



Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
13051 North Telecom Parkway  
Temple Terrace, FL 33637-0926  
Telephone: 813-632-7600

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, Fl. 33771

December 15, 2006

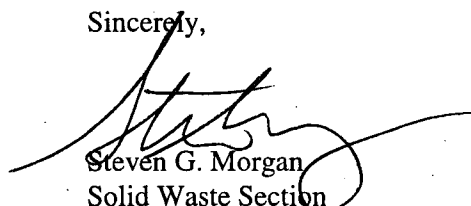
RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County  
Certification of Construction Completion, Cell 4 (approximately 7.34 acres)

Dear Mr. Iafrate:

The Department has reviewed the Certification of Construction Completion for the Cell 4, prepared by John Arnold, P.E. dated and received October 27, 2006 and additional information dated and received November 22, 2006. Based on the information submitted, the Department approves the certification of construction completion of the 7.34 acres of Cell 4. Operation of Cell 4 shall be in accordance with Department Permit No. 177982-002-SO.

If you have any questions, you may contact me at (813) 632-7600 ext. 385.

Sincerely,



Steven G. Morgan  
Solid Waste Section  
Southwest District

sgm

cc: John Arnold, P.E., 34924 Williams Cemetery Road, Dade City, Fl. 33525  
Fred Wick, FDEP, Tallahassee  
Susan Pelz, P.E., FDEP Tampa, SW  
John Morris, P.G., FDEP Tampa, SW

"More Protection, Less Process"

Printed on recycled paper.

Dept. of Environmental  
Protection

NOV 22 2006

November 22, 2006

Southwest District

Susan Pelz, P.E.  
Solid Waste Section  
Florida Department of Environmental Protection - Southwest District  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926

RE: Enterprise Class III Landfill  
Cell 4 Construction Completion Report  
Request for Additional Information  
Angelo's Aggregate Materials, Ltd.  
FDEP Permit Nos. 177982-001-SC and 177982-002-SO  
Pasco County, Florida

Dear Ms. Pelz:

We received your correspondence dated November 16, 2006 requesting additional information (RAI) for certification of the referenced project. The additional information you've requested is provided herein. For clarification, we have repeated the Departments request (bold) with our response immediately following. We have provided three (3) original responses for your use and review.

**Comment No.1: Please provide surveys that indicate which layer is included in the survey (i.e., subbase or top of confining/clay layer).**

Response No.1: Signed and sealed drawings of both the "top of clay" and "top of subgrade" are provided in Attachment A of this response. The "subgrade" or "subbase" is the top of the excavation, prior to backfilling with clay. The "top of clay" is the top of the finished 3' clay layer.

**Comment No. 2.a.: Please provide the laboratory reports for the permeability testing.**

Response No. 2.a.: Universal Engineering Sciences, Inc. (Universal) has prepared a separate response to questions concerning their work as the Independent Construction Quality Assurance (CQA) Engineer for this project. Universal's response and the requested laboratory reports for the permeability tests are provided in Attachment B.

**Comment No. 2.b.: Please provide photographs that are numbered and correspond to the appropriate daily reports. Several of the reports referenced photographs that are not located with the report for that specific date.**

Response No. 2.b.: Additional information from Universal, addressing this comment, is provided in Attachment B.

**Comment No. 2.c.: The QA daily reports do not describe the activity observed, the occurrence of limestone or other problems encountered during construction. Some reports do not describe any observations, but only indicate "Cell #4."**

Response No. 2.c.: Additional information from Universal, addressing this comment, is provided in Attachment B.

**Comment No. 2.d.: The Department was notified on an occurrence of limestone encountered in June 2006 located at the central part near the eastern boundary. The notification indicated that the elevation of the limerock was from +84ft. to 95 ft. NGVD. Discussion of this limerock occurrence was not included in the QA report. Based on the surveys provided, it appears that this material was completely excavated during construction. Please provide photographs that demonstrate that the limestone in this area was completely excavated prior to placing the clay layer.**

Response No. 2.d.: Additional information from Universal, addressing this comment, is provided in Attachment B.

**Comment No. 2.e.: Please provide the dates that the clay later was constructed for each of the grids shown in the Test Location Maps.**

Response No. 2.e.: Additional information from Universal, addressing this comment, is provided in Attachment B.

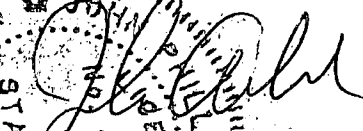
**Comment No. 2.g.: Please explain why no photographs were taken from 10/5/06 and 10/10/06.**

Response No. 2.g.: Additional information from Universal, addressing this comment, is provided in Attachment B.

Ms. Susan Pelz, P.E., Solid Waste Section  
Enterprise Road Class III Landfill RAI  
Page 3 of 3

We trust that this information completely answers the Departments RAI and would like to commence operations in the Cell 4 within 14 days from your receipt of this additional information. Please call me at 352.339.1408 if you have any questions or require any additional information.

Sincerely,



Date: 11/22/06

John Arnold, P.E.  
State of Florida  
P.E. # 47164

34924 Williams Cemetery Road  
Neade City, FL 33525

Attachments

cc: John Morris, P.G., FDEP  
Dominic Iafrate  
Jeff Rogers



**Attachment A**

**Top of Clay and Top of Subgrade Surveys**

**Enterprise Class III Landfill - Cell 4 Construction Completion**

**Response to the Departments November 16, 2006 Request for Additional Information**

**Attachment B**

**Universal Engineering Sciences, Inc. Report**

**Enterprise Class III Landfill – Cell 4 Construction Completion**

**Response to the Departments November 16, 2006 Request for Additional Information**



# UNIVERSAL ENGINEERING SCIENCES

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

November 22, 2006

Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Avenue, S.E.  
Largo, Florida 33771

Attention: Mr. Dominic Iafrate

Reference: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC & 177982-002-SO, Pasco County  
Certification of Construction Completion, Cell #4  
Pasco County, Florida

Dear Mr. Iafrate:

We have reviewed the comments from the FDEP with respect to the letter dated November 16, 2006 and have made the appropriate changes to Attachment C.

- a. Lab reports with the permeability testing has been included.
- b. Photographs have been numbered and located with the daily report.
- c. We have reviewed the QA daily reports. The reports indicate the observations of our technician while on the site. A few reports indicate the equipment was excavating to design grade without further explanation. No additional comments were recorded since the technician did not note any activity out of the ordinary.
- d. We notified the FDEP of the occurrence of limestone. We understood that the limestone would be over excavated, surveyed and backfilled with clay. We did not realize photographic documentation was necessary, thus we do not have any photographs.
- e. Dates of the clay layer construction has been added to the grids.
- f. The white material shown in photos was clay material.
- g. The technician accidentally recorded over the digital photographs for the week of 10/05/06 through 10/10/06.

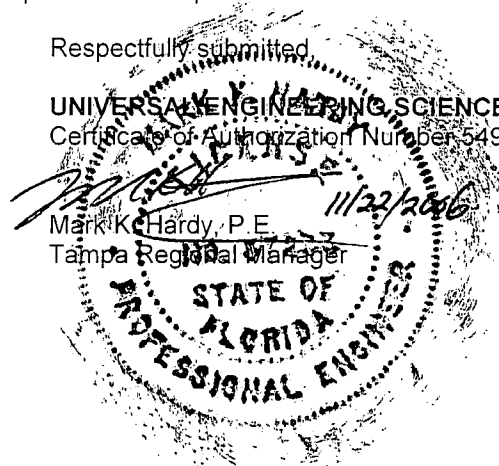
Please contact the undersigned if you have any further questions or require additional information.

Respectfully submitted,

UNIVERSAL ENGINEERING SCIENCES, INC.  
Certificate of Authorization Number 549

Mark K. Hardy, P.E.  
Tampa Regional Manager

cc: John Arnold P.E., Angelo's



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

OFFICES IN: Atlanta • Daytona Beach • DeBary • Fort Myers • Fort Pierce • Gainesville • Hollywood • Houston • Jacksonville • Leesburg • Miami  
Ocala • Orlando • Palm Coast • Panama City • Pensacola • Rockledge • Sarasota • St. Augustine • Tampa • West Palm Beach



# 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

---

CELL #4  
SITE INSPECTION REPORTS  
PICTURES  
TEST RESULTS  
TEST LOCATION MAPS

\*\*\*

Project #: 80540-001-02

**Prepared For:**

Angelo's Aggregate Materials

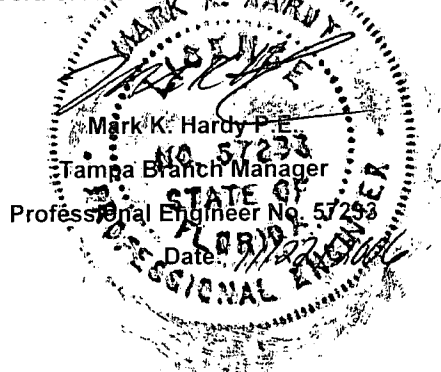
**Prepared By:**

Universal Engineering Sciences  
9802 Palm River Road  
Tampa, Florida 33619  
(813) 740-8506

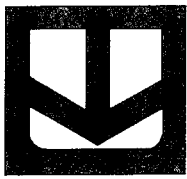
**Reviewed By,**

Universal Engineering Sciences, Inc.

Cert. of Authorization No. 00000549



Reissued 11/21/06



# **UNIVEF.SAL**

## **ENGINEERING SCIENCES**

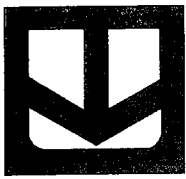
Consultants in: Geotechnical Engineering • Environmental Sciences  
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

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

---

### **Test Performed in Accordance with the Following Test procedures.**

Density's - ASTM D-2397  
Standard Proctor - ASTM D-698  
200 Wash - AASHTO T-11  
Permeability - ASTM D-2434



# UNIVET.SAL

## 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

### Test Location Summary and Results Cell 4 / Lift 1

Location	Density	Moisture	Perm.	200 Wash	Atterburg
A - 1	107%	19.9%			
A - 2	104%	24.3%			
A - 3	107%	20.8%			
A - 4	104%	20.3%	10 -9	50.3	
A - 5	105%	22.3%			
A - 6	104%	21.7%	10 -9	51.5	
A - 7	101%	24.3%	10 -9	52.1	39
A - 8					
B - 1	104%	20.4%			
B - 2	102%	21.1%	10 -9	46.9	
B - 3	104%	20.7%			
B - 4	109%	21.1%			
B - 5	110%	21.7%	10 -9	52.8	
B - 6	110%	20.8%			
B - 7	112%	19.8%			
B - 8	107%	21.1%	10 -9	62.9	52
C - 1	106%	20%	10 -9	49.6	
C - 2					
C - 3	106%	19.6%	10 -7	47.2	
C - 4	105%	21.7%			
C - 5	105%	21.4%			
C - 6	108%	17.8%	10 -9	58.1	
C - 7	106%	17.5%			
C - 8					

