



TETRA TECH HAI

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Jennifer L. Woodall, PE  
Valerie C. Davis, PG  
Charles M. Shultz, PE  
Sean M. Parks, AICP QEP  
W. Bruce Lalenz, PG  
James R. Warner, PE

March 23, 2006

Via UPS Overnight

Ms. Susan J. Pelz, P.E. *3/25*  
Florida Department of Environmental Protection  
Southwest District  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

MAR 24 2006

SOUTHWEST DISTRICT  
TAMPA

**Subject: Confining Material Verification, Cell 14 West Side Slope  
Enterprise Recycling & Disposal Facility  
FDEP Permit No. 177982-001-SC/MM  
Specific Condition No. 5) a) 1) & Attachment 1  
Pasco County, Florida**

Tt HAI # 98.0104.023, File 12.0

Dear Ms. Pelz:

On behalf of Angelo's Aggregate Materials, Ltd. (Angelo's) and consistent with our recent discussions, Tetra Tech HAI (Tt HAI) is submitting this summary of field borings completed on March 7, 2006 at the above facility. More specifically, the borings were performed on the west side slope of Cell 14 in the location where limestone fragments were encountered in heavy clay during construction of Cell 14 as part of the temporary stormwater pond.

During this construction, Angelo's excavated the area where the limestone fragments were found and placed back at least three feet of compacted clay obtained from on-site stockpiled confining material. As discussed with the Department on February 28, 2006, Tt HAI's professional geologist was to perform borings in this area with a hand auger to confirm the presence of confining material.

Tt HAI's professional geologist completed five borings to a depth of three feet in this location. At boring location AB-3, one small limestone fragment (2-3 inches in diameter) was found. The boring was moved approximately 1-foot from the original location to check for additional fragments. No additional fragments were found in any of the borings and we believe the one fragment found to be incidental and of no consequence.

Boring logs and a survey of the locations are attached for your review. Based on the surveyed locations, the area where limestone fragments were encountered is west of the designed pond slope, above the elevation of the temporary pond (top of bank of the temporary pond is 80 ft, NGVD).



**TETRA TECH HAI**

Ms. Susan J. Pelz, P.E.  
March 23, 2006  
Page 2

Based upon our discussions, it is my understanding that the Department will accept the foregoing as compliant with the certification requirements of Specific Condition No. 5) a) 1) and Attachment 1 of FDEP Permit No. 177982-001-SC/MM.

Please call me if you have any questions.

Very truly yours,

  
Miguel Garcia, P.G.  
Project Hydrogeologist  
MAG/sma/98.0104.023/corresp/pelz-2.jld.doc

3-23-06

cc: Jeff Rogers, Angelo's  
Joe Polito

CELL 14 WELL & TEST LOCATIONS

SEC 26 TWP 22 S, RNG 18 E.  
PASCO COUNTY, FLORIDA

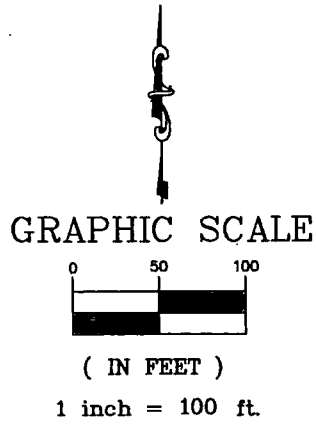
MW-4  
TOP CASING EL.=100.59  
COND. EL.=97.35  
GROUND EL.=97.14

MW-3  
TOP CASING EL.=85.39  
COND. EL.=81.57  
GROUND EL.=81.32

TEST BORING  
GROUND EL.=81.97  
TEST BORING  
GROUND EL.=81.60  
TEST BORING  
GROUND EL.=81.69  
TEST BORING  
GROUND EL.=81.49  
TEST BORING  
GROUND EL.=81.42

CELL 14  
PHASE 1

CELL 16  
PHASE 2



FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
MAR 24 2006  
SOUTHWEST DISTRICT  
TAMPA

ASBUILT SURVEY

NOTES:

- 1. THIS DRAWING IS NOT INTENDED TO REPRESENT A BOUNDARY SURVEY.
- 2. ELEVATIONS SHOWN HEREON ARE BASED ON THE CONSTRUCTION PLANS FOR THE ENTERPRISE RECYCLING & DISPOSAL FACILITY AND ENTERPRISE RD. BENCH MARK USED IS A NAIL & DISK IN A POWER POLE STATION 115+74.55 58.36 LT. ELEVATION = 114.02'.
- 3. THIS SURVEY DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF THE PARTY OR PARTIES CERTIFIED TO BELOW FOR THE EXPRESS PURPOSE STATED HEREON AND/OR CONTAINED IN THE CONTRACT BETWEEN FORESIGHT SURVEYORS, INC. AND THE CLIENT FOR THIS PROJECT. COPYING, DISTRIBUTING, AND/OR USING THIS DRAWING, IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT WRITTEN CONSENT FROM FORESIGHT SURVEYORS, INC. IS STRICTLY PROHIBITED, AND RENDERS THE SURVEYOR'S CERTIFICATION, SIGNATURE AND SEAL HEREON NULL AND VOID. ANY QUESTIONS CONCERNING THE CONTENT OR PURPOSE OF THIS DRAWING SHOULD BE DIRECTED TO FORESIGHT SURVEYORS, INC.

(Subject to any notes and notations listed or labeled hereon)  
This survey is not valid without the signature and original raised seal of a Florida licensed surveyor and mapper LB 5776

**FORESIGHT  
SURVEYORS, INC.**

1277 KASS CIRCLE  
SPRING HILL, FLORIDA 34606  
PH. (352) 397-8396 FAX (352) 684-6052

FILE	CERTIFIED AS TO SURVEY	SCALE 1"=100'
DRAWN ARM	DATE 03/08/06	FIELD DATE
CHECKED	DATE 03/08/06	PROJECT #
JOHN A. BEND, P.S. Fla. Surveyor, Reg. No. 5070		23196



**HARTMAN &  
ASSOCIATES, INC.**

engineers, hydrogeologists, surveyors & management consultants  
ORLANDO • FT. MYERS • PLANTATION • JACKSONVILLE • DESTIN

## FIELD BORING LOG

NGARCTA

AB-1

1 of 1

DEPTH (FT)	SAMPLE			BLOWS PER 6"	N-VALUE	BORING LOG	MATERIAL DESCRIPTION CLASSIFICATION	WELL	REMARKS
	NO. TYPE	SYMBOL	% REC.						
14							CLAYEY-SAND, LIGHT GRAY + DARK ORANGE, FINE TO SILT, VERY FIRM, 0.7'		
24							STURDY CLAYEY-SAND, ORANGE TO DARK ORANGE, FINE TO SILT, VERY FIRM TO FIRM, 1-3'		
34							END @ 3'		FROM CEMENTED SANDSTONE @ 2.5'
0									
5									
0									

**PROJECT**  
NAME: ENTER PR-ISE  
LF  
CLIENT: ANGEL'S  
LOCATION: DADE CITY, FL  
**BORING**  
GR. ELEV:  
DIA-TYPE: 3.5" BUCKET  
DEPTH: 3' AUGER  
DATE STARTED: 3-7-06  
DATE ENDED: 3-7-06  
**GROUNDWATER**  
DEPTH:  
TIME:  
DATE:  
REMARKS:  
**DRILLING**  
RIG TYPE: -  
CREW: -  
SUPERVISOR: -  
**PIEZ/WELL**  
CASING DIAM:  
CASING TYPE:  
CASING DEPTH:  
SCREEN DEPTH:  
SCREEN LENGTH:  
FILTER PACK:  
RISER HEIGHT ALS:  
T.O.C. ELEV:  
**REMARKS**





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## FIELD BORING LOG

MBAN CIA

ARB-2

1 of 1

DEPTH (FT)	SAMPLE			BLOWS PER 6"	N-VALUE	BORING LOG	MATERIAL DESCRIPTION CLASSIFICATION	WELL	REMARKS	PROJECT	
	NO/TYPE	SYMBOL	% REC.							NAME: ENTERPRISE LP	CLIENT: ANGELO
1							CLAYEY - SAND, ORANGE + LIGHT GRAY (MOTTLED) FINE TO SILT, VERY FIRM. 0'-1'			LOCATION: DADE CITY, FL	
2							SILT. CLAYEY - SAND, DARK TO LIGHT ORANGE + GRAY (MOTTLED), FINE TO SILT, VERY FIRM TO FIRM, 1'-1.5'			<b>BORING</b> GR. ELEV: DIA-TYPE: 3.5" - B A DEPTH: 3-7' $\phi$ 6" DATE STARTED: 3' DATE ENDED: 3-7- $\phi$ 6"	
3							SANDY - CLAY, GRAY + DK. ORANGE, MINOR TO MOD. FINE TO SILT GRAIN, EXTREMELY FIRM. 1.5-3'			<b>GROUNDWATER</b> DEPTH: TIME: DATE: REMARKS:	
0							EOB @ 3'			<b>DRILLING</b> RIG TYPE: CREW: SUPERVISOR:	
5										<b>PIEZ/WELL</b> CASING DIAM: CASING TYPE: CASING DEPTH: SCREEN DEPTH: SCREEN LENGTH: FILTER PACK: RISER HEIGHT ALS:	
0										T.O.C. ELEV: <b>REMARKS</b>	



# FIELD BORING LOG

MARCIA

AB - 3

of (

DEPTH (FT)	SAMPLE			BLOWS PER 6"	N-VALUE	BORING LOG	MATERIAL DESCRIPTION CLASSIFICATION	WELL	REMARKS	PROJECT	
	NO. TYPE	SYMBOL	% REC.							NAME: ENTERPRISE	CLIENT: ANGE
1.5							Silty-clayey sand, dark orange + light gray (mottled) fine to silt, mod. clay, firm to v. firm. 0-1.75'			LOCATION: DATE CITY	<b>BORING</b>
2.5							Sandy clay, light gray orange (mottled), low to minor sand, fine green, major clay, v. firm. 1.75-2.5'		small ls frag. 2.0'	DATE STARTED: 3-7-06 DATE ENDED: 3-7-06	<b>GROUNDWATER</b>
3.0							Silty-clayey-sand, dark orange + gray (mottled) fine to silt, mod. to heavy clay, firm to v. firm. 2.5-3.0'		IRON CEMENTED SANDSTONE @ 2.75' ON	DEPTH: TIME: DATE: REMARKS:	<b>DRILLING</b>
0							EOB @ 3'			CREW: SUPERVISOR:	<b>PIEZ/WELL</b>
5										CASING DIAM: CASING TYPE: CASING DEPTH: SCREEN DEPTH: SCREEN LENGTH: FILTER PACK: RISER HEIGHT ALS:	
0										T.O.C. ELEV:	<b>REMARKS</b>



