41	
52 / 92	4/7/12	18	CG	FUS	40	800/9	9:18 AM	68		
50 / 92	4/7/12	6	CG	FUS	40	800/9	9:19 AM	68		
94 / 95	4/7/12	23	FG	FUS	42	820/11.5	9:30 AM	67		
94 / 96	4/7/12	128	HM	FUS	13	800/12	9:30 AM	68		
93 / 94	4/7/12	128	FG	FUS	42	820/11.5	9:32 AM	67		
97 / 98	4/7/12	23	HM	FUS	13	800/12	9:55 AM	68		
96 / 97	4/7/12	252	FG	FUS	42	820/11.5	10:00 AM	68	DS-40	
96 / 98	4/7/12	38	HM	FUS	13	800/12	10:09 AM	68		
98 / 99	4/9/12	38	FG	FUS	42	820/12	10:40 AM	68		
97 / 99	4/9/12	252	FG	FUS	42	820/12	10:42 AM	68		
99 / 100	4/9/12	290	CG	FUS	13	800/13	10:43 AM	68		
101 / 102	4/9/12	23	CG	FUS	13	800/13	11:17 AM	70		
101 / 103	4/9/12	70	FG	FUS	42	820/12	11:22 AM	70		
100 / 101	4/9/12	70	CG	FUS	13	800/13	11:25 AM	71	DS-43	
102 / 103	4/9/12	221	FG	FUS	42	820/12	11:27 AM	71	DS-42	

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
100 / 102	4/9/12	221	CG	FUS	13	800/13	11:31 AM	71		
104 / 105	4/9/12	23	FG	FUS	42	820/12	1:02 PM	77		
103 / 104	4/9/12	185	FG	FUS	42	820/12	1:09 PM	77		
104 / 106	4/9/12	185	CG	FUS	13	800/13	1:14 PM	77		
103 / 105	4/9/12	108	FG	FUS	42	820/12	1:25 PM	77		
105 / 106	4/9/12	108	CG	FUS	13	800/13	1:29 PM	77	DS-44	
106 / 107	4/9/12	249	FG	FUS	42	820/12	1:47 PM	78	DS-45	
108 / 109	4/9/12	23	CG	FUS	13	800/13	1:52 PM	78		
107 / 109	4/9/12	55	CG	FUS	13	800/13	1:58 PM	78		
107 / 108	4/9/12	122	CG	FUS	13	800/13	2:05 PM	78		
110 / 111	4/9/12	47	FG	FUS	42	820/12	2:20 PM	78		
111 / 112	4/9/12	55	FG	FUS	42	820/12	2:29 PM	78		
110 / 112	4/9/12	20	FG	FUS	42	820/13	2:35 PM	78		
112 / 113	4/9/12	115	FG	FUS	42	820/13	2:45 PM	80		
113 / 114	4/9/12	161	CG	FUS	13	800/13	2:55 PM	80		
109 / 110	4/9/12	55	FG	FUS	42	820/12	3:05 PM	80	DS-47	
108 / 110	4/9/12	20	FG	FUS	42	820/12	3:08 PM	80		
115 / 116	4/9/12	23	CG	FUS	13	800/13	3:18 PM	80		
108 / 112	4/9/12	43	FG	FUS	42	820/12	3:18 PM	80		
108 / 113	4/9/12	54	FG	FUS	42	820/12	3:21 PM	80		
108 / 114	4/9/12	9	FG	FUS	42	820/12	3:40 PM	80		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
107 / 114	4/9/12	52	FG	FUS	42	820/12	3:40 PM	80		
114 / 116	4/9/12	188	CG	FUS	13	800/12	3:46 PM	80	DS-46	
107 / 115	4/9/12	36	FG	FUS	42	820/12	3:55 PM	80		
114 / 115	4/9/12	28	CG	FUS	13	800/12	3:58 PM	80		
106 / 115	4/9/12	26	FG	FUS	42	820/12	3:58 PM	80		
116 / 117	4/9/12	188	CG	FUS	13	800/12	4:25 PM	80		
106 / 117	4/9/12	20	FG	FUS	42	820/12	4:30 PM	80		
118 / 119	4/9/12	23	FG	FUS	42	820/12	4:32 PM	80		
115 / 117	4/9/12	80	CG	FUS	13	800/12	4:34 PM	80		
117 / 118	4/9/12	210	FG	FUS	42	820/12	4:44 PM	80	DS-49	
117 / 119	4/9/12	77	FG	FUS	42	820/12	5:00 PM	80		
118 / 120	4/9/12	210	CG	FUS	13	800/12	5:02 PM	80		
120 / 121	4/9/12	288	FG	FUS	42	820/12	5:14 PM	80	DS-50	
119 / 120	4/9/12	78	CG	FUS	13	800/12	5:21 PM	80	DS-48	
121 / 122	4/9/12	288	CG	FUS	13	800/12	5:31 PM	80		
49 / WTI	4/10/12	23	FG	FUS	42	780/13	1:30 PM	82		
48 / WTI	4/10/12	22	FG	FUS	42	780/13	1:31 PM	82		
45 / WTI	4/10/12	22	FG	FUS	42	780/13	1:32 PM	83		
47 / WTI	4/10/12	23	FG	FUS	42	780/13	1:33 PM	82		
44 / WTI	4/10/12	23	FG	FUS	42	780/13	1:34 PM	83		
42 / WTI	4/10/12	22	FG	FUS	42	780/13	1:35 PM	83		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
41 / WTI	4/10/12	23	FG	FUS	42	780/13	1:37 PM	83		
40 / WTI	4/10/12	5	FG	FUS	42	780/13	1:38 PM	83		
50 / WTI	4/10/12	23	FG	FUS	42	780/13	2:00 PM	83		
51 / WTI	4/10/12	22	FG	FUS	42	780/13	2:01 PM	83		
53 / WTI	4/10/12	23	FG	FUS	42	780/13	2:03 PM	83		
54 / WTI	4/10/12	13	FG	FUS	42	780/13	2:04 PM	83		
62 / WTI	4/10/12	23	FG	FUS	42	780/13	2:06 PM	83		
61 / WTI	4/10/12	23	FG	FUS	42	780/13	4:07 PM	85		
60 / WTI	4/10/12	22	FG	FUS	42	780/13	4:08 PM	85	DS-51	
58 / WTI	4/10/12	23	FG	FUS	42	780/13	4:09 PM	85		
57 / WTI	4/10/12	22	FG	FUS	42	780/13	4:11 PM	85		
56 / WTI	4/10/12	23	FG	FUS	42	780/13	4:12 PM	85		
54 / WTI	4/10/12	9	FG	FUS	42	780/13	4:14 PM	85		
66 / WTI	4/10/12	12	FG	FUS	42	780/13	5:16 PM	80		
65 / WTI	4/10/12	22	FG	FUS	42	780/13	5:18 PM	80		
64 / WTI	4/10/12	23	FG	FUS	42	780/13	5:20 PM	80		
63 / WTI	4/10/12	22	FG	FUS	42	780/13	5:22 PM	80		
124 / 125	4/11/12	23	FG	FUS	42	820/13	8:45 AM	67		
122 / 123	4/11/12	290	CG	FUS	13	800/13	8:57 AM	67		
123 / 124	4/11/12	114	FG	FUS	42	820/13	8:57 AM	67		
123 / 125	4/11/12	176	FG	FUS	42	820/13	9:04 AM	68		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
127 / 128	4/11/12	23	FG	FUS	42	820/13	9:28 AM	70	DS-52	
125 / 126	4/11/12	176	CG	FUS	13	800/13	9:30 AM	70	DS-53	
127 / 129	4/11/12	234	FG	FUS	42	820/13	9:42 AM	72		
124 / 126	4/11/12	114	CG	FUS	13	800/13	9:43 AM	71		
128 / 129	4/11/12	58	FG	FUS	42	820/13	9:58 AM	73		
126 / 127	4/11/12	234	CG	FUS	13	800/13	10:02 AM	72		
129 / 130	4/11/12	292	FG	FUS	42	820/13	10:10 AM	73		
126 / 128	4/11/12	58	CG	FUS	13	800/13	10:20 AM	73		
131 / 132	4/11/12	23	CG	FUS	13	800/13	10:47 AM	74		
134 / 135	4/11/12	23	FG	FUS	42	820/13	10:48 AM	74	DS-54	
130 / 131	4/11/12	56	CG	FUS	13	800/13	10:56 AM	75	DS-55	
130 / 132	4/11/12	236	CG	FUS	13	800/13	11:00 AM	75		
133 / 134	4/11/12	162	FG	FUS	42	820/13	11:00 AM	75		
133 / 135	4/11/12	129	FG	FUS	42	820/13	11:12 AM	78		
131 / 133	4/11/12	56	CG	FUS	13	800/13	11:33 AM	78		
134 / 136	4/11/12	162	FG	FUS	42	820/13	11:36 AM	78		
132 / 133	4/11/12	236	CG	FUS	13	800/13	11:37 AM	78	DS-56	
135 / 136	4/11/12	129	FG	FUS	42	820/13	11:52 AM	82	DS-57	
136 / 137	4/11/12	291	CG	FUS	13	800/13	1:22 PM	82		
137 / 138	4/11/12	291	FG	FUS	42	800/14	1:22 PM	83		
138 / 139	4/11/12	147	FG	FUS	42	800/14	1:54 PM	83	DS-59	

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
138 / 139	4/11/12	144	CG	FUS	13	800/13	1:57 PM	83	DS-58	
140 / 141	4/12/12	23	HM	FUS	13	800/12	1:55 PM	78		
139 / 140	4/12/12	107	HM	FUS	13	800/12	2:00 PM	78		
139 / 141	4/12/12	184	HM	FUS	13	800/12	2:09 PM	79		
140 / 142	4/12/12	107	HM	FUS	13	800/12	2:35 PM	80	DS-60	
141 / 142	4/12/12	184	HM	FUS	13	800/12	2:43 PM	80		
143 / 144	4/12/12	23	HM	FUS	13	800/12	3:08 PM	81		
142 / 143	4/12/12	235	HM	FUS	13	800/12	3:18 PM	81		
142 / 144	4/12/12	56	HM	FUS	13	800/12	3:37 PM	81	DS-61	
143 / 145	4/12/12	235	HM	FUS	13	800/12	3:54 PM	81		
144 / 145	4/12/12	56	HM	FUS	13	800/12	4:15 PM	81		
145 / 146	4/12/12	291	HM	FUS	13	800/12	4:25 PM	81	DS-62	
49 / 93	4/13/12	5	HM	EXT	61	400/220	1:15 PM	80		
50 / 93	4/13/12	20	HM	EXT	61	400/220	1:18 PM	80	DS-63	
147 / 148	4/14/12	291	CG	FUS	13	800/13	8:30 AM	68		
146 / 147	4/14/12	291	FG	FUS	42	830/12	8:40 AM	68		
149 / 150	4/14/12	23	CG	FUS	13	800/13	9:00 AM	69		
148 / 150	4/14/12	179	HM	FUS	1	800/13	9:05 AM	69		
151 / 152	4/14/12	147	CG	FUS	13	800/13	9:18 AM	69		
149 / 151	4/14/12	113	FG	FUS	42	830/12	9:19 AM	69	DS-64	
148 / 149	4/14/12	113	HM	FUS	1	800/13	9:21 AM	69		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
150 / 151	4/14/12	34	FG	FUS	42	830/12	9:30 AM	70		
150 / 152	4/14/12	144	FG	FUS	42	830/12	9:33 AM	70		
152 / 153	4/14/12	209	HM	FUS	1	800/13	9:39 AM	70	DS-66	
153 / 154	4/14/12	23	CG	FUS	13	800/13	9:41 AM	70	DS-65	
155 / 156	4/14/12	301	FG	FUS	42	830/12	9:56 AM	71	DS-67	
152 / 154	4/14/12	57	HM	FUS	1	800/13	10:02 AM	71		
150 / 154	4/14/12	33	HM	FUS	1	800/13	10:07 AM	71		
154 / 155	4/14/12	94	HM	FUS	1	800/13	10:23 AM	73		
156 / 158	4/14/12	304	FG	FUS	42	830/12	10:30 AM	73		
153 / 155	4/14/12	209	HM	FUS	1	800/13	10:31 AM	73		
158 / 159	4/14/12	314	HM	FUS	1	800/13	11:00 AM	73	DS-68	
156 / 157	4/14/12	15	FG	FUS	42	830/12	11:03 AM	73		
157 / 158	4/14/12	10	FG	FUS	42	830/12	11:06 AM	73		
160 / 161	4/14/12	348	FG	FUS	42	830/12	11:21 AM	71	DS-69	
162 / 163	4/16/12	336	FG	FUS	42	830/12	10:16 AM	72	DS-70	
161 / 162	4/16/12	347	CG	FUS	55	800/13	10:30 AM	74		
163 / 164	4/16/12	331	FG	FUS	42	830/12	11:03 AM	76		
164 / 168	4/16/12	177	FG	FUS	42	830/12	11:45 AM	77	DS-72	
164 / 168	4/16/12	150	CG	FUS	55	800/13	11:49 AM	77	DS-71	
168 / 169	4/16/12	319	FG	FUS	42	830/12	12:58 PM	81		
169 / 170	4/16/12	48	CG	FUS	55	800/13	12:59 PM	81		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
167 / 170	4/16/12	11	CG	FUS	55	800/13	1:15 PM	81		
165 / 166	4/16/12	43	FG	FUS	42	830/12	1:37 PM	81		
167 / 169	4/16/12	91	CG	FUS	55	800/13	1:40 PM	81		
159 / 165	4/16/12	42	FG	FUS	42	830/12	1:57 PM	81		
159 / 166	4/16/12	110	FG	FUS	42	830/12	1:59 PM	81		
166 / 167	4/16/12	91	CG	FUS	55	800/13	2:02 PM	81		
170 / 171	4/16/12	16	FG	FUS	42	830/12	2:14 PM	81	DS-74	
171 / 172	4/16/12	10	FG	FUS	42	830/12	2:20 PM	81		
166 / 170	4/16/12	48	CG	FUS	55	800/13	2:29 PM	81		
169 / 171	4/16/12	74	FG	FUS	42	830/12	2:31 PM	81		
166 / 171	4/16/12	16	CG	FUS	55	800/13	2:34 PM	81		
169 / 172	4/16/12	53	FG	FUS	42	830/12	2:36 PM	81		
159 / 171	4/16/12	59	CG	FUS	55	800/13	2:48 PM	81		
159 / 169	4/16/12	60	FG	FUS	42	830/12	2:48 PM	81		
159 / 172	4/16/12	55	CG	FUS	55	800/13	2:52 PM	81	DS-73	
67 / NTI	4/17/12	16	FG	FUS	42	820/12	9:16 AM	70		
68 / NTI	4/17/12	22	FG	FUS	42	820/12	9:18 AM	71		
69 / NTI	4/17/12	23	FG	FUS	42	820/12	9:20 AM	72		
85 / NTI	4/17/12	22	FG	FUS	42	820/12	10:01 AM	73		
83 / NTI	4/17/12	23	FG	FUS	42	820/12	10:03 AM	73		
82 / NTI	4/17/12	22	FG	FUS	42	820/12	10:04 AM	73		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
80 / NTI	4/17/12	23	FG	FUS	42	820/12	10:06 AM	73		
78 / NTI	4/17/12	22	FG	FUS	42	820/12	10:07 AM	74		
77 / NTI	4/17/12	23	FG	FUS	42	820/12	10:09 AM	74		
76 / NTI	4/17/12	22	FG	FUS	42	820/12	10:10 AM	74		
75 / NTI	4/17/12	23	FG	FUS	42	820/12	10:12 AM	74		
73 / NTI	4/17/12	22	FG	FUS	42	820/12	10:15 AM	74		
72 / NTI	4/17/12	23	FG	FUS	42	820/12	10:17 AM	75		
97 / NTI	4/17/12	17	FG	FUS	42	820/12	11:45 AM	76		
96 / NTI	4/17/12	23	FG	FUS	42	820/12	11:46 AM	76		
94 / NTI	4/17/12	22	FG	FUS	42	820/12	11:48 AM	76		
93 / NTI	4/17/12	23	FG	FUS	42	820/12	11:49 AM	76		
92 / NTI	4/17/12	22	FG	FUS	42	820/12	11:51 AM	77		
90 / NTI	4/17/12	23	FG	FUS	42	820/12	11:52 AM	77	DS-76	
89 / NTI	4/17/12	22	FG	FUS	42	820/12	11:53 AM	76		
88 / NTI	4/17/12	23	FG	FUS	42	820/12	11:54 AM	76		
86 / NTI	4/17/12	20	FG	FUS	42	820/12	11:56 AM	75		
110 / NTI	4/17/12	23	FG	FUS	42	820/12	2:24 PM	82		
109 / NTI	4/17/12	22	FG	FUS	42	820/12	2:25 PM	82		
106 / NTI	4/17/12	22	FG	FUS	42	820/12	2:26 PM	82		
107 / NTI	4/17/12	23	FG	FUS	42	820/12	2:27 PM	82		
104 / NTI	4/17/12	23	FG	FUS	42	820/12	2:28 PM	82		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
103 / NTI	4/17/12	22	FG	FUS	42	820/12	2:29 PM	82		
101 / NTI	4/17/12	23	FG	FUS	42	820/12	2:31 PM	82		
100 / NTI	4/17/12	22	FG	FUS	42	820/12	2:32 PM	82		
99 / NTI	4/17/12	23	FG	FUS	42	820/12	2:33 PM	82		
121 / ETI	4/17/12	22	FG	FUS	42	820/12	5:28 PM	82		
120 / ETI	4/17/12	23	FG	FUS	42	820/12	5:29 PM	82		
118 / ETI	4/17/12	22	FG	FUS	42	820/12	5:31 PM	82		
117 / ETI	4/17/12	23	FG	FUS	42	820/12	5:32 PM	82		
116 / ETI	4/17/12	22	FG	FUS	42	820/12	5:34 PM	81		
114 / ETI	4/17/12	23	FG	FUS	42	820/12	5:35 PM	81		
113 / ETI	4/17/12	22	FG	FUS	42	820/12	5:36 PM	81		
112 / ETI	4/17/12	23	FG	FUS	42	820/12	5:38 PM	81	DS-77	
111 / ETI	4/17/12	26	FG	FUS	42	820/12	5:39 PM	81		
70 / NTI	4/17/12	--	--	--	--	--	--	--		Repair 243
133 / ETI	4/18/12	22	FG	FUS	42	820/12	11:26 AM	77		
131 / ETI	4/18/12	23	FG	FUS	42	820/12	11:27 AM	77		
130 / ETI	4/18/12	22	FG	FUS	42	820/12	11:29 AM	77		
129 / ETI	4/18/12	23	FG	FUS	42	820/12	11:30 AM	77		
127 / ETI	4/18/12	22	FG	FUS	42	820/12	11:32 AM	78		
126 / ETI	4/18/12	23	FG	FUS	42	820/12	11:33 AM	78		
124 / ETI	4/18/12	22	FG	FUS	42	820/12	11:35 AM	78		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
123 / ETI	4/18/12	23	FG	FUS	42	820/12	11:36 AM	78		
122 / ETI	4/18/12	22	FG	FUS	42	820/12	11:38 AM	78		
145 / ETI	4/18/12	19	FG	FUS	42	820/12	1:43 PM	81		
143 / ETI	4/18/12	23	FG	FUS	42	820/12	1:44 PM	81		
142 / ETI	4/18/12	22	FG	FUS	42	820/12	1:46 PM	81		
140 / ETI	4/18/12	23	FG	FUS	42	820/12	1:47 PM	81		
139 / ETI	4/18/12	22	FG	FUS	42	820/12	1:49 PM	81		
138 / ETI	4/18/12	23	FG	FUS	42	820/12	1:50 PM	81		
137 / ETI	4/18/12	22	FG	FUS	42	820/12	1:52 PM	82		
136 / ETI	4/18/12	23	FG	FUS	42	820/12	1:53 PM	82		
134 / ETI	4/18/12	22	FG	FUS	42	820/12	1:55 PM	82		
149 / ETI	4/18/12	23	FG	FUS	42	820/12	2:45 PM	82		
148 / ETI	4/18/12	22	FG	FUS	42	820/12	2:46 PM	82		
147 / ETI	4/18/12	23	FG	FUS	42	820/12	2:48 PM	82		
146 / ETI	4/18/12	22	FG	FUS	42	820/12	2:49 PM	82	DS-78	
156 / ETI	4/25/12	22	CG	FUS	42	800/11	10:13 AM	72		
155 / ETI	4/25/12	23	CG	FUS	42	800/11	10:14 AM	72		
153 / ETI	4/25/12	22	CG	FUS	42	800/11	10:16 AM	72		
152 / ETI	4/25/12	23	CG	FUS	42	800/11	10:18 AM	72		
151 / ETI	4/25/12	22	CG	FUS	42	800/11	10:19 AM	72		
169 / ETI	4/25/12	23	CG	FUS	42	800/11	11:33 AM	74		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
167 / ETI	4/25/12	11	CG	FUS	42	800/11	11:34 AM	74		
166 / ETI	4/25/12	22	CG	FUS	42	800/11	11:36 AM	74		
165 / ETI	4/25/12	8	CG	FUS	42	800/11	11:36 AM	74		
159 / ETI	4/25/12	23	CG	FUS	42	800/11	11:38 AM	75		
158 / ETI	4/25/12	22	CG	FUS	42	800/11	11:39 AM	75		
161 / ETI	4/25/12	23	CG	FUS	42	800/11	1:44 PM	77		
162 / ETI	4/25/12	23	CG	FUS	42	800/11	1:45 PM	77	DS-79	
163 / ETI	4/25/12	22	CG	FUS	42	800/11	1:47 PM	77		
164 / ETI	4/25/12	23	CG	FUS	42	800/11	1:48 PM	77		
168 / ETI	4/25/12	22	CG	FUS	42	800/11	1:50 PM	77		
160 / ETI	4/25/12	12	CG	FUS	42	800/11	3:06 PM	83		
176 / 177	7/5/12	23	VM	FUS	43	750/14	1:51PM	95		
174 / 175	7/5/12	23	VM	FUS	47	750/50	11:21AM	91		
173 / 175	7/5/12	166	VM	FUS	47	750/50	11:30AM	91		
173 / 174	7/5/12	366	VM	FUS	47	750/50	11:41AM	91	DS-80	
177 / 178	7/5/12	23	VR	FUS	52	750/12	12:00PM	92		
175 / 178	7/5/12	150	VM	FUS	43	750/14	12:05PM	92		
178 / 179	7/5/12	166	VR	FUS	52	750/12	12:08PM	92		
174 / 178	7/5/12	20	AQ	FUS	43	750/14	12:16PM	92	DS-81	
177 / 179	7/5/12	316	VR	FUS	52	750/12	12:18PM	92	DS-82	
174 / 177	7/5/12	316	AQ	FUS	43	750/14	12:19PM	92		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
174 / 176	7/5/12	15	AQ	FUS	43	750/14	12:43PM	92		
176 / 179	7/5/12	12	VR	FUS	52	750/12	12:43PM	92		
182 / 183	7/5/12	23	VM	FUS	43	750/14	2:08PM	95		
179 / 180	7/5/12	497	VR	FUS	52	750/12	2:08PM	95	DS-83	
180 / 183	7/5/12	191	VM	FUS	43	750/14	2:44PM	95		
180 / 182	7/5/12	269	VM	FUS	43	750/14	3:09PM	95	DS-84	
181 / 182	7/5/12	23	VR	FUS	52	750/12	3:15PM	95		
181 / 184	7/5/12	25	VR	FUS	52	750/12	3:25PM	95		
180 / 181	7/5/12	25	VM	FUS	43	750/14	3:30PM	95		
182 / 184	7/5/12	247	VR	FUS	52	750/12	3:30PM	95		
185 / 186	7/5/12	23	VM	FUS	43	750/14	3:40PM	95		
184 / 185	7/5/12	19	VM	FUS	43	750/14	3:45PM	95		
184 / 186	7/5/12	153	VM	FUS	43	750/14	3:50PM	95	DS-85	
186 / 187	7/5/12	23	VR	FUS	52	750/12	3:50PM	95		
184 / 192	7/5/12	10	VM	FUS	43	750/14	4:10PM	95		
184 / 187	7/5/12	58	VM	FUS	43	750/14	4:12PM	95		
186 / 188	7/5/12	152	VR	FUS	52	750/12	4:45PM	93		
187 / 188	7/5/12	62	VR	FUS	52	750/12	4:55PM	93		
188 / 190	7/5/12	148	VM	FUS	43	750/14	5:00PM	93	DS-86	
189 / 190	7/5/12	20	VM	FUS	43	750/14	5:15PM	93		
188 / 189	7/5/12	49	VM	FUS	43	750/14	5:25PM	93		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
200 / 201	7/6/12	23	HP	FUS	47	750/13	1:07PM	90		
199 / 201	7/6/12	120	HP	FUS	47	750/13	1:15PM	90		
201 / 202	7/6/12	120	SR	FUS	43	700/60	1:15PM	90	DS-91	
200 / 202	7/6/12	256	SR	FUS	43	700/60	1:25PM	90		
203 / 204	7/6/12	23	HP	FUS	47	750/13	1:48PM	90		
202 / 204	7/6/12	160	HP	FUS	47	750/13	1:53PM	90	DS-92	
184 / 191	7/6/12	23	SR	FUS	43	700/60	10:30AM	88		
187 / 192	7/6/12	23	SR	FUS	43	700/60	10:35AM	88		
188 / 193	7/6/12	23	SR	FUS	43	700/60	10:40AM	88		
194 / 195	7/6/12	158	HP	FUS	47	750/13	11:05AM	88		
195 / 197	7/6/12	240	HP	FUS	47	750/13	11:20AM	88	DS-89	
173 / WTI	7/6/12	390	SR	FUS	43	700/60	11:25AM	88	DS-88	
196 / 197	7/6/12	23	HP	FUS	47	750/13	11:45AM	88		
195 / 196	7/6/12	72	HP	FUS	47	750/13	11:50AM	88		
197 / 198	7/6/12	19	VR	FUS	52	720/13	12:01PM	88		
198 / 199	7/6/12	60	VR	FUS	52	720/13	12:06PM	90		
199 / 200	7/6/12	256	HP	FUS	47	750/13	12:10PM	89	DS-90	
197 / 199	7/6/12	258	VR	FUS	52	720/13	12:14PM	89		
196 / 199	7/6/12	72	VR	FUS	52	720/13	12:29PM	89		
202 / 203	7/6/12	210	HP	FUS	43	750/13	2:08PM	90		
204 / 205	7/6/12	166	VR	FUS	52	720/13	2:11PM	91		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
206 / 209	7/6/12	199	HP	FUS	47	750/13	2:25PM	92		
203 / 205	7/6/12	210	VR	FUS	52	720/13	2:25PM	92	DS-93	
205 / 207	7/6/12	167	SR	FUS	43	700/60	2:30PM	92		
205 / 206	7/6/12	199	SR	FUS	43	700/60	2:45PM	92		
206 / 207	7/6/12	23	SR	FUS	43	700/60	2:50PM	92	DS-94	
193 / 209	7/6/12	150	HP	FUS	47	750/13	3:10PM	92	DS-95	
173 / 194	7/6/12	23	VR	FUS	52	720/13	3:22PM	92		
175 / 195	7/6/12	23	VR	FUS	52	720/13	3:27PM	92		
207 / 209	7/6/12	166	HP	FUS	47	750/13	3:30PM	92		
175 / 196	7/6/12	10	VR	FUS	52	720/13	3:32PM	92		
178 / 196	7/6/12	23	VR	FUS	52	720/13	3:35PM	92		
179 / 196	7/6/12	10	VR	FUS	52	720/13	3:45PM	92		
179 / 199	7/6/12	23	VR	FUS	52	720/13	3:47PM	92		
180 / 200	7/6/12	23	VR	FUS	52	720/13	3:50PM	92		
183 / 202	7/6/12	23	VR	FUS	52	720/13	3:55PM	92		
191 / 203	7/6/12	23	VR	FUS	52	720/13	4:00PM	92		
192 / 205	7/6/12	23	VR	FUS	52	720/13	4:05PM	92		
193 / 206	7/6/12	23	VR	FUS	52	720/13	4:10PM	92		
208 / 209	7/6/12	23	HP	FUS	47	750/13	4:30PM	93		
190 / 208	7/6/12	23	HP	FUS	47	750/13	4:33PM	89		
193 / 208	7/6/12	83	HP	FUS	47	750/13	5:02PM	93	DS-99	