\* Permeability reported in cm/s

## Test Location Map

### Cell 4 / Lift 1

C	Density Perm. 10/13/06	10/13/2006	Density Perm. 10/11/06	Density 9/28/06	Density 9/28/06	Density Perm. 10/6/06	Density 10/6/06	10/6/2006
B	Density 10/13/06	Density Perm. 9/29/06	Density 9/23/06	Density 9/23/06	Density Perm. 9/13/06	Density 9/13/06	Density 9/13/06	Density Perm. Atterburg 9/13/06
A	Density 10/13/06	Density 9/29/06	Density 9/23/06	Density Perm. 9/23/06	Density 9/1/06	Density Perm. 9/1/06	Density Perm. Atterburg 9/1/06	9/1/2006
	1	2	3	4	5	6	7	8



# UNIVET SAL

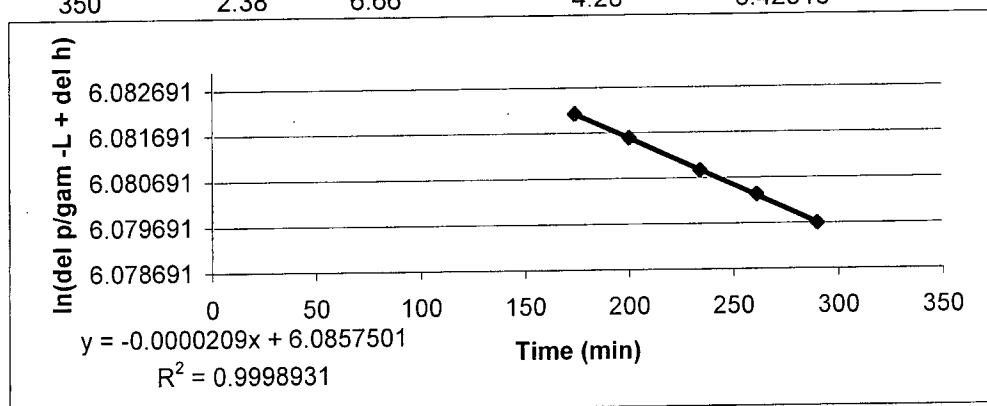
## ENGINEERING SCIENCES

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

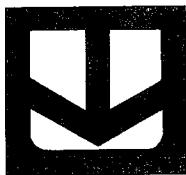
Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- A-4/Cell 4  
Depth of the Sample :- Lift 1

Time (min)	Burette 2 vol c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_{\text{sat}}} w - L + \Delta h \ln(y)$	
10.33 am						
0	1.1	8.16		7.06	13.89761	441.9301 6.091152
39	1.3	7.48		6.18	12.16533	440.1979 6.087224
77	1.48	7.24		5.76	11.33856	439.3711 6.085344
113	1.64	7.1		5.46	10.74801	438.7805 6.083999
140	1.74	7		5.26	10.35431	438.3868 6.083102
174	1.88	6.92		5.04	9.92124	437.9538 6.082113
200	1.96	6.88		4.92	9.68502	437.7176 6.081574
234	2.08	6.84		4.76	9.37006	437.4026 6.080854
261	2.16	6.8		4.64	9.13384	437.1664 6.080314
290	2.24	6.74		4.5	8.85825	436.8908 6.079683
320	2.3	6.7		4.4	8.6614	436.6939 6.079233
350	2.38	6.66		4.28	8.42518	436.4577 6.078691



Date of test setup :- 9-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.45 psi  
Back pressure:- 16.04 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000209  
K= 5.19179E-07 cm/min  
K= 8.65298E-09 cm/sec  
K= 2.45281E-05 ft/day





# UNIVEF.SAL

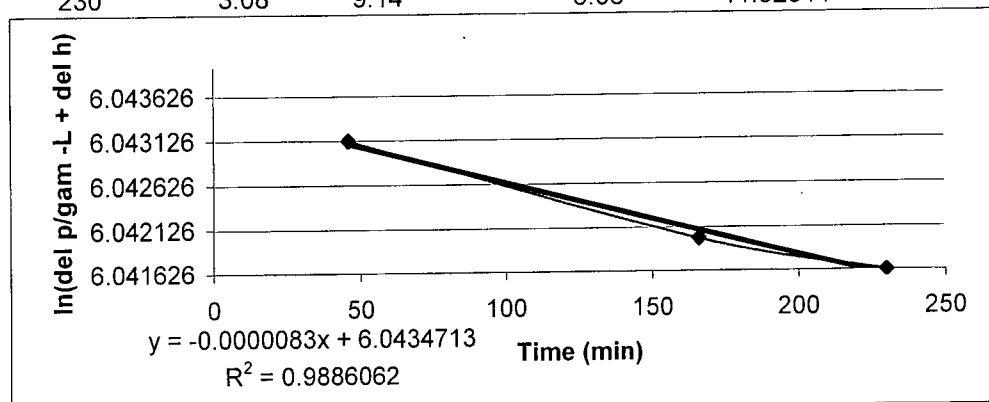
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- A-7/Cell 4  
Depth of the Sample :- Lift 1

Time (min)	Burette 2	Burette 3	Del v	Del h	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
10.33 am	vol c.c	vol. c.c	c.c	inches		
0	2.78	9.34		6.56	12.91336	421.5607 6.043964
46	2.9	9.28		6.38	12.55903	421.2064 6.043123
166	3.04	9.18		6.14	12.08659	420.7339 6.042001
230	3.08	9.14		6.06	11.92911	420.5764 6.041626



Date of test setup :- 18-Sep-06  
Sample length :- 9.21 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 19.71 psi  
Back pressure :- 15.34 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000083  
K= 1.86169E-07 cm/min  
K= 3.10282E-09 cm/sec  
K= 8.7954E-06 ft/day



# UNIVET.SAL

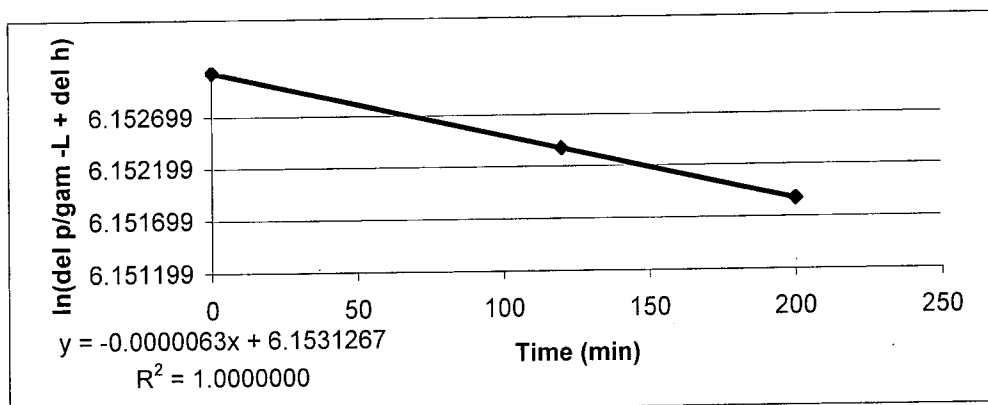
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- A-6/Cell 4  
Depth of the Sample :- Lift 1

Time (min)	Burette 2 vol c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
0	2.1	8.32		6.22	12.24407	470.1852 6.153127
120	2.22	8.26		6.04	11.88974	469.8309 6.152373
200	2.3	8.22		5.92	11.65352	469.5947 6.15187
340	2.4	8.16		5.76	11.33856	469.2797 6.151199



Date of test setup :- 19-Sep-06  
Sample length :- 8.6 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.2 psi  
Back pressure :- 17.12 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000063  
K= 1.3195E-07 cm/min  
K= 2.19917E-09 cm/sec  
K= 6.23386E-06 ft/day



# UNIVEF.SAL

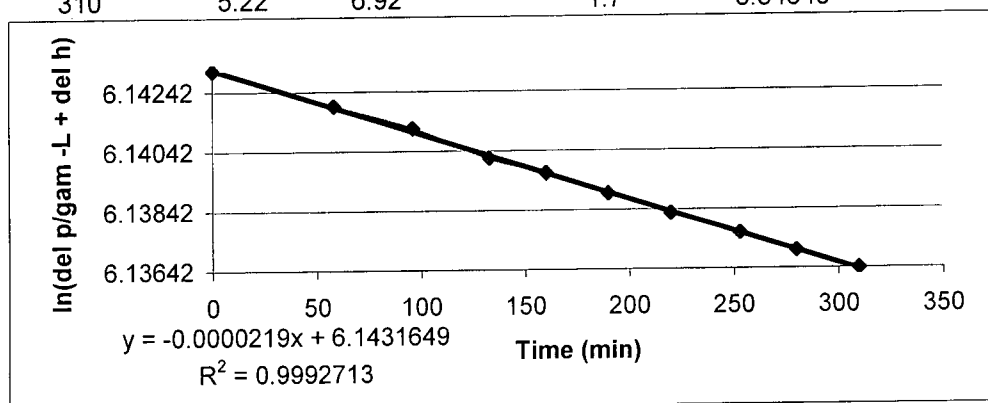
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- B-2/Cell 4  
Depth of the Sample :- Lift 1

Time (min)	Burette 2 vol. c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \text{del } p / \text{gam } w - L + \text{del } h \ln(y)$	
10.33 am						
0	4.46	7.74		3.28	6.45668	465.5056 6.143124
58	4.6	7.6		3	5.9055	464.9544 6.141939
96	4.7	7.52		2.82	5.55117	464.6 6.141177
133	4.8	7.38		2.58	5.07873	464.1276 6.14016
160	4.86	7.32		2.46	4.84251	463.8914 6.13965
190	4.94	7.24		2.3	4.52755	463.5764 6.138971
220	5.02	7.16		2.14	4.21259	463.2615 6.138292
253	5.1	7.08		1.98	3.89763	462.9465 6.137612
280	5.16	7		1.84	3.62204	462.6709 6.137016
310	5.22	6.92		1.7	3.34645	462.3953 6.13642



Date of test setup :- 9-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 23.74 psi  
Back pressure :- 17.16 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000219  
K= 5.4402E-07 cm/min  
K= 9.067E-09 cm/sec  
K= 2.57017E-05 ft/day



# UNIVEF.SAL

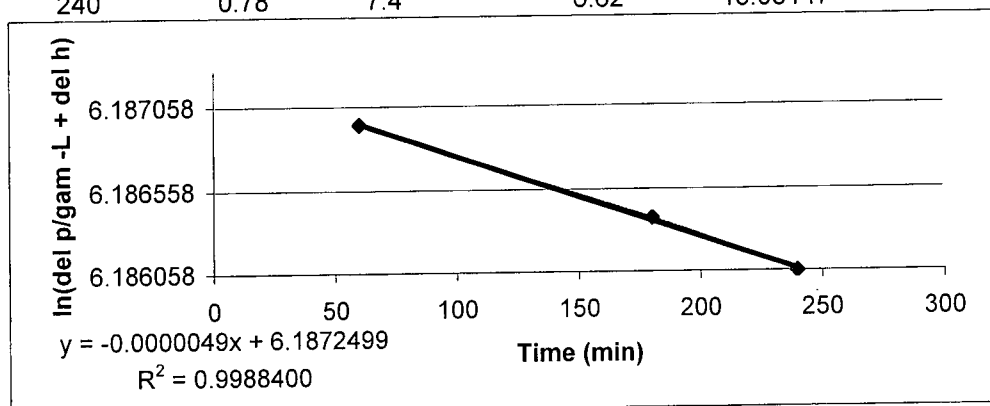
## ENGINEERING SCIENCES

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

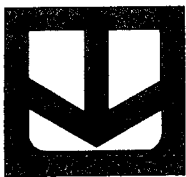
9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- B-5/Cell 4  
Depth of the Sample :- Lift 1