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## FIELD BORING LOG

M. GARCIA

AB-4

1 of 1

DEPTH (FT)	SAMPLE			BLOWS PER 6"	N-VALUE	BORING LOG	MATERIAL DESCRIPTION CLASSIFICATION	WELL	REMARKS
	NO. TYPE	SYMBOL	% REC.						
14							CLAYEY - SAND, DARK ORANGE MED. TO SILT, MED. CLAY, FIRM, 0'-1.5'		
24							SANDY - CLAY, LIGHT GRAY + ORANGE (MOTTLED), LOW SAND CONTENT, VERY FIRM, 1.5'-2.5'		
34							SILT-CLAYEY - SAND, DARK ORANGE, FINE TO SILT, FIRM TO V. FIRM, HEAVY CLAY, 2.5'-3.0'		
0							END @ 3.0		
5									
0									

**PROJECT**

NAME: ENTERPRISE LP

CLIENT: ANGELO'S

LOCATION: DADE CITY, FL

**BORING**

GR. ELEV:

DIA-TYPE: 3.5" - BA

DEPTH: 3'

DATE STARTED: 3-7-96

DATE ENDED: 3-7-96

**GROUNDWATER**

DEPTH:

TIME:

DATE:

REMARKS:

**DRILLING**

RIG TYPE:

CREW:

SUPERVISOR:

**PIEZ/WELL**

CASING DIAM:

CASING TYPE:

CASING DEPTH:

SCREEN DEPTH:

SCREEN LENGTH:

FILTER PACK:

RISER HEIGHT ALS:

T.O.C. ELEV:

**REMARKS**



4 of 1

[illegible]



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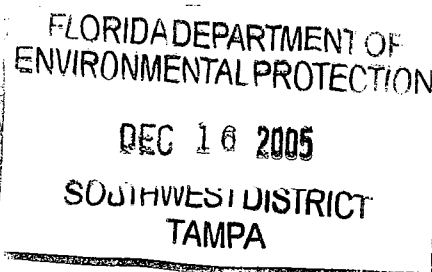
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W. Bruce Lafrenz, PG  
Alexis K. Stewart, PE  
Christopher W. Hardin, PE  
James R. Warner, PE

December 9, 2005

### Via UPS Ground

Ms. Susan Pelz, P.E.  
Florida Department of Environmental Protection  
Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

**Subject: Response to Comments, dated December 5, 2005  
Enterprise Recycling & Disposal Facility  
FDEP Permit No. 177982-001-SC, 177982-002-SO  
Pasco County, Florida**



Tt HAI #99.0331.023, File 12.0

Dear Ms. Pelz:

On behalf of Angelo's Aggregate Materials, Ltd. (Angelo's), Tetra Tech HAI (Tt HAI) is submitting this response to your comments, dated December 5, 2005, regarding the certification of the confining layer for Cell 14 at the above facility. Your comments are stated first with our responses following.

**Comment 1:** Please provide a figure that shows the locations of permeability retests # RT-1, RT-2, and RT-3.

**Response:** The retest locations were performed in the locations of the original permeability tests. The locations are summarized in the following table.

Retest #	Original Test #	Location
RT-1	2-4	2-4 / 2059
RT-2	3-3	3-3 / 2064
RT-3	3-4	3-4 / 2065

The test locations are listed on the Test Results sheet, Report No. PW #1. The original locations were indicated on the figures previously provided by Universal Engineering Sciences.

**Comment 2:** Photos # 4, 6F, and 7G (attached for reference) appear to show a white material in a layer in the background, being dumped into the cell as part of the construction, and at the permeability location stake. Please clarify what this White/gray material is. In the event that limestone was encountered during construction, please provide a figure that delineates the extent of the limestone encountered.



**TETRA TECH HAI**

Ms. Susan Pelz, P.E.

December 9, 2005

Page 2

**Response:** The white/gray material being dumped into Cell 14 for construction and at the permeability location stake is confining material (white/gray clay material). The white/gray material in the background of the photos is limestone fragments and white clay. A small area of limestone was encountered on the west side slope of Cell 14 during excavation.

During the previous construction permit modification for this facility, Angelo's voluntarily agreed to a condition requiring the construction of a three-foot thick confining layer at the base of each landfill cell. Angelo's did not realize that the condition requiring Department notification upon finding limestone during construction was still included in the permit, as they assumed this condition was removed and replaced with the above mentioned confining layer condition. As a result, Angelo's did not notify Tt HAI or the Department of this finding. This was a misunderstanding on the part of Angelo's. Please see the attached map, provided by Angelo's, indicating the area where limestone was encountered.

Since the modified construction permit requires construction of the three-foot confining layer, Angelo's requests to revise the construction permit to remove the notification requirement.

We trust this response will satisfy the Department's concerns. Please call me if you have any further questions.

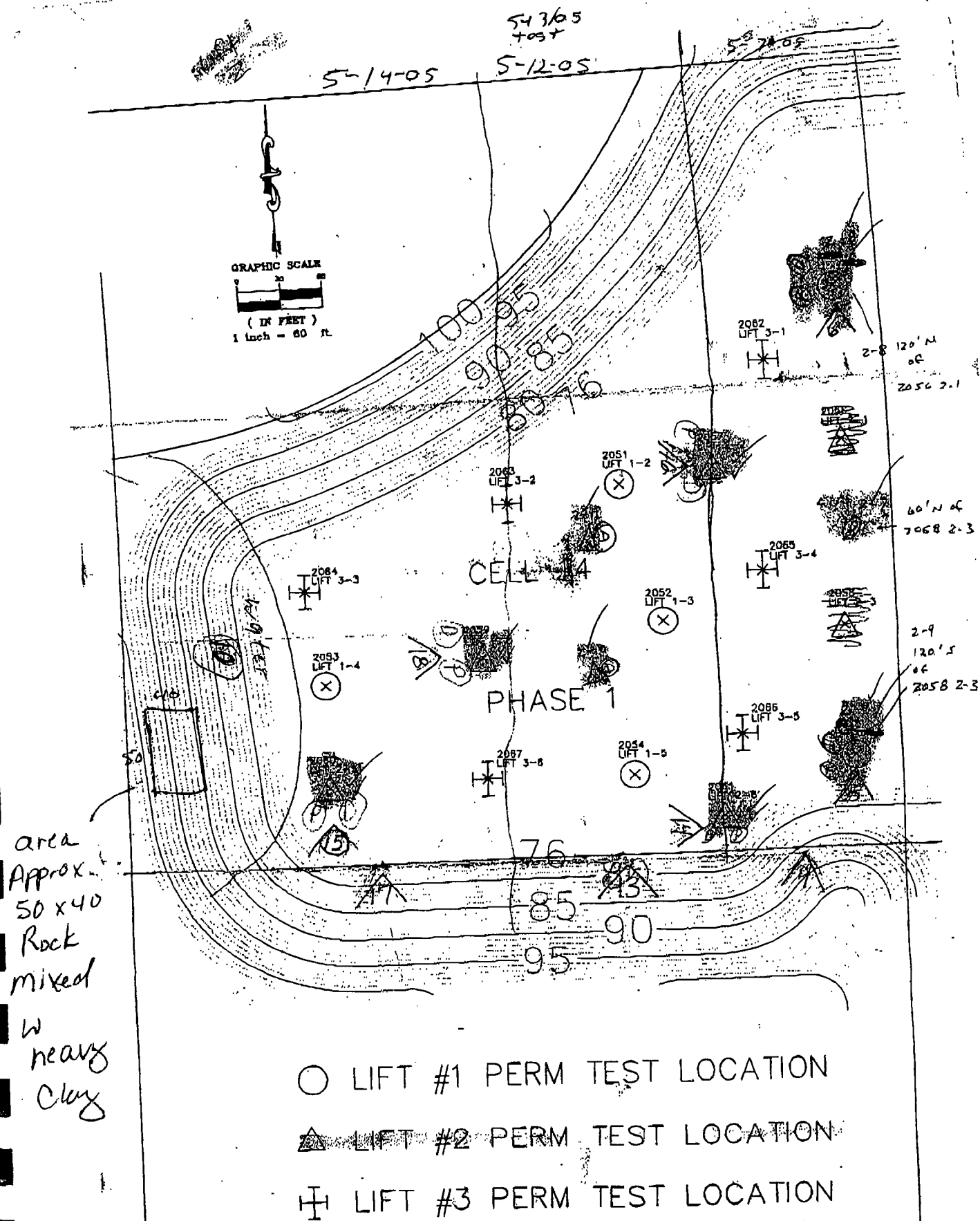
Very truly yours,

**Tetra Tech HAI**

Jennifer L. Deal, P.E.  
Project Manager

JLD/cr/99.0331.023/corresp/PELZ1

cc: Jeff Rogers, Angelo's





## TETRA TECH HAI

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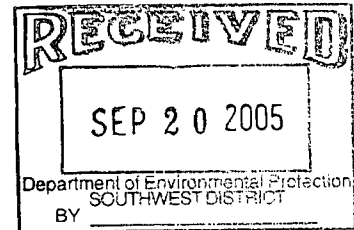
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W. Bruce Lafrenz, PG  
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Christopher W. Hardin, PE  
James R. Warner, PE

September 19, 2005

Via UPS Overnight

Ms. Susan Pelz, P.E.  
Florida Department of Environmental Protection  
Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619



**Subject: Cell 14 Confining Layer Certification  
Enterprise Recycling & Disposal Facility  
Angelo's Aggregate Materials, Ltd.  
FDEP Permit Nos. 177982-001-SC, 177982-002-SO  
Pasco County, Florida**

Tt HAI #99.0331.023  
File 12.0

Dear Ms. Pelz:

On behalf of Angelo's Aggregate Materials, Ltd. (Angelo's), Tetra Tech HAI (Tt HAI) is submitting this certification for the confining layer in Cell 14 at the above referenced facility. Confining layer construction activities were completed in May 2005. The certification form is included in Appendix A.

Specific Condition 9.c of the facility construction permit #177982-001-SC, in part, states "The maximum hydraulic conductivity below or as part of each cell floor shall be less than  $1 \times 10^{-6}$  cm/sec in a continuous layer of at least 36 inches in thickness, unless otherwise approved in writing by the Department."

### Confining Layer Construction

Construction of the confining layer in Cell 14 was performed in concurrence with raising the cell floor elevation in Cell 15, in accordance with FDEP stormwater permit #51-0172489-007. A representative of Universal Engineering Sciences (UES) was on-site to document construction activities and verify that the work was performed to Tt HAI's criteria. This included verification of the use of appropriate confining material and compaction equipment, coordination with Foresight Surveyors, Inc. (Foresight) for documentation of the excavation and fill elevations, and on-site soil testing and permeability test sample collection. Angelo's used a track hoe to excavate the cell. Foresight verified the excavation grades to ensure that the appropriate base elevation was achieved. Surveys of the constructed areas were also completed to ensure the appropriate cell floor grades and confining material thickness were achieved. Copies of the excavation and fill as-built surveys, including the cell boundaries, are attached for your review in Appendix B.