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
209 / 212	7/6/12	514	SR	FUS	43	700/60	5:20PM	92	DS-96	
208 / 212	7/6/12	50	SR	FUS	43	700/60	5:50PM	89		
208 / 211	7/6/12	25	SR	FUS	43	700/60	5:55PM	89		
190 / 211	7/6/12	46	SR	FUS	43	700/60	6:00PM	89		
212 / 214	7/6/12	490	VR	FUS	52	720/13	6:00PM	89		
210 / 211	7/6/12	19	SR	FUS	43	700/60	6:05PM	89		
190 / 210	7/6/12	90	SR	FUS	43	700/60	6:10PM	89		
211 / 212	7/6/12	23	HP	FUS	47	750/13	6:15PM	89		
214 / 215	7/6/12	276	HP	FUS	47	750/13	6:45PM	87		
214 / 216	7/6/12	173	SR	FUS	43	700/60	6:50PM	87		
183 / 191	7/6/12	191	HP	FUS	47	750/13	9:10AM	88		
192 / 193	7/6/12	236	VR	FUS	52	720/13	9:15AM	88	DS-87	
182 / 191	7/6/12	40	HP	FUS	47	750/13	9:25AM	88		
191 / 192	7/6/12	231	SR	FUS	43	700/60	9:28AM	88		
215 / 217	7/9/12	65	VR	FUS	52	750/19.5	1:00PM	90		
215 / 218	7/9/12	178	VR	FUS	52	750/19.5	1:20PM	90		
218 / 219	7/9/12	224	VR	FUS	52	750/19.5	10:40AM	88		
219 / 221	7/9/12	147	VR	FUS	52	750/19.5	10:55AM	88	DS-100	
215 / 216	7/9/12	23	VR	FUS	52	750/19.5	2:10PM	90		
221 / 225	7/9/12	25	VR	FUS	52	750/19.5	2:15PM	90		
218 / 222	7/9/12	15	VR	FUS	52	750/19.5	2:20PM	90		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
219 / 222	7/9/12	8	VR	FUS	52	750/19.5	2:20PM	90		
221 / 226	7/9/12	12	VR	FUS	52	750/19.5	2:25PM	90		
222 / 223	7/9/12	23	VR	FUS	52	750/19.5	2:30PM	90		
221 / 227	7/9/12	38	VR	FUS	52	750/19.5	2:35PM	90		
224 / 227	7/9/12	131	VR	FUS	52	750/19.5	2:55PM	90		
225 / 226	7/9/12	20	VR	FUS	52	750/19.5	3:00PM	90		
216 / 222	7/9/12	40	VR	FUS	52	750/14	3:05PM	90		
216 / 223	7/9/12	90	VR	FUS	52	750/14	3:10PM	90	DS-101	
219 / 224	7/9/12	8	VR	FUS	52	750/14	3:50PM	90		
221 / 224	7/9/12	15	VR	FUS	52	750/14	3:55PM	90		
219 / 224	7/9/12	29	VR	FUS	52	750/14	4:08PM	90		
222 / 224	7/9/12	40	VR	FUS	52	750/14	4:12PM	90		
223 / 224	7/9/12	52	VR	FUS	52	750/14	4:16PM	90		
226 / 227	7/9/12	17	VR	FUS	52	750/14	4:28PM	90		
188 / ETI	7/10/12	22	RA	EXT	24	440/300	1:15PM	95		
185 / 188	7/10/12	14	RA	EXT	24	440/300	1:20PM	80		
214 / 229	7/10/12	23	FG	FUS	47	850/12	10:03AM	85		
228 / 229	7/10/12	68	FG	FUS	47	850/12	10:06AM	85		
195 / WTI	7/10/12	77	JG	EXT	28	450/443	10:15AM	90		
194 / WTI	7/10/12	35	JG	EXT	28	450/443	10:30PM	90		
223 / 230	7/10/12	23	FG	FUS	47	850/12	10:34AM	88		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
174 / NTI	7/10/12	23	RA	EXT	24	440/300	10:35AM	85		
229 / 230	7/10/12	89	FG	FUS	47	850/12	10:38AM	88		
198 / WTI	7/10/12	87	MM	EXT	8	420/415	10:45AM	90		
176 / NTI	7/10/12	25	RA	EXT	24	440/300	10:45AM	89		
197 WTI	7/10/12	12	MM	EXT	8	420/415	11:00AM	90		
179 / NTI	7/10/12	25	RA	EXT	24	440/300	11:00AM	91		
195 / WTI	7/10/12	60	MM	EXT	8	420/415	11:05AM	90		
180 / NTI	7/10/12	25	RA	EXT	24	440/300	11:10AM	929		
223 / 231	7/10/12	37	FG	FUS	47	850/12	11:22AM	92		
230 / 231	7/10/12	25	FG	FUS	47	850/12	11:25AM	92	DS-103	
224 / 231	7/10/12	19	FG	FUS	47	850/12	11:30AM	93		
181 / NTI	7/10/12	25	RA	EXT	24	440/300	11:30AM	93		
184 / NTI	7/10/12	25	RA	EXT	24	440/300	11:45AM	93		
185 / NTI	7/10/12	25	RA	EXT	24	440/300	12:55PM	95		
173 / WTI	7/10/12	102	MM	EXT	8	420/415	8:20PM	80	DS-102	
214 / 228	7/10/12	23	FG	FUS	47	850/12	9:30AM	82		
212 / 228	7/10/12	68	FG	FUS	47	850/12	9:41AM	83		
216 / 229	7/10/12	23	FG	FUS	47	850/12	9:59AM	85		
194 / WTI	7/11/12	127	CG	EXT	23	440/380	10:16AM	89		
173 / WTI	7/11/12	63	RA	EXT	24	440/300	11:30AM	93		
173 / WTI	7/11/12	7	CG	EXT	23	440/380	11:41AM	93		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
188 / ETI	7/11/12	36	RA	EXT	24	440/300	2:20AM	80		
214 / 216	7/11/12	59	CG	EXT	25	440/380	6:00PM	80	DS-104	
189 / ETI	7/11/12	42	RA	EXT	24	440/300	8:45AM	83		
230 / ETI	7/12/12	50	CG	EXT	25	440/380	1:15PM	83		
214 / ETI	7/12/12	20	RA	EXT	24	440/300	1:20PM	85		
211 / ETI	7/12/12	10	RA	EXT	24	440/300	1:40PM	85		
213 / ETI	7/12/12	47	RA	EXT	24	440/300	1:42PM	85		
213 / 214	7/12/12	17	RA	EXT	24	440/300	1:45PM	85		
214 / 216	7/12/12	42	CG	EXT	25	440/380	10:12AM	82		
190 / ETI	7/12/12	30	RA	EXT	24	440/300	10:46AM	82		
210 / ETI	7/12/12	64	RA	EXT	24	440/300	10:53AM	82		
211 / 213	7/12/12	44	RA	EXT	24	440/300	11:30AM	83		
211 / 214	7/12/12	24	RA	EXT	24	440/300	11:42AM	83		
224 / ETI	7/12/12	41	FG	FUS	47	800/12	11:50AM	83		
212 / 214	7/12/12	17	RA	EXT	24	440/300	11:50AM	83	DS-97	
231 / ETI	7/12/12	61	FG	FUS	47	800/12	11:55AM	84		
215 / ETI	7/12/12	70	RA	EXT	24	440/300	2:00PM	85	DS-106	
214 / 215	7/12/12	120	RA	EXT	24	440/300	2:15PM	85	DS-98	
227 / ETI	7/12/12	128	CG	EXT	25	440/380	2:40PM	84	DS-105	
226 / ETI	7/12/12	13	CG	EXT	25	440/380	3:22PM	85		
225 / ETI	7/12/12	27	CG	EXT	25	440/380	3:25PM	85		

Panel Seaming Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

Project Number: 3804-352-17-00

QA/QC Monitor: Wolfe / Arthur

Material ID: 40 mil. LLDPG

Seam Number	Date Seamed	Final Seam Length (Feet)	Welder Id.	Weld Type	Machine Number	Machine Temp/ Speed or Preheat	Start Time	Ambient Temp. (°F)	DS Sample Number	Comments
221 / ETI	7/12/12	45	CG	EXT	25	440/380	3:45PM	85		
219 / ETI	7/12/12	41	CG	EXT	25	440/380	3:57PM	85		
217 / 218	7/12/12	20	RA	EXT	24	440/300	4:08PM	85		
217 / ETI	7/12/12	60	CG	EXT	25	440/380	4:10PM	85		
217 / 219	7/12/12	6	RA	EXT	24	440/300	4:15PM	85		
214 / 215	7/12/12	101	RA	EXT	24	440/300	9:00AM	80	DS-98	
214 / 215	7/12/12	82	CG	EXT	25	440/380	9:37AM	80		