Time (min)	Burette 2 vol. c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
0	0.62	7.54	6.92	13.62202	486.5175	6.187273
60	0.66	7.5	6.84	13.46454	486.36	6.186949
180	0.74	7.44	6.7	13.18895	486.0844	6.186382
240	0.78	7.4	6.62	13.03147	485.9269	6.186058



Date of test setup :- 4-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.08 psi  
Back pressure:- 17.66 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000049  
K= 1.21721E-07 cm/min  
K= 2.02869E-09 cm/sec  
K= 5.75061E-06 ft/day



# UNIVEF.SAL

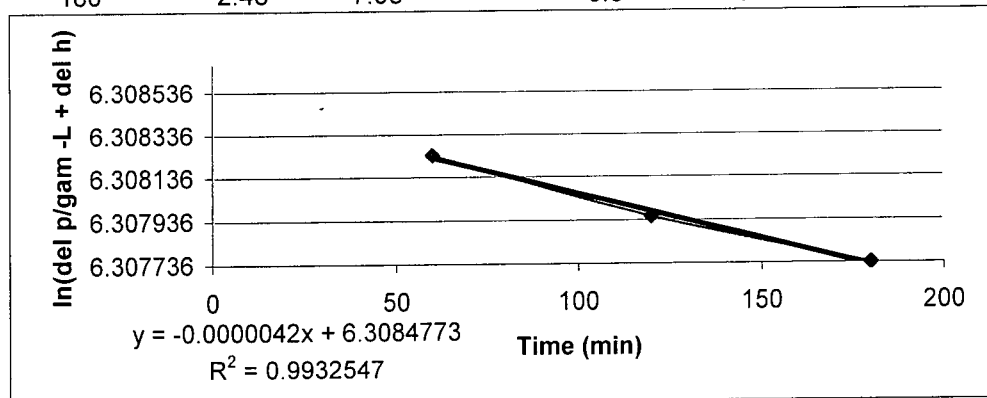
## ENGINEERING SCIENCES

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

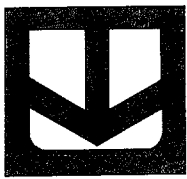
9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- B-8/Cell 4  
Depth of the Sample :- Lift 1

Time (min)	Burette 2	Burette 3	Del v	Del h	y=del p/gam w - L + del h ln(y)	
10.33 am	vol c.c	vol. c.c	c.c	inches		
0	2.34	8.1		5.76	11.33856	549.3129 6.308668
60	2.4	8.04		5.64	11.10234	549.0767 6.308238
120	2.44	8		5.56	10.94486	548.9192 6.307951
180	2.48	7.98		5.5	10.82675	548.8011 6.307736



Date of test setup :- 25-Sep-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 25.08 psi  
Back pressure:- 20.01 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000042  
K= 1.04333E-07 cm/min  
K= 1.73888E-09 cm/sec  
K= 4.9291E-06 ft/day



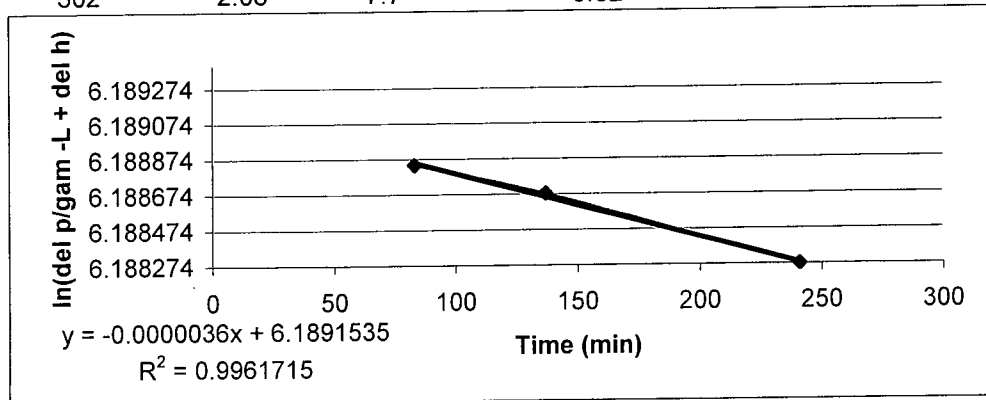
# UNIVERSAL ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- C-1/Cell 4  
Depth of the Sample :- Lift 1

Time (min)	Burette 2 vol. c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
10.33 am						
0	1.6	7.5		5.9	11.61415	487.5559 6.189405
83	1.8	7.56		5.76	11.33856	487.2803 6.188839
137	1.88	7.6		5.72	11.25982	487.2015 6.188678
241	2.02	7.64		5.62	11.06297	487.0047 6.188274
302	2.08	7.7		5.62	11.06297	487.0047 6.188274



Date of test setup :- 11-Sep-06  
Sample length :- 8.9 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 24.21 psi  
Back pressure :- 17.77 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000036  
K= 7.80302E-08 cm/min  
K= 1.3005E-09 cm/sec  
K= 3.68647E-06 ft/day



# UNIVEF.SAL

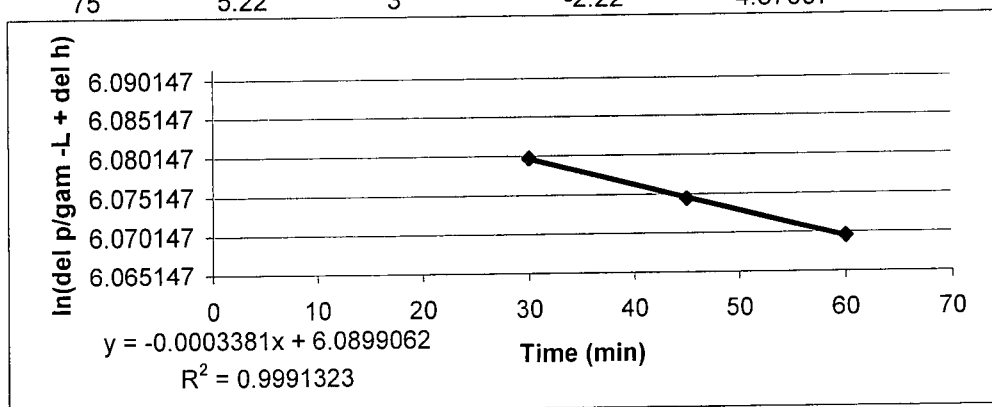
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- C-3/Cell 4  
Depth of the Sample :- Lift 1

Time (min)	Burette 2 vol. c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
10.33 am						
0	2.6	6.24		3.64	7.16534	442.1212 6.091584
15	3.18	5.44		2.26	4.44881	439.4046 6.085421
30	3.72	4.74		1.02	2.00787	436.9637 6.07985
45	4.26	4.1		-0.16	-0.31496	434.6409 6.07452
60	4.74	3.52		-1.22	-2.40157	432.5543 6.069708
75	5.22	3		-2.22	-4.37007	430.5858 6.065147



Date of test setup :- 16-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.1 psi  
Back pressure:- 16.29 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0003381  
K= 8.39877E-06 cm/min  
K= 1.3998E-07 cm/sec  
K= 0.000396792 ft/day



# UNIVEF.SAL

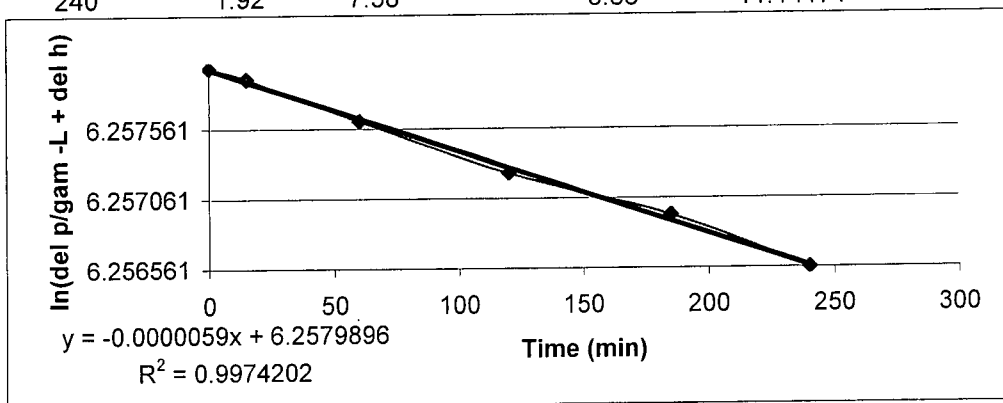
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- C-6/Cell 4  
Depth of the Sample :- Lift 1

Time (min)	Burette 2	Burette 3	Del v	Del h	y=del p/gam w - L + del h ln(y)	
10.33 am	vol c.c	vol. c.c	c.c	inches		
0	1.7	7.74		6.04	11.88974	522.171 6.257995
15	1.72	7.74		6.02	11.85037	522.1316 6.25792
60	1.76	7.7		5.94	11.69289	521.9741 6.257618
120	1.82	7.66		5.84	11.49604	521.7773 6.257241
185	1.86	7.62		5.76	11.33856	521.6198 6.256939
240	1.92	7.58		5.66	11.14171	521.4229 6.256561



Date of test setup :- 13-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 28.5 psi  
Back pressure:- 19.01 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000059  
K= 1.46562E-07 cm/min  
K= 2.44271E-09 cm/sec  
K= 6.92421E-06 ft/day





# UNIVEF.SAL

## 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

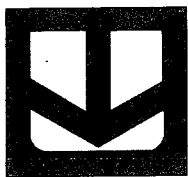
### Test Location Summary and Results Cell 4 / Lift 2

Location	Density	Moisture	Perm.	200 Wash	Atterburg
A - 1	108%	18.6%			
A - 2	105%	24.6%			
A - 3	108%	20.2%	10 -8	50.7	
A - 4	109%	20.8%			
A - 5			10 -9	53.4	36
A - 6	103%	24.3%	10 -9	42.8	
A - 7	106%	19.9%			
A - 8	106%	20.4%	10 -9	54.1	
B - 1	112%	19.2%	10 -8		
B - 2	106%	21.7%			
B - 3	111%	21%			
B - 4	107%	19.9%	10 -9	65.7	
B - 5	110%	20%			
B - 6	111%	21%			
B - 7	108%	24.3%	10 -9	56.7	34
B - 8	109%	21.5%			
C - 1	109%	18.8%			
C - 2	115%	18.8%	10 -8	41.2	
C - 3					
C - 4	107%	17%			
C - 5	108%	18%	10 -8	53.5	
C - 6	107%	17.2%			
C - 7					
C - 8	109%	16.9%	10 -7		