FILE





## **TETRA TECH HAI**

Ms. Susan Pelz, P.E.

September 19, 2005

Page 2

Clay material excavated from Cell 14 was used for construction of the confining layer. To be acceptable for confining layer construction in Cell 14, Tt HAI required the material compaction to achieve 95% of the maximum density, as evaluated by the laboratory proctor test. The result of the Wash 200 test on the material was 53.4%. The optimum moisture content for the material to achieve maximum compaction was 19.5%. The results of the proctor test, provided by UES, are attached for your review in Appendix C.

The designated confining material was spread in three lifts, at least 12-inches in thickness, and compacted by multiple passes with a loaded articulating dump truck (ADT). The ADT compacted the material in the bottom of the excavation and into the cell side slopes. A representative of UES was on-site to document the confining layer construction activities and dates of testing, and to conduct in-place density testing on the confining layer lifts and to obtain soil samples for confirmation laboratory permeability testing. A copy of UES's construction summary and test results are provided in Appendix D.

### **Field CQA and Permeability Testing**

In-place density testing of the confining material lifts was performed by UES using a Speedy Moisture Content device in accordance with ASTM D2937-00e1, Standard Test Method for Density of Soil in Place by the Drive-Cylinder Method, to test each compacted lift to ensure the proper density and moisture content were achieved. Field test results were reviewed by Tt HAI and demonstrate that appropriate compaction was achieved during construction.

Shelby tube samples were collected for laboratory confirmation testing for permeability at a frequency of one sample, per acre, per lift, as previously requested by the Department. Permeability samples were collected in accordance with ASTM D1587, Standard Practice for Thin-Walled Tube Geotechnical Sampling of Soils. Eighteen permeability samples were collected from Cell 14 and correspond to the locations and depths of the in-place density tests. Please see the location plans in Appendix E, provided by UES, for reference. Permeability testing was completed by UES, in accordance with ASTM D5084-00e1, Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter. Permeability test results, along with UES's Permeability Test Location Plans, are included in Appendix E. The permeability sample test dates will not necessarily correspond with the sample collection dates. This is due to sample preparation and limited laboratory equipment to run all of the collected samples concurrently.

Permeability tests were collection from locations 1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 2-2, 2-4, 2-5, 2-6, 2-8, 2-9, 3-1, 3-2, 3-3, 3-4, 3-5, and 3-6, in substantial accordance with the pre-approved test locations. In-place density tests were taken at all permeability test locations with the exception of 3-1, 3-4, and 3-5. However, other in-place density tests were taken in the proximity of these locations. Additional locations indicated on the Foresight As-built Survey, Cell 14 Test Locations were locations of supplemental in-place density tests.



## TETRA TECH HAI

Ms. Susan Pelz, P.E.  
September 19, 2005  
Page 3

Initially, three of the test locations, 2-4, 3-3, and 3-4 did not pass the permeability requirements. The permeability results did not seem comparable with the material descriptions. Since all three tests were performed by a subcontracted laboratory, UES resampled these locations and performed the permeability testing. The samples tested by UES met the permeability requirements. The retest results are included in Appendix D.

Photographs of some construction activities, provided by UES, are included on a CD in Appendix E along with Photograph Location Plans.

### Field Inspection

A representative of Tt HAI performed a field inspection to observe the completed construction. At the time of the inspection, the cell floor appeared to be constructed properly and in accordance with the requirements previously discussed with the Department, and included in the modified construction permit. Photographs (#4-11) from this site visit are included in Appendix F. The general locations and directions of the photographs have been hand-entered on a copy of the Foresight As-built Survey, Cell 14 Test Locations. This is also provided in Appendix F.

We trust this submittal will satisfy the Department's certification requirements. Please call me if you have any questions or require additional information.

Very truly yours,

Tetra Tech HAI

Jennifer L. Deal, P.E.  
Project Manager

JLD/cp09.0331.023/corresp/Cell 14 cert.jld  
Attachments

cc: Jeff Rogers, Angelo's

## APPENDIX A



Florida Department of Environmental Protection  
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, FL 32399-2400

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

DEP Application No. \_\_\_\_\_  
(Filled by DEP)

## Certification of Construction Completion of a Solid Waste Management Facility

DEP Construction Permit No: 177982-001-SC County: Pasco

Name of Project: Enterprise Recycling & Disposal Facility

Name of Owner: Angelo's Aggregate Materials, Ltd.

Name of Engineer: Tetra Tech HAI

Type of Project: Confining layer certification for Cell 14

See attached surveys from Foresight Surveyors for as-built elevations.

Cost: Estimate \$ 100,000 Actual \$ 150,000

Site Design: Quantity: 7500 cy/day ton/day Site Acreage: 5.78 Acres

Deviations from Plans and Application Approved by DEP: Initially, Cell 14 will serve as a part of the temporary stormwater pond. The elevations indicated on the survey are substantially in accordance with the requirements of the above construction permit. A loaded articulating dump truck weighing approximately 130,000 lbs. was used to compact the material, rather than a dozer and roller as specified in the Engineering Report. The end result of compaction met the required permeability.

Address and Telephone No. of Site: 41111 Enterprise Road, Dade City, FL 33525  
352-567-7676

Name(s) of Site Supervisor: Jeff Rogers

Date Site inspection is requested: September 27, 2005

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. 177982-001-SC :Dated: October 5, 2001

Date: \_\_\_\_\_

Signature of Professional Engineer

Page 1 of 1



Northwest District  
160 Governmental Center  
Pensacola, FL 32501-5794  
850-595-8360

Northeast District  
7825 Baymeadows Way, Ste. B200  
Jacksonville, FL 32256-7590  
904-448-4300

Central District  
3319 Maguire Blvd., Ste. 232  
Orlando, FL 32803-3767  
407-894-7555

Southwest District  
3804 Coconut Palm Dr.  
Tampa, FL 33619  
813-744-6100

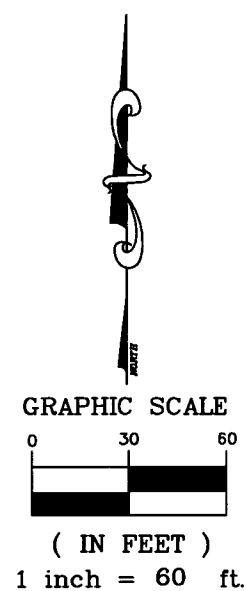
South District  
2295 Victoria Ave., Ste. 364  
Fort Myers, FL 33901-3881  
941-332-6975

Southeast District  
400 North Congress Ave.  
West Palm Beach, FL 33401  
561-681-6600

## APPENDIX B

CELL 14 BOTTOM ELEVATIONS

SEC 26 TWP 22 S, RNG 18 E.  
PASCO COUNTY, FLORIDA



ASBUILT SURVEY

NOTES:

1. THIS DRAWING IS NOT INTENDED TO REPRESENT A BOUNDARY SURVEY.
2. ELEVATIONS SHOWN HEREON ARE BASED ON THE CONSTRUCTION PLANS FOR THE ENTERPRISE RECYCLING & DISPOSAL FACILITY AND ENTERPRISE RD. BENCH MARK USED IS A NAIL & DISK IN A POWER POLE STATION 115+74.55 58.36 LT. ELEVATION = 114.02'.
3. THIS SURVEY DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF THE PARTY OR PARTIES CERTIFIED TO BELOW FOR THE EXPRESS PURPOSE STATED HEREON AND/OR CONTAINED IN THE CONTRACT BETWEEN FORESIGHT SURVEYORS, INC. AND THE CLIENT FOR THIS PROJECT. COPYING, DISTRIBUTING, AND/OR USING THIS DRAWING, IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT WRITTEN CONSENT FROM FORESIGHT SURVEYORS, INC. IS STRICTLY PROHIBITED, AND RENDERS THE SURVEYOR'S CERTIFICATION, SIGNATURE AND SEAL HEREON NULL AND VOID. ANY QUESTIONS CONCERNING THE CONTENT OR PURPOSE OF THIS DRAWING SHOULD BE DIRECTED TO FORESIGHT SURVEYORS, INC.

(Subject to any notes and notations listed or labeled hereon)  
This survey is not valid without the signature and original raised seal of a Florida licensed surveyor and mapper LB 5776



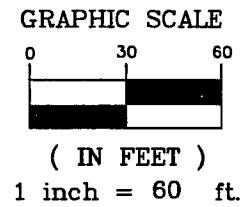
**FORESIGHT**  
**SURVEYORS, INC.**



773 PROVIDENCE BOULEVARD	
BROOKSVILLE, FLORIDA 34601	
PH. (352) 797-6308 FAX (352) 797-6308	
FILE	DATE
DRAWN ADM	DATE
CHECKED	DATE
A. DANIEL MILLER, S.M. Fla. Surveyor No. 6294	
SCALE: 1"=60'	FIELD DATE: 5-13-05
PROJECT # 23196	

# CELL 14 FILL ELEVATIONS

SEC 26 TWP 22 S, RNG 18 E.  
PASCO COUNTY, FLORIDA



## ASBUILT SURVEY

Thickness ok  
Elevation ok  
r/s/05

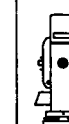
CELL 14

PHASE 1

### NOTES:

1. THIS DRAWING IS NOT INTENDED TO REPRESENT A BOUNDARY SURVEY.
2. ELEVATIONS SHOWN HEREON ARE BASED ON THE CONSTRUCTION PLANS FOR THE ENTERPRISE RECYCLING & DISPOSAL FACILITY AND ENTERPRISE RD. BENCH MARK USED IS A NAIL & DISK IN A POWER POLE STATION 115+74.55 58.36 LT. ELEVATION = 114.02'.
3. THIS SURVEY DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF THE PARTY OR PARTIES CERTIFIED TO BELOW FOR THE EXPRESS PURPOSE STATED HEREON AND/OR CONTAINED IN THE CONTRACT BETWEEN FORESIGHT SURVEYORS, INC. AND THE CLIENT FOR THIS PROJECT. COPYING, DISTRIBUTING, AND/OR USING THIS DRAWING, IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT WRITTEN CONSENT FROM FORESIGHT SURVEYORS, INC. IS STRICTLY PROHIBITED, AND RENDERS THE SURVEYOR'S CERTIFICATION, SIGNATURE AND SEAL HEREON NULL AND VOID. ANY QUESTIONS CONCERNING THE CONTENT OR PURPOSE OF THIS DRAWING SHOULD BE DIRECTED TO FORESIGHT SURVEYORS, INC.

(Subject to any notes and notations listed or labeled hereon)  
This survey is not valid without the signature and original raised seal of a Florida licensed surveyor and mapper LB 5776



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SURVEYORS, INC.