51539

Non-Destructive Test Summary

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
1 / 2	BOS to R-1	3/30/12	30	8:25 AM	30	8:30 AM	P		
1 / 2	R-1 to R-30	3/30/12	30	8:37 AM	29	8:42 AM	P		
1 / 2	R-30 to EOS	3/30/12	30	8:54 AM	29	8:59 AM	P		
2 / 3	BOS to R-4	3/30/12	30	9:31 AM	30	9:36 AM	P		
2 / 3	R-4 to EOS	3/30/12	30	9:16 AM	28	9:21 AM	P		
3 / 4	BOS to R-3	3/30/12	30	9:43 AM	29	9:48 AM	P		
3 / 4	R-3 to R-21	3/30/12	30	10:26 AM	29	10:31 AM	P		
3 / 4	R-21 to EOS	3/30/12	30	10:51 AM	28	10:56 AM	P		
4 / 5	BOS to R-7	3/30/12	30	11:16 AM	29	10:21 AM	P		
4 / 5	R-7 to EOS	3/30/12	30	10:23 AM	30	10:28 AM	P		
5 / 6	BOS to R-5	3/30/12	30	11:34 AM	29	11:39 AM	P		
5 / 6	R-5 to EOS	3/30/12	30	2:43 PM	30	2:48 PM	P		
6 / 7	BOS to R-16	3/30/12	30	2:56 PM	30	3:01 PM	P		
6 / 7	R-16 to EOS	3/30/12	30	3:04 PM	29	3:09 PM	P		
7 / 8	BOS to R-15	3/30/12	30	3:24 PM	30	3:29 PM	P		
7 / 8	R-15 to EOS	3/30/12	30	3:37 PM	28	3:42 PM	P		
8 / 9	Entire Seam	3/30/12	30	3:54 PM	30	3:59 PM	P		
9 / 10	BOS to R-14	3/30/12	30	4:13 PM	30	3:18 PM	P		
9 / 10	R-14 to EOS	3/30/12	30	4:28 PM	29	4:33 PM	P		
10 / 11	Entire Seam	3/30/12	30	4:44 PM	28	4:49 PM	P		
11 / 12	Entire Seam	4/2/12	30	10:00 AM	28	10:05 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
12 / 13	Entire Seam	4/2/12	30	10:02 AM	29	10:07 AM	P		
13 / 14	BOS to R-24	4/2/12	30	10:07 AM	28	10:12 AM	P		
13 / 14	R-24 to EOS	4/2/12	30	10:17 AM	29	10:22 AM	P		
14 / 15	Entire Seam	4/2/12	30	10:10 AM	30	10:15 AM	P		
15 / 16	Entire Seam	4/2/12	30	10:35 AM	30	10:40 AM	P		
16 / 18	Entire Seam	4/2/12	30	10:36 AM	28	10:41 AM	P		
18 / 19	Entire Seam	4/2/12	30	10:37 AM	28	10:42 AM	P		
16 / 17	BOS to R-69	4/2/12	30	10:52 AM	27	10:57 AM	P		
16 / 17	R-69 to EOS	4/2/12	30	10:55 AM	30	11:00 AM	P		
17 / 18	Entire Seam	4/2/12	30	10:48 AM	29	10:53 AM	P		
17 / 19	Entire Seam	4/2/12	30	10:53 AM	27	10:58 AM	P		
19 / 20	BOS toR-35	4/2/12	30	11:06 AM	28	11:11 AM	P		
19 / 20	R-35 to EOS	4/2/12	30	11:06 AM	28	11:11 AM	P		
20 / 21	Entire Seam	4/2/12	30	11:18 AM	27	11:23 AM	P		
21 / 22	Entire Seam	4/2/12	30	11:25 AM	28	11:30 AM	P		
20 / 22	Entire Seam	4/2/12	30	11:18 AM	27	11:23 AM	P		
19 / 21	Entire Seam	4/2/12	30	11:20 AM	29	11:25 AM	P		
22 / 23	Entire Seam	4/2/12	30	11:31 AM	28	11:36 AM	P		
23 / 25	Entire Seam	4/2/12	30	11:32 AM	28	11:37 AM	P		
25 / 26	Entire Seam	4/2/12	30	11:34 AM	29	11:39 AM	P		
23 / 24	Entire Seam	4/2/12	30	11:50 AM	28	11:55 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
24 / 25	Entire Seam	4/2/12	30	11:50 AM	30	11:55 AM	P		
24 / 26	Entire Seam	4/2/12	30	11:50 AM	29	11:55 AM	P		
26 / 27	Entire Seam	4/2/12	30	1:07 PM	29	1:13 PM	P		
26 / 28	Entire Seam	4/2/12	30	1:05 PM	30	1:10 PM	P		
27 / 28	Entire Seam	4/2/12	30	1:05 PM	30	1:10 PM	P		
27 / 29	BOS to R-59	4/2/12	30	1:09 PM	28	1:14 PM	P		
27 / 29	R-59 to EOS	4/2/12	30	1:20 PM	30	1:25 PM	P		
28 / 29	Entire Seam	4/2/12	30	1:06 PM	29	1:11 PM	P		
29 / 30	Entire Seam	4/2/12	30	1:30 PM	30	1:35 PM	P		
30 / 31	Entire Seam	4/2/12	30	1:32 PM	28	1:37 PM	P		
31 / 32	BOS to R-81	4/2/12	30	1:35 PM	29	1:40 PM	P		
31 / 32	R-81 to EOS	4/2/12	30	1:30 PM	30	1:35 PM	P		
32 / 33	Entire Seam	4/2/12	30	2:11 PM	29	2:16 PM	P		
33 / 34	Entire Seam	4/2/12	30	2:10 PM	30	2:15 PM	P		
33 / 35	Entire Seam	4/2/12	30	2:10 PM	28	2:15 PM	P		
32 / 34	Entire Seam	4/2/12	30	1:52 PM	30	1:57 PM	P		
34 / 35	Entire Seam	4/2/12	30	1:53 PM	28	1:58 PM	P		
35 / 37	BOS to R-83	4/2/12	30	1:56 PM	29	2:01 PM	P		
35 / 37	R-83 to EOS	4/2/12	30	2:08 PM	28	2:13 PM	P		
35 / 36	Entire Seam	4/2/12	30	2:21 PM	28	2:26 PM	P		
36 / 37	Entire Seam	4/2/12	30	2:21 PM	30	2:26 PM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
36 / 38	Entire Seam	4/2/12	30	2:22 PM	30	2:27 PM	P		
37 / 38	Entire Seam	4/2/12	30	2:41 PM	28	2:46 PM	P		
38 / 39	Entire Seam	4/2/12	30	2:42 PM	27	2:47 PM	P		
39 / 40	BOS to R-183	4/2/12	30	2:44 PM	29	2:49 PM	P		
39 / 40	R-184 to EOS	4/2/12	30	2:46 PM	28	2:51 PM	P		
5 / WTI	BOS to R-93	4/2/12	30	3:42 PM	30	3l47 P	P		
5 / WTI	R-93 to EOS	4/2/12	30	3:43 PM	30	3:48 PM	P		
6 / WTI	BOS to R-31	4/2/12	30	3:44 PM	30	3:49 PM	P		
6 / WTI	R-31 to EOS	4/2/12	30	3:45 PM	30	3:50 PM	P		
7 / WTI	BOS to R-33	4/3/12	30	8:52 AM	29	8:57 AM	P		
7 / WTI	R-33 to EOS	4/3/12	30	8:52 AM	30	8:57 AM	P		
8 / WTI	BOS to R-43	4/3/12	30	8:56 AM	30	9:01 AM	P		
8 / WTI	R-43 to EOS	4/3/12	30	8:57 AM	29	9:02 AM	P		
9 / WTI	BOS to R-45	4/3/12	30	9:05 AM	28	9:10 AM	P		
9 / WTI	R-45 to EOS	4/3/12	30	9:06 AM	29	9:11 AM	P		
10 / WTI	BOS to R-47	4/3/12	30	9:14 AM	30	9:19 AM	P		
10 / WTI	R-47 to EOS	4/3/12	30	9:15 AM	30	9:20 AM	P		
11 / WTI	BOS to R-49	4/3/12	30	9:30 AM	30	9:35 AM	P		
11 / WTI	R-49 to EOS	4/3/12	30	9:31 AM	30	9:36 AM	P		
12 / WTI	BOS to R-52	4/3/12	30	9:33 AM	30	9:38 AM	P		
12 / WTI	R-52 to EOS	4/3/12	30	9:34 AM	30	9:39 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
13 / WTI	BOS to R-62	4/3/12	30	9:44 AM	30	9:49 AM	P		
13 / WTI	R-62 to EOS	4/3/12	30	9:45 AM	30	9:50 AM	P		
14 / WTI	BOS to R-64	4/3/12	30	9:46 AM	29	9:51 AM	P		
14 / WTI	R-64 to EOS	4/3/12	30	9:47 AM	30	9:52 AM	P		
15 / WTI	BOS to R-66	4/3/12	30	9:58 AM	29	10:03 AM	P		
15 / WTI	R-66 to EOS	4/3/12	30	9:59 AM	30	10:04 AM	P		
16 / WTI	BOS to R-68	4/3/12	30	10:01 AM	30	10:06 AM	P		
16 / WTI	R-68 to EOS	4/3/12	30	10:02 AM	28	10:07 AM	P		
17 / WTI	BOS to R-98	4/3/12	30	10:10 AM	30	10:15 AM	P		
17 / WTI	R-98 to EOS	4/3/12	30	10:11 AM	30	10:16 AM	P		
19 / WTI	BOS to R-100	4/3/12	30	10:20 AM	29	10:25 AM	P		
19 / WTI	R-100 to EOS	4/3/12	30	10:21 AM	30	10:26 AM	P		
20 / WTI	BOS to R-102	4/3/12	30	10:26 AM	30	10:31 AM	P		
20 / WTI	R-102 to EOS	4/3/12	30	10:27 AM	30	10:32 AM	P		
22 / WTI	BOS to R-107	4/3/12	30	10:39 AM	30	10:44 AM	P		
22 / WTI	R-107 to EOS	4/3/12	30	10:40 AM	30	10:45 AM	P		
23 / WTI	BOS to R-109	4/3/12	30	10:41 AM	29	10:46 AM	P		
23 / WTI	R-109 to EOS	4/3/12	30	10:42 AM	29	10:47 AM	P		
24 / WTI	BOS to R-111	4/3/12	30	10:56 AM	30	11:01 AM	P		
24 / WTI	R-111 to EOS	4/3/12	30	10:59 AM	30	11:04 AM	P		
26 / WTI	BOS to R-113	4/3/12	30	11:00 AM	30	11:05 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
26 / WTI	R-113 to EOS	4/3/12	30	11:01 AM	30	11:06 AM	P		
27 / WTI	BOS to R-115	4/3/12	30	11:05 AM	30	11:10 AM	P		
27 / WTI	R-115 to EOS	4/3/12	30	11:06 AM	30	11:11 AM	P		
29 / WTI	BOS to R-117	4/3/12	30	11:11 AM	29	11:16 AM	P		
29 / WTI	R-117 to EOS	4/3/12	30	11:12 AM	30	11:17 AM	P		
30 / WTI	BOS to R-119	4/3/12	30	11:32 AM	30	11:37 AM	P		
30 / WTI	R-119 to EOS	4/3/12	30	11:37 AM	28	11:42 AM	P		
31 / WTI	BOS to R-121	4/3/12	30	11:38 AM	30	11:43 AM	P		
31 / WTI	R-121 to EOS	4/3/12	30	11:53 AM	30	11:58 AM	P		
32 / WTI	BOS to R-123	4/3/12	30	11:54 AM	29	11:59 AM	P		
32 / WTI	R-123 to EOS	4/3/12	30	11:55 AM	28	12:00 PM	P		
33 / WTI	BOS to R-125	4/3/12	30	11:56 AM	29	12:01 PM	P		
33 / WTI	R-125 to EOS	4/3/12	30	1:23 PM	30	1:28 PM	P		
35 / WTI	BOS to R-127	4/3/12	30	1:24 PM	30	1:29 PM	P		
35 / WTI	R-127 to EOS	4/3/12	30	1:25 PM	30	1:30 PM	P		
36 / WTI	BOS to R-129	4/3/12	30	1:26 PM	30	1:31 PM	P		
36 / WTI	R-129 to EOS	4/3/12	30	1:39 PM	30	1:44 PM	P		
38 / WTI	BOS to R-133	4/3/12	30	1:40 PM	28	1:45 PM	P		
38 / WTI	R-133 to EOS	4/3/12	30	1:41 PM	30	1:46 PM	P		
39 / WTI	BOS to R-171	4/3/12	30	1:42 PM	30	1:47 PM	P		
39 / WTI	R-171 to EOS	4/3/12	30	2:21 PM	29	2:26 PM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
40 / WTI	BOS to R-173	4/3/12	30	2:22 PM	30	2:27 PM	P		
40 / WTI	R-173 to EOS	4/3/12	30	2:25 PM	29	2:30 PM	P		
4 / WTI	BOS to R-91	4/3/12	30	2:52 PM	26	2:57 PM	P		
4 / WTI	R-91 to EOS	4/3/12	30	2:51 PM	30	2:56 PM	P		
3 / WTI	BOS to R-89	4/3/12	30	2:55 PM	30	3:00 PM	P		
3 / WTI	R-89 to EOS	4/3/12	30	3:08 PM	30	3:13 PM	P		
2 / WTI	BOS to R-87	4/3/12	30	3:09 PM	28	3:14 PM	P		
2 / WTI	R-87 to EOS	4/3/12	30	3:05 PM	30	3:10 PM	P		
1 / WTI	Entire Seam	4/3/12	30	3:04 PM	29	3:09 PM	P		
40 / 41	Entire Seam	4/4/12	30	4:33 PM	28	4:38 PM	P		
41 / 43	BOS to R-136	4/4/12	30	4:35 PM	30	4:40 PM	P		
41 / 43	R-136 to EOS	4/4/12	30	4:50 PM	29	4:55 PM	P		
41 / 42	Entire Seam	4/4/12	30	5:03 PM	27	5:08 PM	P		
42 / 43	Entire Seam	4/4/12	30	5:16 PM	29	5:21 PM	P		
42 / 44	Entire Seam	4/4/12	30	5:19 PM	28	5:24 PM	P		
43 / 44	Entire Seam	4/5/12	30	1:53 PM	30	1:58 PM	P		
44 / 46	Entire Seam	4/5/12	30	3:24 PM	28	3:29 PM	P		
44 / 45	Entire Seam	4/5/12	30	1:56 PM	28	2:01 PM	P		
45 / 46	Entire Seam	4/5/12	30	3:29 PM	30	2:34 PM	P		
46 / 47	BOS to R-140	4/5/12	30	3:20 PM	30	3:25 PM	P		
46 / 47	R-140 to EOS	4/5/12	30	3:08 PM	29	3:13 PM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
45 / 47	Entire Seam	4/5/12	30	2:10 PM	28	2:15 PM	P		
47 / 48	Entire Seam	4/5/12	30	2:17 PM	28	2:22 PM	P		
48 / 49	Entire Seam	4/5/12	30	3:35 PM	29	3:40 PM	P		
49 / 50	Entire Seam	4/5/12	30	3:48 PM	30	3:53 PM	P		
50 / 51	Entire Seam	4/6/12	30	1:57 PM	28	2:02 PM	P		
50 / 52	BOS to R-143	4/6/12	30	1:52 PM	28	1:57 PM	P		
50 / 52	R-143 to EOS	4/6/12	30	1:40 PM	30	1:45 PM	P		
51 / 52	Entire Seam	4/6/12	30	2:06 PM	30	2:11 PM	P		
51 / 53	Entire Seam	4/6/12	30	2:16 PM	28	2:21 PM	P		
52 / 53	Entire Seam	4/6/12	30	1:45 PM	29	1:50 PM	P		
53 / 54	BOS to R-146	4/7/12	30	8:00 AM	30	8:05 AM	P		
53 / 54	R-146 to EOS	4/7/12	30	8:07 AM	29	8:12 AM	P		
54 / 55	Entire Seam	4/7/12	30	8:24 AM	28	8:29 AM	P		
55 / 57	Entire Seam	4/7/12	30	8:34 AM	27	8:39 AM	P		
55 / 56	Entire Seam	4/7/12	30	8:41 AM	28	8:46 AM	P		
54 / 56	Entire Seam	4/7/12	30	8:49 AM	30	8:54 AM	P		
56 / 57	Entire Seam	4/7/12	30	9:05 AM	29	9:10 AM	P		
57 / 58	Entire Seam	4/7/12	30	9:17 AM	29	9:22 AM	P		
58 / 59	Entire Seam	4/7/12	30	9:30 AM	29	9:35 AM	P		
59 / 61	Entire Seam	4/10/12	30	8:44 AM	30	8:49 AM	P		
59 / 60	Capped by Repair 151	--	--	--	--	--	--		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
58 / 60	Entire Seam	4/10/12	30	10:03 AM	30	10:08 AM	P		
60 / 61	Entire Seam	4/10/12	30	10:21 AM	30	10:26 AM	P		
61 / 62	Entire Seam	4/10/12	30	10:30 AM	28	10:35 AM	P		
62 / 63	Entire Seam	4/10/12	30	10:38 AM	28	10:43 AM	P		
62 / 63	60' to EOS	4/10/12	30	10:40 AM	30	10:45 AM	P		
63 / 64	Entire Seam	4/10/12	30	10:45 AM	28	10:50 AM	P		
64 / 65	Entire Seam	4/10/12	30	10:52 AM	30	10:57 AM	P		
65 / 66	Entire Seam	4/10/12	30	11:07 AM	29	11:12 AM	P		
66 / 67	Entire Seam	4/10/12	30	11:12 AM	29	11:17 AM	P		
67 / 68	Entire Seam	4/10/12	30	11:20 AM	28	11:25 AM	P		
65 / 68	BOS to R-230	4/10/12	30	11:27 AM	27	11:32 AM	P		
65 / 68	R-230 to EOS	4/12/12	30	1:36 PM	28	1:41 PM	P		
62 / 71	Entire Seam	4/10/12	30	2:22 PM	30	2:27 PM	P		
70 / 71	Entire Seam	4/12/12	30	2:15 PM	29	2:20 PM	P		
76 / 77	Entire Seam	4/12/12	30	3:01 PM	29	3:06 PM	P		
77 / 78	Entire Seam	4/12/12	30	3:00 PM	30	3:05 PM	P		
80 / 82	Entire Seam	4/12/12	30	3:11 PM	29	3:16 PM	P		
82 / 89	Entire Seam	4/12/12	30	3:20 PM	29	3:25 PM	P		
88 / 89	Entire Seam	4/12/12	30	2:25 PM	30	2:30 PM	P		
89 / 90	Entire Seam	4/12/12	30	2:26 PM	29	2:31 PM	P		
93 / 95	BOS to R-272	4/11/12	30	8:02 AM	28	8:07 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
93 / 95	R-272 to R-213	4/11/12	30	7:58 AM	30	8:03 AM	P		
93 / 95	R-213 to EOS	4/11/12	30	8:17 AM	27	8:22 AM	P		
95 / 96	Entire Seam	4/11/12	30	7:51 AM	29	7:56 AM	P		
92 / 93	Entire Seam	4/11/12	30	11:20 AM	29	11:25 AM	P		
50 / 92	Entire Seam	4/11/12	30	11:05 AM	30	11:10 AM	P		
52 / 92	Entire Seam	4/11/12	30	11:07 AM	28	11:12 AM	P		
91 / 92	Entire Seam	4/11/12	30	11:23 AM	28	11:28 AM	P		
90 / 92	BOS to R-308	4/11/12	30	11:41 AM	30	11:46 AM	P		
90 / 92	R-308 to EOS	4/11/12	30	11:44 AM	29	11:49 AM	P		
89 / 91	Entire Seam	4/11/12	30	11:20 AM	28	11:25 AM	P		
90 / 91	Entire Seam	4/11/12	30	11:34 AM	28	11:39 AM	P		
82 / 91	Entire Seam	4/11/12	30	11:16 AM	29	11:21 AM	P		
53 / 91	Entire Seam	4/11/12	30	1:01 PM	30	1:06 PM	P		
53 / 82	Entire Seam	4/11/12	30	11:16 AM	27	11:21 AM	P		
52 / 91	Entire Seam	4/11/12	30	1:00 PM	30	1:05 PM	P		
82 / 88	Entire Seam	4/11/12	30	1:35 PM	27	1:40 PM	P		
87 / 88	Entire Seam	4/11/12	30	11:42 AM	30	11:47 AM	P		
82 / 87	Entire Seam	4/11/12	30	11:49 AM	30	11:54 AM	P		
84 / 87	Entire Seam	4/11/12	30	2:00 PM	30	2:05 PM	P		
86 / 87	Entire Seam	4/11/12	30	2:01 PM	30	2:06 PM	P		
82 / 84	Entire Seam	4/11/12	30	3:25 PM	27	3:30 PM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
83 / 84	Entire Seam	4/11/12	30	3:39 PM	28	3:44 PM	P		
86 / 88	Entire Seam	4/11/12	30	3:15 PM	28	3:20 PM	P		
84 / 86	Entire Seam	4/11/12	30	3:16 PM	29	3:21 PM	P		
82 / 83	Entire Seam	4/11/12	30	3:39 PM	29	3:44 PM	P		
84 / 85	Entire Seam	4/11/12	30	4:05 PM	30	4:10 PM	P		
83 / 85	Entire Seam	4/11/12	30	4:06 PM	27	4:11 PM	P		
85 / 86	Entire Seam	4/11/12	30	3:53 PM	27	3:58 PM	P		
78 / 80	Entire Seam	4/11/12	30	4:25 PM	29	4:30 PM	P		
79 / 80	Entire Seam	4/12/12	30	9:57 AM	28	10:02 AM	P		
78 / 79	Entire Seam	4/11/12	30	4:27 PM	27	4:32 PM	P		
77 / 79	Entire Seam	4/11/12	30	4:47 PM	30	4:52 PM	P		
77 / 81	Entire Seam	4/11/12	30	4:47 PM	30	4:52 PM	P		
79 / 81	Entire Seam	4/12/12	30	9:43 AM	27	9:48 AM	P		
57 / 79	Entire Seam	4/12/12	30	10:08 AM	30	10:13 AM	P		
57 / 81	Entire Seam	4/12/12	30	9:43 AM	30	9:48 AM	P		
58 / 81	Capped by Repair 217	--	--	--	--	--	--		
58 / 77	Entire Seam	4/12/12	30	10:01 AM	28	10:06 AM	P		
58 / 76	Entire Seam	4/12/12	30	10:02 AM	27	10:07 AM	P		
59 / 76	Entire Seam	4/12/12	30	10:18 AM	29	10:23 AM	P		
59 / 74	Entire Seam	4/12/12	30	10:26 AM		10:31 AM			
61 / 74	Entire Seam	4/12/12	30	10:29 AM	29	10:34 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
73 / 74	Entire Seam	4/12/12	30	10:31 AM	27	10:36 AM	P		
61 / 73	Entire Seam	4/12/12	30	10:35 AM	30	10:40 AM	P		
62 / 73	Entire Seam	4/12/12	30	11:11 AM	30	11:16 AM	P		
71 / 73	Entire Seam	4/12/12	30	11:16 AM	28	11:21 AM	P		
63 / 71	Entire Seam	4/12/12	30	1:21 PM	29	11:26 AM	P		
71 / 72	Entire Seam	4/12/12	30	11:35 AM	29	11:40 AM	P		
72 / 73	Entire Seam	4/12/12	30	11:35 AM	28	11:40 AM	P		
70 / 72	Entire Seam	4/12/12	30	11:38 AM	29	11:43 AM	P		
63 / 70	Entire Seam	4/12/12	30	10:50 AM	30	10:55 AM	P		
64 / 70	Capped by Repair 228	--	--	--	--	--	--		
69 / 70	Entire Seam	4/12/12	30	1:25 PM	30	1:30 PM	P		
64 / 69	Entire Seam	4/12/12	30	1:30 PM	27	1:35 PM	P		
65 / 69	Capped by Repair 229	--	--	--	--	--	--		
68 / 69	Entire Seam	4/12/12	30	1:33 PM	28	1:38 PM	P		
41 / WTI	BOS to R-176	4/12/12	30	3:35 PM	30	3:40 PM	P		
41 / WTI	R-176 to EOS	4/12/12	30	3:41 PM	28	3:46 PM	P		
42 / WTI	BOS to R-178	4/12/12	30	3:41 PM	27	3:46 PM	P		
42 / WTI	R-178 to EOS	4/12/12	30	3:42 PM	29	3:47 PM	P		
55 / 79	Entire Seam	4/12/12	30	9:38 AM	30	9:43 AM	P		
55 / 80	Entire Seam	4/12/12	30	9:40 AM	28	9:45 AM	P		
54 / 80	Entire Seam	4/12/12	30	8:10 AM	30	8:15 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
54 / 82	Entire Seam	4/12/12	30	8:10 AM	30	8:15 AM	P		
74 / 76	Entire Seam	4/12/12	30	10:57 AM	29	11:02 AM	P		
74 / 75	Entire Seam	4/12/12	30	11:24 AM	29	11:29 AM	P		
73 / 75	Entire Seam	4/12/12	30	11:25 AM	27	11:30 AM	P		
75 / 76	Entire Seam	4/12/12	30	11:24 AM	29	11:29 AM	P		
44 / WTI	BOS to R-180	4/12/12	30	3:42 PM	29	3:47 PM	P		
44 / WTI	R-180 to EOS	4/12/12	30	3:43 PM	28	3:48 PM	P		
45 / WTI	BOS to R-182	4/12/12	30	3:43 PM	30	3:48 PM	P		
45 / WTI	R-182 to EOS	4/12/12	30	3:46 PM	27	3:51 PM	P		
47 / WTI	BOS to R-184	4/12/12	30	4:05 PM	28	4:10 PM	P		
47 / WTI	R-184 to EOS	4/12/12	30	4:05 PM	29	4:10 PM	P		
48 / WTI	BOS to R-186	4/12/12	30	4:06 PM	30	4:11 PM	P		
48 / WTI	R-186 to EOS	4/12/12	30	4:06 PM	29	4:11 PM	P		
49 / WTI	BOS to R-188	4/12/12	30	4:07 PM	29	4:12 PM	P		
49 / WTI	R-188 to EOS	4/12/12	30	4:07 PM	27	4:12 PM	P		
50 / WTI	BOS to R-194	4/12/12	30	4:09 PM	29	4:14 PM	P		
50 / WTI	R-194 to EOS	4/12/12	30	4:09 PM	30	4:14 PM	P		
51 / WTI	BOS to R-196	4/13/12	30	8:02 AM	28	8:07 AM	P		
51 / WTI	R-196 to EOS	4/13/12	30	8:02 AM	30	8:07 AM	P		
53 / WTI	BOS to R-198	4/13/12	30	8:04 AM	29	8:09 AM	P		
53 / WTI	R-198 to EOS	4/13/12	30	8:04 AM	27	8:09 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
54 / WTI	BOS to R-201	4/13/12	30	8:06 AM	30	8:11 AM	P		
54 / WTI	R-201 to EOS	4/13/12	30	8:06 AM	28	8:11 AM	P		
56 / WTI	BOS to R-204	4/13/12	30	8:07 AM	30	8:12 AM	P		
56 / WTI	R-204 to EOS	4/13/12	30	8:07 AM	27	8:12 AM	P		
57 / WTI	BOS to R-206	4/13/12	30	8:26 AM	30	8:13 AM	P		
57 / WTI	R-206 to EOS	4/13/12	30	8:26 AM	30	8:13 AM	P		
58 / WTI	BOS to R-208	4/13/12	30	8:28 AM	29	8:33 AM	P		
58 / WTI	R-208 to EOS	4/13/12	30	8:28 AM	30	8:33 AM	P		
60 / WTI	BOS to R-209	4/13/12	30	8:30 AM	28	8:35 AM	P		
60 / WTI	R-209 to EOS	4/13/12	30	9:01 AM	28	9:06 AM	P		
61 / WTI	BOS to R-211	4/13/12	30	9:08 AM	27	9:13 AM	P		
61 / WTI	R-211 to EOS	4/13/12	30	9:08 AM	28	9:13 AM	P		
62 / WTI	BOS to R-213	4/13/12	30	9:28 AM	28	9:33 AM	P		
62 / WTI	R-213 to EOS	4/13/12	30	9:28 AM	28	9:33 AM	P		
63 / WTI	BOS to R-214	4/13/12	30	9:35 AM	28	9:40 AM	P		
63 / WTI	R-214 to EOS	4/13/12	30	9:35 AM	29	9:40 AM	P		
64 / WTI	BOS to R-233	4/13/12	30	9:47 AM	28	9:52 AM	P		
64 / WTI	R-233 to EOS	4/13/12	30	9:47 AM	30	9:52 AM	P		
65 / WTI	BOS to R-235	4/13/12	30	9:57 AM	28	10:02 AM	P		
65 / WTI	R-235 to EOS	4/13/12	30	9:57 AM	30	10:02 AM	P		
66 / WTI	BOS to R-237	4/13/12	30	10:03 AM	29	10:08 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
66 / WTI	R-237 to EOS	4/13/12	30	10:03 AM	29	10:08 AM	P		
96 / 97	BOS to R-316	4/11/12	30	10:02 AM	28	10:07 AM	P		
96 / 97	R-316 to EOS	4/11/12	30	9:47 AM	29	9:52 AM	P		
96 / 98	BOS to R-282	4/11/12	30	8:12 AM	30	8:17 AM	P		
96 / 98	R-282 to EOS	4/11/12	30	8:15 AM	30	8:20 AM	P		
102 / 103	Entire Seam	4/11/12	30	10:40 AM	30	10:45 AM	P		
94 / 96	Entire Seam	4/13/12	30	11:36 AM	29	11:41 AM	P		
93 / 94	Entire Seam	4/13/12	30	1:14 PM	28	1:19 PM	P		
94 / 95	Entire Seam	4/13/12	30	1:35 PM	27	1:40 PM	P		
97 / 98	Entire Seam	4/13/12	30	2:03 PM	29	2:08 PM	P		
98 / 99	Entire Seam	4/13/12	30	1:56 PM	30	2:01 PM	P		
97 / 99	BOS to R-274	4/13/12	30	1:40 PM	29	1:45 PM	P		
97 / 99	R-274 to EOS	4/13/12	30	1:32 PM	29	1:37 PM	P		
99 / 100	BOS to R-305	4/13/12	30	2:08 PM	29	2:13 PM	P		
99 / 100	R-305 to R-317	4/13/12	30	2:09 PM	30	2:14 PM	P		
99 / 100	R-317 to EOS	4/13/12	30	2:25 PM	27	2:30 PM	P		
100 / 102	Entire Seam	4/13/12	30	3:11 PM	28	3:16 PM	P		
100 / 101	Entire Seam	4/13/12	30	3:05 PM	28	3:10 PM	P		
101 / 102	BOS to R-319	4/13/12	30	3:44 PM	30	3:49 PM	P		
101 / 102	R-319 to EOS	4/13/12	30	3:41 PM	30	3:46 PM	P		
101 / 103	Entire Seam	4/13/12	30	3:48 PM	30	3:52 PM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
103 / 104	Entire Seam	4/13/12	30	4:09 PM	29	4:14 PM	P		
104 / 105	Entire Seam	4/13/12	30	4:10 PM	27	4:15 PM	P		
103 / 105	Entire Seam	4/13/12	30	4:14 PM	27	4:19 PM	P		
105 / 106	Entire Seam	4/13/12	30	4:15 PM	28	4:20 PM	P		
106 / 107	Entire Seam	4/13/12	30	4:51 PM	30	4:56 PM	P		
106 / 115	Entire Seam	4/13/12	30	4:56 PM	28	5:01 PM	P		
106 / 117	Entire Seam	4/16/12	30	2:32 PM	30	2:37 PM	P		
107 / 115	Entire Seam	4/16/12	30	2:36 PM	28	2:41 PM	P		
107 / 114	Entire Seam	4/16/12	30	2:40 PM	29	2:45 PM	P		
108 / 114	Entire Seam	4/16/12	30	2:47 PM	27	2:52 PM	P		
107 / 108	Entire Seam	4/16/12	30	2:47 PM	30	2:52 PM	P		
108 / 113	Entire Seam	4/16/12	30	2:57 PM	28	3:02 PM	P		
108 / 112	Entire Seam	4/16/12	30	2:59 PM	29	3:04 PM	P		
108 / 110	Entire Seam	4/16/12	30	3:31 PM	29	3:36 PM	P		
108 / 109	Entire Seam	4/16/12	30	3:32 PM	28	3:37 PM	P		
109 / 110	Entire Seam	4/16/12	30	3:45 PM	30	3:50 PM	P		
107 / 109	Entire Seam	4/16/12	30	3:45 PM	27	3:50 PM	P		
110 / 111	Entire Seam	4/17/12	30	8:09 AM	30	8:14 AM	P		
111 / 112	Entire Seam	4/17/12	30	8:09 AM	30	8:14 AM	P		
110 / 112	Entire Seam	4/17/12	30	8:06 AM	29	8:11 AM	P		
112 / 113	Entire Seam	4/17/12	30	8:12 AM	28	8:17 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
113 / 114	Entire Seam	4/17/12	30	8:23 AM	27	8:28 AM	P		
114 / 116	Entire Seam	4/17/12	30	8:39 AM	28	8:44 AM	P		
115 / 116	Entire Seam	4/17/12	30	8:30 AM	29	8:35 AM	P		
114 / 115	Entire Seam	4/17/12	30	8:33 AM	30	8:38 AM	P		
115 / 117	Entire Seam	4/17/12	30	9:27 AM	30	9:32 AM	P		
116 / 117	Entire Seam	4/17/12	30	8:47 AM	29	8:52 AM	P		
118 / 119	Entire Seam	4/17/12	30	9:38 AM	27	9:43 AM	P		
117 / 118	Entire Seam	4/17/12	30	9:35 AM	29	9:40 AM	P		
117 / 119	Entire Seam	4/17/12	30	9:49 AM	29	9:54 AM	P		
119 / 120	Entire Seam	4/17/12	30	9:46 AM	30	9:51 AM	P		
118 / 120	Entire Seam	4/17/12	30	9:40 AM	30	9:45 AM	P		
120 / 121	Entire Seam	4/17/12	30	10:10 AM	28	10:15 AM	P		
121 / 122	BOS to R-235	4/17/12	30	10:12 AM	27	10:17 AM	P		
121 / 122	R-235 to EOS	4/17/12	30	10:15 AM	29	10:20 AM	P		
122 / 123	Entire Seam	4/17/12	30	10:43 AM	28	10:48 AM	P		
124 / 125	Entire Seam	4/17/12	30	10:58 AM	30	11:03 AM	P		
123 / 124	Entire Seam	4/17/12	30	10:59 AM	27	11:04 AM	P		
123 / 125	Entire Seam	4/17/12	30	11:25 AM	30	11:30 AM	P		
124 / 126	Entire Seam	4/17/12	30	10:58 AM	30	11:03 AM	P		
125 / 126	Entire Seam	4/17/12	30	11:45 AM	27	11:50 AM	P		
127 / 128	Entire Seam	4/17/12	30	11:32 AM	30	11:37 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
126 / 128	Entire Seam	4/17/12	30	11:48 AM	28	11:53 AM	P		
126 / 127	Entire Seam	4/17/12	30	12:58 PM	28	1:03 PM	P		
128 / 129	Entire Seam	4/17/12	30	11:47 AM	29	11:52 AM	P		
127 / 129	Entire Seam	4/17/12	30	1:00 PM	30	1:05 PM	P		
129 / 130	Entire Seam	4/17/12	30	1:18 PM	28	1:23 PM	P		
131 / 132	Entire Seam	4/18/12	30	9:10 AM	29	9:15 AM	P		
130 / 131	Entire Seam	4/18/12	30	9:09 AM	29	9:14 AM	P		
130 / 132	BOS to R-324	4/18/12	30	9:00 AM	30	9:05 AM	P		
130 / 132	R-324 to EOS	4/18/12	30	8:56 AM	30	9:01 AM	P		
131 / 133	Entire Seam	4/18/12	30	9:17 AM	30	9:22 AM	P		
132 / 133	Entire Seam	4/18/12	30	9:54 AM	29	9:59 AM	P		
134 / 135	Entire Seam	4/18/12	30	9:34 AM	28	9:39 AM	P		
133 / 135	Entire Seam	4/18/12	30	9:55 AM	30	10:00 AM	P		
133 / 134	Entire Seam	4/18/12	30	9:38 AM	30	9:43 AM	P		
134 / 136	Entire Seam	4/18/12	30	9:41 AM	29	9:46 AM	P		
135 / 136	Entire Seam	4/18/12	30	10:02 AM	30	10:07 AM	P		
136 / 137	Entire Seam	4/18/12	30	10:24 AM	29	10:29 AM	P		
137 / 138	Entire Seam	4/18/12	30	10:26 AM	28	10:31 AM	P		
138 / 139	Entire Seam	4/18/12	30	11:15 AM	27	11:20 AM	P		
140 / 141	Entire Seam	4/18/12	30	10:55 AM	30	11:00 AM	P		
139 / 140	Entire Seam	4/18/12	30	10:50 AM	28	10:55 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
139 / 141	Entire Seam	4/18/12	30	11:25 AM	29	11:30 AM	P		
140 / 142	Entire Seam	4/18/12	30	10:51 AM	28	10:56 AM	P		
141 / 142	Entire Seam	4/18/12	30	11:26 AM	28	11:31 AM	P		
143 / 144	Entire Seam	4/18/12	30	1:02 PM	28	1:07 PM	P		
142 / 144	Entire Seam	4/18/12	30	12:57 PM	30	1:02 PM	P		
142 / 143	BOS to R-384	4/18/12	30	12:50 PM	30	12:55 PM	P		
142 / 143	R-384 to EOS	4/18/12	30	1:13 PM	29	1:18 PM	P		
143 / 145	Entire Seam	4/18/12	30	1:14 PM	30	1:19 PM	P		
144 / 145	Entire Seam	4/18/12	30	12:59 PM	28	1:04 PM	P		
145 / 146	BOS to R-414	4/18/12	30	1:52 PM	30	1:57 PM	P		
145 / 146	R-414 to EOS	4/18/12	30	1:58 PM	30	2:03 PM	P		
67 / NTI	Entire Seam	4/17/12	30	1:53 PM	30	1:58 PM	P		
68 / NTI	BOS to R-239	4/17/12	30	2:02 PM	28	2:07 PM	P		
68 / NTI	R-239 to EOS	4/17/12	30	2:02 PM	30	2:07 PM	P		
69 / NTI	BOS to R-242	4/17/12	30	2:07 PM	30	2:12 PM	P		
69 / NTI	R-242 to EOS	4/17/12	30	2:08 PM	30	2:13 PM	P		
70 / NTI	Capped by Repair 243	--	--	--	--	--	--		
72 / NTI	BOS to R-247	4/17/12	30	2:10 PM	30	2:15 PM	P		
72 / NTI	R-247 to EOS	4/17/12	30	1:10 PM	30	2:15 PM	P		
73 / NTI	BOS to R-249	4/17/12	30	2:12 PM	30	2:17 PM	P		
73 / NTI	R-249 to EOS	4/17/12	30	2:12 PM	27	2:17 PM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
75 / NTI	BOS to R-251	4/17/12	30	2:14 PM	29	2:19p	P		
75 / NTI	R-251 to EOS	4/17/12	30	2:14 PM	30	2:19 PM	P		
76 / NTI	BOS to R-253	4/17/12	30	2:20 PM	27	2:25 PM	P		
76 / NTI	R-253 to EOS	4/17/12	30	2:20 PM	29	2:25 PM	P		
77 / NTI	BOS to R-267	4/17/12	30	2:23 PM	29	2:28 PM	P		
77 / NTI	R-267 to EOS	4/17/12	30	2:23 PM	27	2:28 PM	P		
78 / NTI	BOS to R-269	4/17/12	30	2:41 PM	29	2:46 PM	P		
78 / NTI	R-269 to EOS	4/17/12	30	2:41 PM	29	2:46 PM	P		
80 / NTI	BOS to R-326	4/17/12	30	2:42 PM	28	2:47 PM	P		
80 / NTI	R-326 to EOs	4/17/12	30	2:42 PM	28	2:47 PM	P		
82 / NTI	BOS to R-328	4/17/12	30	2:47 PM	30	2:52 PM	P		
82 / NTI	R-328 to EOS	4/17/12	30	2:47 PM	28	2:52 PM	P		
83 / NTI	BOS to R-330	4/17/12	30	3:02 PM	27	3:07 PM	P		
83 / NTI	R-330 to EOS	4/17/12	30	3:02 PM	29	3:07 PM	P		
85 / NTI	BOS to R-332	4/17/12	30	3:03 PM	29	3:08 PM	P		
85 / NTI	R-332 to EOS	4/17/12	30	3:03 PM	29	3:08 PM	P		
86 / NTI	BOS to R-337	4/17/12	30	3:17 PM	28	3:22 PM	P		
86 / NTI	R-337 to EOS	4/17/12	30	3:20 PM	27	3:25 PM	P		
88 / NTI	BOS to R-339	4/17/12	30	3:30 PM	28	3:35 PM	P		
88 / NTI	R-339 to EOS	4/17/12	30	3:30 PM	28	3:35 PM	P		
89 / NTI	BOS to R-354	4/17/12	30	3:31 PM	30	3:36 PM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
89 / NTI	R-354 to EOS	4/17/12	30	3:31 PM	29	3:36 PM	P		
90 / NTI	BOS to R-357	4/17/12	30	3:35 PM	29	3:40 PM	P		
90 / NTI	R-357 to EOS	4/17/12	30	3:35 PM	28	3:40 PM	P		
92 / NTI	BOS to R-359	4/17/12	30	3:36 PM	30	3:41 PM	P		
92 / NTI	R-359 to EOS	4/17/12	30	3:36 PM	30	3:41 PM	P		
93 / NTI	BOS to R-360	4/17/12	30	3:45 PM	29	3:50 PM	P		
93 / NTI	R-360 to EOS	4/17/12	30	3:45 PM	28	3:50 PM	P		
94 / NTI	BOS to R-362	4/17/12	30	4:00 PM	30	4:05 PM	P		
94 / NTI	R-362 to EOS	4/17/12	30	4:00 PM	27	4:05 PM	P		
96 / NTI	BOS to R-364	4/17/12	30	4:06 PM	30	4:11 PM	P		
96 / NTI	R-364 to EOS	4/17/12	30	4:06 PM	29	4:11 PM	P		
97 / NTI	BOS to R-395	4/17/12	30	4:10 PM	28	4:15 PM	P		
97 / NTI	R-395 to EOS	4/17/12	30	4:10 PM	30	4:15 PM	P		
99 / NTI	BOS to R-398	4/17/12	30	4:45 PM	30	4:50 PM	P		
99 / NTI	R-398 to EOS	4/17/12	30	4:57 PM	30	5:02 PM	P		
100 / NTI	BOS to R-400	4/17/12	30	4:57 PM	29	5:02 PM	P		
100 / NTI	R-400 to EOS	4/17/12	30	5:05 PM	28	5:10 PM	P		
101 / NTI	BOS to R-402	4/17/12	30	5:05 PM	28	5:10 PM	P		
101 / NTI	R-402 to EOS	4/17/12	30	5:06 PM	29	5:11 PM	P		
103 / NTI	Entire Seam	4/17/12	30	5:30 PM	27	5:35 PM	P		
104 / NTI	BOS to R-405	4/18/12	30	8:03 AM	30	8:08 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
104 / NTI	R-405 to EOS	4/18/12	30	8:03 AM	28	8:08 AM	P		
106 / NTI	BOS to R-407	4/18/12	30	8:04 AM	30	8:09 AM	P		
106 / NTI	R-407 to EOS	--	--	--	--	--	--		
107 / NTI	BOS to R-408	4/18/12	30	8:10 AM	29	8:15 AM	P		
107 / NTI	R-408 to EOS	4/18/12	30	8:10 AM	27	8:15 AM	P		
109 / NTI	BOS to R-411	4/18/12	30	8:13 AM	30	8:18 AM	P		
109 / NTI	R-411 to Eos	4/18/12	30	8:13 AM	30	8:18 AM	P		
110 / NTI	BOS to R-412	4/18/12	30	8:21 AM	27	8:26 AM	P		
110 / NTI	R-412 to EOS	4/18/12	30	8:21 AM	27	8:26 AM	P		
146 / 147	Entire Seam	4/18/12	30	1:39 PM	30	1:44 PM	P		
147 / 148	Entire Seam	4/18/12	30	1:46 PM	30	1:51 PM	P		
148 / 149	Entire Seam	4/18/12	30	2:15 PM	30	2:20 PM	P		
149 / 150	Entire Seam	4/18/12	30	2:10 PM	30	2:15 PM	P		
148 / 150	Entire Seam	4/18/12	30	2:13 PM	28	2:18 PM	P		
149 / 151	Entire Seam	4/18/12	30	2:25 PM	29	2:30 PM	P		
150 / 151	Entire Seam	4/18/12	30	2:30 PM	30	2:35 PM	P		
151 / 152	Entire Seam	4/18/12	30	3:00 PM	28	3:05 PM	P		
150 / 152	Entire Seam	4/18/12	30	3:00 PM	29	3:05 PM	P		
152 / 153	Entire Seam	4/18/12	30	3:41 PM	28	3:46 PM	P		
153 / 154	Entire Seam	4/18/12	30	2:52 PM	30	3:57 PM	P		
153 / 155	Entire Seam	4/18/12	30	2:52 PM	30	2:57 PM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
152 / 154	Entire Seam	4/18/12	30	2:16 PM	30	3:21 PM	P		
150 / 154	Entire Seam	4/18/12	30	2:18 PM	30	3:23 PM	P		
154 / 155	Entire Seam	4/18/12	30	2:40 PM	28	2:45 PM	P		
155 / 156	BOS to R-510	4/18/12	30	4:10 PM	28	4:15 PM	P		
155 / 156	R-510 to EOS	4/18/12	30	4:13 PM	30	4:18 PM	P		
156 / 157	Entire Seam	4/18/12	30	4:17 PM	28	4:22 PM	P		
156 / 158	Entire Seam	4/18/12	30	4:13 PM	30	4:18 PM	P		
157 / 158	Entire Seam	4/18/12	30	4:15 PM	30	4:20 PM	P		
158 / 159	Entire Seam	4/18/12	30	4:23 PM	30	4:28 PM	P		
159 / 169	Entire Seam	4/18/12	30	4:26 PM	28	4:31 PM	P		
159 / 172	Entire Seam	4/18/12	30	4:31 PM	30	4:36 PM	P		
169 / 172	Entire Seam	4/19/12	30	7:44 AM	28	7:49 AM	P		
171 / 172	Entire Seam	4/18/12	30	5:02 PM	29	5:07 PM	P		
159 / 171	Entire Seam	4/19/12	30	7:53 AM	28	7:58 AM	P		
169 / 171	Entire Seam	4/19/12	30	7:52 AM	29	7:57 AM	P		
170 / 171	Entire Seam	4/19/12	30	8:12 AM	30	8:17 AM	P		
159 / 166	Entire Seam	4/19/12	30	8:10 AM	30	8:15 AM	P		
166 / 171	Entire Seam	4/19/12	30	8:07 AM	30	8:12 AM	P		
166 / 170	Entire Seam	4/19/12	30	8:16 AM	27	8:21 AM	P		
169 / 170	Entire Seam	4/19/12	30	8:17 AM	30	8:22 AM	P		
167 / 170	Entire Seam	4/19/12	30	8:47 AM	27	8:52 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
167 / 169	Entire Seam	4/19/12	30	8:48 AM	30	8:53 AM	P		
166 / 167	Entire Seam	4/19/12	30	8:47 AM	27	8:52 AM	P		
159 / 165	Entire Seam	4/19/12	30	8:57 AM	29	9:01 AM	P		
165 / 166	Entire Seam	4/19/12	30	8:57 AM	29	9:02 AM	P		
168 / 169	Entire Seam	4/19/12	30	9:27 AM	27	9:32 AM	P		
164 / 168	Entire Seam	4/19/12	30	9:27 AM	27	9:32 AM	P		
163 / 164	Entire Seam	4/19/12	30	9:23 AM	30	9:28 AM	P		
162 / 163	Entire Seam	4/19/12	30	9:30 AM	29	9:35 AM	P		
161 / 162	Entire Seam	4/19/12	30	9:36 AM	30	9:41 AM	P		
160 / 161	BOS to R-159	4/19/12	30	9:45 AM	30	9:50 AM	P		
160 / 161	R-159 to EOS	4/19/12	30	9:50 AM	30	9:55 AM	P		
111 / ETI	BOS to R-417	4/19/12	30	11:17 AM	27	11:22 AM	P		
111 / ETI	R-417 to EOS	4/19/12	30	11:17 AM	28	11:22 AM	P		
112 / ETI	BOS to R-419	4/19/12	30	11:19 AM	30	11:24 AM	P		
112 / ETI	R-419 to EOS	4/19/12	30	11:19 AM	28	11:24 AM	P		
113 / ETI	BOS to R-422	4/19/12	30	11:24 AM	30	11:29 AM	P		
113 / ETI	R-422 to EOS	4/19/12	30	11:24 AM	30	11:29 AM	P		
114 / ETI	BOS to R-425	4/19/12	30	11:32 AM	27	11:37 AM	P		
114 / ETI	R-425 to EOS	4/19/12	30	11:32 AM	27	11:37 AM	P		
116 / ETI	BOS to R-427	4/19/12	30	11:35 AM	28	11:40 AM	P		
116 / ETI	R-427 to EOS	4/19/12	30	11:35 AM	30	11:40 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
117 / ETI	BOS to R-430	4/19/12	30	11:44 AM	29	11:49 AM	P		
117 / ETI	R-430 to EOS	4/19/12	30	11:44 AM	29	11:49 AM	P		
118 / ETI	BOS to R-433	4/19/12	30	11:51 AM	30	11:56 AM	P		
118 / ETI	R-433 to EOS	4/19/12	30	11:51 AM	30	11:56 AM	P		
120 / ETI	BOS to R-435	4/19/12	30	2:13 PM	28	2:18 PM	P		
120 / ETI	R-435 to EOS	4/19/12	30	2:13 PM	28	2:18 PM	P		
121 / ETI	BOS to R-437	4/19/12	30	2:14 PM	29	2:19 PM	P		
121 / ETI	R-437 to EOS	4/19/12	30	2:14 PM	28	2:19 AM	P		
122 / ETI	BOS to R-440	4/19/12	30	2:07 PM	30	2:12 PM	P		
122 / ETI	R-440 to EOS	4/19/12	30	2:29 PM	27	2:34 PM	P		
123 / ETI	BOS to R-442	4/19/12	30	2:29 PM	27	2:34 PM	P		
123 / ETI	R-442 to EOS	4/19/12	30	2:55 PM	28	3:00 PM	P		
124 / ETI	BOS to R-444	4/19/12	30	2:55 PM	29	3:00 PM	P		
124 / ETI	R-444 to EOS	4/19/12	30	2:56 PM	30	3:01 PM	P		
126 / ETI	BOS to R-426	4/19/12	30	2:56 PM	27	3:01 PM	P		
126 / ETI	R-426 to EOS	4/19/12	30	3:13 PM	30	3:18 PM	P		
127 / ETI	BOS to R-448	4/19/12	30	3:13 PM	30	3:18 PM	P		
127 / ETI	R-448 to EOS	4/19/12	30	3:14 PM	29	3:19 PM	P		
129 / ETI	BOS to R-450	4/19/12	30	3:14 PM	28	3:19 PM	P		
129 / ETI	R-450 to EOS	4/20/12	30	8:13 AM	29	8:18 AM	P		
130 / ETI	BOS to R-452	4/20/12	30	8:13 AM	30	8:18 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
130 / ETI	R-452 to EOS	4/20/12	30	8:17 AM	29	8:22 AM	P		
131 / ETI	BOS to R-454	4/20/12	30	8:44 AM	29	8:49 AM	P		
131 / ETI	R-454 to EOS	4/20/12	30	8:44 AM	28	8:49 AM	P		
133 / ETI	BOS to R-456	4/20/12	30	8:46 AM	28	8:51 AM	P		
133 / ETI	R-456 to EOS	4/20/12	30	9:04 AM	27	9:09 AM	P		
134 / ETI	BOS to R-459	4/20/12	30	9:04 AM	30	9:09 AM	P		
134 / ETI	R-459 to EOS	4/20/12	30	9:07 AM	29	9:12 AM	P		
136 / ETI	BOS to R-461	4/20/12	30	9:24 AM	30	9:29 AM	P		
136 / ETI	R-461 to EOS	4/20/12	30	9:24 AM	30	9:29 AM	P		
137 / ETI	BOS to R-464	4/20/12	30	9:25 AM	30	9:30 AM	P		
137 / ETI	R-464 to EOS	4/20/12	30	9:31 AM	28	9:36 AM	P		
138 / ETI	BOS to R-466	4/20/12	30	9:31 AM	29	9:36 AM	P		
138 / ETI	R-466 to EOS	4/20/12	30	9:33 AM	29	9:38 AM	P		
139 / ETI	BOS to R-468	4/20/12	30	9:41 AM	29	9:46 AM	P		
139 / ETI	R-468 to EOS	4/20/12	30	9:41 AM	29	9:46 AM	P		
140 / ETI	BOS to R-470	4/20/12	30	9:42 AM	28	9:47 AM	P		
140 / ETI	R-470 to EOS	4/20/12	30	9:52 AM	27	9:57 AM	P		
142 / ETI	BOS to R-472	4/20/12	30	9:52 AM	28	9:57 AM	P		
142 / ETI	R-472 to EOS	4/20/12	30	9:53 AM	28	9:58 AM	P		
143 / ETI	BOS to R-475	4/20/12	30	10:03 AM	30	10:08 AM	P		
143 / ETI	R-475 to EOS	4/20/12	30	10:03 AM	30	10:08 AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
145 / ETI	BOS to R-477	4/20/12	30	10:04 AM	30	10:09 AM	P		
145 / ETI	R-477 to R-478 (EOS)	--	--	--	--	--	--		
146 / ETI	BOS to R-479	4/20/12	30	10:11 AM	29	10:16 AM	P		
146 / ETI	R-479 to EOS	4/20/12	30	10:15 AM	30	10:20 AM	P		
147 / ETI	Entire Seam	4/20/12	30	10:27 AM	30	10:32 AM	P		
148 / ETI	BOS to R-482	4/20/12	30	10:28 AM	30	10:33 AM	P		
148 / ETI	R-482 to EOS	4/20/12	30	10:29 AM	28	10:34 AM	P		
149 / ETI	BOS to R-484	4/20/12	30	10:34 AM	28	10:39 AM	P		
149 / ETI	R-484 to EOS	4/20/12	30	10:35 AM	27	10:40 AM	P		
151 / ETI	BOS to R-486	4/25/12	30	3:07 PM	30	3:12 PM	P		
151 / ETI	R-486 to EOS	4/25/12	30	3:07 PM	30	3:12 PM	P		
152 / ETI	Entire Seam	4/25/12	30	3:19 PM	30	3:24 PM	P		
153 / ETI	Entire Seam	4/25/12	30	3:19 PM	28	3:24 PM	P		
155 / ETI	Entire Seam	4/25/12	30	3:28 PM	30	3:33 PM	P		
156 / ETI	Entire Seam	4/25/12	30	3:28 PM	29	3:33 PM	P		
158 / ETI	Entire Seam	4/25/12	30	3:36 PM	29	3:41 PM	P		
159 / ETI	Entire Seam	4/25/12	30	3:36 PM	28	3:41 PM	P		
165 / ETI	Entire Seam	4/25/12	30	3:45 PM	29	3:50 PM	P		
166 / ETI	BOS to R-496	4/25/12	30	3:45 PM	29	3:50 PM	P		
166 / ETI	R-496 to EOS	4/25/12	30	3:52 PM	27	3:57 PM	P		
167 / ETI	Entire Seam	4/25/12	30	3:52 PM	30	3:57 PM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
169 / ETI	Entire Seam	4/25/12	30	3:59 PM	30	4:04 PM	P		
168 / ETI	Entire Seam	4/25/12	30	3:59 PM	30	4:04 PM	P		
164 / ETI	Entire Seam	4/25/12	30	4:14 PM	27	4:19 PM	P		
163 / ETI	BOS to R-502	4/25/12	30	4:11 PM	29	4:16 PM	P		
163 / ETI	R-502 to EOS	4/25/12	30	4:19 PM	30	4:24 PM	P		
162 / ETI	BOS to R-504	4/25/12	30	4:19 PM	29	4:24 PM	P		
162 / ETI	R-504 to EOS	4/25/12	30	4:26 PM	29	4:31 PM	P		
160 / ETI	Entire Seam	4/25/12	30	4:14 PM	27	4:19 PM	P		
161 / ETI	BOS to R-506	4/25/12	30	4:26 PM	30	4:31 PM	P		
161 / ETI	R-506 to EOS	4/25/12	30	4:38 PM	27	4:43 PM	P		
173 / 174	BOS to R-553	7/5/12	30	4:03PM	29	4:08PM	P	7/7/2012	
173 / 174	R-553 to EOS	7/5/12	30	4:11PM	30	4:16PM	P	7/7/2012	
173 / 175	Entire Seam	7/5/12	30	4:23PM	29	4:28PM	P	7/7/2012	
175 / 178	Entire Seam	7/5/12	30	4:26PM	29	4:31PM	P	7/7/2012	
174 / 175	Entire Seam	7/5/12	30	4:36PM	28	4:41PM	P	7/7/2012	
174 / 178	BOS to R-556	7/5/12	30	4:42PM	29	4:47PM	P	7/7/2012	
174 / 178	R-556 to EOS	7/5/12	30	4:42PM	29	4:47PM	P	7/7/2012	
177 / 178	Entire Seam	7/5/12	30	4:53PM	30	4:58PM	P	7/7/2012	
178 / 179	Entire Seam	7/5/12	30	4:53PM	29	4:58PM	P	7/7/2012	
177 / 179	BOS to R-551	7/5/12	30	5:07PM	30	5:12PM	P	7/7/2012	
177 / 179	R-551 to R-550	7/5/12	30	5:32PM	29	5:37PM	P	7/7/2012	