\* Permeability reported in cm/s

**Test Location Map**  
**Cell 4 / Lift 2**

C	Density 10/18/06	Density Perm. 10/11/06	10/11/2006	Density 10/6/06	Density Perm. 10/6/06	Density 10/6/06	10/6/2006	Density Perm. 10/6/06
B	Density Perm. 10/18/06	Density 9/29/06	Density 9/23/06	Density Perm. 9/23/06	Density 9/13/06	Density 9/13/06	Density Perm. Atterburg 9/13/06	Density 9/13/06
A	Density 10/18/06	Density 9/29/06	Density Perm. 9/23/06	Density Perm. 9/23/06	Density Perm. 9/5/06	Density Perm. 9/5/06	Density 9/5/06	Density Perm. 9/5/06
	1	2	3	4	5	6	7	8



# UNIVERSAL

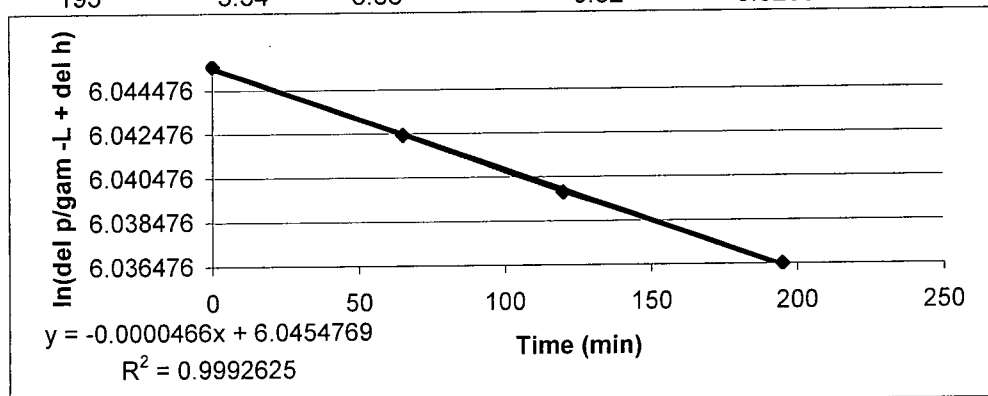
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- A-3/Cell 4  
Depth of the Sample :- Lift 2

Time (min)	Burette 2	Burette 3	Del v	Del h	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
10.33 am	vol c.c	vol. c.c	c.c	inches		
0	2.1	4.36		2.26	4.44881	422.2349 6.045562
65	2.58	4.16		1.58	3.11023	420.8963 6.042386
120	2.92	3.94		1.02	2.00787	419.7939 6.039764
195	3.34	3.66		0.32	0.62992	418.416 6.036476



Date of test setup :- 5-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.25 psi  
Back pressure :- 15.67 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000466  
K= 1.15759E-06 cm/min  
K= 1.92932E-08 cm/sec  
K= 5.46895E-05 ft/day



# UNIVET.SAL

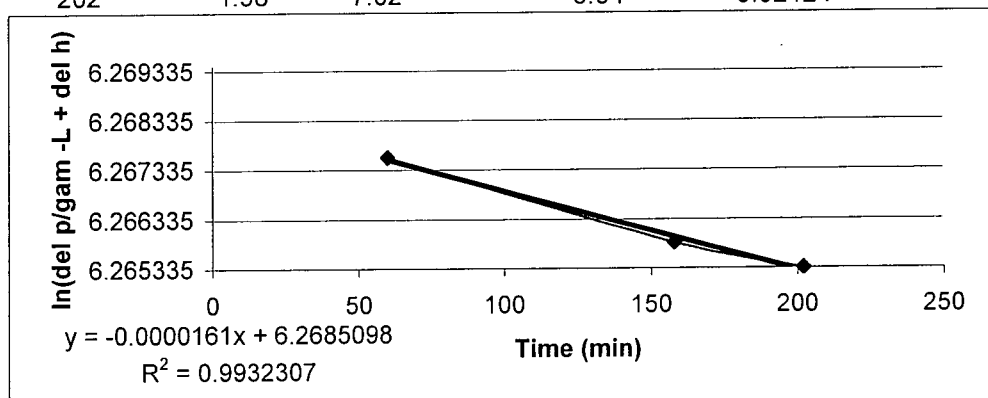
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- A-5/Cell 4  
Depth of the Sample :- Lift 2

Time (min)	Burette 2 vol c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
0	1.42	7.56		6.14	12.08659	528.1834 6.269444
60	1.66	7.3		5.64	11.10234	527.1991 6.267578
158	1.9	7.08		5.18	10.19683	526.2936 6.265859
202	1.98	7.02		5.04	9.92124	526.018 6.265335



Date of test setup :- 14-Sep-06  
Sample length :- 8.89 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 24.83 psi  
Back pressure :- 19.22 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000161  
K= 3.48577E-07 cm/min  
K= 5.80961E-09 cm/sec  
K= 1.64682E-05 ft/day



# UNIVEF.SAL

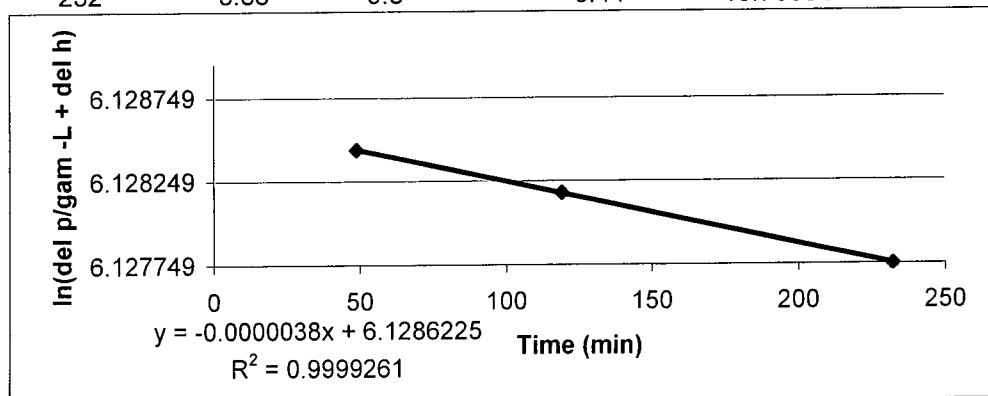
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- A-6/Cell 4  
Depth of the Sample :- Lift 2

Time (min)	Burette 2 vol c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
10.33 am						
0	3.76	9.48		5.72	11.25982	458.9545 6.128951
49	3.8	9.4		5.6	11.0236	458.7183 6.128436
119	3.82	9.36		5.54	10.90549	458.6002 6.128179
232	3.86	9.3		5.44	10.70864	458.4033 6.127749



Date of test setup :- 18-Sep-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 20.3 psi  
Back pressure:- 16.75 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000038  
K= 9.43961E-08 cm/min  
K= 1.57327E-09 cm/sec  
K= 4.45966E-06 ft/day



# UNIVEF.SAL

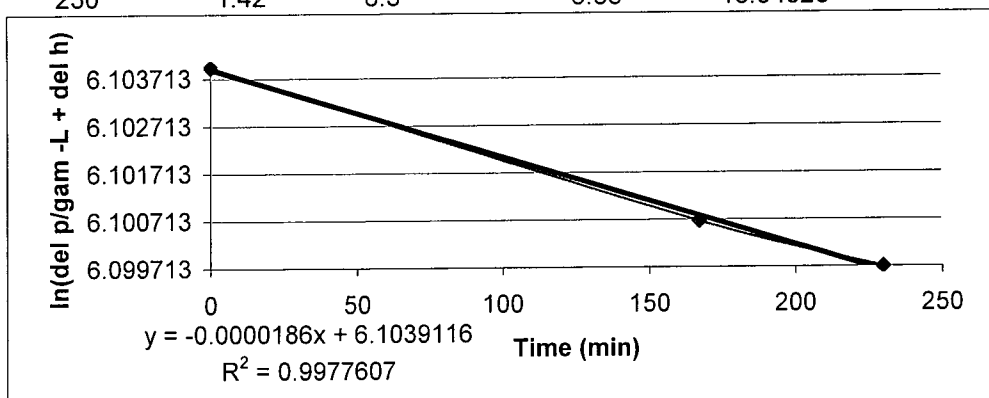
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- A-8/Cell 4  
Depth of the Sample :- Lift 2

Time (min)	Burette 2	Burette 3	Del v	Del h	y=del p/gam w - L + del h ln(y)	
10.33 am	vol c.c	vol. c.c	c.c	inches		
0	1.2	9.04		7.84	15.43304	447.6195 6.103944
167	1.36	8.46		7.1	13.97635	446.1629 6.100684
230	1.42	8.3		6.88	13.54328	445.7298 6.099713



Date of test setup :- 18-Sep-06  
Sample length :- 9.21 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 20.75 psi  
Back pressure:- 16.19 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000186  
K= 4.17199E-07 cm/min  
K= 6.95331E-09 cm/sec  
K= 1.97102E-05 ft/day



# UNIVEF.SAL

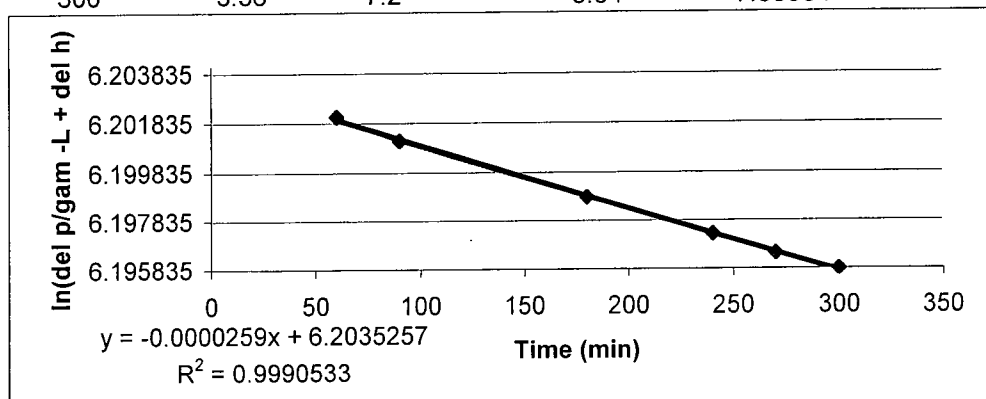
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- B-1/Cell 4  
Depth of the Sample :- Lift 2

Time (min)	Burette 2 vol c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
10.33 am						
0	1.62	7.54		5.92	11.65352	494.7954 6.204144
60	2.06	7.46		5.4	10.6299	493.7718 6.202074
90	2.26	7.42		5.16	10.15746	493.2994 6.201116
180	2.74	7.32		4.58	9.01573	492.1577 6.198799
240	3.06	7.26		4.2	8.2677	491.4096 6.197278
270	3.22	7.22		4	7.874	491.0159 6.196477
300	3.36	7.2		3.84	7.55904	490.701 6.195835



Date of test setup :- 24-Oct-06  
Sample length :- 10.16 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.75 psi  
Back pressure :- 18.03 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000259  
K= 6.40861E-07 cm/min  
K= 1.0681E-08 cm/sec  
K= 3.02769E-05 ft/day