773 PROVIDENCE BOULEVARD

BROOKSVILLE, FLORIDA 34601

PH. (352) 797-6306 FAX (352) 797-6308

FILE	CERTIFIED AS TO SURVEY	SCALE 1"=60'
DRAWN ADM	DATE: 6-8-05	FIELD DATE 5-23-05
CHECKED	A. DANIEL MILLER, P.S.M. Fla. Surveyors-Reg'n No. 6294	PROJECT # 23196

## APPENDIX C





# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Client : Angelo's Recycling

Project: Dade City Landfill

Sample Date: 5/04/05

Location: Cell #14

Project No.: 80540-001-02

Report No.: PR #1

Date: 5/5/2005

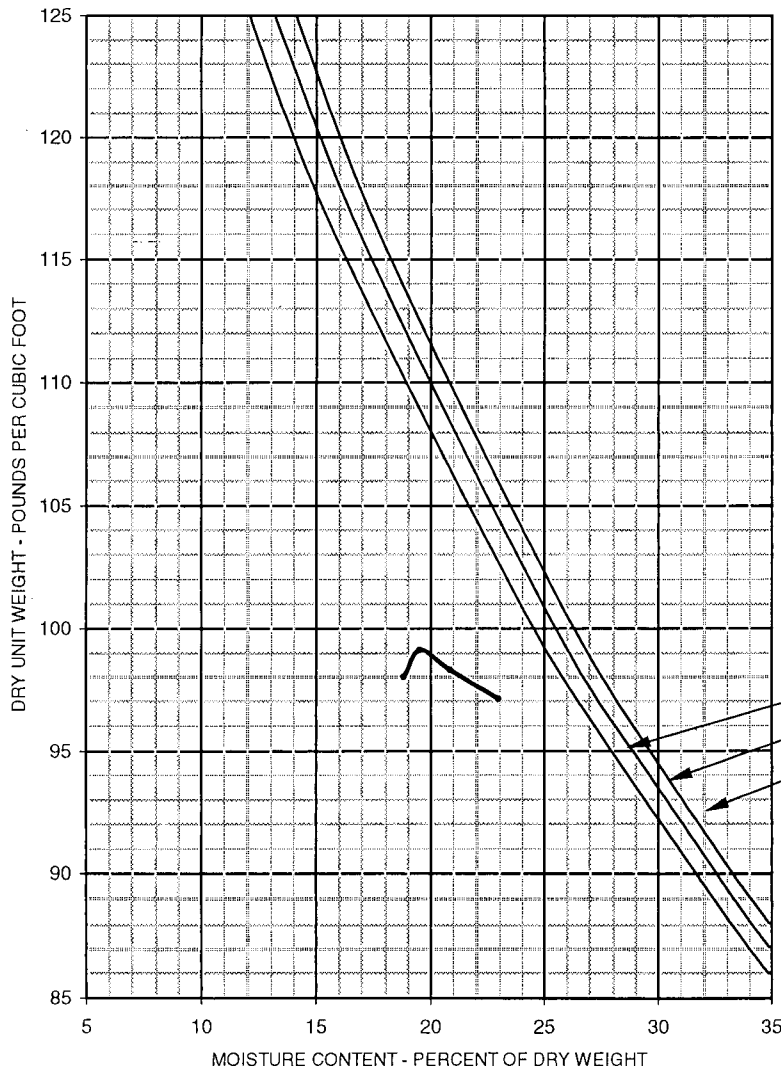
Lab #: 716

Test Method: D-689

Rammer Type: Manual

Soil Description:

Orange to Tan clay



Date Tested :	5/5/2005
Maximum Dry Density(pcf)	99
Optimum Moisture Content (%)	19.5
Wash 200%	53.4

Reviewed By,  
Universal Engineering Sciences, Inc.

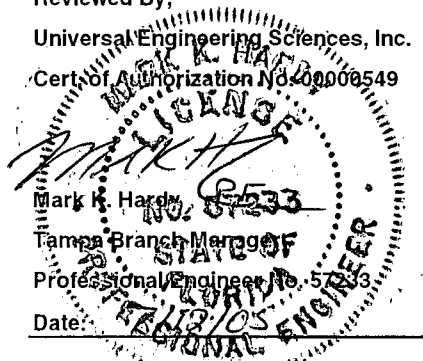
Cert. of Authorization No. 00000549

Mark R. Hardy

Tampa Branch Manager

Professional Engineer No. 57233

Date: 5/5/05



## APPENDIX D



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02  
Report No.: SI # 1  
Date: May 6, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

JUL 15 2005

**Project:** Dade City Landfill, 5 acre Clay Liner

**Scope of  
Field Work:** Monitoring Clay Liner

**Date Inspected:** May 5, 2005 **Inspected By:** Mr. Mario Arroyo

On May 5, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

Technician arrive on-site at 7:00 a.m. with Mr. Chris Haley of UES. Photographs were taken of density and permeability at staked location #'s 2055, 1-6 and staked location #'s 2050, 1-1 & 1-7.

Mr. Haley returned to UES Tampa office with 2nd proctor sample and two permeability samples.

The technician observed a Track hoe loading a haul truck with clay. The clay was spread-out with a bull dozer for the first and second lift. A photograph was taken at 10:30 a.m. from the south side of the cell, facing north of the second lift being moved into place.

From 10:30 a.m. to 11:30 a.m. the track hoe loaded dump truck with clay to be removed from job-site.

At 11:30 a.m. the track hoe proceeded to load the haul truck with material for work on the second lift station. A second haul truck was loaded with clay to be hauled off-site.

At 2:30 p.m. it began raining at the job-site and work stopped at 3:30 p.m.

**Equipment in use for the day:**

one - track hoe  
one - bull dozer  
one - haul truck

cc: Client (1)

Imp

Reviewed By: Mark K. Hardy, P.E.  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 7/15/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02

Report No.: SI # 2

Date: May 12, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner

**Scope of  
Field Work:** Monitoring Clay Liner

**Date Inspected:** May 6, 2005

**Inspected By:** Mr. Mario Arroyo

On May 6, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

Contractor reported that no work was being performed on clay liner, due to rain making site too wet. Work will resume on Monday 9, 2005.

cc: Client (1)

Imp

Reviewed by  
**Universal Engineering Sciences, Inc.**  
Certificate of Authorization No. 00000549

*M. K. H.*  
M. K. H.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 5/12/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02

Report No.: SI # 3

Date: May 12, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner

**Scope of  
Field Work:** Monitoring-Testing Clay Liner

**Date Inspected:** May 7, 2005 **Inspected By:** Mr. Mario Arroyo

On May 7, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

The contractor resumed work on second lift at 07:30, at 11:30 a density was performed at second lift and at 12:00 a permeability test was obtained on the second lift.

Work began on a third lift at 13:30, UES technician took photograph of lift being installed.

Contractor stated that the survey crew will be at the job site on Monday May 9, 2005 at 07:00, to install permeability stake for the third lift.

Notes: Lift # 2 is approximately 120 feet west from the east side of Cell # 14.

No stakes provided for lift # 2 test 2-8 and 2-9.

Represents Permeability and density for locations 2058 2-3 and 2056 2-1

Equipment on-site:

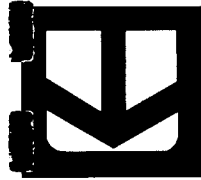
One Track hoe  
One Haul truck  
One Bull dozer

cc: Client (1)

Imp

Reviewed by:  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

NO. 57233  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 6/16/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02

Report No.: SI # 4

Date: May 12, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner

**Scope of  
Field Work:** Monitoring-Testing Clay Liner

**Date Inspected:** May 9, 2005 **Inspected By:** Mr. Mario Arroyo

On May 9, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

At 07:30 the contractor resumed work on third lift, two haul trucks were loaded. Surveyor cancelled work for day and rescheduled for Tuesday May 10, 2005.

Lift # 3 is approximately 120 feet west of the east side of Cell # 14.

Equipment on-site:

One Track hoe  
One Haul truck  
One Bull dozer

cc: Client (1)

Imp

Reviewed By:   
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

NO. 57233  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 5/20/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02

Report No.: SI # 5

Date: May 12, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner

**Scope of  
Field Work:** Monitoring-Testing Clay Liner

**Date Inspected:** May 10, 2005

**Inspected By:** Mr. Mario Arroyo

On May 10, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

Surveyor placed permeability stakes on 3rd lift and staked-out second half of 1st lift.  
At 13:45 contractor began to dig-out second half of 1st lift.

**Equipment on-site:**

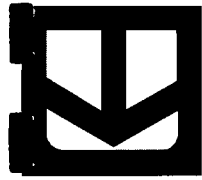
One Track hoe  
One Bull dozer

cc: Client (1)

Imp

Reviewed by  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 5/20/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02

Report No.: SI # 6

Date: May 16, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner, Cell 14

**Scope of  
Field Work:** Monitoring-Testing Clay Liner

**Date Inspected:** May 11, 2005

**Inspected By:** Mr. Mario Arroyo

On May 11, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

The technician took third permeability from third lift 3-5. Picture was taken of second half of first lift being excavated.

Contractor began to excavate third section of first lift and crowd water to an area to be pumped-out. A picture was taken of worker digging out third section of first lift.

A permeability and a density test was performed at station 2054 1-5, 2052 1-3 and 2051 1-2 from second half of first lift.

Equipment on-site:

one track hoe  
one bull dozer  
one haul truck

cc: Client (1)

Imp

Reviewed by  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

Mark B. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 5/20/05





# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02  
Report No.: SI # 7  
Date: May 16, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner, Cell 14

**Scope of  
Field Work:** Monitoring-Testing Clay Liner

**Date Inspected:** May 12, 2005

**Inspected By:** Mr. Mario Arroyo

On May 12, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

The technician performed permeability and density tests from station 2053 1-4, from third portion of first lift.

A density test was performed 50 feet east of 2053 1-4 (lift 1-6).

A track hoe put in second half of second lift.

At 12:30 p.m. another track hoe proceeded to load dump trucks.

Another bull dozer began to move dumped clay pile.

Equipment on-site:

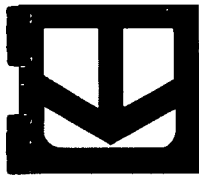
two track hoes  
one bull dozer  
one haul truck

cc: Client (1)

Imp

Reviewed by  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 5/20/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02  
Report No.: SI # 8  
Date: May 16, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner, Cell 14

**Scope of  
Field Work:** Monitoring-Testing Clay Liner

**Date Inspected:** May 13, 2005 **Inspected By:** Mr. Mario Arroyo

On May 13, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

The contractor began to put clay on the third portion of second lift, UES technician performed density tests on second half of second lift at stations 2061 lift 2-6, 2060, lift 2-5, 2057 lift 2-2.

The UES technician performed density tests at 2-11, 75 feet west of 2057/2-2.

The UES technician waited for the contractor to complete second lift to complete testing.

A photograph was taken of second lift facing north.