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
177 / 179	R-550 to EOS	7/5/12	30	5:33PM	29	5:38PM	P	7/7/2012	
174 / 177	BOS to R-554	7/5/12	30	5:08PM	29	5:13PM	P	7/7/2012	
174 / 177	R-554 to R-552	7/5/12	30	5:17PM	29	5:22PM	P	7/7/2012	
174 / 177	R-552 to EOS	7/5/12	30	5:17PM	28	5:22PM	P	7/7/2012	
174 / 176	Entire Seam	7/5/12	30	5:26PM	30	5:31PM	P	7/7/2012	
176 / 177	Entire Seam	7/5/12	30	5:27PM	29	5:32PM	P	7/7/2012	
176 / 179	Entire Seam	7/5/12	30	5:32PM	29	5:37PM	P	7/7/2012	
180 / 183	BOS to R-620	7/6/12	30	12:20PM	29	12:25PM	P	7/7/2012	
180 / 183	R-620 to R-619	7/6/12	30	12:59PM	30	1:04PM	P	7/7/2012	
180 / 183	R-619 to EOS	7/6/12	30	12:50PM	30	12:55PM	P	7/7/2012	
180 / 182	Entire Seam	7/6/12	30	12:20PM	29	12:25PM	P	7/7/2012	
182 / 183	Entire Seam	7/6/12	30	12:28PM	30	1:33PM	P	7/7/2012	
179 / 180	Entire Seam	7/6/12	30	12:57PM	30	1:02PM	P	7/7/2012	
180 / 181	Entire Seam	7/6/12	30	1:14PM	30	1:19PM	P	7/7/2012	
181 / 182	Entire Seam	7/6/12	30	1:14PM	30	1:19PM	P	7/7/2012	
184 / 182	Entire Seam	7/6/12	30	1:20PM	29	1:25PM	P	7/7/2012	
181 / 184	Entire Seam	7/6/12	30	1:20PM	29	1:25PM	P	7/7/2012	
184 / 188	Entire Seam	7/6/12	30	1:21PM	29	1:26PM	P	7/7/2012	
185 / 184	Entire Seam	7/6/12	30	1:21PM	30	1:26PM	P	7/7/2012	
185 / 186	BOS to R-590	7/6/12	30	1:27PM	30	1:32PM	P	7/7/2012	
185 / 186	R-590 to EOS	7/6/12	30	1:27PM	30	1:32PM	P	7/7/2012	

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
188 / 189	Entire Seam	7/6/12	30	1:34PM	30	1:39PM	P	7/7/2012	
189 / 190	Entire Seam	7/6/12	30	1:30PM	28	1:35PM	P	7/7/2012	
188 / 190	Entire Seam	7/6/12	30	1:36PM	30	1:41PM	P	7/7/2012	
187 / 188	Entire Seam	7/6/12	30	1:41PM	28	1:46PM	P	7/7/2012	
186 / 188	Entire Seam	7/6/12	30	1:38PM	29	1:43PM	P	7/7/2012	
186 / 187	Entire Seam	7/6/12	30	1:38PM	28	1:43PM	P	7/7/2012	
184 / 187	BOS to R-585	7/6/12	30	1:45PM	30	1:50PM	P	7/7/2012	
184 / 187	R-585 to EOS	7/6/12	30	2:05PM	30	2:10PM	P	7/7/2012	
182 / 191	Entire Seam	7/6/12	30	2:06PM	29	2:11PM	P	7/7/2012	
184 / 191	Entire Seam	7/6/12	30	2:14PM	30	2:19PM	P	7/7/2012	
187 / 192	Entire Seam	7/6/12	30	2:10PM	29	2:15PM	P	7/7/2012	
191 / 192	Entire Seam	7/6/12	30	2:13PM	29	2:18PM	P	7/7/2012	
188 / 193	Entire Seam	7/6/12	30	2:16PM	29	2:21PM	P	7/7/2012	
192 / 193	BOS to R-682	7/6/12	30	2:21PM	28	2:26PM	P	7/7/2012	
192 / 193	R-682 to R-680	7/6/12	30	2:23PM	30	2:28PM	P	7/7/2012	
192 / 193	R-680 to EOS	7/6/12	30	2:55PM	29	3:00PM	P	7/7/2012	
183 / 191	Entire Seam	7/6/12	30	2:57PM	28	3:02PM	P	7/7/2012	
196 / 197	Entire Seam	7/6/12	30	3:31PM	30	3:36PM	P	7/7/2012	
195 / 196	Entire Seam	7/6/12	30	3:37PM	30	3:42PM	P	7/7/2012	
196 / 199	Entire Seam	7/6/12	30	3:42PM	30	3:47PM	P	7/7/2012	
194 / 195	BOS to R-711	7/6/12	30	4:03PM	30	4:08PM	P	7/7/2012	

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
194 / 195	R-711 to EOS	7/6/12	30	4:13PM	30	4:18PM	P	7/7/2012	
173 / 194	Entire Seam	7/6/12	30	4:20PM	29	4:25PM	P	7/7/2012	
175 / 195	Entire Seam	7/6/12	30	4:25PM	30	4:30PM	P	7/7/2012	
175 / 196	Entire Seam	7/6/12	30	4:31PM	30	4:36PM	P	7/7/2012	
178 / 196	Entire Seam	7/6/12	30	4:37PM	30	4:42PM	P	7/7/2012	
179 / 199	Entire Seam	7/6/12	30	4:51PM	30	4:56PM	P	7/7/2012	
179 / 196	Entire Seam	7/6/12	30	4:43PM	30	4:48PM	P	7/7/2012	
180 / 200	Entire Seam	7/6/12	30	5:10PM	28	5:15PM	P	7/7/2012	
183 / 202	Entire Seam	7/6/12	30	5:08PM	29	5:13PM	P	7/7/2012	
191 / 203	Entire Seam	7/6/12	30	5:18PM	29	5:23PM	P	7/7/2012	
192 / 205	Entire Seam	7/6/12	30	5:18PM	28	5:23PM	P	7/7/2012	
193 / 206	Entire Seam	7/6/12	30	5:26PM	30	5:31PM	P	7/7/2012	
205 / 206	BOS to R-613	7/6/12	30	5:28PM	29	5:33PM	P	7/7/2012	
205 / 206	R-613 to R-612	7/6/12	30	5:36PM	30	5:41PM	P	7/7/2012	
205 / 206	R-612 to R-606	7/6/12	30	5:46PM	29	5:51PM	P	7/7/2012	
205 / 206	R-606 to EOS	7/7/12	30	8:55AM	30	9:00AM	P	7/9/2012	
206 / 209	BOS to R-713	7/6/12	30	5:44PM	28	5:49PM	P	7/9/2012	
206 / 209	R-713 to R-718	7/6/12	30	5:53PM	29	5:58PM	P	7/9/2012	
206 / 209	R-718 to EOS	7/7/12	30	9:15AM	28	9:20AM	P	7/9/2012	
203 / 205	BOS to R-611	7/6/12	30	6:01PM	28	6:06PM	P	7/9/2012	
203 / 205	R-611 to EOS	7/7/12	30	9:20AM	30	9:25AM	P	7/9/2012	

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
203 / 202	BOS to R-603	7/6/12	30	6:04PM	29	6:09PM	P	7/9/2012	
203 / 202	R-603 to EOS	7/7/12	30	9:28AM	30	9:33AM	P	7/9/2012	
200 / 202	Entire Seam	7/6/12	30	6:11PM	28	6:16PM	P	7/9/2012	
199 / 200	BOS to R-610	7/6/12	30	6:30PM	29	6:35PM	P	7/9/2012	
199 / 200	R-610 to R-608	7/6/12	30	6:50PM	30	6:55AM	P	7/9/2012	
199 / 200	R-608 to R-609	7/6/12	30	7:00PM	28	7:05AM	P	7/9/2012	
199 / 200	R-609 to EOS	7/7/12	30	9:38AM	28	9:43AM	P	7/9/2012	
202 / 204	BOS to R-579	7/7/12	30	9:30AM	30	9:35AM	P	7/9/2012	
202 / 204	R-579 to EOS	7/7/12	30	8:04AM	30	8:09AM	P	7/9/2012	
204 / 205	Entire Seam	7/7/12	30	8:05AM	29	8:10AM	P	7/9/2012	
201 / 202	BOS to R-737	7/7/12	30	8:19AM	28	8:24AM	P	7/9/2012	
201 / 202	R-737 to EOS	7/7/12	30	8:16AM	28	8:21AM	P	7/9/2012	
199 / 201	Entire Seam	7/7/12	30	8:14AM	29	8:19AM	P	7/9/2012	
205 / 207	BOS to R-573	7/7/12	30	8:26AM	29	8:31AM	P	7/9/2012	
205 / 207	R-573 to R-576	7/7/12	30	8:28AM	29	8:33AM	P	7/9/2012	
205 / 207	R-576 to EOS	7/7/12	30	8:40AM	29	8:45AM	P	7/9/2012	
206 / 207	BOS to R-596	7/7/12	30	8:49AM	30	8:54AM	P	7/9/2012	
206 / 207	R-596 to EOS	7/7/12	30	8:53AM	29	8:58AM	P	7/9/2012	
207 / 209	BOS to R-593	7/7/12	30	9:03AM	28	9:08AM	P	7/9/2012	
207 / 209	R-593 to EOS	7/7/12	30	9:06AM	29	9:11AM	P	7/9/2012	
203 / 204	Entire Seam	7/7/12	30	9:23AM	29	9:28AM	P	7/9/2012	

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
200 / 201	Entire Seam	7/7/12	30	9:36AM	29	9:41AM	P	7/9/2012	
198 / 199	Entire Seam	7/7/12	30	9:47AM	29	9:52AM	P	7/9/2012	
197 / 198	Entire Seam	7/7/12	30	9:47AM	30	9:52AM	P	7/9/2012	
197 / 199	Entire Seam	7/7/12	30	9:55AM	29	10:00AM	P	7/9/2012	
195 / 197	BOS to R-626	7/7/12	30	10:08AM	29	10:13AM	P	7/9/2012	
195 / 197	R-626 to R-628	7/7/12	30	10:13AM	30	10:18AM	P	7/9/2012	
195 / 197	R-628 to EOS	7/7/12	30	10:21AM	29	10:26AM	P	7/9/2012	
209 / 212	BOS to R-689	7/7/12	30	10:51AM	30	10:56AM	P	7/9/2012	
209 / 212	R-689 to R-688	7/7/12	30	10:50AM	28	10:55AM	P	7/9/2012	
209 / 212	R-688 to R-687	7/7/12	30	11:35AM	30	11:40AM	P	7/9/2012	
209 / 212	R-687 to R-686	7/7/12	30	1:33PM	30	1:38PM	P	7/9/2012	
209 / 212	R-686 to R-684	7/7/12	30	1:36PM	29	1:41PM	P	7/9/2012	
209 / 212	R-684 to EOS	7/7/12	30	1:46PM	29	1:51PM	P	7/9/2012	
212 / 214	BOS to R-690	7/7/12	30	11:02AM	29	11:07AM	P	7/9/2012	
212 / 214	R-690 to R-693	7/7/12	30	1:08PM	28	1:13PM	P	7/9/2012	
212 / 214	R-693 to R-692	7/7/12	30	1:11PM	28	1:16PM	P	7/9/2012	
212 / 214	R-692 to R-691	7/7/12	30	1:16PM	29	1:21PM	P	7/9/2012	
212 / 214	R-691 to EOS	7/7/12	30	1:54PM	29	1:59PM	P	7/9/2012	
214 / 216	BOS to R-717	7/7/12	30	11:04AM	28	11:09AM	P	7/9/2012	
214 / 216	R-717 to R694	7/7/12	30	11:21AM	28	11:26AM	P	7/9/2012	
214 / 216	R-694 to EOS	7/7/12	30	11:22AM	28	11:27AM	P	7/9/2012	

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
193 / 209	Entire Seam	7/7/12	30	1:42PM	30	1:47PM	P	7/9/2012	
208 / 209	Entire Seam	7/7/12	30	2:06PM	29	2:11PM	P	7/9/2012	
193 / 208	Entire Seam	7/7/12	30	2:09PM	28	2:14PM	P	7/9/2012	
190 / 208	Entire Seam	7/7/12	30	2:19PM	30	2:24PM	P	7/9/2012	
173 / WTI	BOS to R-642	7/9/12	30	9:45AM	28	9:50AM	P		
173 / WTI	R-642 to R-643	7/9/12	30	9:54AM	29	9:59AM	P		
173 / WTI	R-643 to R-644	7/9/12	30	10:03AM	28	10:08AM	P		
173 / WTI	R-644 to R-645	7/9/12	30	10:11AM	29	10:16AM	P		
173 / WTI	R-645 to R-646	7/9/12	30	10:20AM	29	10:25AM	P		
173 / WTI	R-646 to R-647	7/9/12	30	10:30AM	29	10:35AM	P		
173 / WTI	R-647 to R-648	7/9/12	30	10:39AM	30	10:44AM	P		
173 / WTI	R-648 to R-649	7/9/12	30	10:48AM	29	10:53AM	P		
173 / WTI	R-649 to R-650	7/9/12	30	10:56AM	29	11:01AM	P		
173 / WTI	R-650 to R-651	7/9/12	30	10:57AM	29	11:02AM	P		
173 / WTI	R-651 to R-652	7/9/12	30	10:59AM	29	11:04AM	P		
173 / WTI	R-652 to R-653	7/9/12	30	11:00AM	30	11:05AM	P		
173 / WTI	R-653 to R-654	7/9/12	30	11:02AM	29	11:07AM	P		
173 / WTI	R-654 to R-655	7/9/12	30	11:04AM	30	11:09AM	P		
173 / WTI	R-655 to R-656	7/9/12	30	11:06AM	30	11:11AM	P		
173 / WTI	R-656 to R-657	7/9/12	30	11:08AM	29	11:13AM	P		
173 / WTI	R-657 to R-658	7/9/12	30	11:08AM	30	11:13AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
173 / WTI	R-658 to R-659	7/9/12	30	11:08AM	30	11:13AM	P		
173 / WTI	R-659 to R-660	7/9/12	30	11:10AM	29	11:15AM	P		
215 / 217	Entire Seam	7/9/12	30	3:06PM	28	3:11PM	P		
215 / 218	Entire Seam	7/9/12	30	3:07PM	29	3:12PM	P		
218 / 219	BOS to R-710	7/9/12	30	3:19PM	30	3:24PM	P		
218 / 219	R-710 to R-709	7/9/12	30	3:22PM	30	3:27PM	P		
218 / 219	R-709 to R-708	7/9/12	30	3:31PM	28	3:36PM	P		
218 / 219	R-708 to EOS	7/9/12	30	3:41PM	30	3:46PM	P		
215 / 216	Entire Seam	7/9/12	30	3:54PM	29	3:59PM	P		
219 / 221	Entire Seam	7/9/12	30	3:57PM	29	4:02PM	P		
219 / 224	Entire Seam	7/9/12	30	4:06PM	29	4:11PM	P		
218 / 222	Entire Seam	7/9/12	30	4:22PM	30	4:27PM	P		
216 / 222	Entire Seam	7/9/12	30	4:24PM	28	4:29PM	P		
219 / 224	Entire Seam	7/9/12	30	4:32PM	29	4:37PM	P		
221 / 224	Entire Seam	7/10/12	30	7:45AM	30	7:50AM	P		
221 / 227	Entire Seam	7/10/12	30	7:50AM	29	7:55AM	P		
224 / 227	Entire Seam	7/10/12	30	7:55AM	29	8:00AM	P		
190 / 210	Entire Seam	7/10/12	30	8:15AM	30	8:20AM	P		
216 / 223	Entire Seam	7/10/12	30	7:36AM	30	7:41AM	P		
212 / 228	Entire Seam	7/10/12	30	11:37AM	30	11:42AM	P		
214 / 228	Entire Seam	7/10/12	30	11:37AM	30	11:42AM	P		

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
228 / 229	Entire Seam	7/10/12	30	11:45AM	28	11:50AM	P		
214 / 229	Entire Seam	7/10/12	30	11:45AM	28	11:20AM	P		
216 / 229	Entire Seam	7/10/12	30	11:52AM	30	11:57AM	P		
229 / 230	Entire Seam	7/10/12	30	11:52AM	30	11:57AM	P		
223 / 230	Entire Seam	7/10/12	30	12:57PM	30	1:02PM	P		
230 / 231	Entire Seam	7/10/12	30	12:57PM	28	1:02PM	P		
223 / 231	Entire Seam	7/10/12	30	12:57PM	28	1:02PM	P		
224 / 231	Entire Seam	7/10/12	30	1:04PM	28	1:09PM	P		
211 / 214	EXTRUSION	-	-	-	-	-	-	7/12/2012	
213 / 214	EXTRUSION	-	-	-	-	-	-	7/12/2012	
211 / 212	Entire Seam	7/10/12	30	11:05PM	30	11:10AM	P		
185 / 188	EXTRUSION	-	-	-	-	-	-	7/12/2012	
227 / ETI	Entire Seam	7/12/12	30	12:55PM	29	1:00PM	P		
231 / ETI	Entire Seam	7/12/12	30	12:55PM	29	1:00PM	P		
230 / ETI	Entire Seam	-	-	-	-	-	-	7/12/2012	
226 / 227	Entire Seam	7/10/12	30	7:45AM	30	7:50AM	P		
221 / 226	Entire Seam	7/10/12	30	8:05AM	30	8:10AM	P		
221 / 225	Entire Seam	7/10/12	30	8:07AM	29	8:12AM	P		
225 / 226	Entire Seam	7/10/12	30	8:10AM	29	8:15AM	P		
217 / 218	Entire Seam	-	-	-	-	-	-	7/12/2012	
217 / 219	Entire Seam	-	-	-	-	-	-	7/12/2012	

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
222 / 224	Entire Seam	7/10/12	30	8:22AM	29	8:27AM	P		
223 / 224	Entire Seam	7/10/12	30	8:27AM	20	8:32AM	P		
222 / 223	Entire Seam	7/10/12	30	8:28AM	30	8:33AM	P		
216 / 222	Entire Seam	7/10/12	30	8:30AM	30	8:35AM	P		
214 / 215	Entire Seam	-	-	-	-	-	-	7/12/2012	
210 / 211	Entire Seam	7/7/12	30	8:35AM	30	8:40AM	P		
190 / 211	Entire Seam	7/7/12	30	8:40AM	30	8:45AM	P		
208 / 211	Entire Seam	7/7/12	30	8:44AM	29	8:49AM	P		
208 / 212	Entire Seam	7/7/12	30	9:01AM	30	9:06AM	P		
184 / 192	Entire Seam	7/6/12	30	5:01PM	30	5:06PM	P		
194 / WTI	Entire Seam	-	-	-	-	-	-	7/12/2012	
195 / WTI	Entire Seam	-	-	-	-	-	-	7/12/2012	
197 / WTI	Entire Seam	-	-	-	-	-	-	7/12/2012	
198 / WTI	Entire Seam	-	-	-	-	-	-	7/12/2012	
173 / NTI	Entire Seam	-	-	-	-	-	-	7/12/2012	
174 / NTI	Entire Seam	-	-	-	-	-	-	7/12/2012	
176 / NTI	Entire Seam	-	-	-	-	-	-	7/12/2012	
179 / NTI	Entire Seam	-	-	-	-	-	-	7/12/2012	
180 / NTI	Entire Seam	-	-	-	-	-	-	7/12/2012	
181 / NTI	Entire Seam	-	-	-	-	-	-	7/12/2012	
184 / NTI	Entire Seam	-	-	-	-	-	-	7/12/2012	

Non-Destructive Test Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Seam Number	Description	Air Test						Date Vacuum Tested	Comments
		Date Air Tested	Air Pressure				Air Test Results (P/F)		
			Start		End				
			PSI	Time	PSI	Time			
185 / NTI	Entire Seam	-	-	-	-	-	-	7/12/2012	
188 / ETI	Entire Seam	-	-	-	-	-	-	7/12/2012	
189 / ETI	Entire Seam	-	-	-	-	-	-	7/12/2012	
190 / ETI	Entire Seam	-	-	-	-	-	-	7/12/2012	
210 / ETI	Entire Seam	-	-	-	-	-	-	7/12/2012	
211 / ETI	Entire Seam	-	-	-	-	-	-	7/12/2012	
213 / ETI	Entire Seam	-	-	-	-	-	-	7/12/2012	
214 / ETI	Entire Seam	-	-	-	-	-	-	7/12/2012	
215 / ETI	Entire Seam	-	-	-	-	-	-	7/12/2012	
217 / ETI	Entire Seam	-	-	-	-	-	-	7/12/2012	
219 / ETI	Entire Seam	-	-	-	-	-	-	7/12/2012	
221 / ETI	Entire Seam	-	-	-	-	-	-	7/12/2012	