# UNIVEF.SAL

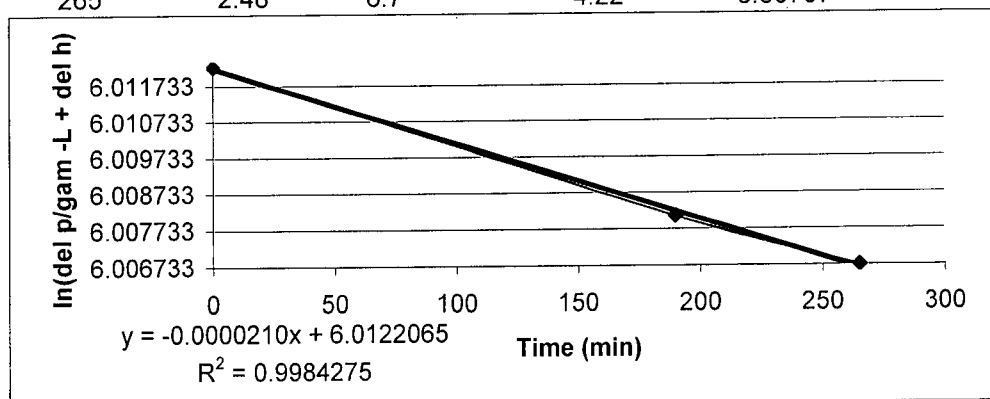
## ENGINEERING SCIENCES

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

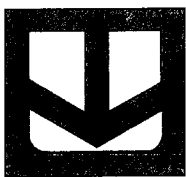
Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- B-4/Cell 4  
Depth of the Sample :- Lift 2

Time (min)	Burette 2 vol c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
0	1.44	6.8		5.36	10.55116	408.3982 6.012243
190	2.24	6.74		4.5	8.85825	406.7052 6.008089
265	2.48	6.7		4.22	8.30707	406.1541 6.006733



Date of test setup :- 4-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.1 psi  
Back pressure :- 14.95 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.000021  
K = 5.21663E-07 cm/min  
K = 8.69438E-09 cm/sec  
K = 2.46455E-05 ft/day





# UNIVEF.SAL

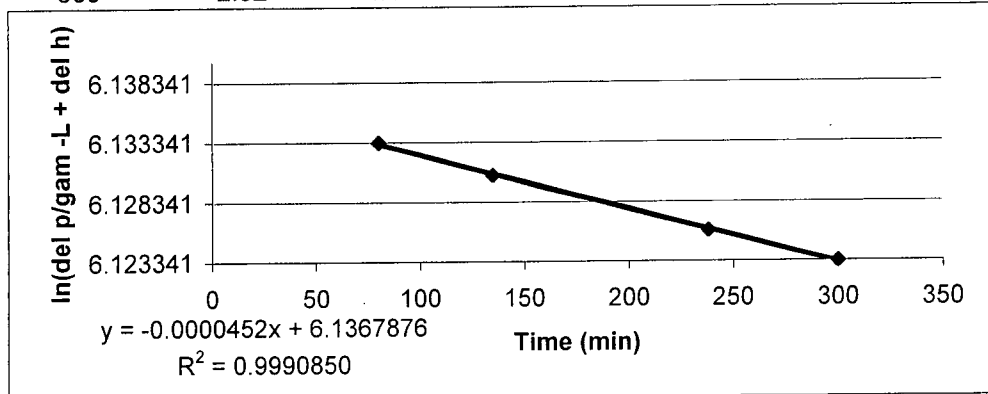
## ENGINEERING SCIENCES

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

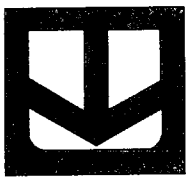
9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- B-7/Cell 4  
Depth of the Sample :- Lift 2

Time (min)	Burette 2 vol. c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
10.33 am						
0	1.66	6.76		5.1	10.03935	464.1035 6.140107
80	1.98	5.48		3.5	6.88975	460.9539 6.133298
135	2.2	5.06		2.86	5.62991	459.694 6.130561
238	2.64	4.42		1.78	3.50393	457.568 6.125926
300	2.92	4.1		1.18	2.32283	456.3869 6.123341



Date of test setup :- 11-Sep-06  
Sample length :- 7.6 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 25.14 psi  
Back pressure :- 16.98 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000452  
K = 8.36609E-07 cm/min  
K = 1.39435E-08 cm/sec  
K = 3.95248E-05 ft/day



# UNIVERSAL

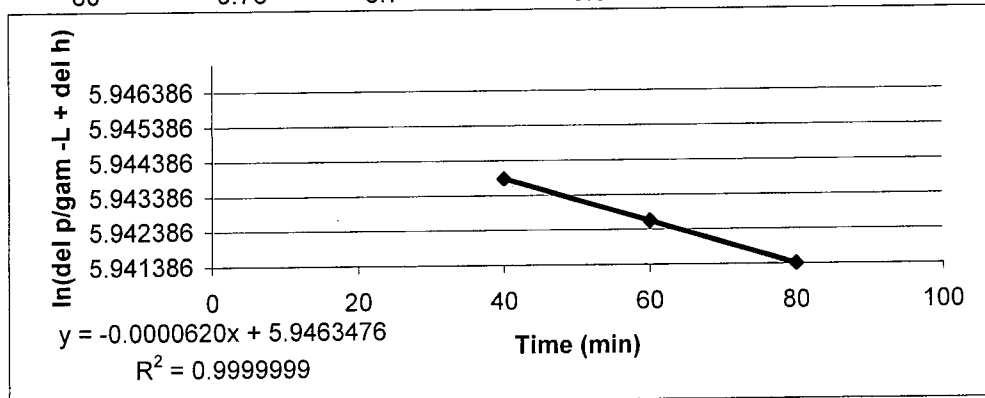
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- C-2/Cell 4  
Depth of the Sample :- Lift 2

Time (min)	Burette 2 vol c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
10.33 am						
0	0.46	7.52		7.06	13.89761	382.6668 5.947165
20	0.52	7.32		6.8	13.3858	382.155 5.945826
40	0.58	7		6.42	12.63777	381.4069 5.943867
60	0.66	6.84		6.18	12.16533	380.9345 5.942627
80	0.76	6.7		5.94	11.69289	380.4621 5.941386



Date of test setup :- 16-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.1 psi  
Back pressure :- 13.9 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.000062  
K= 1.54015E-06 cm/min  
K= 2.56691E-08 cm/sec  
K= 7.27629E-05 ft/day



# UNIVERSAL

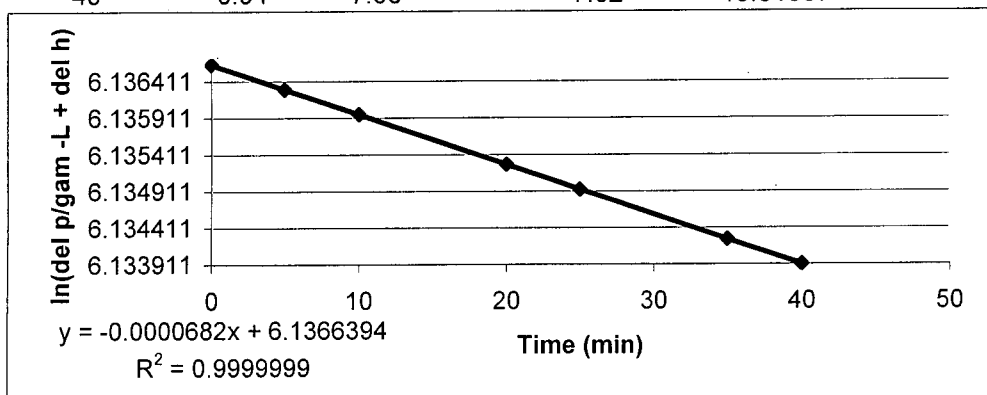
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- C-5/Cell 4  
Depth of the Sample :- Lift 2

Time (min)	Burette 2 vol. c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	y=del p/gam w - L + del h ln(y)	
10.33 am						
0	0.54	8.2		7.66	15.07871	462.4965 6.136639
5	0.6	8.18		7.58	14.92123	462.339 6.136298
10	0.66	8.16		7.5	14.76375	462.1815 6.135958
20	0.76	8.1		7.34	14.44879	461.8665 6.135276
25	0.8	8.06		7.26	14.29131	461.7091 6.134935
35	0.9	8		7.1	13.97635	461.3941 6.134253
40	0.94	7.96		7.02	13.81887	461.2366 6.133911



Date of test setup :- 12-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.04 psi  
Back pressure:- 16.74 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000682  
K= 1.69416E-06 cm/min  
K= 2.8236E-08 cm/sec  
K= 8.00392E-05 ft/day



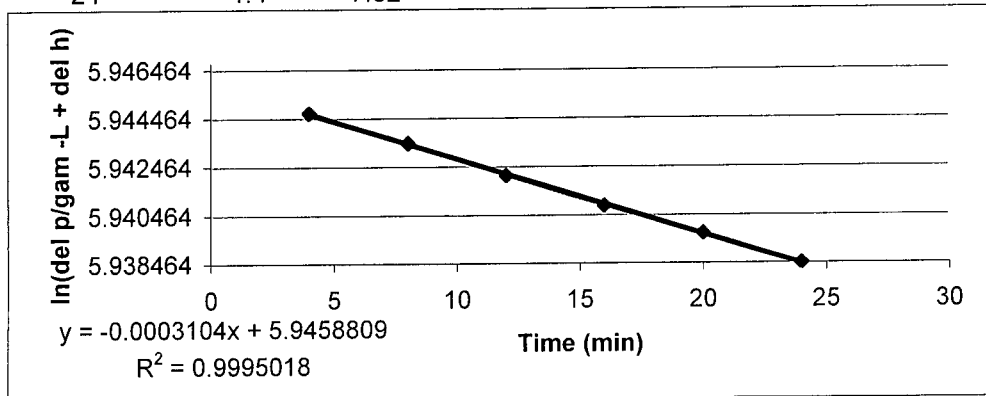
# UNIVERSAL ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- C-8/Cell 4  
Depth of the Sample :- Lift 2

Time (min)	Burette 2 vol. c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
0	0.58	8.4		7.82	15.39367	382.5013 5.946732
4	0.76	8.18		7.42	14.60627	381.7139 5.944671
8	0.9	8.08		7.18	14.13383	381.2414 5.943433
12	1.04	7.96		6.92	13.62202	380.7296 5.942089
16	1.16	7.84		6.68	13.14958	380.2572 5.940848
20	1.28	7.74		6.46	12.71651	379.8241 5.939708
24	1.4	7.62		6.22	12.24407	379.3517 5.938464



Date of test setup :- 12-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 20.26 psi  
Back pressure:- 13.84 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0003104  
K= 7.71067E-06 cm/min  
K= 1.28511E-07 cm/sec  
K= 0.000364284 ft/day