**Equipment on-site:**

one track hoe  
one bull dozer

cc: Client (1)

Imp

Reviewed By: *Mark K. Hardy*  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

*Mark K. Hardy*  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: *6/16/05*



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02

Report No.: SI # 9

Date: May 16, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner, Cell 14

**Scope of  
Field Work:** Monitoring-Testing Clay Liner

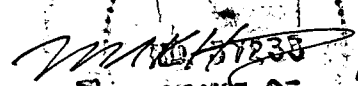
**Date Inspected:** May 14, 2005

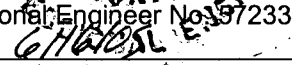
**Inspected By:** Mr. Mario Arroyo

On May 14, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

Permeability and density tests were performed on Stations 2059, lift 2-4 and 55 feet east of station 2059 (2-10).

Contractor stated work will begin on third lift Monday, May 19 at 9:00 a.m.

Reviewed By:   
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

Mark K. Hardy  
Tampa Branch Manager  
Professional Engineer No. 397233  
Date: 

cc: Client (1)

Imp



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02

Report No.: SI # 10

Date: May 31, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner, Cell 14

**Scope of  
Field Work:** Monitoring-Testing Clay Liner

**Date Inspected:** May 16, 2005

**Inspected By:** Mr. Mario Arroyo

On May 16, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

The technician observed the track hoe load one haul truck with Clay to dump on Second Lift. A bull dozer proceeded to push clay pile towards third lift station.

9:30 a.m. to 11:20 a.m. the Track Hoe broke down. At 11:20 a.m. another Track Hoe began loading haul truck and dump trucks. At 11:30 a.m. the Track Hoe was repaired and resumed working.

From 10:00 a.m. to 4:45 p.m. the Bull Dozer broke down. At 4:45 p.m. Bull dozer resumed moving Clay pile.

Photographs were taken of Bull Dozer moving Clay pile.

cc: Client (1)

Imp

Reviewed By:   
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

NO. 57233  
STATE OF  
FLORIDA  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 6/16/05



# UNIVERSAL

## ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02

Report No.: SI # 11

Date: June 1, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

### WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Mr. Dominic Lafrate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner, Cell 14

**Scope of  
Field Work:** Monitoring-Testing Clay Liner

**Date Inspected:** May 17, 2005

**Inspected By:** Mr. Mario Arroyo

On May 17, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

A track hoe loaded a haul truck for the bull dozer to knock down later for third lift.

A bull dozer arrived on-site at 9:30 a.m. and began to move piles. A second bull dozer was on-site from 10:00 a.m. to 10:20 a.m.

At 3:45 p.m., technician took permeability and density samples from Station 2063, lift 3-2, another density sample was taken 60 feet east of 2063, at lift 3-10.

At 4:45 p.m. another bulldozer arrived to assist with third lift.

cc: Client (1)

Imp

Reviewed By:  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 6/16/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02  
Report No.: SI # 12  
Date: June 2, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Mr. Dominic Lafrate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner, Cell 14

**Scope of  
Field Work:** Monitoring-Testing Clay Liner

**Date Inspected:** May 19, 2005

**Inspected By:** Mr. Mario Arroyo

On May 19, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

A track hoe was digging out east wall of cell to load clay on haul truck for placement on cell walls, also clay was taken off-site.

The bull dozer began to slope cell wall at north end of cell.

At 3:00 p.m. another bull dozer arrived on-site to assist with sloping of cell wall.

cc: Client (1)

Imp

Reviewed By: *Mark K. Hardy*  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

*Mark K. Hardy*  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: *06/02/05*



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02  
Report No.: SI # 13  
Date: June 2, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Mr. Dominic Lafrate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner, Cell 14

**Scope of  
Field Work:** Monitoring-Testing Clay Liner

**Date Inspected:** May 18, 2005 **Inspected By:** Mr. Mario Arroyo

On May 18, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

A track hoe was loading a haul truck and dump trucks for bull dozer to push down later.

The bull dozer arrived on-site at 8:15 a.m. to begin work on third lift.

A permeability and density sample was taken from 2067, lift 3-6, a density sample was taken 55 feet east of 2067 at lift 3-11, a permeability and density sample was taken from station 2064, lift 3-3.

A density sample was taken 55 feet south of 2064 at lift 3-12.

A bull dozer began to slope cell walls at north end of cell.

*per @ 3-4 ?*

cc: Client (1)

Imp

Reviewed By:  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

MD 57233  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 6/16/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02  
Report No.: SI # 14  
Date: June 2, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## WEEKLY REPORT ON SITE INSPECTIONS

**Client:** Angelo's Aggregate Materials  
Mr. Dominic Lafrate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, 5 acre Clay Liner, Cell 14

**Scope of  
Field Work:** Monitoring-Testing Clay Liner

**Date Inspected:** May 20, 2005      **Inspected By:** Mr. Mario Arroyo

On May 20, 2005, a representative of Universal Engineering Sciences (UES) was present at the above project site as requested to perform the referenced work.

The contractor had finished cell # 14, a photograph was taken of completed cell.

cc: Client (1)

Imp

Reviewed By: *[Signature]*  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

*[Signature]*  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 6/16/05





# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02  
Report No.: DR #1  
Date: May 6, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## IN-PLACE DENSITY TEST REPORT

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, Cell 14

**Area Tested:** Clay Liner, First Lift

**Reference**  
**Datum:** 0 = Top of Native

**Type of Test - Field:** ASTM D-2937 Drive Cylinder Method  
**Laboratory:** ASTM D-698 Standard Proctor  
**Date Tested:** May 5, 2005

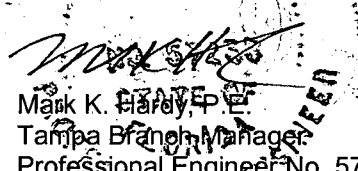
**Remarks:** The tests below have met the minimum 95% relative soil compaction requirement of Laboratory Proctor maximum dry density.

TEST LOCATION			LABORATORY RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
1-6	2055, 1-6	0	99.0	19.5	116.1	7.9	117.2
1-1	2050, 1-1	0	99.0	19.5	114.8	7.6	115.9
1-7	1-7, 60 feet SOUTH of 1-1	0	99.0	19.5	100.7	15.8	101.7

**Technician:** Mr. Mario Arroyo

**cc:** Client (1)

Reviewed By:   
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

  
Mark K. Gray, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 6/16/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02  
Report No.: DR #3  
Date: May 12, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## IN-PLACE DENSITY TEST REPORT

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, Cell 14

**Area Tested:** Clay Liner, second lift

**Reference  
Datum:** 0 = Bottom of Liner

**Type of Test - Field:** ASTM D-2397 Drive Sleeve Method  
**Laboratory:** ASTM D-698 Standard Proctor  
**Date Tested:** May 9, 2005

**Remarks:** The tests below have met the minimum 95% relative soil compaction requirement of Laboratory Proctor maximum dry density.

TEST LOCATION			LABORATORY RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
2-8	120 feet north of 2056 2-1	0	99.0	19.5	110.8	12.8	111.9
2-7	60 feet north of 2058 2-3	0	99.0	19.5	95.3	12.0	96.2
2-9	120 feet south of 2058 2-3	0	99.0	19.5	107.2	12.6	108.2

**Technician:** Mr. Mario Arroyo

**cc:** Client (1)

Reviewed By:   
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

NO. 57233  
STATE OF  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 6/16/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-01  
Report No.: DR #11  
Date: July 12, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## IN-PLACE DENSITY TEST REPORT

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, Cell 14

**Area Tested:** Clay Liner

**Reference**

**Datum:** 0 = Bottom of Clay Liner

**Type of Test - Field:** ASTM D-2397 Drive Sleeve Method  
**Laboratory:** ASTM D-1557 Modified Proctor

**Date Tested:** May 9, 2005

**Remarks:** The tests below have met the minimum 95% relative soil compaction requirement of Laboratory Proctor maximum dry density.

TEST LOCATION			LABORATORY RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
3-7	3-7 60 feet north x 60 feet east of 2066 3-5	+0	99.0	19.5	104.3	11.5	105.3
3-8	3-8 35 feet north of 2065 3-4	+0	99.0	19.5	110.1	11.7	111.2
3-9	3-9 120 feet north of 2062 3-1	+0	99.0	19.5	114.1	11.0	115.2

**Technician:** Mr. Mario Arroyo

**cc:** Client (1)

Reviewed By:  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 7/12/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-02  
Report No.: DR #4  
Date: May 11, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## IN-PLACE DENSITY TEST REPORT

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, Cell 14

**Area Tested:** Clay Liner

**Reference**  
**Datum:** 0 = Bottom of Liner

**Type of Test - Field:** ASTM D-2397 Drive Sleeve Method  
**Laboratory:** ASTM D-1557 Modified Proctor  
**Date Tested:** May 13, 2005

**Remarks:** The tests below have met the minimum 95% relative soil compaction requirement of Laboratory Proctor maximum dry density.

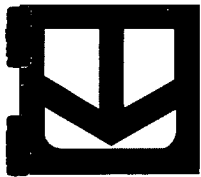
TEST LOCATION			LABORATORY RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
1-5	2054 lift 1-5	0	99.0	19.5	106.8	12.6	107.8
1-3	2052 lift 1-3	0	99.0	19.5	104.1	12.0	105.1
1-2	2051 lift 1-2	0	99.0	19.5	106.5	11.7	107.5

**Technician:** Mr. Mario Arroyo

**cc:** Client (1)

Reviewed By: **MARK K. HARDY**  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

Professional Engineer No. 57233  
Date: 6/16/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-01  
Report No.: DR #5  
Date: May 16, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## IN-PLACE DENSITY TEST REPORT

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, Cell 14

**Area Tested:** Clay Liner

**Reference**

**Datum:** 0 = Bottom of Liner

**Type of Test - Field:** ASTM D-2397 Drive Sleeve Method  
**Laboratory:** ASTM D-1557 Modified Proctor

**Date Tested:** May 13, 2005

**Remarks:** The tests below have met the minimum 95% relative soil compaction requirement of Laboratory Proctor maximum dry density.

TEST LOCATION			LABORATORY RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
1-4	2053 lift 1-4	0	99.0	19.5	102.4	13.0	103.4
1-6	50 feet east of 2053 1-4, lift 1-6	0	99.0	19.5	102.8	12.8	103.8

Should be #1-8

**Technician:** Mr. Mario Arroyo

**cc:** Client (1)

Reviewed By:   
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 6/15/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-01  
Report No.: DR #6  
Date: May 16, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## IN-PLACE DENSITY TEST REPORT

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, Cell 14

**Area Tested:** Clay Liner

**Reference**

**Datum:** 0 = Bottom of Liner

**Type of Test - Field:** ASTM D-2397 Drive Sleeve Method  
**Laboratory:** ASTM D-1557 Modified Proctor

**Date Tested:** May 13, 2005

**Remarks:** The tests below have met the minimum 95% relative soil compaction requirement of Laboratory Proctor maximum dry density.