Repair Summary

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
1	3/31/12	11:57 AM	HM/61	1/2	DS-1	DS-1	2x8	4/9/12
2	3/31/12	12:45 PM	HM/61	1/2	1/2/AT West 61'	Burnout/SR	2x2	4/9/12
3	3/31/12	1:05 PM	HM/61	3/4	DS-2	DS-2	2x7	4/9/12
4	3/31/12	1:15 PM	HM/61	2/3	from AT West 4'	Seam Repair	2x3	4/9/12
5	3/31/12	1:20 PM	HM/61	5/6	See Seaming form/TI to East	Seam Repair	2x3	4/9/12
6	3/31/12	2:40 PM	HM/61	1/S AT	from 1/2/AT West 108' and South 16'	Pipe Penetration	5x12	4/9/12
7	4/2/12	10:51 AM	HM/61	4/5	from AT West 191'	Seam Repair	2x3	4/9/12
8	4/2/12	10:55 AM	HM/61	4/5	from AT West 183'	Seam Repair	2x2	4/9/12
9	4/2/12	11:14 AM	HM/61	5/6	DS-3	DS-3	2x7	4/9/12
10	4/2/12	11:25 AM	HM/61	6/7	DS-4	DS-4	2x7	4/9/12
11	4/2/12	1:18 PM	HM/61	6	from 5/6/AT West 312' and North 13'	Pipe Penetration	6x8	4/9/12
12	4/2/12	2:20 PM	HM/61	9/10	DS-6	DS-6	2x7	4/9/12
13	4/2/12	2:40 PM	HM/61	8/9	DS-5	DS-5	2x7	4/9/12
14	4/2/12	3:50 PM	HM/61	9/10	from 9/10/AT West 85'	Pipe Penetration	6x8	4/9/12
19	4/3/12	9:38 AM	CG/20	15	Boot from 14/15/WTI West 9' and North 3'	Panel Repair	6x7	4/9/12
30	4/3/12	11:38 AM	CG/20	1/2	from 1/2/AT West 139'	Pipe Penetration	2x4	4/9/12
31	4/3/12	1:25 PM	CG/20	6/WTI	from 5/6/WTI North 9'	Seam Repair	3x9	4/9/12
32	4/3/12	1:31 PM	CG/20	6/7/WTI	Intersection	Intersection	2x2	4/9/12
33	4/3/12	1:36 PM	CG/20	7/WTI	from 6/7/WTI North 7'	Seam Repair	2x2	4/9/12
34	4/3/12	1:45 PM	CG/20	7/8/WTI	Intersection	Intersection	2x7	4/9/12
43	4/3/12	1:52 PM	CG/20	8/WTI	from 7/8 at North 7'	Seam Repair	2x2	4/9/12
44	4/3/12	2:17 PM	CG/20	8/9/WTI	Intersection	Intersection	2x2	4/9/12
45	4/3/12	2:40 PM	CG/20	9/WTI	from 8/9/WTI North 9'	Seam Repair	2x8	4/9/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
46	4/3/12	2:41 PM	CG/20	9/10/WTI	Intersection	Intersection	2x2	4/9/12
50	4/3/12	2:45 PM	CG/20	9	from 8/9/WTI East 11' to North 10'	Liner Damage	2x2	4/9/12
47	4/3/12	2:50 PM	CG/20	10/WTI	from 9/10/WTI North 7'	Seam Repair	2x2	4/9/12
42	4/3/12	2:59 PM	CG/20	21	from 19/21 at West 6'	Liner Damage	2x2	4/9/12
48	4/3/12	3:02 PM	CG/20	10/11/WTI	Intersection	Intersection	3x3	4/9/12
49	4/3/12	3:05 PM	CG/20	11/WTI	from 10/11/WTI North 7'	Seam Repair	2x2	4/9/12
51	4/3/12	3:14 PM	CG/20	11/12/WTI	Intersection	Intersection	2x2	4/9/12
52	4/3/12	3:20 PM	CG/20	12/WTI	from 11/12/WTI North 7'	Seam Repair	2x2	4/9/12
61	4/3/12	3:38 PM	CG/20	12/13/WTI	Intersection	Intersection	6x8	4/9/12
62	4/3/12	3:45 PM	CG/20	13/WTI	from 12/13/WTI North 7'	Seam Repair	2x3	4/9/12
63	4/3/12	3:53 PM	CG/20	13/14 WTI	Intersection	Intersection	2x2	4/9/12
64	4/3/12	3:58 PM	CG/20	14/WTI	from 13/14/WTI North 7'	Seam Repair	2x2	4/9/12
65	4/3/12	4:20 PM	CG/20	14/15 WTI	Intersection	Intersection	2x2	4/9/12
66	4/3/12	4:26 PM	CG/20	15/WWTI	from 14/15/WTI North 9'	Seam Repair	2x6	4/9/12
67	4/3/12	4:30 PM	CG/20	15/16/WTI	Intersection	Intersection	2x2	4/9/12
68	4/3/12	4:35 PM	CG/20	16/WTI	from 15/16/WTI North 9'	Seam Repair	2x2	4/9/12
69	4/3/12	4:44 PM	CG/20	16/17	from 16/17/18 West 84'	Seam Repair	2x8	4/9/12
15	4/3/12	8:15 AM	HM/61	7/8	from 7/8/AT West 27'	Seam Repair	3x3	4/9/12
16	4/3/12	8:25 AM	HM/61	6/7	from 76/7/AT West 53'	Seam Repair	2x3	4/9/12
17	4/3/12	8:30 AM	HM/61	6/7	at AT	Seam Repair	2x2	4/9/12
18	4/3/12	9:08 AM	HM/61	11	from 11/12/AT South 7' corner AT	Panel Repair	6x6	4/9/12
22	4/3/12	10:51 AM	HM/61	12/13	DS-7	DS-7	2x7	4/9/12
24	4/3/12	10:59 AM	HM/61	13/14	DS-8	DS-8	2x9	4/9/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
23	4/3/12	11:02 AM	HM/61	13/14	from 13/14 West 122'	Seam Repair	2x2	4/9/12
25	4/3/12	11:10 AM	HM/61	16/18	DS-9	DS-9	2x8	4/9/12
26	4/3/12	11:17 AM	HM/61	16/17/18	CR SM	Seam Repair	2x5	4/9/12
27	4/3/12	11:20 AM	HM/61	17/18/19	CR SM	Seam Repair	2x3	4/9/12
28	4/3/12	11:27 AM	HM/61	17/19	DS-10	DS-10	2x7	4/9/12
29	4/3/12	11:37 AM	HM/61	20/22	from 20/21/22 West 145'	Seam Repair	2x4	4/9/12
60	4/3/12	11:45 AM	HM/61	22	from 20/21/22 West 189' to North 2'	Liner Damage	2x2	4/9/12
35	4/3/12	2:00 PM	HM/61	19	from 19/20/21 West 16' to South 3'	Pipe Penetration	4x4	4/9/12
36	4/3/12	2:30 PM	HM/61	19/20/21	Intersection	Intersection	4x6	4/9/12
37	4/3/12	2:45 PM	HM/61	20/21	DS-11	DS-11	2x7	4/9/12
38	4/3/12	2:48 PM	HM/61	21	from 19/20/21 North 11' to East 4'	Liner Damage	1x1	4/9/12
39	4/3/12	2:50 PM	HM/61	20/21/22	Intersection	Intersection	2x5	4/9/12
40	4/3/12	2:54 PM	HM/61	21	from 19/21 at West 21'	Liner Damage	2x2	4/9/12
41	4/3/12	2:55 PM	HM/61	21	from 19/21 at West 15'	Liner Damage	2x2	4/9/12
53	4/3/12	3:05 PM	HM/61	18/19	at AT	Seam Repair	2x5	4/9/12
55	4/3/12	3:30 PM	HM/61	26/28	DS-14	DS-14	2x7	4/9/12
56	4/3/12	3:56 PM	HM/61	26/27/28	Intersection	Intersection	4x4	4/9/12
57	4/3/12	3:58 PM	HM/61	27/28/29	Intersection	Intersection	2x2	4/9/12
54	4/3/12	4:00 PM	HM/61	23/25	DS-12	DS-12	2x7	4/9/12
58	4/3/12	4:05 PM	HM/61	27/29	from 27/28/29 West 61'	Seam Repair	2x2	4/9/12
59	4/3/12	4:08 PM	HM/61	27	from 27/28/29 West 65' to South 2'	Liner Damage	2x2	4/9/12
70	4/3/12	4:30 PM	HM/61	25/26	DS-13	DS-13	2x7	4/9/12
71	4/3/12	4:33 PM	HM/61	25	from 24/25/26 East 15' to South 9'	Liner Damage	2x2	4/9/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
72	4/3/12	4:35 PM	HM/61	25	from 24/25/26 East 7' to South 9'	Liner Damage	2x2	4/9/12
73	4/3/12	4:38 PM	HM/61	24/25/26	Intersection	Intersection	2x2	4/9/12
74	4/3/12	4:43 PM	HM/61	23/24/25	Intersection	Intersection	3x5	4/9/12
20	4/3/12	10:46 AM	KM 13	4/R20/R21	See Seaming form/TI to East	Seam Repair	44'	4/9/12
21	4/3/12	10:55 AM	KM/13	4/R20/R21	See Seaming form/TI to East	Seam Repair	44'	4/9/12
76	4/6/12	1:42 PM	CG/20	30	20' from AT 5' from 29/30	Liner Damage	2x2	4/9/12
77	4/6/12	1:46 PM	CG/20	32/33/34	Intersection	Intersection	2x2	4/9/12
78	4/6/12	1:52 PM	CG/20	33/34/35	DS-16	DS-16	2x7	4/9/12
75	4/6/12	2:08 PM	CG/20	29/30	DS-15	DS-15	2x5	4/9/12
79	4/6/12	2:20 PM	CG/20	35/36/37	Intersection	Intersection	2x4	4/9/12
80	4/6/12	2:24 PM	CG/20	36/37/38	Intersection	Intersection	2x2	4/9/12
81	4/9/12	10:17 AM	HM/61	31	from 31/32 at West 69' to South 11'	Pipe Penetration	5x8	4/9/12
82	4/9/12	10:58 AM	HM/61	35/37	DS-17	DS-17	3x8	4/9/12
84	4/9/12	11:06 AM	HM/61	39/40	DS-18	DS-18	2x7	4/9/12
83	4/9/12	11:27 AM	HM/61	35/37	from 35/37 at West 135'	Seam Repair	2x5	4/9/12
104	4/9/12	11:44 AM	HM/61	41/42/43	DS-22	DS-22	3x8	4/9/12
105	4/9/12	11:48 AM	HM/61	42/43/44	Intersection	Intersection	2x2	4/9/12
96	4/9/12	2:10 PM	HM/61	3/4	cap over R20 from East to West 18'	Seam Repair	6x18	4/9/12
95	4/9/12	2:20 PM	HM/61	3/4/R20/R21	cap over repair	Seam Repair	3x5	4/9/12
94	4/9/12	2:25 PM	HM/61	5/6/TIE	Intersection	Intersection	3x3	4/9/12
93	4/9/12	2:29 PM	HM/61	5/TIE	7' from 4/5	Seam Repair	3x3	4/9/12
92	4/9/12	2:32 PM	HM/61	4/5/TIE	Intersection	Intersection	3x5	4/9/12
91	4/9/12	2:36 PM	HM/61	4/TIE	7' from South end	Seam Repair	2x3	4/9/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
90	4/9/12	2:39 PM	HM/61	3/4/R21/TIE	Intersection	Intersection	2x5	4/9/12
89	4/9/12	2:42 PM	HM/61	3/TIE	7' from 2/3/TIE	Seam Repair	2x3	4/9/12
88	4/9/12	2:46 PM	HM/61	2/3/TIE	Intersection	Intersection	2x3	4/9/12
87	4/9/12	2:55 PM	HM/61	2/TIE	7' from 1/2/TIE	Seam Repair	2x3	4/9/12
86	4/9/12	3:00 PM	HM/61	1/2/TIE	Intersection	Intersection	2x3	4/9/12
85	4/9/12	3:20 PM	HM/61	1/TIE	2' from South end	Seam Repair	2x2	4/9/12
97	4/9/12	5:30 PM	HM/61	16/17/TIE	Intersection	Intersection	2x3	4/9/12
98	4/9/12	5:34 PM	HM/61	17/TIE	8' from 16/17	Seam Repair	2x2	4/9/12
99	4/9/12	5:40 PM	HM/61	17/19/TIE	Intersection	Intersection	2x4	4/9/12
100	4/9/12	5:41 PM	HM/61	19/TIE	8' from 17/19	Seam Repair	2x2	4/9/12
101	4/9/12	5:45 PM	HM/61	19/20/TIE	Intersection	Intersection	2x2	4/9/12
102	4/9/12	5:47 PM	HM/61	20/TIE	8' from 19/20	Seam Repair	2x3	4/9/12
103	4/9/12	5:50 PM	HM/61	20/22/TIE	Intersection	Intersection	2x2	4/9/12
106	4/10/12	8:14 AM	HM/61	11	215' from AT, 8' from 11/12	Liner Damage	2x2	4/9/12
107	4/10/12	8:26 AM	HM/61	22/WTI	from 20/22/WTI North 9'	Seam Repair	3x3	4/9/12
108	4/10/12	8:33 AM	HM/61	22/23 WTI	Intersection	Intersection	2x2	4/9/12
109	4/10/12	8:37 AM	HM/61	23/WTI	from 22/23/WTI North 9'	Seam Repair	2x2	4/9/12
110	4/10/12	9:00 AM	HM/61	23/24/WTI	DS-20	DS-20	2x13	4/9/12
111	4/10/12	9:07 AM	HM/61	24/WTI	from 23/24/WTI North 9'	Seam Repair	2x4	4/9/12
112	4/10/12	11:08 AM	HM/61	24/26/WTI	from 24/26/WTI East 9' to North 6'	Pipe Penetration	13x13	4/9/12
113	4/10/12	11:25 AM	HM/61	26/27/WTI	Intersection	Intersection	2x2	4/9/12
114	4/10/12	11:29 AM	HM/61	27/WTI	from 26/27/WTI North 10'	Seam Repair	2x2	4/9/12
115	4/10/12	11:33 AM	HM/61	27/29/WTI	Intersection	Intersection	2x2	4/9/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
116	4/10/12	11:36 AM	HM/61	29/WTI	from 27/29/WTI North 10'	Seam Repair	2x2	4/9/12
117	4/10/12	11:48 AM	HM/61	29/30/WTI	Intersection	Intersection	2x2	4/9/12
118	4/10/12	1:30 PM	HM/61	30/WTI	from 29/30/WTI North 10'	Seam Repair	2x2	4/9/12
120	4/10/12	1:38 PM	HM/61	30/31/WTI	Intersection	Intersection	2x2	4/9/12
121	4/10/12	1:42 PM	HM/61	31/WTI	from 30/31/WTI North 10'	Seam Repair	2x2	4/9/12
122	4/10/12	1:56 PM	HM/61	31/32/WTI	Intersection	Intersection	2x2	4/9/12
123	4/10/12	2:00 PM	HM/61	32/WTI	from 31/32/WTI North 10'	Seam Repair	2x2	4/9/12
124	4/10/12	2:05 PM	HM/61	32/33/WTI	Intersection	Intersection	2x2	4/9/12
125	4/10/12	2:16 PM	HM/61	33/WTI	from 32/33/WTI North 10;	Seam Repair	2x2	4/9/12
126	4/10/12	2:22 PM	HM/61	33/35/WTI	Intersection	Intersection	2x3	4/9/12
130	4/10/12	2:33 PM	HM/61	33/35	from 33/35/WTI East 9'	Seam Repair	2x2	4/9/12
127	4/10/12	2:40 PM	HM/61	35/WTI	from 33/35/WTI North 10'	Seam Repair	2x5	4/9/12
128	4/10/12	2:50 PM	HM/61	35/36/WTI	Intersection	Intersection	2x2	4/9/12
129	4/10/12	2:55 PM	HM/61	36/WTI	from 35/36/WTI North 10'	Seam Repair	2x2	4/9/12
131	4/10/12	4:30 PM	HM/61	36	from 36/38/WTI East 12' to South 5'	Pipe Penetration	11x12	4/13/12
132	4/10/12	5:30 PM	HM/61	36/38/WTI	Intersection	Intersection	2x2	4/13/12
133	4/10/12	5:35 PM	HM/61	38/WTI	8' from 36/38	Seam Repair	2x4	4/13/12
134	4/10/12	5:40 PM	HM/61	38	from 36/38/WTI East 10' to North 10'	Liner Damage	2x3	4/13/12
135	4/10/12	5:50 PM	HM/61	38/39	DS-19	DS-19	2x5	4/13/12
119	4/10/12	11:34 PM	HM/61	30/WTI	from 29/30/WTI North 18'	Seam Repair	2x5	4/9/12
170	4/13/12	2:58 PM	CG/70	38/39/WTI	Intersection	Intersection	2x2	4/18/12
171	4/13/12	3:03 PM	CG/70	39/WTI	from 38/39/WTI North 10'	Seam Repair	2x2	4/18/12
172	4/13/12	3:06 PM	CG/70	39/40/WTI	Intersection	Intersection	2x2	4/18/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
173	4/13/12	3:11 PM	CG/70	40/WTI	from 39/40/WTI North 10'	Seam Repair	2x2	4/18/12
174	4/13/12	3:23 PM	CG/70	40	from 39/40/WTI North 12' to East 5'	Liner Damage	3x6	4/18/12
175	4/13/12	3:29 PM	CG/70	40/41/WTI	Intersection	Intersection	4x5	4/18/12
176	4/13/12	3:34 PM	CG/70	41/WTI	from 40/41/WTI North 10'	Seam Repair	2x2	4/18/12
177	4/13/12	3:37 PM	CG/70	41/42/WTI	Intersection	Intersection	2x2	4/18/12
178	4/13/12	3:40 PM	CG/70	42/WTI	from 41/42/WTI North 10'	Seam Repair	2x2	4/18/12
179	4/13/12	3:44 PM	CG/70	42/44/WTI	Intersection	Intersection	2x3	4/18/12
180	4/13/12	3:47 PM	CG/70	44/WTI	from 42/44/WTI North 10'	Seam Repair	2x2	4/18/12
181	4/13/12	3:55 PM	CG/70	44/45 WTI	Intersection	Intersection	2x2	4/13/12
182	4/13/12	3:58 PM	CG/70	45/WTI	from 44/45/WTI North 10'	Seam Repair	2x2	4/13/12
183	4/13/12	4:03 PM	CG/70	45/47/WTI	Intersection	Intersection	3x3	4/13/12
184	4/13/12	4:06 PM	CG/70	47/WTI	from 45/47/WTI North 10'	Seam Repair	2x2	4/13/12
185	4/13/12	4:09 PM	CG/70	47/48/WTI	Intersection	Intersection	2x2	4/13/12
186	4/13/12	4:13 PM	CG/70	48/WTI	from 47/48/WTI North 10'	Seam Repair	2x2	4/13/12
187	4/13/12	4:18 PM	CG/70	48/49/WTI	Intersection	Intersection	2x2	4/13/12
188	4/13/12	4:22 PM	CG/70	49/WTI	from 48/49/WTI North 10'	Seam Repair	2x2	4/13/12
189	4/13/12	4:38 PM	CG/70	49/50/WTI	from 49/50/WTI East 8' to South 2'	Pipe Penetration	6x8	4/13/12
136	4/13/12	9:05 AM	HM/61	41/43	from 41/43/AT West 55'	Pipe Penetration	7x8	4/13/12
137	4/13/12	9:15 AM	HM/61	43/44	DS-23	DS-23	2x7	4/13/12
138	4/13/12	9:40 AM	HM/61	44/45/46	Intersection	Intersection	3x5	4/13/12
139	4/13/12	9:52 AM	HM/61	40/41	at AT	Seam Repair	2x5	4/13/12
140	4/13/12	9:59 AM	HM/61	46/47	from 46/47 West 15'	Seam Repair	2x5	4/13/12
141	4/13/12	10:06 AM	HM/61	45/46/47	Intersection	Intersection	2x2	4/13/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
142	4/13/12	10:18 AM	HM/61	47/48	DS-24	DS-24	2x7	4/13/12
143	4/13/12	10:37 AM	HM/61	50/52	from 50/52 at West 147'	SR/Burnout	2x3	4/13/12
144	4/13/12	10:41 AM	HM/61	50/51/52	DS-26	DS-26	3x12	4/13/12
145	4/13/12	10:48 AM	HM/61	51/52/53	Intersection	Intersection	2x2	4/13/12
168	4/13/12	10:53 AM	HM/61	50/51	from 50/51/52 West 18'	Seam Repair	2x2	4/13/12
146	4/13/12	11:00 AM	HM/61	53/54	DS-28	DS-28	2x8	4/13/12
169	4/13/12	11:18 AM	HM/61	49/50	DS-25	DS-25	2x6	4/13/12
148	4/13/12	11:34 AM	HM/61	55/56/57	Intersection	Intersection	2x2	4/13/12
147	4/13/12	11:55 AM	HM/61	54/55/56	DS-27	DS-27	2x13	4/13/12
161	4/13/12	2:46 PM	HM/61	82/89/91	Intersection	Intersection	3x5	4/13/12
162	4/13/12	3:00 PM	HM/61	82/89	DS-37	DS-37	2x6	4/13/12
163	4/13/12	3:10 PM	HM/61	89/90/91	Intersection	Intersection	2x6	4/13/12
164	4/13/12	3:15 PM	HM/61	90/91/92	Intersection	Intersection	2x2	4/13/12
165	4/13/12	3:20 PM	HM/61	89/90	DS-38	DS-38	2x6	4/13/12
166	4/13/12	3:35 PM	HM/61	82/88/89	Intersection	Intersection	3x10	4/13/12
167	4/13/12	3:42 PM	HM/61	80/82	DS-36	DS-36	2x7	4/13/12
191	4/13/12	3:47 PM	HM/61	54/55/80	Intersection	Intersection	2x3	4/13/12
192	4/13/12	4:44 PM	HM/61	55/79/80	Intersection/Boot	Pipe Penetration	10x12	4/13/12
193	4/13/12	4:59 PM	HM/61	55/57/79	Intersection	Intersection	3x3	4/13/12
215	4/13/12	5:00 PM	HM/61	57/79/81	Intersection	Intersection	2x2	4/18/12
190	4/17/12	9:22 AM	CG/70	49/50	from 49/50/WTI East 30'	Seam Repair	2x13	4/13/12
194	4/17/12	9:26 AM	CG/70	50/WTI	from 49/50/WTI North 10'	Seam Repair	2x2	4/18/12
195	4/17/12	9:30 AM	CG/70	50/51/WTI	Intersection	Intersection	2x2	4/18/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
196	4/17/12	9:33 AM	CG/70	51/WTI	from 50/51/WTI North 10'	Seam Repair	2x2	4/18/12
197	4/17/12	9:36 AM	CG/70	51/53/WTI	Intersection	Intersection	2x2	4/18/12
198	4/17/12	9:39 AM	CG/70	53/WTI	from 51/53/WTI North 10'	Seam Repair	2x2	4/18/12
199	4/17/12	9:41 AM	CG/70	53	from 51/53/WTI South 10' to East 7'	Liner Damage	2x2	4/18/12
200	4/17/12	9:44 AM	CG/70	53/54/WTI	Intersection	Intersection	2x2	4/18/12
201	4/17/12	9:46 AM	CG/70	54/WTI	from 53/54/WTI Norht 10'	Seam Repair	2x2	4/18/12
202	4/17/12	9:50 AM	CG/70	54/WTI	from 54/56/WTI South 9'	Seam Repair	2x4	4/18/12
203	4/17/12	10:00 AM	CG/70	54/56/WTI	Intersection	Intersection	2x2	4/18/12
204	4/17/12	10:03 AM	CG/70	56/WTI	from 54/56/WTI North 10'	Seam Repair	2x2	4/18/12
205	4/17/12	10:06 AM	CG/70	56/57/WTI	Intersection	Intersection	2x2	4/18/12
206	4/17/12	10:09 AM	CG/70	57/WTI	from 56/57/WTI North 10'	Seam Repair	2x2	4/18/12
207	4/17/12	10:12 AM	CG/70	57/58/WTI	Intersection	Intersection	2x2	4/18/12
208	4/17/12	10:27 AM	CG/70	58/WTI	from 57/58/WTI North 10'	Seam Repair	2x2	4/18/12
209	4/17/12	10:32 AM	CG/70	58/60/WTI	DS-51 / Intersection	DS-51 / Intersection	2x11	4/18/12
210	4/17/12	10:42 AM	CG/70	60/61/WTI	Intersection	Intersection	2x2	4/18/12
211	4/17/12	10:45 AM	CG/70	61/WTI	from 60/61/WTI North 10'	Seam Repair	2x2	4/18/12
212	4/17/12	10:50 AM	CG/70	61/62/WTI	Intersection	Intersection	2x2	4/18/12
213	4/17/12	10:53 AM	CG/70	62/WTI	from 61/62/WTI North 10'	Seam Repair	2x2	4/18/12
151	4/17/12	11:00 AM	CG/70	58/59/60	Cap	Seam Repair	2x24	4/13/12
152	4/17/12	11:05 AM	CG/70	59/R151	DS-75	DS-75	2x3	4/13/12
214	4/17/12	11:20 AM	CG/70	62/63/WTI	from 62/63/WTI East 20' to South 4'	Pipe Penetration/Seam Repair	10x30	4/18/12
246	4/17/12	2:00 PM	CG/70	71/72/73	Intersection	Intersection	2x2	4/18/12
232	4/17/12	2:03 PM	CG/70	63/64/WTI	Intersection	Intersection	2x2	4/18/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
233	4/17/12	2:06 PM	CG/70	64/WTI	from 63/64/WTI North 10'	Seam Repair	2x2	4/18/12
234	4/17/12	2:09 PM	CG/70	64/65/WTI	Intersection	Intersection	2x2	4/18/12
235	4/17/12	2:31 PM	CG/70	65/WTI	from 64/65/WTI North 10'	Seam Repair	2x2	4/18/12
236	4/17/12	2:34 PM	CG/70	65/66/WTI	Intersection	Intersection	2x2	4/18/12
237	4/17/12	2:44 PM	CG/70	66/67/NTI	Northwest point	Seam Repair	6x10	4/18/12
238	4/17/12	2:54 PM	CG/70	67/68/NTI	Intersection to West	Intersection	2x10	4/18/12
240	4/17/12	3:38 PM	CG/70	68/NTI	from 67/68/NTI East 16'	Seam Repair	2x2	4/18/12
241	4/17/12	3:41 PM	CG/70	68/69/NTI	Intersection	Intersection	2x2	4/18/12
242	4/17/12	3:44 PM	CG/70	69/NTI	from 68/69/NTI East 16'	Seam Repair	2x2	4/18/12
239	4/17/12	3:55 PM	CG/70	68/NTI	from 67/68/NTI East 12'	Seam Repair	2x2	4/18/12
247	4/17/12	4:34 PM	CG/70	72/NTI	from 70/72/NTI East 16'	Seam Repair	2x2	4/18/12
148	4/17/12	4:37 PM	CG/70	72/73/NTI	Intersection	Intersection	2x2	4/18/12
249	4/17/12	4:40 PM	CG/70	73/NTI	from 72/73/NTI East 16'	Seam Repair	2x2	4/18/12
250	4/17/12	4:42 PM	CG/70	73/75/NTI	Intersection	Intersection	2x2	4/18/12
251	4/17/12	4:46 PM	CG/70	75/NTI	from 73/75/NTI East 16'	Seam Repair	2x2	4/18/12
252	4/17/12	4:49 PM	CG/70	75/76/NTI	Intersection	Intersection	2x2	4/18/12
253	4/17/12	4:52 PM	CG/70	76/NTI	from 75/76/NTI East 16'	Seam Repair	2x2	4/18/12
254	4/17/12	4:55 PM	CG/70	76/77/NTI	Intersection	Intersection	2x2	4/18/12
267	4/17/12	4:58 PM	CG/70	77/NTI	from 76/77/NTI East 16'	Seam Repair	2x2	4/18/12
268	4/17/12	5:01 PM	CG/70	77/78/NTI	Intersection	Intersection	2x2	4/18/12
269	4/17/12	5:04 PM	CG/70	78/NTI	from 77/78/NTI East 16'	Seam Repair	2x2	4/18/12
270	4/17/12	5:07 PM	CG/70	78/80/NTI	Intersection	Intersection	2x2	4/18/12
277	4/17/12	6:07 PM	CG/70	96/97/98	Intersection	Intersection	2x2	4/18/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
278	4/17/12	6:09 PM	CG/70	98	from 96/98 North 30' to East 10'	Liner Damage	2x2	4/18/12
279	4/17/12	6:11 PM	CG/70	98	from 96/98 North 20' to East 10'	Liner Damage	2x2	4/18/12
280	4/17/12	6:14 PM	CG/70	98	from 96/98 North 10' to East 10'	Liner Damage	2x2	4/18/12
281	4/17/12	6:16 PM	CG/70	98	from 96/98/AT East 10'	Liner Damage	2x2	4/18/12
282	4/17/12	6:23 PM	CG/70	96/98	from 96/98/AT North 9'	SR/Burnout	2x7	4/18/12
276	4/17/12	6:27 PM	CG/70	97/98	from 96/97/98 East 10'	SR/Burnout	2x2	4/18/12
271	4/17/12	6:32 PM	CG/70	93/95	DS-39	DS-39	2x7	4/18/12
275	4/17/12	6:40 PM	CG/70	97/98/99	Intersection	Intersection	2x7	4/18/12
283	4/17/12	6:42 PM	CG/70	97/99	from 97/98/99 North 19'	SR/Burnout	2x2	4/18/12
274	4/17/12	6:45 PM	CG/70	99	from 97/98/99 North 40' to East 5'	Pipe Penetration	7x9	4/18/12
216	4/17/12	8:25 AM	HM/61	77/79/81	Intersection	Intersection	3x3	4/18/12
217	4/17/12	8:40 AM	HM/61	57/58/77/81	Intersection	Intersection	4x9	4/18/12
218	4/17/12	8:49 AM	HM/61	58/76/77	Intersection	Intersection	2x2	4/18/12
219	4/17/12	8:51 AM	HM/61	58/59/76	Intersection	Intersection	2x2	4/18/12
220	4/17/12	9:20 AM	HM/61	59/74/76	Intersection	Intersection	2x10	4/18/12
221	4/17/12	9:45 AM	HM/61	59/61/74	Intersection	Intersection	2x14	4/18/12
222	4/17/12	9:50 AM	HM/61	61/72/74	Intersection	Intersection	2x4	4/18/12
149	4/17/12	9:57 AM	HM/61	58/59	DS-30	DS-30	2x7	4/13/12
223	4/17/12	10:00 AM	HM/61	64/62/73	Intersection	Intersection	2x2	4/18/12
224	4/17/12	10:04 AM	HM/61	62/73	from 61/62/73 Northwest 6'	Seam Repair	2x2	4/18/12
225	4/17/12	10:11 AM	HM/61	62/71/73	Intersection	Intersection	3x6	4/18/12
226	4/17/12	10:22 AM	HM/61	62/71	DS-31 / Intersection	DS-31 / Intersection	2x12	4/18/12
227	4/17/12	10:40 AM	HM/61	63/70/71	Intersection	Intersection	3x7	4/18/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
150	4/17/12	10:46 AM	HM/61	59/61	DS-29	DS-29	2x7	4/13/12
228	4/17/12	11:38 AM	HM/61	63/64/69/70	Intersection / Cap	Intersection	3x15	4/18/12
229	4/17/12	11:54 AM	HM/61	64/65/68/69	Intersection / Cap	Intersection	3x10	4/18/12
230	4/17/12	1:20 PM	HM/61	65/68	from 65/68/69 Northwest 9'	Seam Repair	2x2	4/18/12
231	4/17/12	1:30 PM	HM/61	65/66/67/68	Intersection	Intersection	2x6	4/18/12
245	4/17/12	1:38 PM	HM/61	70/71/72	Intersection	Intersection	2x2	4/18/12
153	4/17/12	1:41 PM	HM/61	93	At bend Anchor Trench	Panel Repair	3x6	4/13/12
244	4/17/12	1:54 PM	HM/61	70/71	DS-32	DS-32	2x7	4/18/12
154	4/17/12	1:57 PM	HM/61	50/93	DS-63	DS-63	3x6	4/13/12
155	4/17/12	2:03 PM	HM/61	50/92/93	Intersection	Intersection	3x3	4/13/12
156	4/17/12	2:10 PM	HM/61	50/52/92	Intersection	Intersection	2x2	4/13/12
157	4/17/12	2:19 PM	HM/61	52/91/92	Intersection	Intersection	2x3	4/13/12
158	4/17/12	2:30 PM	HM/61	52/53/82/91	Intersection	Intersection	5x7	4/13/12
159	4/17/12	2:36 PM	HM/61	53/54/82	Intersection	Intersection	2x5	4/13/12
160	4/17/12	2:40 PM	HM/61	54/80/82	Intersection	Intersection	2x2	4/13/12
243	4/17/12	4:07 PM	HM/61	69/70/72/NTI	Intersection / Cap	Intersection	3x25	4/18/12
255	4/17/12	4:48 PM	HM/61	73/74/75	Intersection	Intersection	2x2	4/18/12
256	4/17/12	4:50 PM	HM/61	74/75/76	Intersection	Intersection	2x2	4/18/12
257	4/17/12	4:52 PM	HM/61	76/77	DS-34	DS-34	2x7	4/18/12
258	4/17/12	5:05 PM	HM/61	77/78/79	DS-33 / Intersection	DS-33 / Intersection	2x10	4/18/12
259	4/17/12	5:12 PM	HM/61	78/79/80	Intersection	Intersection	2x2	4/18/12
264	4/17/12	5:27 PM	HM/61	82/83/84	Intersection	Intersection	3x8	4/18/12
263	4/17/12	5:29 PM	HM/61	82/84/87	Intersection	Intersection	2x2	4/18/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
265	4/17/12	5:48 PM	HM/61	84/86/87	Intersection	Intersection	2x2	4/18/12
266	4/17/12	5:50 PM	HM/61	86/87/88	Intersection	Intersection	2x2	4/18/12
260	4/17/12	6:00 PM	HM/61	82/87/88	Intersection	Intersection	3x5	4/18/12
261	4/17/12	6:09 PM	HM/61	82/88	from 82/87/88 South 10'	Seam Repair	2x2	4/18/12
262	4/17/12	6:13 PM	HM/61	82/88	from 82/87/88 South 22'	Seam Repair	2x2	4/18/12
272	4/17/12	6:30 PM	HM/61	93/95	from 93/95 at North 105'	SR/Burnout	2x3	4/18/12
273	4/17/12	6:33 PM	HM/61	95/96	DS-41	DS-41	2x7	4/18/12
284	4/18/12	7:57 AM	HM/61	99/100/AT	at Anchor Trench to South	Seam Repair	2x6	4/18/12
285	4/18/12	8:09 AM	HM/61	105/106/AT	at Anchor Trench to South	Seam Repair	2x6	4/18/12
286	4/18/12	8:18 AM	HM/61	105/106	DS-44	DS-44	2x7	4/18/12
301	4/18/12	11:45 AM	HM/61	104/105/106	Intersection	Intersection	2x2	4/18/12
302	4/18/12	11:50 AM	HM/61	103/104/105	Intersection	Intersection	2x2	4/18/12
303	4/18/12	11:55 AM	HM/61	102/103	DS-42	DS-42	2x7	4/18/12
304	4/18/12	1:20 PM	HM/61	100/102	from 100/102 North 95'	Seam Repair	2x4	4/18/12
305	4/18/12	1:27 PM	HM/61	99/100	from 99/100 North 94'	Seam Repair	2x3	4/18/12
306	4/18/12	1:35 PM	HM/61	97/99	from 97/98/99 North 80'	Seam Repair	2x13	4/18/12
307	4/18/12	1:55 PM	HM/61	96/97	from 96/97/98 North 70'	Seam Repair	2x3	4/18/12
308	4/18/12	2:00 PM	HM/61	90/91/92	from 90/91/92 North 90'	Seam Repair	2x2	4/18/12
309	4/18/12	2:10 PM	HM/61	88/89	DS-35	DS-35	2x6	4/18/12
310	4/18/12	2:15 PM	HM/61	93/94	from 93/94/95 North 65'	Seam Repair	2x2	4/18/12
311	4/18/12	2:29 PM	HM/61	93/94/95	Intersection	Intersection	2x6	4/18/12
312	4/18/12	2:32 PM	HM/61	93/95	from 93/94/95 South 20'	Seam Repair	2x2	4/18/12
313	4/18/12	2:35 PM	HM/61	94/95/96	Intersection	Intersection	2x2	4/18/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
314	4/18/12	2:38 PM	HM/61	96	from 94/95/96 North 7' to East 1'	Liner Damage	2x2	4/18/12
315	4/18/12	2:42 PM	HM/61	96/97	DS-40	DS-40	2x6	4/18/12
316	4/18/12	2:55 PM	HM/61	96/97	from 96/97/98 North 232'	Seam Repair	2x2	4/18/12
317	4/18/12	3:05 PM	HM/61	99/100	from 99/100 at North 216'	Seam Repair	2x10	4/18/12
318	4/18/12	3:10 PM	HM/61	100/101/102	DS-43 / Intersection	DS-43 / Intersection	2x8	4/18/12
319	4/18/12	3:30 PM	HM/61	101/102	from 101/102/103 West 10'	Seam Repair	2x3	4/18/12
320	4/18/12	3:34 PM	HM/61	101/102/103	Intersection	Intersection	2x2	4/18/12
321	4/18/12	4:45 PM	HM/61	41/43	Cap / Boot / Northside	Seam Repair	2x66	4/19/12
287	4/18/12	8:23 PM	HM/61	106/115/117	Intersection	Intersection	2x6	4/18/12
288	4/18/12	8:29 PM	HM/61	106/107/115	Intersection	Intersection	2x5	4/18/12
289	4/18/12	8:33 PM	HM/61	107/114/115	Intersection	Intersection	3x7	4/18/12
290	4/18/12	8:38 PM	HM/61	115/119	from 106/115/117 East 66'	SR/Burnout	2x2	4/18/12
291	4/18/12	9:13 PM	HM/61	119/120	DS-48	DS-48	2x7	4/18/12
292	4/18/12	9:17 PM	HM/61	118/119/120	Intersection	Intersection	3x3	4/18/12
293	4/18/12	9:19 PM	HM/61	117/118/119	Intersection	Intersection	2x2	4/18/12
294	4/18/12	9:30 PM	HM/61	119	from 118/119/120 North 10' to West 8'	Pipe Penetration	8x12	4/18/12
295	4/18/12	10:53 PM	HM/61	117/118	DS-49	DS-49	2x6	4/18/12
296	4/18/12	11:04 PM	HM/61	115/116/117	Intersection	Intersection	2x2	4/18/12
297	4/18/12	11:11 PM	HM/61	114/115/116	Intersection	Intersection	2x2	4/18/12
298	4/18/12	11:18 PM	HM/61	107/108/114	Intersection	Intersection	3x3	4/18/12
299	4/18/12	11:23 PM	HM/61	108/113/114	Intersection	Intersection	2x5	4/18/12
300	4/18/12	11:29 PM	HM/61	106/107	DS-45	DS-45	2x7	4/18/12
326	4/19/12	8:03 AM	CG/70	80	from 78/80/NTI East 16'	Seam Repair	2x2	4/19/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
327	4/19/12	8:06 AM	CG/70	80/82	Intersection / NTI	Intersection	2x2	4/19/12
328	4/19/12	8:09 AM	CG/70	82	from 80/82/NTI East 16'	Seam Repair	2x2	4/19/12
329	4/19/12	8:12 AM	CG/70	82/83	Intersection / NTI	Intersection	2x2	4/19/12
330	4/19/12	8:16 AM	CG/70	83	from 82/83/NTI East 16'	Seam Repair	2x2	4/19/12
331	4/19/12	8:17 AM	CG/70	83/85	Intersection / NTI	Intersection	2x2	4/19/12
332	4/19/12	8:20 AM	CG/70	85	from 83/85/NTI East 16'	Seam Repair	2x2	4/19/12
335	4/19/12	8:23 AM	CG/70	85/86	Intersection / NTI	Intersection	2x2	4/19/12
333	4/19/12	8:26 AM	CG/70	83/84/85	Intersection	Intersection	2x2	4/19/12
334	4/19/12	8:29 AM	CG/70	84/85/86	Intersection	Intersection	2x2	4/19/12
338	4/19/12	8:33 AM	CG/70	86/88/NTI	86/88/NTI West 8'	Seam Repair	2x9	4/19/12
339	4/19/12	8:36 AM	CG/70	88/NTI	from 86/88/NTI East 16'	Seam Repair	2x2	4/19/12
340	4/19/12	8:39 AM	CG/70	87/88/NTI	Intersection / NTI	Intersection	2x2	4/19/12
336	4/19/12	9:21 AM	CG/70	85	from 83/84/85 Northeast 4'	Seam Repair	2x2	4/19/12
337	4/19/12	9:25 AM	CG/70	86/NTI	Boot from 85/85/NTI East 13' South 9'	Seam Repair	13x10	4/19/12
354	4/19/12	10:11 AM	CG/70	89/NTI	from 88/89/NTI East 16'	Seam Repair	2x2	4/19/12
355	4/19/12	10:15 AM	CG/70	89/90/NTI	Intersection	Intersection	2x2	4/19/12
356	4/19/12	10:19 AM	CG/70	90/NTI	DS-76	DS-76	2x7	4/19/12
357	4/19/12	10:22 AM	CG/70	90/NTI	from 89/90/NTI East 19'	Seam Repair	2x2	4/19/12
358	4/19/12	10:25 AM	CG/70	90/92/NTI	Intersection	Intersection	2x2	4/19/12
359	4/19/12	10:29 AM	CG/70	92/93/NTI	92/93/NTI East 19'	Seam Repair	2x8	4/19/12
360	4/19/12	10:42 AM	CG/70	93/NTI	from 92/93/NTI East 19'	Seam Repair	2x2	4/19/12
361	4/19/12	10:45 AM	CG/70	93/94/NTI	Intersection	Intersection	2x2	4/19/12
362	4/19/12	10:47 AM	CG/70	94/NTI	from 93/94/NTI East 19'	Seam Repair	2x2	4/19/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
363	4/19/12	10:49 AM	CG/70	94/96/NTI	Intersection	Intersection	2x2	4/19/12
364	4/19/12	11:02 AM	CG/70	96/NTI	from 94/96/NTI East 19'	Seam Repair	2x2	4/19/12
366	4/19/12	11:35 AM	CG/70	97	from 96/97/NTI East 15' to South 13'	Pipe Penetration	5x12	4/19/12
395	4/19/12	1:20 PM	CG/70	97/NTI	from 96/97/NTI East 16'	Seam Repair	2x2	4/19/12
396	4/19/12	1:23 PM	CG/70	97/NTI	from 96/97/NTI East 19'	Seam Repair	2x2	4/19/12
397	4/19/12	1:26 PM	CG/70	97/99/NTI	Intersection	Intersection	2x2	4/19/12
400	4/19/12	2:10 PM	CG/70	100/NTI	from 99/100/NTI East 19'	Seam Repair	2x2	4/19/12
401	4/19/12	2:13 PM	CG/70	100/101/NTI	Intersection	Intersection	2x2	4/19/12
398	4/19/12	2:30 PM	CG/70	99/NTI	from 97/99/NTI East 19'	Seam Repair	2x2	4/19/12
399	4/19/12	2:33 PM	CG/70	99/100/NTI	Intersection	Intersection	2x2	4/19/12
402	4/19/12	2:43 PM	CG/70	101/NTI	from 100/101/NTI East 19'	Seam Repair	2x2	4/19/12
403	4/19/12	2:49 PM	CG/70	101/103/NTI	Intersection	Intersection	2x2	4/19/12
404	4/19/12	2:52 PM	CG/70	103/104/NTI	Intersection	Intersection	2x8	4/19/12
405	4/19/12	2:55 PM	CG/70	104/NTI	from 103/104/NTI East 19'	Seam Repair	2x2	4/19/12