# 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

### Test Location Summary and Results Cell 4 / Lift 3

Location	Density	Moisture	Perm.	200 Wash	Atterburg
A - 1	115%	17.2%			
A - 2	107%	18.8%	10 -9	46.7	
A - 3					
A - 4	107%	20.8%			
A - 5	106%	21.7%	10 -9	59.8	
A - 6	106%	21.4%			38
A - 7	106%	21%			
A - 8	106%	20%	10 -9	52.8	
B - 1	113%	17.9%			
B - 2	108%	19.1%			
B - 3	105%	21.7%	10 -9	60.6	20
B - 4	106%	19.9%			
B - 5	104%	24.3%			
B - 6	104%	21.7%	10 -9	65.4	
B - 7	108%	24.5%			
B - 8	106%	22.3%			
C - 1	115%	17.5%	10 -9		
C - 2	108%	20%			
C - 3					
C - 4	107%	17.8%	10 -8	55.2	
C - 5					
C - 6	104%	17.3%			
C - 7	105%	17.2%	10 -7	47.5	
C - 8	107%	17.9%			

\* Permeability reported in cm/s

**Test Location Map**  
**Cell 4 / Lift 3**

C	Density Perm. 10/19/06	Density 10/11/06	10/11/2006	Density Perm. 10/6/06	10/6/2006	Density 10/6/06	Density Perm 10/6/06	Density 10/6/06
B	Density 10/19/06	Density 9/26/06	Density Perm. 9/26/06	Density 9/26/06	Density Atterburg 9/13/06	Density Perm. 9/13/06	Density 9/13/06	Density 9/13/06
A	Density 10/19/06	Density Perm. 9/26/06	9/26/06	Density 9/26/06	Density Perm. 9/5/06	Density Atterburg 9/5/06	Density 9/5/06	Density Perm. 9/5/06
	1	2	3	4	5	6	7	8



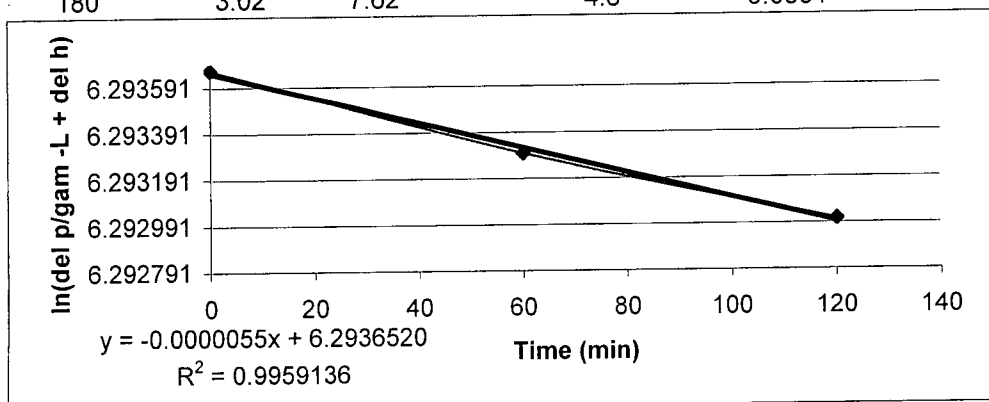
# UNIVERSAL ENGINEERING SCIENCES

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

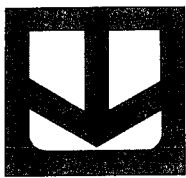
9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- A-2/Cell 4  
Depth of the Sample :- Lift 3

Time (min)	Burette 2 vol. c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
10.33 am						
0	2.88	7.72		4.84	9.52754	541.1325 6.293664
60	2.94	7.68		4.74	9.33069	540.9356 6.2933
120	2.98	7.64		4.66	9.17321	540.7782 6.293009
180	3.02	7.62		4.6	9.0551	540.6601 6.292791



Date of test setup :- 17-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 25.21 psi  
Back pressure:- 19.78 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000055  
K= 1.36626E-07 cm/min  
K= 2.2771E-09 cm/sec  
K= 6.45477E-06 ft/day



# UNIVERSAL

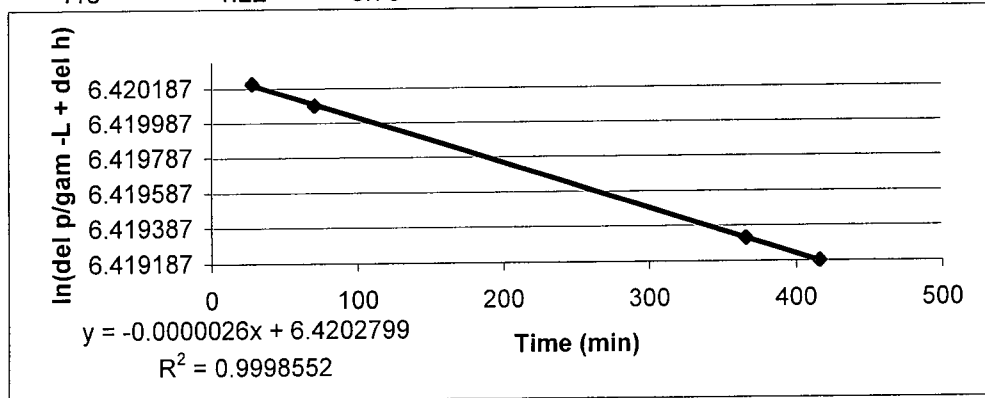
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- A-5/Cell 4  
Depth of the Sample :- Lift 3

Time (min)	Burette 2	Burette 3	Del v	Del h	y=del p/gam w - L + del h ln(y)	
10.33 am	vol c.c	vol. c.c	c.c	inches		
0	0.98	8.9	7.92	15.59052	614.2129	6.420342
28	1	8.88	7.88	15.51178	614.1342	6.420213
71	1.04	8.88	7.84	15.43304	614.0554	6.420085
366	1.2	8.8	7.6	14.9606	613.583	6.419316
416	1.22	8.78	7.56	14.88186	613.5043	6.419187



Date of test setup :- 14-Sep-06  
Sample length :- 10.16 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 25.16 psi  
Back pressure :- 22.2 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000026  
K= 6.43336E-08 cm/min  
K= 1.07223E-09 cm/sec  
K= 3.03938E-06 ft/day





# UNIVEF.SAL

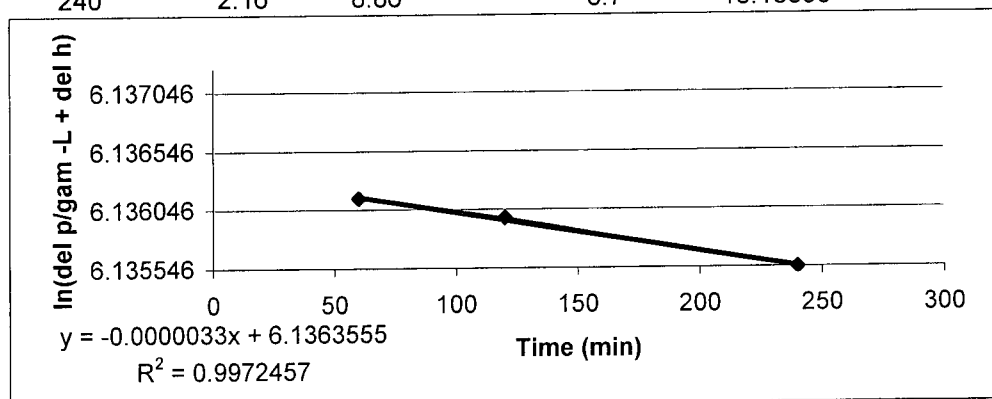
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- A-8/Cell 4  
Depth of the Sample :- Lift 3

Time (min)	Burette 2	Burette 3	Del v	Del h	y=del p/gam w - L + del h ln(y)	
10.33 am	vol c.c	vol. c.c	c.c	inches		
0	2.02	9.12		7.1	13.97635	462.7788 6.137249
60	2.1	8.94		6.84	13.46454	462.2669 6.136143
120	2.12	8.92		6.8	13.3858	462.1882 6.135972
240	2.16	8.86		6.7	13.18895	461.9914 6.135546



Date of test setup :- 18-Sep-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.15 psi  
Back pressure:- 16.79 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000033  
K= 8.19756E-08 cm/min  
K= 1.36626E-09 cm/sec  
K= 3.87286E-06 ft/day



# UNIVERSAL

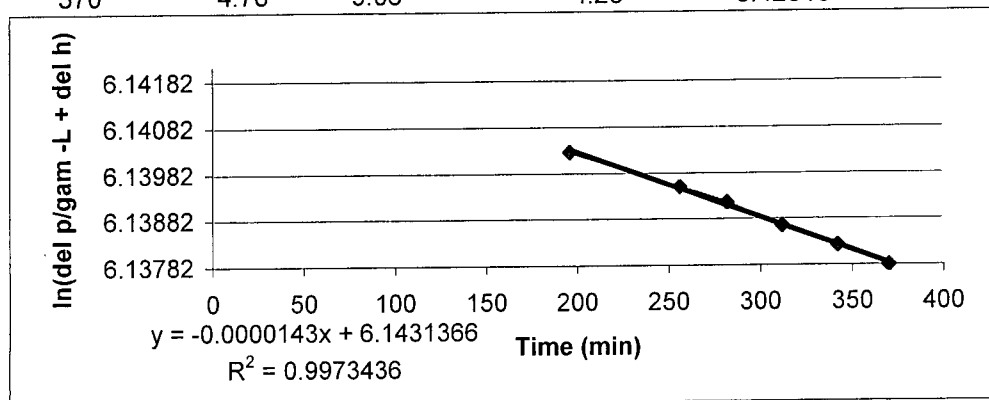
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- B-3/Cell 4  
Depth of the Sample :- Lift 3

Time (min)	Burette 2 vol. c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
0	4.1	9.4	5.3	10.43305	465.051	6.142147
60	4.28	9.4	5.12	10.07872	464.6967	6.141385
99	4.36	9.4	5.04	9.92124	464.5392	6.141046
135	4.42	9.4	4.98	9.80313	464.4211	6.140792
160	4.46	9.4	4.94	9.72439	464.3424	6.140622
196	4.52	9.38	4.86	9.56691	464.1849	6.140283
256	4.62	9.3	4.68	9.21258	463.8305	6.139519
282	4.66	9.26	4.6	9.0551	463.6731	6.13918
312	4.7	9.18	4.48	8.81888	463.4368	6.13867
342	4.74	9.12	4.38	8.62203	463.24	6.138245
370	4.78	9.06	4.28	8.42518	463.0431	6.13782



Date of test setup :- 9-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.27 psi  
Back pressure :- 17 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000143  
K = 3.55228E-07 cm/min  
K = 5.92046E-09 cm/sec  
K = 1.67824E-05 ft/day