TEST LOCATION			LABORATORY RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
2-6	2061, lift 2-6	0	99.0	19.5	107.7	8.8	108.7
2-5	2060, lift 2-5	0	99.0	19.5	110.4	11.0	111.5
2-2	2057, lift 2-2	0	99.0	19.5	112.8	9.8	113.9
2-11	2-11, 75 feet west of 2057	0	99.0	19.5	107.8	10.3	108.8

**Technician:** Mr. Mario Arroyo

**cc:** Client (1)

Reviewed By: **MARK K. HARDY**  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

PA 57233  
STATE OF  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 6/15/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-01  
Report No.: DR #8  
Date: June 1, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## IN-PLACE DENSITY TEST REPORT

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, Cell 14

**Area Tested:** Clay Liner

**Reference**  
**Datum:** 0 = Bottom of Clay Liner


**Type of Test - Field:** ASTM D-2397 Drive Sleeve Method  
**Laboratory:** ASTM D-1557 Modified Proctor  
**Date Tested:** May 17, 2005


**Remarks:** The tests below have met the minimum 95% relative soil compaction requirement of Laboratory Proctor maximum dry density.

TEST LOCATION			LABORATORY RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
3-2	2063, lift 3-2	0	99.0	19.5	113.7	10.8	115.8
3-10	60 feet east of 2063	0	99.0	19.5	97.3	12.0	98.2

**Technician:** Mr. Mario Arroyo

**cc:** Client (1)

Reviewed By:   
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 6/16/05



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-01  
Report No.: DR #9  
Date: June 1, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## IN-PLACE DENSITY TEST REPORT

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, Cell 14

**Area Tested:** Clay Liner

**Reference Datum:** 0 = Bottom of Clay Liner

**Type of Test - Field:** ASTM D-2397 Drive Sleeve Method  
**Laboratory:** ASTM D-1557 Modified Proctor  
**Date Tested:** May 18, 2005

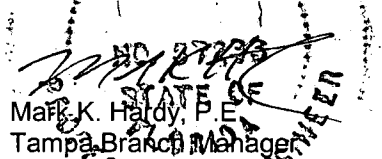
**Remarks:** The tests below have met the minimum 95% relative soil compaction requirement of Laboratory Proctor maximum dry density.

TEST LOCATION			LABORATORY RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
3-6	2067 lift 3-6	0	99.0	19.5	109.9	12.2	111.0
3-11	40 feet north & 20 feet east of 2067	0	99.0	19.5	111.5	11.0	112.6
3-3	2064 lift 3-3	0	99.0	19.5	111.7	8.6	112.8
3-12	20 feet south of 2064	0	99.0	19.5	107.4	12.0	108.4

**Technician:** Mr. Mario Arroyo

**cc:** Client (1)

Reviewed By:   
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 6/16/05





# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No.: 80540-001-01  
Report No.: DR #10  
Date: July 12, 2005

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## IN-PLACE DENSITY TEST REPORT

**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, Cell 14

**Area Tested:** Clay Liner

**Reference**  
**Datum:** 0 = Bottom of Clay Liner

**Type of Test - Field:** ASTM D-2397 Drive Sleeve Method  
**Laboratory:** ASTM D-1557 Modified Proctor  
**Date Tested:** May 14, 2005

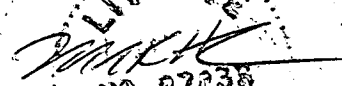
**Remarks:** Second half of third lift. The tests below have met the minimum 95% relative soil compaction requirement of Laboratory Proctor maximum dry density.

TEST LOCATION			LABORATORY RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
2-4	2059 lift 2-4	+0	99.0	19.5	105.3	8.6	106.3
2-10	55 feet east of 2059 2-10	+0	99.0	19.5	106.2	9.5	107.2

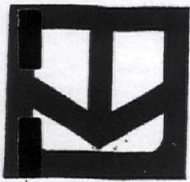
**Technician:** Mr. Mario Arroyo

**cc:** Client (1)

Reviewed By:  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000549

  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 7/12/05

## APPENDIX E



# UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No: 80540-001-02  
Report No.: PW #1  
Date: June 15, 2004

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

## REPORT ON TRIAXIAL PERMEABILITY AND PERCENT PASSING NO. 200 SIEVE

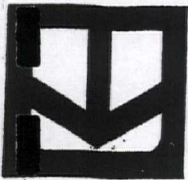
**Client:** Angelo's Aggregate Materials  
Attention: Dominic Lafate  
26400 Sherwood Street  
Warren, MI 48091

**Project:** Dade City Landfill, Cell #14

**Sampled By:** Mario Arroyo

### TEST RESULTS

Test #	Date Sampled	Location	Percent passing No. 200 Sieve	Permeability	
				K (cm/s)	K ft/day
1 - 1	5/5/05	2050	46.3	1.19 E-07	3.39 E-04
1 - 2	5/13/05	2051	61.5	2.03 E-07	5.76 E-04
1 - 3	5/13/05	2052	40.3	2.71 E-07	7.67 E-04
1 - 4	5/13/05	2053	--	2.1 E-07	-----
1 - 5	5/13/05	2054	42.3	2.27 E-07	6.45 E-04
1 - 6	5/05/05	2055	48.7	7.94 E-08	2.25 E-04
2 - 2	5/13/05	2057	--	5.5 E-08	-----
2 - 4	5/14/05	2059	--	4.5 E-05	-----
2 - 5	5/13/05	2060	--	1.0 E-06	-----
2 - 6	5/13/05	2061	--	2.2 E-07	-----
2 - 8	5/09/05	120' North of 2056	41.7	2.43 E-07	6.88 E-04
2 - 9	5/09/05	120' South of 2058	44.5	1.64 E-07	4.64 E-04



# UNIVERSAL ENGINEERING SCIENCES

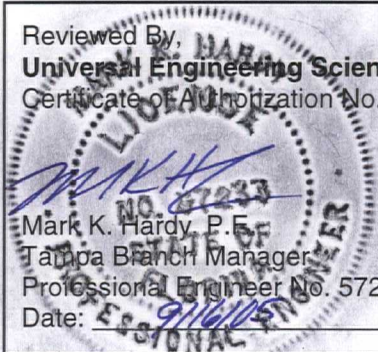
Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

Project No: 80540-001-02  
Report No.: PW #1  
Date: June 15, 2004

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Test #	Date Sampled	Location	Percent passing No. 200 Sieve	Permeability	
				K (cm/s)	K ft/day
3 - 1	5/20/05	2062	45.2	1.43 E-07	4.05 E-04
3 - 2	5/17/05	2063	--	6.1 E-08	-----
3 - 3	5/18/05	2064	--	1.3 E-04	-----
3 - 4	5/20/05	2065	47.2	6.15 E-06	1.74 E-02
3 - 5	5/11/05	2066	43.6	3.61 E-07	1.02 E-03
3 - 6	5/18/05	2067	--	5.7 E-08	-----

Reviewed By,  
**Universal Engineering Sciences, Inc.**  
Certificate of Authorization No. 00000549

  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 9/16/05

# UNIVERSAL ENGINEERING SCIENCES

**Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection**

**9802 Palm River Road • Tampa, Fl 33619-4438 • (813) 740-8506 • Fax (813) 740-8706**

## REPORT ON TRIAXIAL PERMEABILITY AND PERCENT PASSING NO. 200 SIEVE

**Client :** Angelo's Recycling  
**Project :** Dade City Landfill  
**Tested By :** Chris Haley  
**Sampled By :** Mario

**Project No :** 80540-001-02  
**Report No.** MW #1  
**Date :** 7/12/2005

## TEST RESULTS

[illegible]

Reviewed By,  
Universal Engineering Sciences, Inc.  
Cert. of Authorization No. 00000549

Mark K. Hardy P.E.  
Tampa Branch Manager  
Professional Engineer No. 57283  
Date: 3/7/84



**Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection**

**9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706**

## REPORT ON TRIAXIAL PERMEABILITY AND PERCENT PASSING NO. 200 SIEVE

**Client :** Angelo's Recycling  
**Project :** Dade City Landfill  
**Tested By :** Lori Bass  
**Sampled By :** Mario

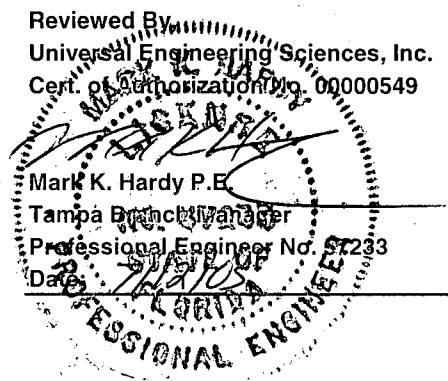
**Project No :** 80540-001-02  
**Report No.** PW #1  
**Date :** 7/12/2005

## TEST RESULTS

[illegible]

Reviewed By:  
Universal Engineering Sciences, Inc.  
Cert. of Authorization No. 00000549

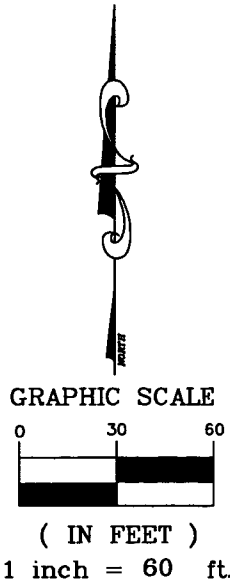
Mark K. Hardy P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 12/18/2018





CELL 14 TEST LOCATIONS

SEC 26 TWP 22 S, RNG 18 E.  
PASCO COUNTY, FLORIDA



ASBUILT SURVEY

NOTES:

- 1. THIS DRAWING IS NOT INTENDED TO REPRESENT A BOUNDARY SURVEY.
- 2. ELEVATIONS SHOWN HEREON ARE BASED ON THE CONSTRUCTION PLANS FOR THE ENTERPRISE RECYCLING & DISPOSAL FACILITY AND ENTERPRISE RD. BENCH MARK USED IS A NAIL & DISK IN A POWER POLE STATION 115+74.55 58.36 LT. ELEVATION = 114.02'.
- 3. THIS SURVEY DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF THE PARTY OR PARTIES CERTIFIED TO BELOW FOR THE EXPRESS PURPOSE STATED HEREON AND/OR CONTAINED IN THE CONTRACT BETWEEN FORESIGHT SURVEYORS, INC. AND THE CLIENT FOR THIS PROJECT. COPYING, DISTRIBUTING, AND/OR USING THIS DRAWING, IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT WRITTEN CONSENT FROM FORESIGHT SURVEYORS, INC. IS STRICTLY PROHIBITED, AND RENDERS THE SURVEYOR'S CERTIFICATION, SIGNATURE AND SEAL HEREON NULL AND VOID. ANY QUESTIONS CONCERNING THE CONTENT OR PURPOSE OF THIS DRAWING SHOULD BE DIRECTED TO FORESIGHT SURVEYORS, INC.