406	4/19/12	3:00 PM	CG/70	104/106/NTI	Intersection	Intersection	2x2	4/19/12
407	4/19/12	3:05 PM	CG/70	106/107/NTI	Intersection	Intersection	2x6	4/19/12
365	4/19/12	\11:06 a	CG/70	96/97/NTI	Intersection	Intersection	2x2	4/19/12
348	4/19/12	8:07 AM	HM/61	114/116	DS-46	DS-46	2x7	4/19/12
341	4/19/12	8:18 AM	HM/61	108/112/113	Intersection	Intersection	2x2	4/19/12
342	4/19/12	8:20 AM	HM/61	108	from 108/110/112 SW 7' to West 3'	Liner Damage	2x2	4/19/12
343	4/19/12	8:27 AM	HM/61	108/110/112	Intersection	Intersection	2x6	4/19/12
346	4/19/12	8:32 AM	HM/61	110/111/112	Intersection	Intersection	2x4	4/19/12
347	4/19/12	8:35 AM	HM/61	111/112	from 110/111/112 East 15'	Seam Repair	2x3	4/19/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
345	4/19/12	8:42 AM	HM/61	108/109/110	DS-47 / Intersection	DS-47 / Intersection	2x9	4/19/12
344	4/19/12	8:50 AM	HM/61	107/108/109	Intersection	Intersection	2x2	4/19/12
349	4/19/12	9:34 AM	HM/61	120/121	DS-50	DS-50	2x8	4/19/12
350	4/19/12	9:47 AM	HM/61	123/124/125	Intersection	Intersection	2x4	4/19/12
352	4/19/12	9:54 AM	HM/61	125/126	DS-53	DS-53	2x2	4/19/12
351	4/19/12	10:03 AM	HM/61	124/125/126	Intersection	Intersection	2x3	4/19/12
367	4/19/12	10:17 AM	HM/61	130/132	from 130/132/AT East 187'	Seam Repair	2x5	4/19/12
368	4/19/12	10:37 AM	HM/61	130/131/132	DS-55 / Intersection	DS-55 / Intersection	2x8	4/19/12
369	4/19/12	10:42 AM	HM/61	131/132/133	Intersection	Intersection	2x2	4/19/12
370	4/19/12	10:55 AM	HM/61	138/139	DS-59	DS-59	2x7	4/19/12
371	4/19/12	11:05 AM	HM/61	139/140/141	Intersection	Intersection	3x3	4/19/12
372	4/19/12	11:18 AM	HM/61	140/141/142	DS-60 / Intersection	DS-60 / Intersection	2x10	4/19/12
373	4/19/12	11:23 AM	HM/61	138/139	from 138/139/AT at East 140'	Seam Repair	4x4	4/19/12
382	4/19/12	11:33 AM	HM/61	145/146	DS-62	DS-62	2x5	4/19/12
385	4/19/12	11:45 AM	HM/61	148/149/150	Intersection to South	Intersection	2x7	4/19/12
386	4/19/12	11:49 AM	HM/61	149/150/151	Intersection	Intersection	2x2	4/19/12
389	4/19/12	1:26 PM	HM/61	151	from 149/151/ETI West 45' to South 5'	Liner Damage	2x2	4/19/12
388	4/19/12	1:38 PM	HM/61	149/151	DS-64	DS-64	2x6	4/19/12
387	4/19/12	1:48 PM	HM/61	150/152	Intersection	Intersection	3x8	4/19/12
390	4/19/12	1:55 PM	HM/61	152/153	DS-66	DS-66	2x6	4/19/12
391	4/19/12	1:59 PM	HM/61	153/155	from 153/155/ETI South 155'	Seam Repair	3x15	4/19/12
392	4/19/12	2:09 PM	HM/61	155/156	from 155/156/ETI South 5'	Seam Repair	2x2	4/19/12
393	4/19/12	2:13 PM	HM/61	153/154/155	Intersection	Intersection	2x3	4/19/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
394	4/19/12	2:24 PM	HM/61	152/153/154	DS-65 / Intersection	DS-65 / Intersection	2x12	4/19/12
416	4/19/12	2:30 PM	HM/61	158/159	158/159 West 140'	Seam Repair	2x5	4/20/12
325	4/19/12	8:16 AM	VM/64	121/122	from 121/122 at East 110'	Seam Repair	2x2	4/19/12
323	4/19/12	8:30 AM	VM/64	126/127/128	Intersection	Intersection	2x2	4/19/12
322	4/19/12	8:40 AM	VM/64	127/128/129	DS-52 / Intersection	DS-52 / Intersection	3x7	4/19/12
324	4/19/12	9:15 AM	VM/64	130/132	from 130/132 at East 65'	Pipe Penetration	8x10	4/19/12
353	4/19/12	10:05 AM	VM/64	125/126/AT	at Anchor Trench	Seam Repair	2x5	4/19/12
377	4/19/12	10:18 AM	VM/64	132/133	DS-56	DS-56	2x6	4/19/12
378	4/19/12	10:30 AM	VM/64	135/136	DS-57	DS-57	2x7	4/19/12
376	4/19/12	10:43 AM	VM/64	132/133	from 132/133 at East 139'	Seam Repair	2x4	4/19/12
375	4/19/12	10:55 AM	VM/64	133/134/135	DS-54 / Intersection	DS-54 / Intersection	2x9	4/19/12
374	4/19/12	10:59 AM	VM/64	134/135/136	Intersection	Intersection	2x2	4/19/12
379	4/19/12	11:03 AM	VM/64	138/139	DS-58	DS-58	2x8	4/19/12
380	4/19/12	11:38 AM	VM/64	142/144	DS-61	DS-61	2x7	4/19/12
381	4/19/12	11:43 AM	VM/64	142/143/144	Intersection	Intersection	2x2	4/19/12
383	4/19/12	2:03 PM	VM/64	143/144/145	Intersection	Intersection	2x2	4/19/12
384	4/19/12	2:10 PM	VM/64	142/143	Boot from 142/143/144 East 20'	Seam Repair	10x12	4/19/12
414	4/19/12	2:52 PM	VM/64	145/146	145/146/ETI South 26'	Seam Repair	2x4	4/20/12
415	4/19/12	3:03 PM	VM/64	150/152/154	Intersection	Intersection	3x6	4/20/12
408	4/20/12	8:04 AM	CG/70	107/NTI	from 106/107/NTI East 19'	Seam Repair	2x2	4/20/12
409	4/20/12	8:07 AM	CG/70	107/109/NTI	Intersection	Intersection	2x2	4/20/12
410	4/20/12	8:15 AM	CG/70	109/110/NTI	Intersection	Intersection	2x10	4/20/12
411	4/20/12	8:17 AM	CG/70	109/NTI	from 109/110/NTI South 5' to West 6'	Liner Damage	2x2	4/20/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
412	4/20/12	9:04 AM	CG/70	110/NTI	from 109/110/NTI South 20'	Seam Repair	3x4	4/20/12
413	4/20/12	9:10 AM	CG/70	110/111/NTI	Boot 110/111/NTI	Seam Repair	8x20	4/20/12
417	4/20/12	9:15 AM	CG/70	111/ETI	from 110/111/ETI South 9'	Seam Repair	2x2	4/20/12
418	4/20/12	9:17 AM	CG/70	111/112/ETI	Intersection	Intersection	2x2	4/20/12
419	4/20/12	9:19 AM	CG/70	112/ETI	from 111/112/ETI South 9'	Seam Repair	2x2	4/20/12
420	4/20/12	9:25 AM	CG/70	112/ETI	DS-77	DS-77	2x6	4/20/12
421	4/20/12	9:30 AM	CG/70	112/113/ETI	Intersection	Intersection	2x2	4/20/12
422	4/20/12	9:32 AM	CG/70	113/ETI	from 112/1113/ETI South 9'	Seam Repair	2x2	4/20/12
423	4/20/12	9:35 AM	CG/70	113/ETI	from 113/114/ETI North 4' to South 2'	Seam Repair	3x3	4/20/12
424	4/20/12	9:37 AM	CG/70	113/114/ETI	Intersection	Intersection	2x2	4/20/12
425	4/20/12	9:39 AM	CG/70	114/ETI	from 113/114/ETI South 9'	Seam Repair	2x2	4/20/12
426	4/20/12	9:41 AM	CG/70	114/116/ETI	Intersection	Intersection	2x2	4/20/12
427	4/20/12	9:43 AM	CG/70	116/ETI	from 114/116/ETI South 9'	Seam Repair	2x2	4/20/12
428	4/20/12	9:59 AM	CG/70	116	from 116/117/ETI North 6' to West 6'	Seam Repair	2x6	4/20/12
432	4/20/12	10:03 AM	CG/70	116/117	from 116/117/ETI West 40'	Seam Repair	2x2	4/20/12
429	4/20/12	10:05 AM	CG/70	116/117/ETI	Intersection	Intersection	2x2	4/20/12
430	4/20/12	10:07 AM	CG/70	117/ETI	from 116/117/ETI South 9'	Seam Repair	2x2	4/20/12
431	4/20/12	10:09 AM	CG/70	117/118/ETI	Intersection	Intersection	2x2	4/20/12
433	4/20/12	10:11 AM	CG/70	118/ETI	from 117/118/ETI South 9'	Seam Repair	2x2	4/20/12
434	4/20/12	10:55 AM	CG/70	118/120/ETI	Intersection	Intersection	3x3	4/20/12
435	4/20/12	10:58 AM	CG/70	120/ETI	from 118/120/ETI South 9'	Seam Repair	2x2	4/20/12
436	4/20/12	11:05 AM	CG/70	120/121/ETI	Intersection	Intersection	2x2	4/20/12
437	4/20/12	11:08 AM	CG/70	121/ETI	from 121/120/ETI South 9'	Seam Repair	2x2	4/20/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
438	4/20/12	11:36 AM	CG/70	121/122/ETI	Intersection	Intersection	3x6	4/20/12
439	4/20/12	2:12 PM	CG/70	121/122	from 121/122/ETI South 6' to West 12'	Pipe Penetration	6x8	4/20/12
440	4/20/12	2:22 PM	CG/70	122/ETI	from 121/122/ETI South 8'	Seam Repair	2x2	4/27/12
441	4/20/12	2:29 PM	CG/70	122/123/ETI	Intersection	Intersection	3x3	4/27/12
442	4/20/12	2:34 PM	CG/70	123/ETI	from 122/123/ETI South 8'	Seam Repair	2x2	4/27/12
443	4/20/12	2:37 PM	CG/70	123/124/ETI	Intersection	Intersection	2x2	4/27/12
444	4/20/12	2:42 PM	CG/70	124/ETI	from 123/124/ETI South 8'	Seam Repair	2x2	4/27/12
445	4/20/12	2:45 PM	CG/70	124/126/ETI	Intersection	Intersection	2x2	4/27/12
446	4/20/12	2:48 PM	CG/70	126/ETI	from 124/126/ETI South 8'	Seam Repair	2x2	4/27/12
447	4/20/12	2:50 PM	CG/70	126/127/ETI	Intersection	Intersection	2x2	4/27/12
448	4/20/12	2:53 PM	CG/70	127/ETI	from 126/127/ETI South 8'	Seam Repair	2x2	4/27/12
449	4/20/12	2:56 PM	CG/70	127/129/ETI	Intersection	Intersection	2x2	4/27/12
450	4/20/12	2:59 PM	CG/70	129/ETI	from 127/129/ETI South 8'	Seam Repair	2x2	4/27/12
451	4/20/12	3:08 PM	CG/70	129/130/ETI	Intersection	Intersection	2x2	4/27/12
452	4/20/12	3:11 PM	CG/70	130/ETI	from 129/130/ETI South 8'	Seam Repair	2x2	4/27/12
453	4/20/12	3:20 PM	CG/70	130/131/ETI	Intersection	Intersection	2x3	4/27/12
454	4/20/12	4:05 PM	CG/70	131/ETI	from 130/131/ETI South 8'	Seam Repair	2x4	4/27/12
455	4/20/12	4:12 PM	CG/70	131/133/ETI	Intersection	Intersection	2x3	4/27/12
456	4/20/12	4:15 PM	CG/70	133/ETI	from 131/133/ETI South 8'	Seam Repair	2x2	4/27/12
462	4/24/12	8:15 AM	CG/70	136/137/ETI	Intersection	Intersection	2x2	4/24/12
457	4/24/12	8:40 AM	CG/70	133	frjom 133/134/ETI West 15' to North 6'	Boot/SR	8x10	4/27/12
458	4/24/12	9:41 AM	CG/70	133/134/ETI	Intersection	Intersection	3x3	4/27/12
459	4/24/12	9:46 AM	CG/70	134/ETI	from 133/134/ETI South 8'	Seam Repair	3x4	4/27/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
460	4/24/12	9:57 AM	CG/70	134/136/ETI	Intersection	Intersection	2x2	4/24/12
461	4/24/12	10:08 AM	CG/70	136/ETI	from 134/136/ETI South 8'	Seam Repair	2x2	4/24/12
464	4/24/12	10:28 AM	CG/70	137/ETI	from 136/137/ETI South 8'	Seam Repair	2x2	4/24/12
463	4/24/12	10:40 AM	CG/70	136/137	from 136/167/ETI West 45'	Seam Repair	2x3	4/24/12
465	4/24/12	10:44 AM	CG/70	137/138/ETI	Intersection	Intersection	2x2	4/24/12
466	4/24/12	10:54 AM	CG/70	138/ETI	from 137/138/ETI South 8'	Seam Repair	2x2	4/24/12
467	4/24/12	10:59 AM	CG/70	138/139/ETI	Intersection	Intersection	2x3	4/24/12
468	4/24/12	11:07 AM	CG/70	139/ETI	from 138/139/ETI South 10'	Seam Repair	2x2	4/24/12
469	4/24/12	11:12 AM	CG/70	139/140/ETI	Intersection	Intersection	2x3	4/24/12
470	4/24/12	11:27 AM	CG/70	140/ETI	from 139/140/ETI South 8'	Seam Repair	2x2	4/24/12
471	4/24/12	11:33 AM	CG/70	140/142/ETI	Intersection	Intersection	2x4	4/24/12
472	4/24/12	1:03 PM	CG/70	142/ETI	from 140/142/ETI South 8'	Seam Repair	2x2	4/24/12
473	4/24/12	1:14 PM	CG/70	142/143/ETI	Intersection	Intersection	2x2	4/24/12
474	4/24/12	1:33 PM	CG/70	142/43	from 142/143/ETI West 38'	Seam Repair	2x3	4/24/12
475	4/24/12	1:39 PM	CG/70	143/ETI	from 142/143/ETI South 9'	Seam Repair	2x2	4/24/12
477	4/24/12	2:00 PM	CG/70	145/ETI	from 143/145/ETI South 9'	Seam Repair	2x2	4/24/12
478	4/24/12	4:15 PM	CG/70	145/146/ETI	Intersection / Boot	Intersection	6x20	4/24/12
476	4/24/12	1:43P	CG/70	143/145/ETI	Intersection	Intersection	4x5	4/24/12
509	4/25/12	9:30 AM	CG/70	155	From ETI West 48'	Liner Damage	2x2	4/28/12
510	4/25/12	2:50 PM	CG/70	155/156/ETI	156/158/ETI West 15' to North 3'	Pipe Penetration/Seam Repair	10x15	4/28/12
480	4/25/12	3:26 PM	CG/70	146/147 ETI	Intersection	Intersection	2x2	4/27/12
479	4/25/12	3:43 PM	CG/70	146/ETI	from 145/146/ETI South 9' / DS-78	Seam Repair	2x13	4/24/12
481	4/25/12	3:48 PM	CG/70	147/148/ETI	Intersection	Intersection	2x2	4/27/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
482	4/25/12	3:55 PM	CG/70	148/ETI	from 147/148/ETI South 9'	Seam Repair	2x6	4/27/12
483	4/25/12	3:59 PM	CG/70	148/149/ETI	Intersection	Intersection	2x3	4/27/12
512	4/25/12	4:01 PM	CG/70	158/159	from ETI West 60'	Seam Repair	2x2	4/28/12
484	4/25/12	4:04 PM	CG/70	149/ETI	from 148/149/ETI South 9'	Seam Repair	2x2	4/27/12
511	4/25/12	4:07 PM	CG/70	158/159	DS-68	DS-68	2x8	4/28/12
513	4/25/12	4:18 PM	CG/70	159/169/172	Intersection	Intersection	4x4	4/28/12
485	4/25/12	4:20 PM	CG/70	149/151/ETI	Intersection	Intersection	2x3	4/27/12
486	4/25/12	4:23 PM	CG/70	151/ETI	from 149/151/ETI South 9'	Seam Repair	2x4	4/27/12
514	4/25/12	4:25 PM	CG/70	159/172	DS-73	DS-73	4x6	4/28/12
487	4/25/12	4:28 PM	CG/70	151/152/ETI	from 151/152/ETI North 3'	Seam Repair	2x2	4/27/12
516	4/25/12	4:30 PM	CG/70	169/171/172	Intersection	Intersection	2x2	4/28/12
515	4/25/12	4:36 PM	CG/70	159/171/172	Intersection	Intersection	2x4	4/28/12
488	4/25/12	4:38 PM	CG/70	152/153/ETI	Intersection / Cr Sm	Intersection	2x4	4/27/12
508	4/25/12	4:44 PM	CG/70	149	from 149/151/ETI North 5' to West 2'	Liner Damage	2x12	4/28/12
489	4/26/12	8:20 AM	CG/70	153/155/ETI	Intersection / Cr Sm	Intersection	2x4	4/27/12
490	4/26/12	8:50 AM	CG/70	155/156/ETI	Intersection / Cr Sm	Intersection	2x4	4/27/12
492	4/26/12	9:30 AM	CG/70	156/158/ETI	Intersection	Pipe Penetration/Seam Repair	6x20	4/27/12
491	4/26/12	10:13 AM	CG/70	156/158/ETI	Intersection / Cr Sm	Intersection	2x4	4/27/12
493	4/26/12	10:58 AM	CG/70	158/159/ETI	Intersection / Cr Sm	Intersection	2x4	4/27/12
494	4/26/12	11:11 AM	CG/70	159/165/ETI	Intersection / Cr Sm	Intersection	2x5	4/27/12
495	4/26/12	11:16 AM	CG/70	165/166/ETI	Intersection	Intersection	2x2	4/27/12
496	4/26/12	11:22 AM	CG/70	166/ETI	from 165/166/ETI South 13'	Seam Repair	2x2	4/27/12
531	4/26/12	11:35 AM	CG/70	159/165/166	Intersection	Intersection	2x4	4/28/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
499	4/26/12	12:00 PM	CG/70	168/169/ETI	Intersection / Cr Sm	Intersection	2x5	4/27/12
500	4/26/12	2:05 PM	CG/70	164/168/ETI	Intersection	Intersection	2x7	4/28/12
501	4/26/12	3:20 PM	CG/70	163/164/ETI	Intersection	Intersection	2x2	4/28/12
502	4/26/12	3:24 PM	CG/70	163/ETI	from 163/164/ETI South 6'	Seam Repair	2x2	4/28/12
503	4/26/12	3:44 PM	CG/70	162/163/ETI	Intersection	Intersection	2x2	4/28/12
504	4/26/12	4:00 PM	CG/70	162/ETI	from 162/163/ETI South 6'	Seam Repair	2x2	4/28/12
505	4/26/12	4:05 PM	CG/70	161/162/ETI	DS-79	DS-79	2x8	4/28/12
507	4/26/12	5:05 PM	CG/70	160/161/ETI	Intersection	Intersection	2x2	4/28/12
497	4/26/12	11:25 a	CG/70	166/167/ETI	Intersection	Intersection	2x2	4/27/12
498	4/26/12	11:50 a	CG/70	167/169/ETI	Intersection / Cr Sm	Intersection	2x5	4/27/12
506	4/27/12	8:17 AM	CG/70	161/ETI	from 161/162/ETI South 7'	Pipe Penetration	6x18	4/28/12
534	4/27/12	10:30 AM	CG/70	162/163	DS-70	DS-70	3x10	4/28/12
535	4/27/12	10:30 AM	CG/70	162	from 162/163/ETI West 50' to South 12'	Pipe Penetration	4x12	4/28/12
536	4/27/12	11:10 AM	CG/70	167/169/170	Intersection	Intersection	2x3	4/28/12
537	4/27/12	11:17 AM	CG/70	166/167/170	Intersection	Intersection	2x2	4/28/12
540	4/27/12	1:25 PM	CG/70	169/171	from 169/171/Top East 200'	Seam Repair	2x4	4/28/12
532	4/27/12	1:32 PM	CG/70	168	from 168/169/ETI West 40' to South 10'	Liner Damage	4x12	4/28/12
533	4/27/12	1:42 PM	CG/70	168	from 168/169/ETI West 5' to South 10'	Liner Damage	2x2	4/28/12
539	4/27/12	3:37 PM	CG/70	155/156	from 155/156 East 4'	Seam Repair	2x2	4/28/12
538	4/27/12	3:40 PM	CG/70	156/157/158	Intersection	Intersection	3x3	4/28/12
529	4/27/12	11:10 AM	HM/61	166/167/168	Intersection	Intersection	2x2	4/28/12
526	4/27/12	11:25 AM	HM/61	159/170/171	Intersection	Intersection	2x2	4/28/12
525	4/27/12	11:33 AM	HM/61	170/171	DS-74	DS-74	2x6	4/28/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
524	4/27/12	1:32 PM	HM/61	159/166/171	Intersection	Intersection	4x4	4/28/12
530	4/27/12	1:43 PM	HM/61	155/156	DS-67	DS-67	2x6	4/28/12
527	4/27/12	4:46 PM	HM/61	164/168	from 164/168/ETI West 150'	Seam Repair	2x2	4/28/12
528	4/27/12	4:52 PM	HM/61	164/168	DS-71	DS-71	2x6	4/28/12
523	4/27/12	5:07 PM	HM/61	160/161	from 160/161/ETI West 175'	Seam Repair	2x2	5/2/12
522	4/27/12	5:03p	HM/61	160/161	DS-69	DS-69	2x6	4/28/12
517	5/2/12	8:19 AM	CG/70	164/168	DS-72	DS-72	2x6	5/2/12
518	5/2/12	8:32 AM	CG/70	160/161	from 160/161/ETI West 50'	Seam Repair	3x5	5/2/12
519	5/2/12	9:00 AM	CG/70	160/161	Pipe Penetration	Pipe Penetration/Seam Repair	8x12	5/2/12
520	5/2/12	9:15 AM	HM/61	160/161	from 160/161/ETI West 220'	Seam Repair	2x2	5/2/12
521	5/2/12	9:20 AM	HM/61	160/161	from 160/161/ETI West 230'	Seam Repair	2x2	5/2/12
566	7/6/12	1:52PM	RA/25	180/182	110'S OF AT	Pipe Penetration	6X6	7/7/12
551	7/6/12	10:13AM	RA/25	177/179	DS-82	DS-82	2X3	7/7/12
552	7/6/12	10:19AM	RA/25	174/177	60'S OF AT	Seam Repair	1X1	7/7/12
553	7/6/12	10:26AM	RA/25	173/174	DS-80	DS-80	2X7	7/7/12
549	7/6/12	10:33AM	RA/25	173/174	30'S OF AT	Seam Repair	1X1	7/7/12
550	7/6/12	10:43AM	RA/25	177/179	25'S OF AT	Seam Repair	1X1	7/7/12
546	7/6/12	10:51AM	RA/25	176/177/179	Intersection	Intersection	2X2	7/7/12
545	7/6/12	10:53AM	RA/25	176/177	5' WEST OF 176/177/179	Seam Repair	1X1	7/7/12
544	7/6/12	10:58AM	RA/25	177/176	10' WEST OF 176/177/179	Seam Repair	1X1	7/7/12
543	7/6/12	11:27AM	RA/25	174/176/177	INT. AND EAST	Intersection	2X8	7/7/12
548	7/6/12	11:32AM	RA/25	174/177	5'S OF 174/176/177	Seam Repair	1X1	7/7/12
542	7/6/12	11:36AM	RA/25	174/176	13'S OF AT	Seam Repair	1X1	7/7/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
541	7/6/12	11:40AM	RA/25	174/176	10'S OF AT	Seam Repair	1X2	7/7/12
547	7/6/12	11:48AM	RA/25	176/179	5'S OF AT	Seam Repair	2X3	7/7/12
565	7/6/12	2:03PM	RA/25	180/182	DS-84	DS-84	2X7	7/7/12
567	7/6/12	2:10PM	RA/25	180/181/184	Intersection	Intersection	2X3	7/7/12
568	7/6/12	2:15PM	RA/25	181/182/184	Intersection	Intersection	1X1	7/7/12
589	7/6/12	2:20PM	RA/25	184/185/186	Intersection	Intersection	2X2	7/7/12
590	7/6/12	2:34PM	RA/25	185/186	CENTER OF SEAM	Seam Repair	2X3	7/7/12
588	7/6/12	2:45PM	RA/25	184/186	DS-85	DS-85	2X6	7/7/12
591	7/6/12	2:56PM	RA/25	188/189/190	Intersection	Intersection	3X3	7/7/12
587	7/6/12	3:10PM	RA/25	186/187/188	Intersection	Intersection	1X1	7/7/12
586	7/6/12	3:15PM	RA/25	184/186/187	Intersection	Intersection	2X2	7/7/12
564	7/6/12	3:32PM	RA/25	182/184	200'S OF 182/184/181	Seam Repair	2X3	7/7/12
563	7/6/12	3:40PM	RA/25	182/184	220'S OF 182/184/181	Seam Repair	2X4	7/7/12
562	7/6/12	3:50PM	RA/25	182/184/191	Intersection	Intersection	2X2	7/7/12
581	7/6/12	4:05PM	RA/25	184/191/192	Intersection	Intersection	2X2	7/7/12
582	7/6/12	4:12PM	RA/25	184/187/192	Intersection	Intersection	2X2	7/7/12
585	7/6/12	4:15PM	RA/25	184/187	40'S OF EOS	Seam Repair	1X1	7/7/12
584	7/6/12	4:20PM	RA/25	184/187	45'S OF EOS	Seam Repair	1X1	7/7/12
583	7/6/12	4:36PM	RA/25	187/188/192/193	Intersection	Intersection	3X4	7/7/12
592	7/6/12	4:45PM	RA/25	188/190	DS-86	DS-86	2X6	7/7/12
561	7/6/12	5:48PM	RA/25	182/183/191	Intersection	Intersection	1X1	7/7/12
560	7/6/12	5:55PM	RA/25	182/183/180	Intersection	Intersection	2X3	7/7/12
559	7/6/12	9:15AM	RA/25	173/174/175	Intersection	Intersection	1X1	7/7/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
558	7/6/12	9:30AM	RA/25	174/175/178	Intersection	Intersection	1X1	7/7/12
557	7/6/12	9:32AM	RA/25	178	10'S, 5'E OF W SEAM	Liner Damage	1X1	7/7/12
555	7/6/12	9:36AM	RA/25	177/178/180	Intersection	Intersection	2X3	7/7/12
556	7/6/12	9:37AM	RA/25	174/177/178	DS-81/INT	DS-81/INT	2X9	7/7/12
554	7/6/12	9:56AM	RA/25	174/177	175'S OF 174/176/177	Seam Repair	2X3	7/7/12
608	7/7/12	1:15PM	VR/24	199/200	100'S OF EOS	Seam Repair	2X4	7/7/12
609	7/7/12	1:20PM	VR/24	199/200	110'S OF EOS	Seam Repair	1X1	7/7/12
610	7/7/12	1:25PM	VR/24	199/200	75'S OF EOS	Seam Repair	1X1	7/7/12
578	7/7/12	10:02AM	VR/24	200/201/202	Intersection	Intersection	1X1	7/7/12
580	7/7/12	10:15AM	VR/24	207	CENTER, 70'S OF 206/207	Pipe Penetration	3X18	7/7/12
579	7/7/12	10:20AM	VR/24	207/209	10'S OF EOS	Seam Repair	1X1	7/7/12
593	7/7/12	10:45AM	VR/24	207/209	15'S OF EOS	Seam Repair	1X1	7/7/12
594	7/7/12	10:50AM	VR/24	206/207/209	Intersection	Intersection	1X2	7/7/12
595	7/7/12	10:55AM	VR/24	206/207	DS-94	DS-94	2X6	7/7/12
596	7/7/12	11:00AM	VR/24	206/207	5'E OF 204/206/207	Seam Repair	1X3	7/7/12
597	7/7/12	11:05AM	VR/24	204/206/207	Intersection	Intersection	2X2	7/7/12
611	7/7/12	11:20AM	VR/24	203/205	90'S OF EOS	Seam Repair	2X3	7/7/12
598	7/7/12	11:25AM	VR/24	203/204/206	Intersection	Intersection	2X2	7/7/12
601	7/7/12	11:25AM	VR/24	199/200	DS-90	DS-90	2X6	7/7/12
599	7/7/12	11:30AM	VR/24	202/203/204	Intersection	Intersection	1X1	7/7/12
602	7/7/12	11:30AM	VR/24	199/200	240'S OF EOS	Seam Repair	2X2	7/7/12
600	7/7/12	11:35AM	VR/24	199/200/201	Intersection	Intersection	1X1	7/7/12
603	7/7/12	11:35AM	VR/24	201/203	140'S OF EOS	Seam Repair	2X4	7/7/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
604	7/7/12	11:40AM	VR/24	203/205	170'S OF EOS	Seam Repair	1X1	7/7/12
605	7/7/12	11:45AM	VR/24	203/205	175'S OF EOS	Seam Repair	1X1	7/7/12
606	7/7/12	11:50AM	VR/24	205/206	175'S OF EOS	Seam Repair	1X2	7/7/12
607	7/7/12	11:55AM	VR/24	203/205	DS-93	DS-93	2X6	7/7/12
612	7/7/12	2:20PM	VR/24	205/206	60'S OF EOS	GAS WELL	1X4	7/7/12
613	7/7/12	2:20PM	VR/24	206	60'S OF NORTH END	GAS WELL	1X20	7/7/12
614	7/7/12	2:25PM	VR/24	205/206	25'S OF EOS	Seam Repair	1X4	7/7/12
615	7/7/12	2:30PM	VR/24	192/193/205	Intersection	Intersection	1X1	7/7/12
616	7/7/12	2:35PM	VR/24	191/192/203/205	Intersection	Intersection	2X2	7/7/12
617	7/7/12	2:45PM	VR/24	183/191/202/203	Intersection	Intersection	2X3	7/7/12
618	7/7/12	2:50PM	VR/24	180/183/200/202	Intersection	Intersection	2X4	7/7/12
619	7/7/12	3:00PM	VR/24	180/183	10'N OF EOS	Seam Repair	2X3	7/7/12
620	7/7/12	3:05PM	VR/24	180/183	15'N OF EOS	Seam Repair	2X7	7/7/12
569	7/7/12	8:00AM	VR/24	204/205	2'N OF AT	Seam Repair	1X1	7/7/12
570	7/7/12	8:05AM	VR/24	204	CENTER PANEL/ 2'N OF AT	Liner Damage	1X1	7/7/12
571	7/7/12	8:10AM	VR/24	202/204	AT	Seam Repair	2X3	7/7/12
572	7/7/12	8:15AM	VR/24	205/207	2'N OF AT	Seam Repair	1X1	7/7/12
573	7/7/12	8:50AM	VR/24	205/207	10'N OF AT	Seam Repair	2X6	7/7/12
574	7/7/12	9:30AM	VR/24	201/202	1'N OF AT	Seam Repair	3X8	7/7/12
575	7/7/12	9:31AM	VR/24	202/204	1'N OF AT	Seam Repair	1X1	7/7/12
576	7/7/12	9:38AM	VR/24	201/202	30'N OF AT	Seam Repair	2X4	7/7/12
577	7/7/12	9:59AM	VR/24	202/204	DS-92	DS-92	2X6	7/7/12
621	7/9/12	8:30AM	RA/24	190/208/211	Intersection	Intersection	2X2	7/11/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
639	7/10/12	11:40AM	CG/25	193/174/W.TI	Intersection	Intersection	4X4	7/11/12
661	7/10/12	1:13PM	MM/08	173/W.TI	FR 194/173 TO 402'N	Intersection	2X2	7/11/12
627	7/10/12	1:25PM	MM/08	194/195/W.TI	Intersection	Intersection	2X10	7/11/12
628	7/10/12	1:52PM	MM/08	195/197	DS-89	DS-89	4X2	7/11/12
641	7/10/12	10:20AM	MM/08	195/197	240'S OF 195	Seam Repair	2X2	7/11/12
640	7/10/12	10:40AM	MM/08	198/199	END OF 199	Seam Repair	5X5	7/11/12
626	7/10/12	10:45AM	MM/08	195/197	250'S OF 195	Seam Repair	10X2	7/11/12
638	7/10/12	11:28AM	MM/08	195/197	Intersection	Intersection	2X2	7/11/12
624	7/10/12	9:13AM	MM/08	199/201	END OF 201	Seam Repair	10X4	7/11/12
625	7/10/12	9:35AM	MM/08	197/198/199	Intersection	Intersection	2X2	7/11/12
662	7/10/12	1:40PM	RA/24	185/186/188	Intersection	Intersection	2X2	7/12/12
623	7/10/12	8:55AM	RA/24	193/188/190/208	Intersection	Intersection	3X3	7/11/12
622	7/10/12	9:06AM	RA/24	210/211/190	Intersection	Intersection	3X9	7/11/12
643	7/10/12	1:05PM	SM/25	173/W.TI	FR 194/173 TO 22'N	Intersection	2X2	7/11/12
644	7/10/12	1:07PM	SM/25	173/W.TI	FR 194/173 TO 44'N	Intersection	2X2	7/11/12
645	7/10/12	1:10PM	SM/25	173/W.TI	FR 194/173 TO 66'N	Intersection	2X2	7/11/12
646	7/10/12	1:20PM	SM/25	173/W.TI	FR 194/173 TO 89'N	Intersection	2X2	7/11/12
647	7/10/12	1:25PM	SM/25	173/W.TI	FR 194/173 TO 112'N	Intersection	2X2	7/11/12
648	7/10/12	1:27PM	SM/25	173/W.TI	FR 194/173 TO 135'N	Intersection	2X2	7/11/12
649	7/10/12	1:54PM	SM/25	173/W.TI	FR 194/173 TO 157'N	Intersection	2X2	7/11/12
634	7/10/12	10:55AM	SM/25	179/178/196	Intersection	Intersection	2X2	7/11/12
636	7/10/12	10:55AM	SM/25	179/199/180/200	INT	Intersection	4X2	7/11/12
629	7/10/12	10:57AM	SM/25	196/197/199	Intersection	Intersection	2X2	7/11/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
635	7/10/12	10:57AM	SM/25	179/196/199	Intersection	Intersection	2X2	7/11/12
630	7/10/12	11:00AM	SM/25	195/196/197	Intersection	Intersection	3X2	7/11/12
633	7/10/12	11:15AM	SM/25	175/178/196	Intersection	Intersection	2X2	7/11/12
632	7/10/12	11:20AM	SM/25	175/195/196	Intersection	Intersection	3X3	7/11/12
631	7/10/12	11:30AM	SM/25	173/194/175/195	Intersection	Intersection	2X2	7/11/12
637	7/10/12	11:45AM	SM/25	180/179	DS-83	DS-83	4X2	7/11/12
664	7/11/12	4:12PM	CG/25	212/214/228	Intersection	Intersection	3X3	7/12/12
665	7/11/12	4:16PM	CG/25	214/228/229	Intersection	Intersection	2X2	7/12/12
666	7/11/12	4:25PM	CG/25	214/216/229	CAP INT	Seam Repair	2X9	7/12/12
667	7/11/12	4:39PM	CG/25	216/223/229/230	Intersection	Intersection	4X4	7/12/12
668	7/11/12	4:48PM	CG/25	223/230/231	DS-103/ INT	Seam Repair	2X5	7/12/12
669	7/11/12	4:54PM	CG/25	223/224/231	Intersection	Intersection	3X4	7/12/12
670	7/11/12	5:00PM	CG/25	216/223	DS-101	DS-101	2X8	7/12/12
671	7/11/12	5:09PM	CG/25	214/216	FM 214/216 129 N. 38'	CAP/SR	2X9	7/12/12
689	7/11/12	5:20PM	CG/25	209/212	FM 209/208/212 S. 389'	Seam Repair	3X3	7/12/12
690	7/11/12	5:43PM	CG/25	212/214	FM 212/214/228 N. 111'	SR/CAP	3X12	7/12/12
694	7/11/12	6:00PM	CG/25	214/216	FM 214/216/229 N. 68'	Seam Repair	2X8	7/12/12
672	7/11/12	6:18PM	CG/25	216/222/223	Intersection	Intersection	2X2	7/12/12
673	7/11/12	6:22PM	CG/25	222/223/224	Intersection	Intersection	2X2	7/12/12
674	7/11/12	6:28PM	CG/25	219/222/224	Intersection	Intersection	2X2	7/12/12
675	7/11/12	6:33PM	CG/25	218/219/222	Intersection	Intersection	2X9	7/12/12
698	7/11/12	6:57PM	CG/25	218/222	FM 216/218/222 E. 7'	Seam Repair	2X46	7/12/12
642	7/11/12	9:30AM	CG/25	173/W.TI	FR 194/173 TO 7.5'N	Intersection	2X2	7/11/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
655	7/11/12	10:05AM	RA/24	173/W.TI	DS-88	DS-88	2X7	7/11/12
656	7/11/12	10:14AM	RA/24	173/W.TI	FR 194/173 TO 292'N	Intersection	2X2	7/11/12
657	7/11/12	10:18AM	RA/24	173/W.TI	FR 194/173 TO 315'N	Intersection	2X2	7/11/12
658	7/11/12	10:21AM	RA/24	173/W.TI	FR 194/173 TO 338'N	Intersection	2X2	7/11/12
659	7/11/12	10:28AM	RA/24	173/W.TI	FR 194/173 TO 359'N	Intersection	2X2	7/11/12
660	7/11/12	10:38AM	RA/24	173/W.TI	FR 194/173 TO 382'N	Intersection	2X2	7/11/12
663	7/11/12	10:46AM	RA/24	173/W.TI	DS-102	DS-102	7X2	7/12/12
676	7/11/12	4:10PM	RA/24	208/211/212	INT	Intersection	3X3	7/12/12
677	7/11/12	4:16PM	RA/24	193/208	DS-99	DS-99	2X7	7/12/12
679	7/11/12	4:25PM	RA/24	193/208/209	Intersection	Intersection	2X2	7/12/12
678	7/11/12	4:34PM	RA/24	208/209/212	Intersection	Intersection	2X5	7/12/12
680	7/11/12	4:50PM	RA/24	192	FM 192/193 GW-51/ N. 80'	BOOT	6X6	7/12/12
681	7/11/12	5:10PM	RA/24	192/193	DS-87	DS-87	2X9	7/12/12
682	7/11/12	5:17PM	RA/24	193	FM 193 S. 170'	Seam Repair	2X3	7/12/12
683	7/11/12	5:24PM	RA/24	193/209	DS-95	DS-95	2X10	7/12/12
684	7/11/12	5:50PM	RA/24	209/212	DS-96	DS-96	2X8	7/12/12
685	7/11/12	5:55PM	RA/24	209/212	FM 209/208/212 S. 54'	Seam Repair	2X8	7/12/12
686	7/11/12	6:06PM	RA/24	209/212	FM 209/208/212 S. 72'	Seam Repair	2X5	7/12/12
697	7/11/12	6:20PM	RA/24	212/214	DS-97	DS-97	2X8	7/12/12
703	7/11/12	6:25PM	RA/24	214/215	FM 214/215/216 N. 233'	Seam Repair	2X2	7/12/12
702	7/11/12	6:30PM	RA/24	214/215	FM 214/215/216 N. 183'	Seam Repair	2X2	7/12/12
691	7/11/12	6:36PM	RA/24	212/214	FM 211/212/214 S. 151'	Seam Repair	2X5	7/12/12
700	7/11/12	6:56PM	RA/24	214/215	FM 214/215/216 N. 69' DS-98/FAILED FIELD TEST	Seam Repair	2X7	7/12/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
650	7/11/12	9:48AM	RA/24	173/W.TI	FR 194/173 TO 179'N	Intersection	2X2	7/11/12
651	7/11/12	9:48AM	RA/24	173/W.TI	FR 194/173 TO 202'N	Intersection	2X2	7/11/12
652	7/11/12	9:50AM	RA/24	173/W.TI	FR 194/173 TO 224'N	Intersection	2X2	7/11/12
653	7/11/12	9:52AM	RA/24	173/W.TI	FR 194/173 TO 247'N	Intersection	2X2	7/11/12
654	7/11/12	9:57AM	RA/24	173/W.TI	FR 194/173 TO 270'N	Intersection	2X2	7/11/12
722	7/12/12	1:35PM	CG/25	230/231	230/231 E.TI TO SOUTH	Panel Repair	5X12	7/13/12
699	7/12/12	10:04AM	CG/25	214/215	FM 214/215/216 N. 18'	Seam Repair	2X2	7/12/12
692	7/12/12	10:35AM	CG/25	212/214	FM 211/212/214 S. 270'	Seam Repair	2X2	7/12/12
693	7/12/12	10:37AM	CG/25	212/214	FM 211/212/214 S. 284'	Seam Repair	2X8	7/12/12
718	7/12/12	10:50AM	CG/25	206/209	FM 206/207/209 N.	Seam Repair	2X2	7/13/12
717	7/12/12	10:55AM	CG/25	214/216	DS-104	DS-104	2X7	7/13/12
711	7/12/12	11:55AM	CG/25	194/195	FM 194/195 W.TI N. 64'	Seam Repair	2X2	7/13/12
721	7/12/12	2:03PM	CG/25	224/227	FM 224/227 E.TI TO SOUTH	Panel Repair	6X21	7/13/12
714	7/12/12	2:17PM	CG/25	221/226/227	Intersection	Intersection	2X2	7/13/12
723	7/12/12	3:01PM	CG/25	227/E.TI	DS-105	DS-105	2X7	7/13/12
715	7/12/12	3:21PM	CG/25	221/225/226	Intersection	Intersection	2X2	7/13/12
728	7/12/12	3:38PM	CG/25	221/225/E.TI	Intersection	Intersection	3X4	7/13/12
729	7/12/12	4:00PM	CG/25	219/221	Intersection	Intersection	3X5	7/13/12
727	7/12/12	4:12PM	CG/25	217/218/E.TI	Intersection	Intersection	2X3	7/13/12
695	7/12/12	8:30AM	CG/25	216/218/215/216	INT/CAP/ES	Intersection	2X46	7/12/12
696	7/12/12	8:46AM	CG/25	215/218	FM 214/216/218 S. 16'	Seam Repair	2X3	7/12/12
706	7/12/12	8:48AM	CG/25	219/224	Intersection	Intersection	3X3	7/12/12
705	7/12/12	8:53AM	CG/25	219/221/224	Intersection	Intersection	2X2	7/12/12