# UNIVERSAL

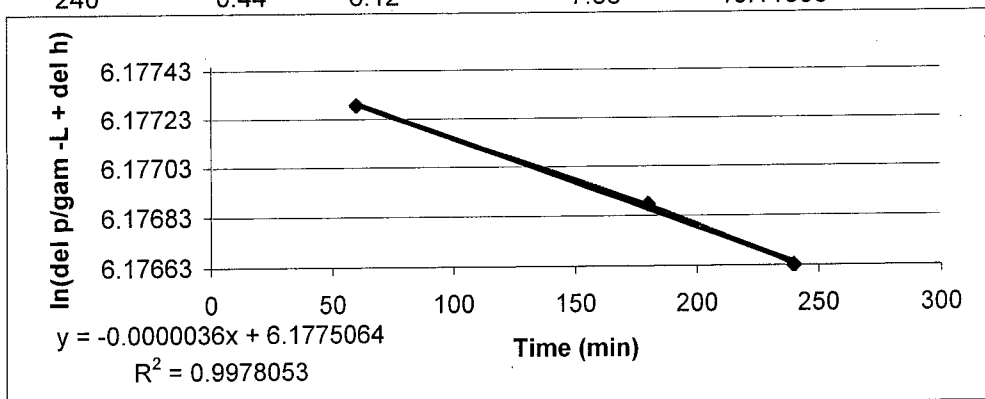
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- B-6/Cell 4  
Depth of the Sample :- Lift 3

Time (min)	Burette 2 vol. c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
0	0.38	8.26	7.88	15.51178	481.7609	6.177448
60	0.4	8.24	7.84	15.43304	481.6821	6.177284
180	0.42	8.16	7.74	15.23619	481.4853	6.176876
240	0.44	8.12	7.68	15.11808	481.3672	6.17663



Date of test setup :- 4-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.1 psi  
Back pressure:- 17.42 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000036  
K= 8.94279E-08 cm/min  
K= 1.49047E-09 cm/sec  
K= 4.22494E-06 ft/day



# UNIVEF.SAL

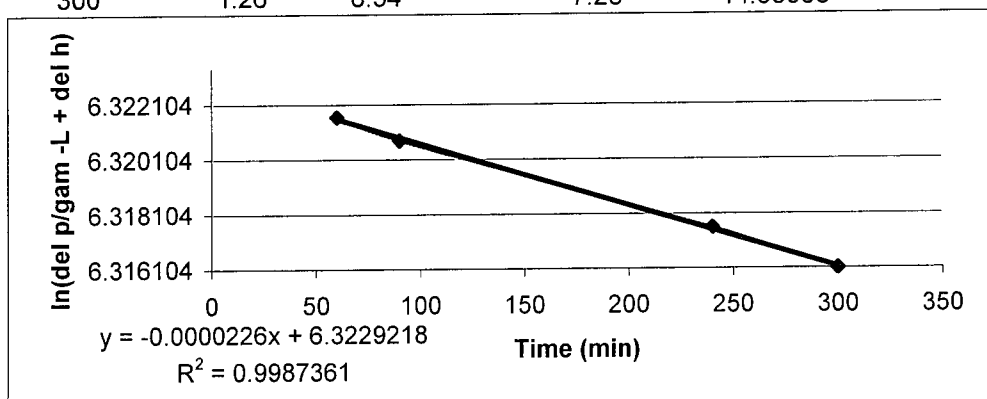
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- C-1/Cell 4  
Depth of the Sample :- Lift 3

Time (min)	Burette 2 vol c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
10.33 am						
0	0.22	9.56		9.34	18.38579	557.4679 6.323405
30	0.38	9.44		9.06	17.83461	556.9167 6.322416
60	0.48	9.32		8.84	17.40154	556.4836 6.321638
90	0.6	9.2		8.6	16.9291	556.0112 6.320788
240	1.06	8.76		7.7	15.15745	554.2396 6.317597
300	1.26	8.54		7.28	14.33068	553.4128 6.316104



Date of test setup :- 24-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 25.83 psi  
Back pressure:- 20.05 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0000226  
K= 5.61409E-07 cm/min  
K= 9.35681E-09 cm/sec  
K= 2.65232E-05 ft/day



# UNIVERSAL

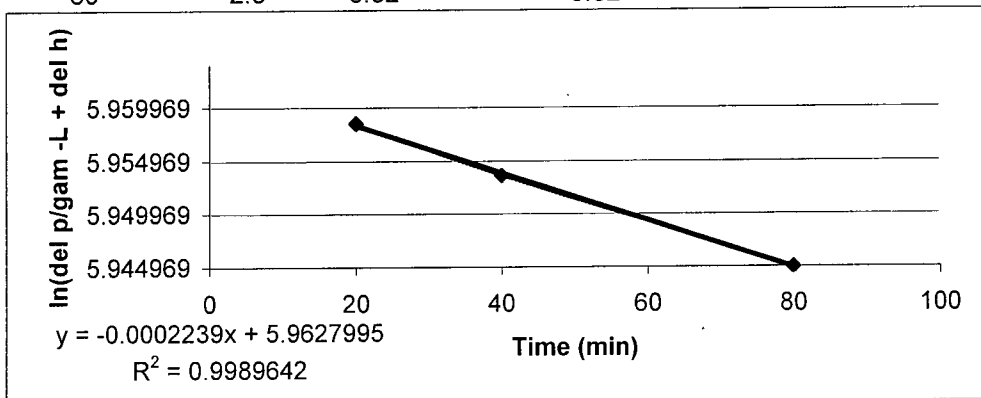
## ENGINEERING SCIENCES

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

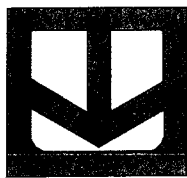
9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- C-4/Cell 4  
Depth of the Sample :- Lift 3

Time (min)	Burette 2 vol. c.c	Burette 3 vol. c.c	Del v c.c	Del h inches	$y = \frac{\Delta p}{\gamma_w} - L + \Delta h \ln(y)$	
0	0.98	8.52	7.54	14.84249	389.1503	5.963966
20	1.34	7.8	6.46	12.71651	387.0243	5.958488
40	1.74	7.24	5.5	10.82675	385.1346	5.953593
80	2.5	6.32	3.82	7.51967	381.8275	5.944969



Date of test setup :- 16-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 22.1 psi  
Back pressure:- 14.1 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0002239  
K= 5.56192E-06 cm/min  
K= 9.26987E-08 cm/sec  
K= 0.000262768 ft/day



# UNIVERSAL

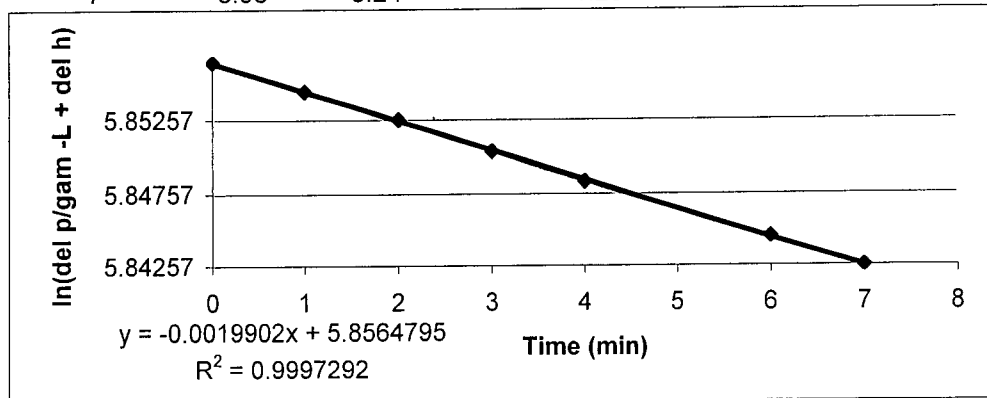
## ENGINEERING SCIENCES

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

Project No :- 80540-001-02  
Project Name :- Dade City Landfill  
Sample Number :- C-7/Cell 4  
Depth of the Sample :- Lift 3

Time (min)	Burette 2	Burette 3	Del v	Del h	y=del p/gam w - L + del h ln(y)	
10.33 am	vol c.c	vol. c.c	c.c	inches		
0	2.78	6.5		3.72	7.32282	349.5066 5.856522
1	2.96	6.32		3.36	6.61416	348.7979 5.854493
2	3.12	6.14		3.02	5.94487	348.1286 5.852572
3	3.3	5.94		2.64	5.19684	347.3806 5.850421
4	3.48	5.76		2.28	4.48818	346.6719 5.848379
6	3.8	5.42		1.62	3.18897	345.3727 5.844624
7	3.98	5.24		1.26	2.48031	344.664 5.84257



Date of test setup :- 12-Oct-06  
Sample length :- 10.2 cm  
Sample cross sectional area :- 41.061 cm<sup>2</sup>  
Burette cross sectional area :- 0.2 cm<sup>2</sup>  
Cell pressure :- 20.34 psi  
Back pressure:- 12.94 psi  
Burette 3 :- vent  
Slope of the Best Fit Line :- 0.0019902  
K= 4.94387E-05 cm/min  
K= 8.23979E-07 cm/sec  
K= 0.002335688 ft/day

# 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 Aggregate Materials

Date: 8/29/2006

Project : Dade City Landfill

Work Order # : 17179

Project # : 80540-001-02

Technician : Mario

Report # : SI#1

### Construction Activity Observed

Area Constructed : Cell # 4 Excavation

Material Used : Clay

Lift # \_\_\_\_\_

Lift Thickness : 12"

Weather : \_\_\_\_\_

Compaction Equipment Used : \_\_\_\_\_ Other Equipment in Use : 1 - Bull Dozer \_\_\_\_\_

Other Equipment in Use : 1 - Bull Dozer

1 - End Dump \_\_\_\_\_

1 - TrackHoe Excavator

### Permeability and Density Test Performed

<u>Location</u>	<u>% Compaction / % Moisture</u>	<u>Permeability</u>	<u>200 wash</u>

Photographs ( explain activity for each )

[illegible]





# 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 Aggregate Materials

Date: 8/30/2006Project : Dade City Landfill

Work Order # : 17180

Project # : 80540-001-02

Technician : Mario

Report # : SI#2

### Construction Activity Observed

Area Constructed : Cell # 4 Excavation

Material Used : Clay

Lift # 1

Lift Thickness : 12"

Weather : Rain

Compaction Equipment Used : 1 - Fully loaded end dump Other Equipment in Use : 1 - Bull Dozer

1 - End Dump

1 - TrackHoe Excavator

### Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

**Photographs ( explain activity for each )**

[illegible]



3



4







7



8



9





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

Report # : SI#4

Weather : Rain/Cloudy

Location	% Compaction / % Moisture	Permeability	200 wash
A - 7	101% / 24.3%	10 -9	49.4
A - 6	104% / 21.7%	10 -9	51.5
A - 5	105% / 22.3%		

[illegible]



10



11







14



12



13









15



16



19



18





17



# 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 Aggregate Materials

Date: 9/5/2006Project : Dade City Landfill

Work Order # : 17284

Project # : 80540-001-02

Technician : Mario

Report # : SI#6A

### Construction Activity Observed

Area Constructed : Cell # 4

Material Used : Clay

Lift # 2

Lift Thickness : 12"

Weather : Cloudy

Compaction Equipment Used : 2 - Loaded end dumps Other Equipment in Use : 1 - Bull dozer

1 - Trackhoe excavator

2 - End dumps

### Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
A - 6	103% / 24.3%	10 -9	42.8
A - 8	106% / 20.4		
A - 7	106% / 19.9%		

Photographs ( explain activity for each )

[illegible]





26



27



25



# 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 Aggregate Materials

Date: 9/13/2006Project : Dade City Landfill

Work Order # : 17349

Project # : 80540-001-02

Technician : Mario

Report # : SI#8

### Construction Activity Observed

Area Constructed : Cell # 4

Material Used : Clay

Lift # 2

Lift Thickness : 12"