(Subject to any notes and notations listed or labeled hereon)  
This survey is not valid without the signature and original raised seal of a Florida licensed surveyor and mapper LB 5776

**FORESIGHT  
SURVEYORS, INC.**

773 PROVIDENCE BOULEVARD  
BROOKSVILLE, FLORIDA 34601  
PH. (352) 797-6306 FAX (352) 797-6308

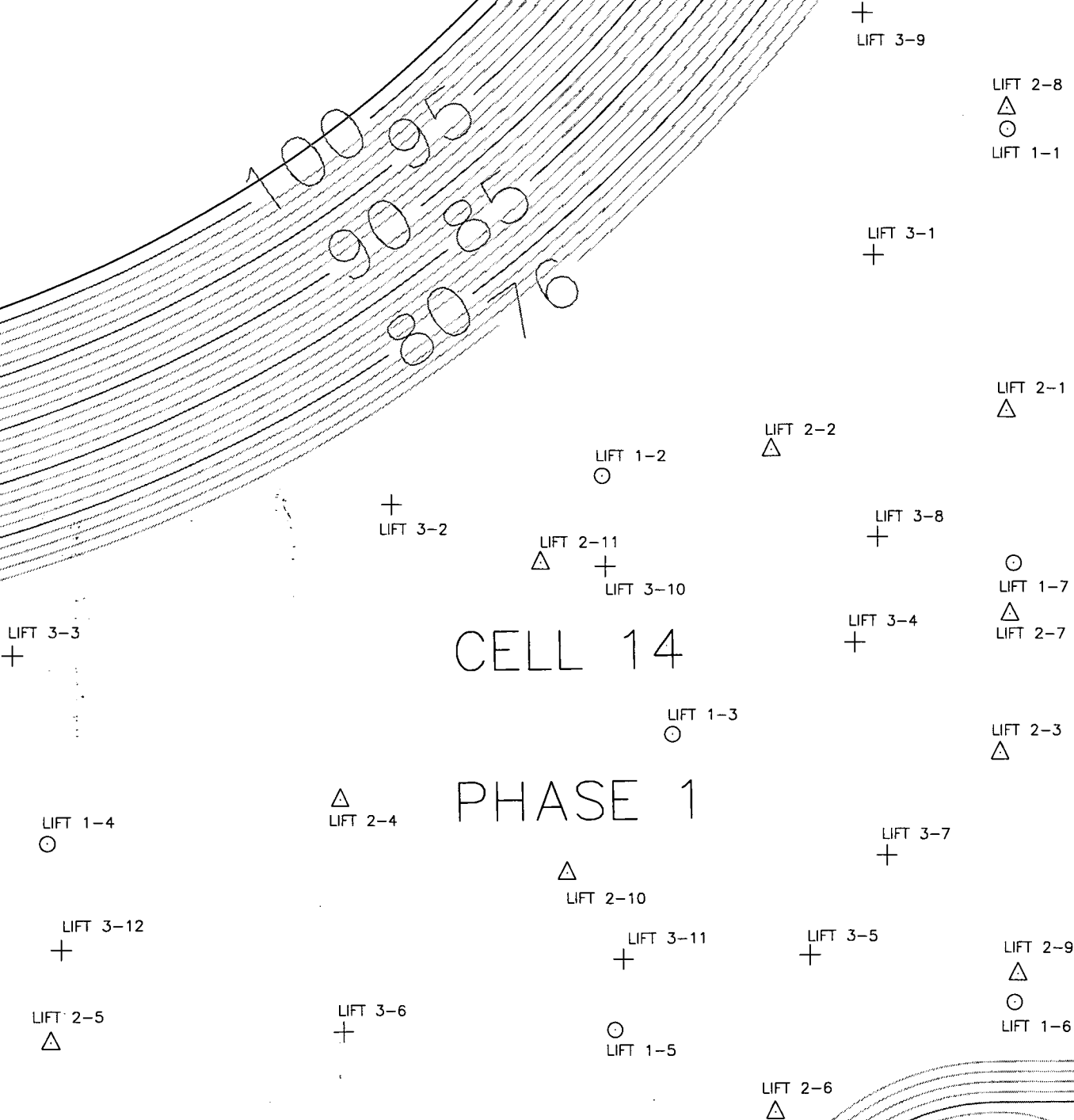
FILE	DATE	SCALE 1"=60'
DRAWN ADM	DATE	FIELD 5-13-05
CHECKED	DATE	PROJECT #
A. DANIEL MILLER, P.S.M. Fla. Surveyors Reg'n No. 6294		23196

CELL 14

PHASE 1

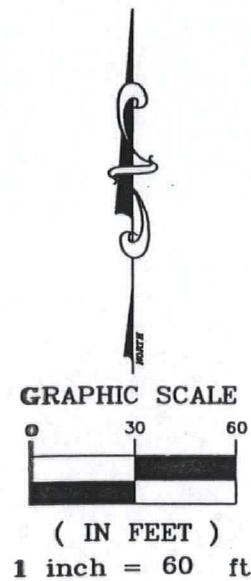
100-95  
90-85  
80-76

76  
80



# CELL 14 TEST LOCATIONS

SEC 26 TWP 22 S, RNG 18 E.  
PASCO COUNTY, FLORIDA





## ASBUILT SURVEY

P= Permeability Test Location  
D= In-place Density Test Location

### NOTES:

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3. THIS SURVEY DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF THE PARTY OR PARTIES CERTIFIED TO BELOW FOR THE EXPRESS PURPOSE STATED HEREON AND/OR CONTAINED IN THE CONTRACT BETWEEN FORESIGHT SURVEYORS, INC. AND THE CLIENT FOR THIS PROJECT. COPYING, DISTRIBUTING, AND/OR USING THIS DRAWING, IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT WRITTEN CONSENT FROM FORESIGHT SURVEYORS, INC. IS STRICTLY PROHIBITED, AND RENDERS THE SURVEYOR'S CERTIFICATION, SIGNATURE AND SEAL HEREON NULL AND VOID. ANY QUESTIONS CONCERNING THE CONTENT OR PURPOSE OF THIS DRAWING SHOULD BE DIRECTED TO FORESIGHT SURVEYORS, INC.

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 <b>FORESIGHT SURVEYORS, INC.</b>		
<b>773 PROVIDENCE BOULEVARD</b> <b>BROOKSVILLE, FLORIDA 34601</b> <b>PH. (352) 797-6306 FAX (352) 797-6308</b>		
FILE	CERTIFIED AS TO SURVEY	SCALE 1"=60'
DRAWN ADM	<i>A. Daniel Miller</i>	FIELD DATE 5-13-05
CHECKED	DATE: 6-8-05	PROJECT #
	A. DANIEL MILLER, P.S.M. Fla. Surveyors Reg'n No. 6294	23196

CELL 14

PHASE 1

LIFT 3-3  
+ P,D

LIFT 1-4  
○ P,D

LIFT 3-12  
+ D

LIFT 2-5  
△ P,D

Lift 1-8  
D

LIFT 2-4  
△ P,D

LIFT 3-6  
+ P,D

LIFT 2-11  
△ D +

LIFT 3-10  
D

LIFT 2-10  
D

LIFT 3-11  
+ D

LIFT 1-5  
○ P,D

LIFT 1-2  
○ P,D

LIFT 2-2  
△ P,D

LIFT 2-6  
△ P,D

LIFT 3-4  
+ P

LIFT 3-7  
+ D

LIFT 3-5  
+ P

LIFT 3-9  
+ D

LIFT 3-1  
+ P

LIFT 2-8  
△ P,D

LIFT 1-1  
○ P,D

~~LIFT 2-1~~  
~~△~~

LIFT 1-7  
○ D

LIFT 2-7  
△ D

~~LIFT 2-3~~  
~~△~~

LIFT 2-9  
△ P,D

LIFT 1-6  
○ P,D

100-95  
90-85  
80-76

76

80

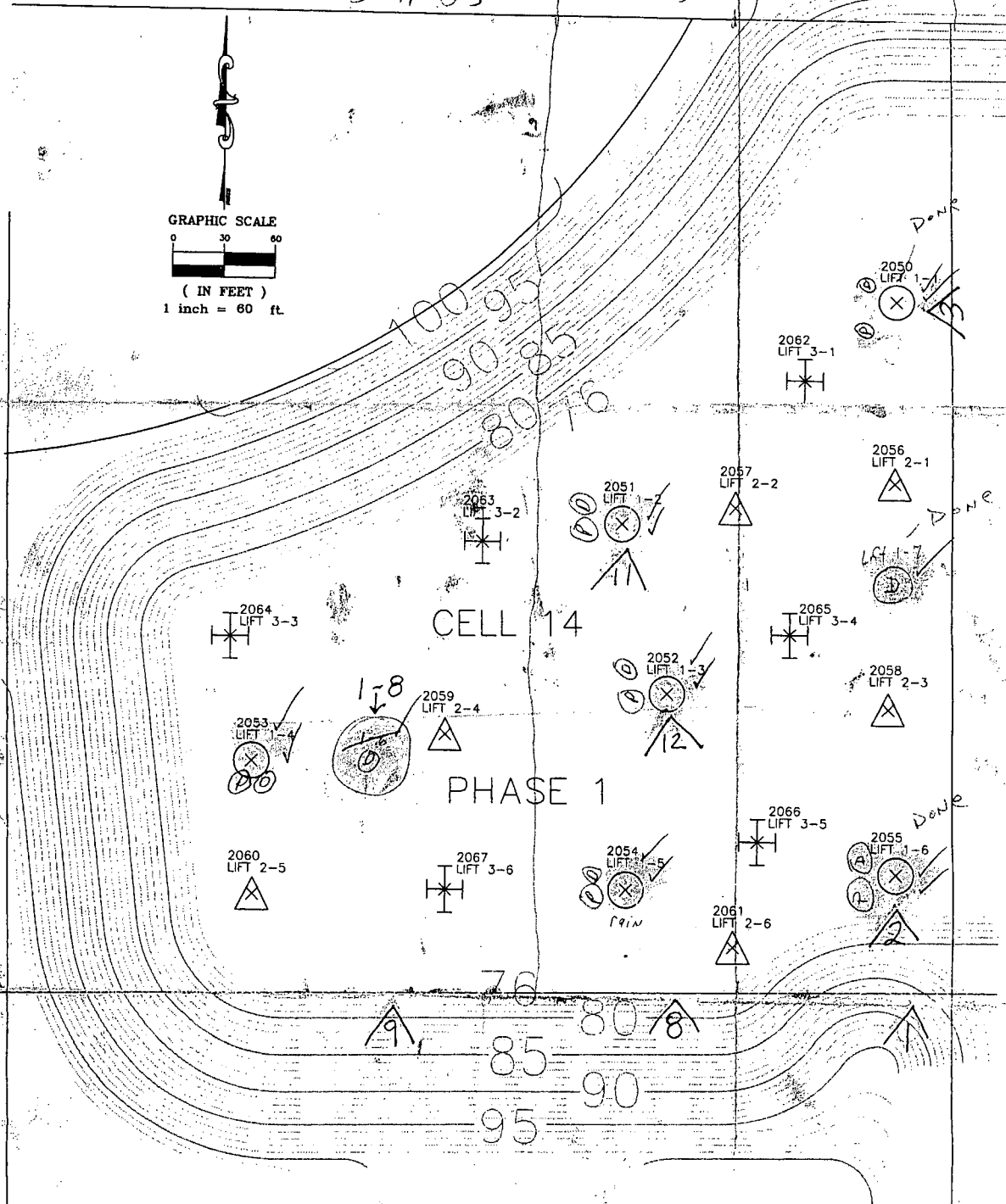


Lift 1  
Page

301 to Clinton Make Right  
go thru 4 way. Approx 120'  
continue to 0.5 PR. Lift  
5-11-05

Approx 120'  
5-5-05

GRAPHIC SCALE  
0 30 60  
( IN FEET )  
1 inch = 60 ft.