Repair Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDPE

Repair Number	Date	Time	Oper./Mach.	Seam or Panel	Repair Location	Description (Repair Type)	Size of Repair	Date Vacuum Tested
704	7/12/12	8:56AM	CG/25	221/224/227	Intersection	Intersection	2X5	7/12/12
707	7/12/12	9:05AM	CG/25	219/221	DS-100	DS-100	2X8	7/12/12
708	7/12/12	9:15AM	CG/25	218/219	FM 218/219 E.TI S. 155'	Seam Repair	2X5	7/12/12
716	7/12/12	9:47AM	CG/25	214/215	DS-98	DS-98	2X7	7/13/12
720	7/12/12	1:00pm	RA/24	211/212/214	Intersection	Intersection	2X3	7/13/12
719	7/12/12	10:52AM	RA/24	190/210/E.TI	Intersection	Intersection	2X2	7/13/12
724	7/12/12	3:40PM	RA/24	215/ETI	DS-106	DS-106	2X7	7/13/12
726	7/12/12	3:57PM	RA/24	215/218	FM 215/217/218 N. 7'	Seam Repair	2X3	7/13/12
725	7/12/12	4:02PM	RA/24	215/217/218	Intersection	Intersection	2X6	7/13/12
709	7/12/12	4:15PM	RA/24	218/219	FM 218/219 E.TI S. 65'	Seam Repair	2X4	7/13/12
710	7/12/12	4:18PM	RA/24	218/219	FM 218/219 E.TI S. 54'	Seam Repair	2X7	7/13/12
730	7/12/12	4:30PM	RA/24	215/217/E.TI	Intersection	Intersection	3X5	7/13/12
701	7/12/12	8:14AM	RA/24	214/216	FM 214/215/216 N. 82'	Seam Repair	2X2	7/12/12
688	7/12/12	8:18AM	RA/24	209/212	FM 209/208/212 S. 135'	Seam Repair	2X3	7/12/12
712	7/12/12	8:21AM	RA/24	193/206/209	Intersection	Intersection	3X3	7/13/12
713	7/12/12	8:25AM	RA/24	206/209	FM 193/206/209 S. 18'	Seam Repair	2X3	7/13/12
687	7/12/12	8:30AM	RA/24	209/212	FM 209/208/212 S. 97'	Seam Repair	2X3	7/12/12
733	7/13/12	10:30AM	CG/25	228/229	SM AT ANCHOR TRENCH	Seam Repair	2X3	7/13/12
731	7/13/12	9:30AM	CG/25	212/P-WEST	SM AT ANCHOR TRENCH	Seam Repair	2X3	7/13/12
732	7/13/12	9:35AM	CG/25	207/P-EAST	SM AT ANCHOR TRENCH	Seam Repair	2X3	7/13/12

Appendix I

Geomembrane Destructive Samples

Destructive Sample Summary
Third Party Laboratory Destructive Sample Test Results