- LIFT #1 PERM TEST LOCATION
- △ LIFT #2 PERM TEST LOCATION
- ⊕ LIFT #3 PERM TEST LOCATION

LIFT 2

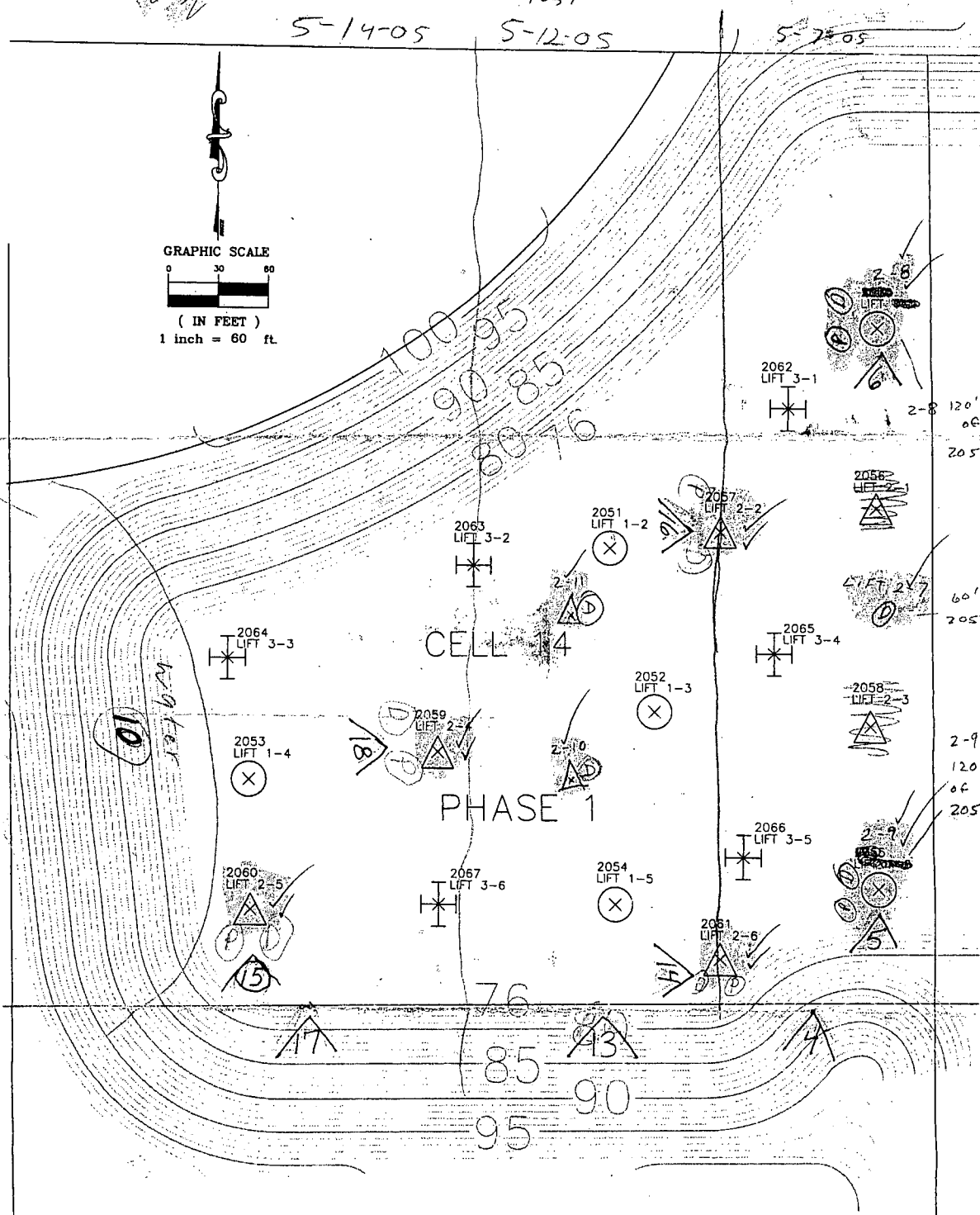
5-13/05  
+05+

5-14-05

5-12-05

5-7-05

GRAPHIC SCALE  
0 30 60  
( IN FEET )  
1 inch = 60 ft.



- LIFT #1 PERM TEST LOCATION
- △ LIFT #2 PERM TEST LOCATION
- ⊕ LIFT #3 PERM TEST LOCATION

LIFT (3)

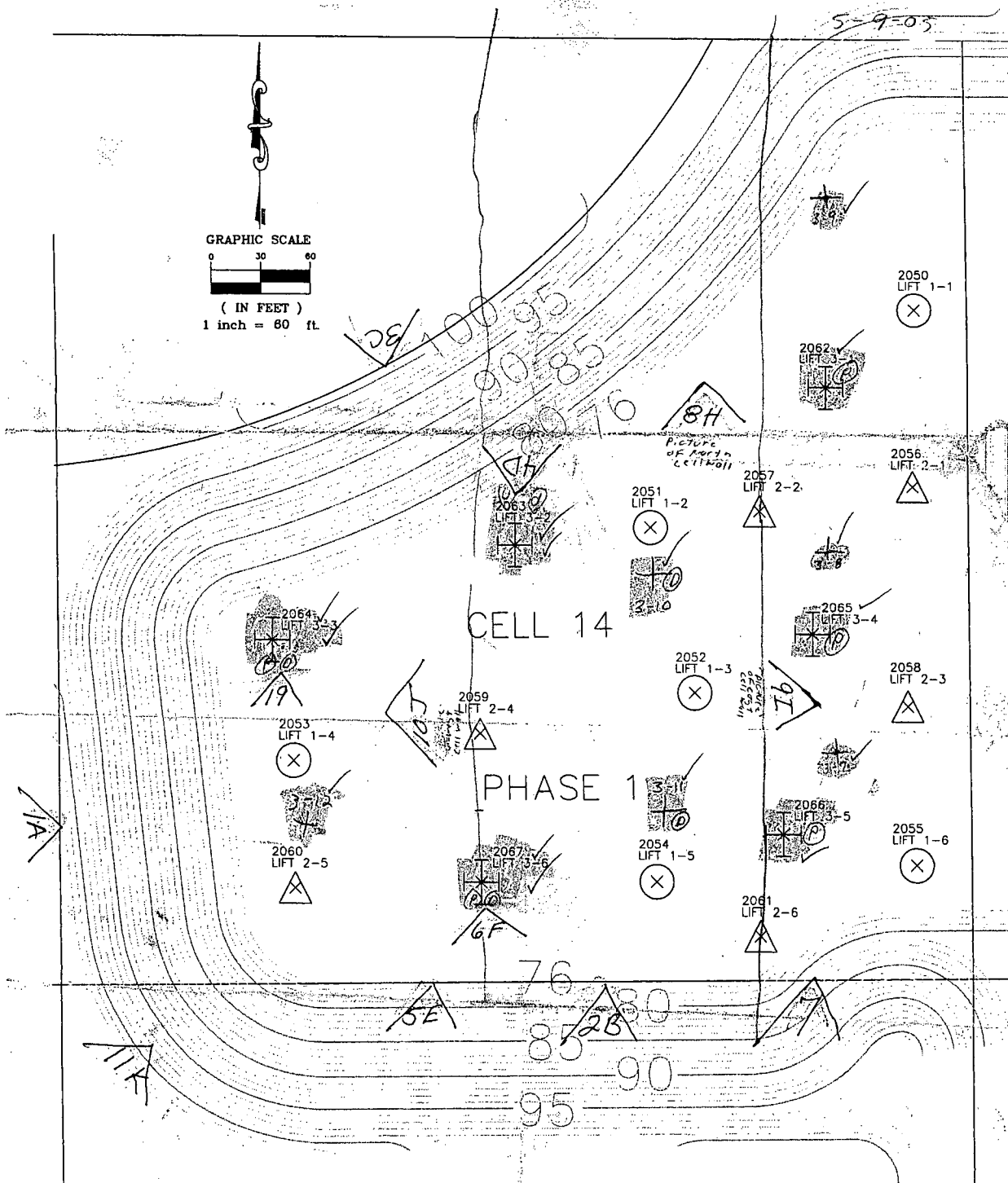
5-9-03

GRAPHIC SCALE



( IN FEET )

1 inch = 60 ft.



○ LIFT #1 PERM TEST LOCATION

△ LIFT #2 PERM TEST LOCATION

⊞ LIFT #3 PERM TEST LOCATION

# Media Insert

Dep Box Number: DWM-SWD-SW-247

Pride Box Number: DEPS-S12B2046

PreIndex ID Number: 1572189

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Notes: **DADE CITY LANDFILL**

## APPENDIX F



4





5





6





7





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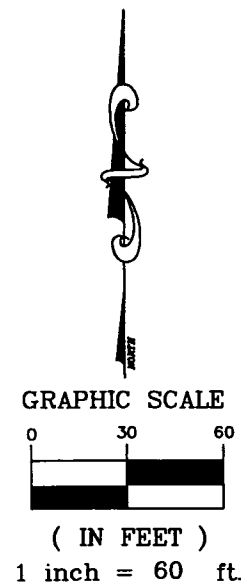


11



# CELL 14 TEST LOCATIONS

SEC 26 TWP 22 S, R18 E.  
PASCO COUNTY, FLORIDA



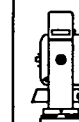
## ASBUILT SURVEY

7 → Approximate Photograph Location and Direction

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FILE	CERTIFIED AS TO SURVEY	SCALE 1"=60'
DRAWN ADM	DATE: 6-8-05	FIELD 5-13-05
CHECKED	A. DANIEL MILLER, P.S.M. Fla. Surveyors Reg'n No. 6294	PROJECT # 23196