Destructive Sample Summary

Destructive Sample Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDP

Destructive Sample Number	Seam Number	Date Seamed	Welder ID	Machine Number	Sample Location	Field Test Results (P/F)	Third Party Results (P/F)	Comments
DS-1	1/2	3/29/12	FG	42	from 1/2/AT West 54'	P	P	
DS-2	3/4	3/29/12	CG	40	from 3/4/AT West 41'	P	P	
DS-3	5/6	3/29/12	FG	42	from 5/6/AT West 180'	P	P	
DS-4	6/7	3/29/12	CG	40	from 6/7/AT West 270'	P	P	
DS-5	8/9	3/30/12	FG	42	from 8/9/AT West 265'	P	P	
DS-6	9/10	3/30/12	CG	40	from 9/10/AT West 259'	P	P	
DS-7	12/13	3/30/12	FG	42	from 12/13/AT West 67'	P	P	
DS-8	13/14	3/30/12	CG	40	from 13/14/AT West 137'	P	P	
DS-9	16/18	3/30/12	FG	42	from 16/18 at 140' West	P	P	
DS-10	17/19	3/30/12	CG	40	from 17/18/19 West 29'	P	P	
DS-11	20/21	3/30/12	FG	42	from 20/21/22 South 9'	P	P	
DS-12	23/25	3/30/12	CG	40	from 23/25/AT West 90'	P	P	
DS-13	25/26	3/30/12	FG	42	from 25/26/AT West 160'	P	P	
DS-14	26/28	3/30/12	CG	40	from 26/28/AT West 18'	P	P	
DS-15	29/30	3/30/12	CG	40	from 29/30/AT West 253'	P	P	
DS-16	34/35	3/31/12	FG	42	from 33/34/35 East 4'	P	P	
DS-17	35/37	3/31/12	CG	40	from 35/37/AT West 100'	P	P	
DS-18	39/40	3/31/12	FG	42	from 39/40/AT West 140'	P	P	
DS-19	38/39	3/31/12	CG	40	from 38/39 at 230' West	P	P	
DS-20	23/WTI	4/2/12	FG	42	from 23/24/WTI South 7'	P	P	

Destructive Sample Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDP

Destructive Sample Number	Seam Number	Date Seamed	Welder ID	Machine Number	Sample Location	Field Test Results (P/F)	Third Party Results (P/F)	Comments
DS-21	3/R-20	4/3/12	KM	13	from R-21/3/WTI East 44'	P	P	
DS-22	41/42	4/4/12	FG	42	from 41/42/43 West 3'	P	P	
DS-23	43/44	4/4/12	CG	40	from 43/44/AT West 60'	P	P	
DS-24	47/48	4/4/12	FG	42	from 47/48/AT West 110'	P	P	
DS-25	49/50	4/4/12	FG	42	from 49/50/AT West 210'	P	P	
DS-26	50/51	4/4/12	CG	40	from 50/51/52 West 5'	P	P	
DS-27	54/55	4/4/12	FG	42	from 54/55/56 East 6'	P	P	
DS-28	53/54	4/4/12	CG	40	103' West from crest (EDS)	P	P	
DS-29	59/61	4/5/12	FG	42	from 59/61 crest West 68'	P	P	
DS-30	58/59	4/5/12	CG	40	from 59/59 crest West 31'	P	P	
DS-31	62/71	4/5/12	CG	40	from 62/63/71 SouthEast 5'	P	P	
DS-32	70/71	4/5/12	FG	42	from 70/71/72 South 10'	P	P	
DS-33	77/78	4/6/12	FG	42	from 77/78/79 North 5'	P	P	
DS-34	76/77	4/6/12	CG	40	from 76/77/NTI South 67'	P	P	
DS-35	88/89	4/6/12	FG	42	from 82/88/89 North 107'	P	P	
DS-36	80/82	4/6/12	CG	40	from 54/80/82 North 45'	P	P	
DS-37	82/89	4/6/12	CG	40	from 82/88/89 SouthEast 26'	P	P	
DS-38	89/90	4/6/12	HM	13	from 89/90/NTI South 170'	P	P	
DS-39	93/95	4/7/12	FG	42	from 93/95/AT North 24'	P	P	
DS-40	96/97	4/7/12	FG	42	from 96/97/98 North 132'	P	P	

Destructive Sample Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

Project Number: 3804-352-17-00

QA/QC Monitor: Wolfe / Arthur

Material ID: 40 mil. LLDP

Destructive Sample Number	Seam Number	Date Seamed	Welder ID	Machine Number	Sample Location	Field Test Results (P/F)	Third Party Results (P/F)	Comments
DS-41	95/96	1/7/12	HM	13	from 95/96/AT North 100'	P	P	
DS-42	102/103	4/9/12	FG	42	from 101/102/103 South 92'	P	P	
DS-43	100/101	4/9/12	CG	13	from 100/101/102 North 4'	P	P	
DS-44	105/106	4/9/12	CG	13	from 105/106/AT North 16'	P	P	
DS-45	106/107	4/9/12	FG	42	from 106/107/108/115 North 107'	P	P	
DS-46	114/116	4/9/12	CG	13	from 114/115/116 East 84'	P	P	
DS-47	109/110	4/9/12	FG	42	from 108/109/110 North 5'	P	P	
DS-48	119/120	4/9/12	CG	13	from 118/119/120 West 28'	P	P	
DS-49	117/118	4/9/12	FG	42	from 117/118/119	P	P	
DS-50	120/121	4/9/12	FG	42	from 120/121/AT East 185'	P	P	
DS-51	60/WTI	4/10/12	FG	42	from 58/60/WTI North 5'	P	P	
DS-52	127/128	4/11/12	FG	42	from 127/128/129 North 5'	P	P	
DS-53	125/126	4/11/12	C	13	from 125/126/AT East 160'	P	P	
DS-54	134/135	4/11/12	FG	42	from 133/134/135 South 7'	P	P	
DS-55	130/131	4/11/12	CG	13	from 130/131/132 East 5'	P	P	
DS-56	132/133	4/11/12	CG	13	from 132/133/AT East 25'	P	P	
DS-57	135/136	4/11/12	FG	42	from 135/136/AT East 70'	P	P	
DS-58	138/139	4/11/12	CG	13	from 138/139/AT East 100'	P	P	
DS-59	138/139	4/11/12	FG	42	from 138/139/AT East 215'	P	P	
DS-60	140/142	4/12/12	HM	13	from 140/141/142 East 6'	P	P	

Destructive Sample Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDP

Destructive Sample Number	Seam Number	Date Seamed	Welder ID	Machine Number	Sample Location	Field Test Results (P/F)	Third Party Results (P/F)	Comments
DS-61	142/144	4/12/12	HM	13	from 142/144/AT East 30'	P	P	
DS-62	145/146	4/12/12	HM	13	from 145/146/AT East 100'	P	P	
DS-63	50/93	4/13/12	HM	61	from 49/50/93 North 7'	P	P	
DS-64	149/151	4/14/12	FG	42	from 149/150/151 East 65'	P	P	
DS-65	153/154	4/14/12	CG	43	from 152/153/154 South 7'	P	P	
DS-66	152/153	4/14/12	HM	1	from 152/153/154 East 100'	P	P	
DS-67	155/156	4/14/12	FG	42	from 155/156/AT East 215'	P	P	
DS-68	158/159	4/14/12	HM	1	from 158/159/ETI West 240'	P	P	
DS-69	160/161	4/14/12	FG	42	from 160/161/ETI West 150'	P	P	
DS-70	162/163	4/16/12	FG	42	from 162/163/AT West 50'	P	P	
DS-71	164/168	4/16/12	CG	55	from 164/168/TI West 140'	P	P	
DS-72	164/168	4/16/12	FG	42	from 164/168/TI West 290'	P	P	
DS-73	159/172	4/16/12	CG	55	from 159/169/172 East 13'	P	P	
DS-74	170/171	4/16/12	FG	42	from 169/170/171 North 7'	P	P	
DS-75	59/R-151	4/17/12	CG	70	fm 58/59/60 N 10' E side repair	P	P	
DS-76	90/NTI	4/17/12	FG	42	from 89/90/NTI East 10'	P	P	
DS-77	112/ETI	4/17/12	FG	42	from 112/113/ETI North 9'	P	P	
DS-78	146/ETI	4/18/12	FG	42	from 146/147/ETI North 10'	P	P	
DS-79	162/ETI	4/25/12	CG	42	from 161/162 ETI North 6'	P	P	
DS-80	173/174	7/5/12	VM	47	173/174. 75'S OF AT	P	P	

Destructive Sample Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDP

Destructive Sample Number	Seam Number	Date Seamed	Welder ID	Machine Number	Sample Location	Field Test Results (P/F)	Third Party Results (P/F)	Comments
DS-81	174/178	7/5/12	AQ	43	10'S OF 174/177/178	P	P	
DS-82	177/179	7/5/12	VR	52	50'S OF 176/177/179	P	P	
DS-83	179/180	7/5/12	VR	52	400'S OF AT	P	P	
DS-84	180/182	7/5/12	VM	43	150'S OF 180/181/182	P	P	
DS-85	184/186	7/5/12	VM	43	30'S OF 184/185/186	P	P	
DS-86	188/190	7/5/12	VM	43	50'S OF 188/189/190	P	P	
DS-87	192/193	7/6/12	VR	52	100'S OF 187/188/192/193	P	P	
DS-88	173/WTI	7/6/12	SR	43	250'S OF 174/AT	P	P	
DS-89	195/197	7/6/12	HP	47	50'S OF 195/196/197	P	P	
DS-90	199/200	7/6/12	HP	47	230'S OF 199/200/?/?	P	P	
DS-91	201/202	7/6/12	SR	43	75'S OF 200/201/202	P	P	
DS-92	202/204	7/6/12	HP	47	25'S OF 202/203/204	P	P	
DS-93	203/205	7/6/12	VR	52	100'S OF 203/205/191/192	P	P	
DS-94	206/207	7/6/12	SR	43	CENTER POINT OF SEAM	P	P	
DS-95	193/209	7/6/12	HP	47	100'S OF 193/208/209	P	P	
DS-96	209/212	7/6/12	SR	43	25'S OF 208/209/212	P	P	
DS-97	212/214	7/6/12	RA	24	50'N OF 211/212/214	P	P	
DS-98	214/215	7/12/12	RA	24	FM 214/215 210 N.98'	P	P	
DS-99	193/208	7/6/12	HP	47	50'S OF 188/190/193/208	P	P	
DS-100	219/221	7/9/12	VR	52	110'S OF BOS	P	P	

Destructive Sample Summary

Weaver Boos Consultants

Project Name: Partial Closure Phase 1 (J.E.D.)

QA/QC Monitor: Wolfe / Arthur

Project Number: 3804-352-17-00

Material ID: 40 mil. LLDP

Destructive Sample Number	Seam Number	Date Seamed	Welder ID	Machine Number	Sample Location	Field Test Results (P/F)	Third Party Results (P/F)	Comments
DS-101	216/223	7/7/12	VR	52	50'S OF BOS	P	P	
DS-102	173/WTI	7/10/12	MM	8	FM 173/W.T S.120'	P	P	
DS-103	230/231	7/10/12	FG	47	FM 223/230 231 S.3'	P	P	
DS-104	214/216	7/11/12	CG	25	FM 214/215 216 S.52'	P	P	
DS-105	227/ETI	7/12/12	CG	25	FM 216/227 E.T. S 25'	P	P	
DS-106	215/ETI	7/12/12	RA	24	FM 214/215 E.T. S: 36'	P	P	

Third Party Laboratory Destructive Sample Test Results

DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8027

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-1 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	90	94	88	89	90	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	100	99	102	101	101	**101**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	105	106	101	103	103	**104**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-2 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	89	93	91	93	88	**91**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	86	92	88	80	84	**86**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	111	105	105	111	106	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8027

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-3 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	87	88	84	92	85	**87**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	100	98	98	102	97	**99**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	104	105	103	104	103	**104**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-4 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	100	101	105	102	100	**102**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	102	100	102	100	100	**101**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	107	107	105	107	108	**107**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8027

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-5 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	95	97	97	95	103	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	87	95	95	88	97	**92**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	109	114	108	108	110	**110**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-6 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	77	97	98	88	79	**88**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	90	87	94	85	86	**88**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	102	103	101	104	103	**103**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8027

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-7 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	96	101	93	98	97	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	94	91	90	89	96	**92**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	110	114	108	111	116	**112**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-8 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	85	86	77	80	85	**83**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	76	90	86	79	75	**81**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	103	112	104	108	110	**107**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-9 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	91	88	85	88	84	**87**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	87	96	95	94	94	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	106	107	101	104	101	**104**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-10 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	99	96	95	97	93	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	100	101	84	101	90	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	102	101	102	105	109	**104**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-11 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	89	91	92	94	94	**92**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	92	93	92	94	93	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	93	92	95	101	94	**95**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-12 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	97	94	93	98	95	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	88	76	78	80	81	**81**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	103	98	97	103	99	**100**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

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SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8027

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-13 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	89	94	86	87	86	**88**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	94	83	97	96	96	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	108	110	107	107	109	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-14 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	102	99	100	96	100	**99**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	89	89	87	81	84	**86**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	108	112	108	110	108	**109**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8027

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-15 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	80	91	90	85	74	**84**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	95	87	95	86	91	**91**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	107	105	106	104	113	**107**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-16 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	92	93	86	96	89	**91**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	86	91	81	88	89	**87**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	111	112	109	109	112	**111**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8027

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-17 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	88	96	93	99	93	**94**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	86	82	87	88	87	**86**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	111	110	107	105	106	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-18 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	99	94	75	89	97	**91**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	85	85	86	82	81	**84**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	108	111	106	108	107	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8027

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-19 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	94	90	89	93	87	**91**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	88	86	86	84	84	**86**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	103	106	101	101	104	**103**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-20 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	93	97	93	93	92	**94**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	97	98	96	98	97	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	97	98	97	97	96	**97**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8027

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-21 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	97	95	89	99	95	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	97	93	101	96	96	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	101	105	102	97	103	**102**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8058

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-22 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	87	89	86	90	90	**88**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	101	88	90	91	103	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	110	109	111	111	109	**110**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-23 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	86	89	85	85	84	**86**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	92	95	94	96	91	**94**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	104	109	105	105	105	**106**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8058

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-24 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	88	102	90	89	105	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	100	89	101	98	87	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	105	108	108	111	113	**109**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-25 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	93	91	93	92	96	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	94	95	94	98	95	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	100	97	94	102	105	**100**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8058

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-26 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	99	106	101	96	108	**102**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	87	95	94	101	98	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	120	118	115	117	114	**117**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-27 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	90	88	89	90	91	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	99	98	98	100	97	**98**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	111	112	111	112	112	**112**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8058

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-28 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	102	97	104	98	103	**101**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	88	89	93	94	88	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	110	109	109	108	112	**110**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-29 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	87	88	86	92	90	**89**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	88	92	89	95	94	**92**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	115	111	110	114	111	**112**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8058

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-30 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	94	97	96	98	102	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	93	89	91	95	90	**92**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	109	113	113	111	107	**111**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-31 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	95	95	96	93	94	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	100	99	94	94	99	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	102	100	100	99	98	**100**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

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SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8058

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-32 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	94	87	85	84	84	**87**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	95	91	95	95	96	**94**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	112	113	112	112	110	**112**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-33 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	91	96	99	92	97	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	95	97	101	97	98	**98**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	115	111	112	110	112	**112**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

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SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8058

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-34 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	99	96	95	95	100	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	90	85	89	88	94	**89**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	115	112	111	111	111	**112**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-35 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	88	96	89	96	93	**92**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	96	96	94	97	101	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	112	109	106	108	105	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8058

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-36 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	89	87	87	93	88	**89**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	96	94	91	99	91	**94**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	114	110	108	112	107	**110**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-37 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	88	88	86	92	86	**88**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	92	91	85	92	87	**89**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	97	97	93	94	94	**95**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

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SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8058

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-38 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	101	92	96	88	100	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	89	77	99	101	103	**94**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	117	115	111	113	110	**113**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-39 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	85	87	90	90	92	**89**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	86	91	89	91	94	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	110	109	106	108	105	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8058

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-40 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	83	83	80	93	84	**85**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	98	92	98	100	99	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	123	120	115	120	114	**118**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-41 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	90	89	91	88	94	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	89	92	84	91	93	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	114	111	109	109	109	**110**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8080

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-42 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	81	79	80	84	83	**81**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	96	97	94	94	97	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	105	102	102	106	109	**105**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-43 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	105	108	97	104	95	**102**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	97	99	101	97	103	**99**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	114	112	110	111	110	**111**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8080

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-44 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	84	82	82	81	85	**83**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	102	91	93	105	93	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	112	110	108	108	107	**109**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-45 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	89	81	86	81	87	**85**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	107	105	102	105	101	**104**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	109	108	108	108	108	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8080

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-46 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	101	101	99	96	98	**99**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	102	99	98	103	100	**100**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	108	107	104	105	106	**106**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-47 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	77	81	80	81	87	**81**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	85	87	87	95	92	**89**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	116	111	111	109	111	**112**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8080

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-48 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	87	93	97	89	100	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	92	91	97	100	99	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	110	108	106	106	107	**107**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-49 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	90	92	88	92	87	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	85	80	87	87	89	**86**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	112	109	108	106	107	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8080

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-50 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	92	96	94	97	96	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	88	95	97	101	97	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	112	108	107	109	106	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8058

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-51 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	108	105	103	102	99	**103**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	99	103	99	100	99	**100**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	117	112	111	110	108	**112**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-52 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	101	106	106	104	97	**103**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	107	118	111	110	104	**110**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	117	118	123	115	127	**120**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-53 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	83	100	91	94	80	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	93	93	94	90	93	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	105	107	106	109	109	**107**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

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SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-54 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	95	96	90	92	91	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	101	100	93	98	95	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	98	99	98	96	97	**98**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-55 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	89	84	95	106	96	**94**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	97	100	91	94	96	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	113	111	111	111	113	**112**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

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SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-56 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	99	109	108	103	108	**105**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	102	103	104	105	108	**104**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	113	112	108	115	108	**111**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-57 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	90	94	100	98	92	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	85	92	96	97	88	**92**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	111	113	109	112	115	**112**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-58 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	96	104	97	100	96	**99**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	100	106	103	97	99	**101**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	107	104	109	108	107	**107**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-59 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	101	107	106	103	102	**104**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	102	106	105	101	103	**103**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	105	106	107	108	107	**107**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-60 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	101	99	100	102	98	**100**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	95	96	100	101	97	**98**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	99	97	100	100	102	**100**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-61 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	95	80	96	93	89	**91**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	100	96	97	104	99	**99**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	105	101	104	103	105	**104**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-62 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	93	95	96	89	94	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	91	89	90	91	87	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	107	106	109	111	106	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-64 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	81	79	84	86	86	**83**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	83	91	94	97	94	**92**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	93	97	92	93	94	**94**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-65 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	81	92	89	92	88	**88**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	94	91	88	91	91	**91**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	97	93	98	94	95	**95**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-66 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	90	96	90	87	90	**91**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	97	100	97	92	98	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	110	109	109	109	114	**110**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-67 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	84	86	86	87	88	**86**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	87	83	88	86	89	**87**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	111	112	112	112	114	**112**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-68 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	95	97	91	90	87	**92**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	99	97	101	102	98	**99**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	113	110	108	115	111	**111**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-69 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	90	88	87	90	87	**88**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	85	87	84	88	88	**86**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	110	111	113	115	109	**112**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-70 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	96	89	96	87	84	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	90	95	92	97	95	**94**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	100	107	108	106	106	**105**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-71 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	95	87	84	91	90	**89**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	99	96	99	99	98	**98**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	107	108	109	108	108	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-72 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	89	84	88	89	89	**88**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	90	90	99	92	93	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	102	107	103	104	101	**103**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-73 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	89	97	85	98	90	**92**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	94	87	87	90	90	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	94	94	96	95	98	**95**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-76 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	101	104	92	92	89	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	98	95	96	103	92	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	97	98	99	96	94	**97**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-77 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	97	93	94	94	93	**94**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	97	95	98	96	95	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	99	100	96	99	101	**99**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-78 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	94	73	78	94	89	**86**
Peel Incursion (%)	<5	25	<5	<5	<5	
Peel Locus Of Failure Code	SE	AD-BRK	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	93	93	94	93	91	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	96	107	93	94	93	**97**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-79 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	102	97	100	100	103	**100**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	101	97	98	98	99	**99**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	100	100	104	101	107	**102**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-74 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	86	98	89	96	89	**92**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	88	107	95	101	86	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	103	98	103	97	107	**102**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS - SINGLE TRACK
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40 mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8167

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-75 | Weld: Single Extrusion						
Side: Peel						**Peel**
Peel Strength (ppi)	97	107	91	94	95	**97**
Peel Incursion (%)	<5%	<5%	<5%	<5%	<5%	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	106	114	106	112	98	**107**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS - SINGLE TRACK

TRI Client: Weaver Boos Consultants

Project: J.E.D. Partial Closure Phase I

Material: 40 mil. LLDPE

SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)

TRI Log#: 8080

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-63 | Weld: Single Extrusion						
Side: Peel						**Peel**
Peel Strength (ppi)	66	93	108	93	96	**91**
Peel Incursion (%)	<5%	<5%	<5%	<5%	<5%	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	95	97	94	95	95	**95**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8731

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-80 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	98	97	100	91	93	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	99	99	100	96	100	**99**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	109	107	111	108	109	**109**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-81 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	91	100	99	99	91	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	69	86	92	88	88	**85**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	110	112	112	109	109	**110**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8731

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-82 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	98	93	96	98	89	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	101	95	83	97	95	**94**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	103	105	103	103	103	**103**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-83 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	95	89	103	96	99	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	90	89	96	94	94	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	110	108	109	111	112	**110**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8731

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-84 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	98	96	99	100	97	**98**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	100	89	94	84	100	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	107	107	106	111	110	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-85 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	99	97	98	95	99	**98**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	100	97	102	102	92	**99**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	108	106	105	111	105	**107**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8731

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-86 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	99	97	101	103	83	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	100	97	102	100	97	**99**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	118	119	120	125	120	**120**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-87 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	95	97	96	95	96	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	86	91	87	87	89	**88**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	110	109	112	109	111	**110**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
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Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8731

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-89 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	94	96	93	91	92	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	97	104	100	99	97	**99**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	110	108	112	113	109	**110**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-90 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	93	93	97	93	94	**94**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	99	98	97	99	93	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	106	107	108	112	109	**108**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8731

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-91 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	98	105	100	88	99	**98**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	89	96	85	94	85	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	111	111	111	116	115	**113**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-92 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	98	96	102	94	96	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	95	97	94	92	97	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	110	110	110	114	112	**111**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8754

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-88 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	95	98	98	97	98	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	91	94	92	96	91	**93**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	101	101	103	98	107	**102**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-93 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	92	92	95	100	99	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	102	94	92	95	94	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	113	110	109	114	110	**111**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8754

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-94 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	91	92	85	92	92	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	89	90	85	96	91	**90**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	91	92	93	91	90	**91**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-95 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	93	97	94	78	94	**91**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	83	103	95	97	100	**96**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	104	106	108	106	107	**106**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8754

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-96 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	91	94	97	91	100	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	95	96	96	100	90	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	114	114	120	116	116	**116**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-97 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	101	101	93	96	94	**97**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	95	97	95	97	93	**95**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	122	122	116	119	117	**119**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8754

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-99 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	97	93	75	94	88	**89**
Peel Incursion (%)	<5	<5	100	<5	<5	
Peel Locus Of Failure Code	SE	SE	AD	SE	SE	
Peel NSF Failure Code	FTB	FTB	NON-FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	103	100	101	101	100	**101**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	116	112	113	115	119	**115**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-100 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	110	112	105	110	112	**110**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	103	109	110	108	111	**108**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	125	129	125	126	130	**127**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS - SINGLE TRACK
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 40 mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8808

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-98 | Weld: Single Extrusion						
Side: Peel						**Peel**
Peel Strength (ppi)	72	87	97	86	74	**83**
Peel Incursion (%)	<5%	<5%	<5%	<5%	<5%	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	108	110	99	111	111	**108**
Shear Elongation @ Break (%)	>50	>50	26	>50	28	
Sample ID: DS-102 | Weld: Single Extrusion						
Side: Peel						**Peel**
Peel Strength (ppi)	89	92	90	91	82	**89**
Peel Incursion (%)	<5%	<5%	<5%	<5%	<5%	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	92	93	93	93	96	**93**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-104 | Weld: Single Extrusion						
Side: Peel						**Peel**
Peel Strength (ppi)	89	86	78	86	83	**84**
Peel Incursion (%)	<5%	<5%	<5%	<5%	<5%	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	121	118	116	116	119	**118**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS - SINGLE TRACK

TRI Client: Weaver Boos Consultants

Project: J.E.D. Partial Closure Phase I

Material: 40 LLDPE

SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)

TRI Log#: 8808

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-106 | Weld: Single Extrusion						
Side: Peel						**Peel**
Peel Strength (ppi)	87	92	94	92	91	**91**
Peel Incursion (%)	<5%	<5%	<5%	<5%	<5%	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	103	97	98	99	100	**99**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 60mil. HDPE/40mil. LLDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54)
TRI Log #: 8809

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-101 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	98	99	95	101	96	**98**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	102	102	101	98	105	**102**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	107	106	106	104	110	**107**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	
Sample ID: DS-105 | Weld: Single Extrusion						
Side: Peel						**Peel A**
Peel Strength (ppi)	88	86	87	85	94	**88**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	83	89	83	86	86	**85**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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DESTRUCTIVE SEAM QUALITY ASSURANCE TEST RESULTS
TRI Client: Weaver Boos Consultants
Project: J.E.D. Partial Closure Phase I

Material: 60mil. HDPE
SAME DAY Peel and Shear (ASTM D 6392/GRI GM19/D 4437/NSF 54/882 mod.)
TRI Log#: 8810

	TEST REPLICATE NUMBER					
PARAMETER	1	2	3	4	5	MEAN
Sample ID: DS-103 | Weld: Heat Fusion						
Side: A						**Peel A**
Peel Strength (ppi)	127	142	138	131	140	**136**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Side: B						**Peel B**
Peel Strength (ppi)	137	147	145	140	130	**140**
Peel Incursion (%)	<5	<5	<5	<5	<5	
Peel Locus Of Failure Code	SE	SE	SE	SE	SE	
Peel NSF Failure Code	FTB	FTB	FTB	FTB	FTB	
Shear						**Shear**
Shear Strength (ppi)	153	159	154	159	155	**156**
Shear Elongation @ Break (%)	>50	>50	>50	>50	>50	

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Appendix J

Sod Documentation

No. A – 224-2012-022

ADAM H. PUTNAM
COMMISSIONER

Florida Department of Agriculture and Consumer Services
Division of Plant Industry

TEMPORARY CERTIFICATE OF INSPECTION

Section 581.031(14)(15), F.S./Rule 5B-2.010, F.A.C.

P.O. Box 147100/1911 SW 34th St., Gainesville, Florida 32614-7100
Phone: (352) 372-3505/FAX: (352) 372-2301

Winter Haven Florida Expires 30 days from **5/10/12**
Date

This is to certify that the plant material located at: **A1 Florida Sod, Inc, 450 Deen Still Rd, Davenport, FL 33897**

Adams Ranch Field, Osceola County, **Florida, has been visually**

inspected for plant pests and meets the minimum requirements of Chapter 581, Florida Statutes.

Additional Declarations: **The sod field referenced at the above location has been inspected and found apparently free of Tropical Soda Apple, Cogon Grass, and other species regulated under 5B-57, F.A.C. This certification does not Guarantee freedom from seeds lying dormant in the soil.**

Description of Plant Material: Quantity and Names of Plant(s) **Bahia Sod**
Paspalum notatum
100 acres

By: Division of Plant Industry

ADAM H. PUTNAM, COMMISSIONER

Original - Owner, 1st copy - Gainesville, 2nd copy - District Inspector

DACS-08010 Rev. 10/08

No. A – 224-2012-028

ADAM H. PUTNAM
COMMISSIONER

Florida Department of Agriculture and Consumer Services
Division of Plant Industry

TEMPORARY CERTIFICATE OF INSPECTION

Section 581.031(14)(15), F.S./Rule 5B-2.010, F.A.C.

P.O. Box 147100/1911 SW 34th St., Gainesville, Florida 32614-7100
Phone: (352) 372-3505/FAX: (352) 372-2301

Winter Haven Florida Expires 30 days from **6/10/12**
Date

This is to certify that the plant material located at: **A1 Florida Sod, Inc, 450 Deen Still Rd, Davenport, FL 33897**
Adams Ranch Field, Osceola County, **Florida, has been visually**

inspected for plant pests and meets the minimum requirements of Chapter 581, Florida Statutes.

Additional Declarations: **The sod field referenced at the above location has been inspected and found apparently free of Tropical Soda Apple, Cogon Grass, and other species regulated under 5B-57, F.A.C. This certification does not Guarantee freedom from seeds lying dormant in the soil.**

Description of Plant Material: Quantity and Names of Plant(s) **Bahia Sod**
Paspalum notatum
80 acres

By: Division of Plant Industry

ADAM H. PUTNAM, COMMISSIONER

Original - Owner, 1st copy - Gainesville, 2nd copy - District Inspector

DACS-08010 Rev. 10/08

No. A – 224-2012-033

ADAM H. PUTNAM
COMMISSIONER

Florida Department of Agriculture and Consumer Services
Division of Plant Industry

TEMPORARY CERTIFICATE OF INSPECTION

Section 581.031(14)(15), F.S./Rule 5B-2.010, F.A.C.

P.O. Box 147100/1911 SW 34th St., Gainesville, Florida 32614-7100
Phone: (352) 372-3505/FAX: (352) 372-2301

Winter Haven Florida Expires 30 days from **7/10/12**
Date

This is to certify that the plant material located at: **A1 Florida Sod, Inc, 450 Deen Still Rd, Davenport, FL 33897**
Adams Ranch Field, Osceola County, **Florida, has been visually**
inspected for plant pests and meets the minimum requirements of Chapter 581, Florida Statutes.

Additional Declarations: **The sod field referenced at the above location has been inspected and found apparently free of Tropical Soda Apple, Cogon Grass, and other species regulated under 5B-57, F.A.C. This certification does not Guarantee freedom from seeds lying dormant in the soil.**

Description of Plant Material: Quantity and Names of Plant(s) **Bahia Sod**
Paspalum notatum
30 acres

By: Division of Plant Industry

ADAM H. PUTNAM, COMMISSIONER

Original - Owner, 1st copy - Gainesville, 2nd copy - District Inspector

DACS-08010 Rev. 10/08