Weather : Cloudy

Compaction Equipment Used : 2 - Loaded end dumps Other Equipment in Use : 1 - Bull dozer

1 - Trackhoe excavator

2 - End dumps

### Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 5	110% / 20%		
B - 6	111% / 21%		
B - 7	108% / 24.3%	10 -9	57.6
B - 8	109% / 21.5%		

Photographs ( explain activity for each )

[illegible]



28



30



29



31





# 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 Aggregate Materials

Date: 9/13/2006

Project : Dade City Landfill

Work Order # : 17349

Project # : 80540-001-02

Technician : Mario

Report # : SI#9

### Construction Activity Observed

Area Constructed : Cell # 4

Material Used : Clay

Lift # 3

Lift Thickness : 12"

Weather : Cloudy

Compaction Equipment Used : 2 - Loaded end dumps Other Equipment in Use : 1 - Bull dozer

1 - Trackhoe excavator

2 - End dumps

### Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 5	104% / 24.3%		
B - 6	104% / 21.7%	10 -9	55.4
B - 7	108% / 24.5%		
B - 8	106% / 22.3%		

**Photographs ( explain activity for each )**

[illegible]

33



34



35





**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 Aggregate Materials

Date: 9/21/2006

Project : Dade City Landfill

Work Order # : 17456

Project # : 80540-001-02

Technician : Mario

Report # : SI#10

### Construction Activity Observed

Area Constructed : Cell # 4 Excavation

Material Used : Clay

Lift #

Lift Thickness :

Weather : Clear

Compaction Equipment Used : Other Equipment in Use : 1 - Bull dozer

1 - Trackhoe excavator \_\_\_\_\_

2 - End dumps

### Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

**Photographs ( explain activity for each )**

[illegible]



37



36





**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 Aggregate Materials

Date: 9/22/2006Project : Dade City Landfill

Work Order # : 17457

Project # : 80540-001-02

Technician : Mario

Report # : SI#11

### Construction Activity Observed

Area Constructed : Cell # 4 Excavation

Material Used : Clay

Lift # \_\_\_\_\_

Lift Thickness : \_\_\_\_\_

Weather : Clear

Compaction Equipment Used : \_\_\_\_\_ Other Equipment in Use : 1 - Bull dozer

1 - Trackhoe excavator

2 - End dumps

### Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

**Photographs ( explain activity for each )**

[illegible]









40



41



42







**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 Aggregate Materials

Date: 9/23/2006

Project : Dade City Landfill

Work Order # : 17543

Project # : 80540-001-02

Technician : Mario

Report # : SI#13

### Construction Activity Observed

Area Constructed : Cell # 4

Material Used : Clay

Lift # 2

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : 3 - End dumps                      Other Equipment in Use : 1 - Bull dozer

Other Equipment in Use : 1 - Bull dozer

1 - Trackhoe excavator

3 -End dumps

### Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 4	111% / 21%	10 -9	65.7
A - 4	107% / 19.9%		
B - 3	108% / 20.2%		
A - 3	109% / 20.8%	10 -8	50.7

**Photographs ( explain activity for each )**

[illegible]



46



47



48



49









43



44



45



50











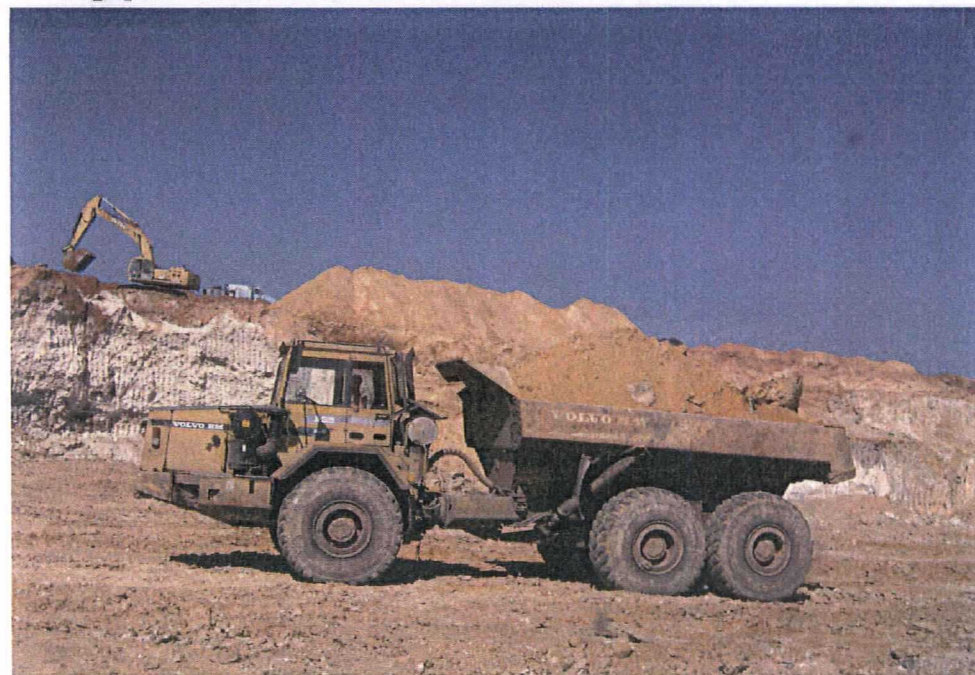
52



53



54



55









56



57



59



58













# 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 Aggregate Materials

Date: 9/28/2006Project : Dade City Landfill

Work Order # : 17539

Project # : 80540-001-02

Technician : Mario

Report # : SI#19

### Construction Activity Observed

Area Constructed : Cell #4 Excavation

Material Used : Clay

Lift # \_\_\_\_\_

Lift Thickness : \_\_\_\_\_

Weather : Clear

Compaction Equipment Used : \_\_\_\_\_ Other Equipment in Use : 2 - Bull dozer \_\_\_\_\_

2 - Trackhoe excavator

3 - End dumps \_\_\_\_\_

### Permeability and Density Test Performed

<b>Location</b>	<b>% Compaction / Moisture</b>	<b>Permeability</b>	<b>200 wash</b>

Photographs ( explain activity for each )

[illegible]







68



66



67



65





64



# 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 Aggregate Materials

Date: 9/29/2006

Project : Dade City Landfill

Work Order # : 17540

Project #: 80540-001-02

Technician : Mario

Report # : SI#21

### Construction Activity Observed

Area Constructed : Cell #4

Material Used : Clay

Lift # 1

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : 1 - End dumps                      Other Equipment in Use : 1 - Bull dozer

1 - Trackhoe excavator

1 - End Dumps

### Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 2	102% / 21.1%	10 -9	46.9
A - 2	104% / 24.3		

**Photographs ( explain activity for each )**

[illegible]



70



72



71



69









73



74



75



76







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

Report # : SI#23

## Weather : Clear

\_\_\_\_\_

Location	% Compaction / Moisture	Permeability	200 wash

[illegible]







**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 Aggregate Materials

Date: 10/6/2006

Project : Dade City Landfill

Work Order # : 17369

Project # : 80540-001-02

Technician : Mario

Report # : SI#25

### Construction Activity Observed

Area Constructed : Cell #4

Material Used : Clay

Lift # 2

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : 3 - End dumps \_\_\_\_\_ Other Equipment in Use : 1 - Trackhoe excavator \_\_\_\_\_

3 - End Dumps

2 - Bull dozers

### Permeability and Density Test Performed

Location	% Compaction / Moisture	Permeability	200 wash
C - 6	107% / 17.2%		
C - 8	109% / 16.9%	10 -7	51.7
C - 4	107% / 17.9%		
C - 5	108% / 18%	10 -8	53.5

Photographs ( explain activity for each )

[illegible]

# 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 Aggregate Materials

Date: 10/6/2006

Project : Dade City Landfill

Work Order # : 17369

Project # : 80540-001-02

Technician : Mario

Report # : SI#26

### Construction Activity Observed

Area Constructed : Cell #4

Material Used : Clay

Lift # 3 \_\_\_\_\_

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : 3 - End dumps Other Equipment in Use : 1 - Trackhoe excavator

3 - End Dumps

2 - Bull dozers \_\_\_\_\_

### Permeability and Density Test Performed

Location	% Compaction / Moisture	Permeability	200 wash
C - 8	107% / 17.9%		
C - 7	105% / 17.2%	10 -7	47.5
C - 6	104% / 17.3%		
C - 4	107% / 17.8%	10 -8	55.2

Photographs ( explain activity for each )

[illegible]





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

Report # : SI#27

Weather : Clear

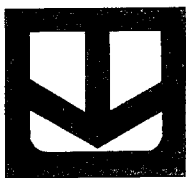
Location	% Compaction / Moisture	Permeability	200 wash

[illegible]



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

[illegible]



# 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 Aggregate Materials

Project : Dade City Landfill

Project # : 80540-001-02

Date: 10/11/2006

Work Order # : 17747

Technician : Mario

Report # : SI#29

### Construction Activity Observed

Area Constructed : Cell #4

Material Used : Clay

Lift # 1

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : 2 - End Dumps Other Equipment in Use : 2 - Trackhoe excavator

2 - End Dumps

2 - Bull dozers

### Permeability and Density Test Performed

Location	% Compaction / Moisture	Permeability	200 wash
C - 3	106% / 19.6%	10 -7	47.2

### Photographs ( explain activity for each )

Photo #	95	Trackhoe loading end dump with material.
Photo #	96	End dump unloading material.
Photo #	97	Bull dozer pushing material.
Photo #	98	Contractor checking grade.
Photo #		
Photo #		
Photo #		
Photo #		
Photo #		



96



98



95



97









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

Report # : SI#31

Weather : Clear

Location	% Compaction / Moisture	Permeability	200 wash
C - 2	108% / 20%		

[illegible]

# 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 Aggregate Materials

Date: 10/12/2006

Project : Dade City Landfill

Work Order # : 17748

Project # : 80540-001-02

Technician : Mario

Report # : SI#32

### Construction Activity Observed

Area Constructed : Cell #4 Excavation

Material Used :

Lift #

Lift Thickness :

Weather : Clear

Compaction Equipment Used : \_\_\_\_\_ Other Equipment in Use : 1 - Trackhoe excavator

1 - End Dumps

1 - Bull dozers

### Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

Photographs ( explain activity for each )

[illegible]



# 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 Aggregate Materials

Date: 10/13/2006

Project : Dade City Landfill

Work Order # : 17749

Project #: 80540-001-02

Technician : Mario

Report # : SI#33

### Construction Activity Observed

Area Constructed : Cell #4

Material Used : Clay

Lift # 1

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : 2 - End Dumps                      Other Equipment in Use : 1 - Trackhoe excavator

2 - End Dumps \_\_\_\_\_

1 - Bull dozers

### Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
C - 1	106% / 20%	10 -9	49.6
B - 1	104% / 20.4%		
A - 1	107% / 19.9%		

**Photographs ( explain activity for each )**

[illegible]



5



4



6



7





# 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 Aggregate Materials

Date: 10/14/2006

Project : Dade City Landfill

Work Order # : 17879

Project # : 80540-001-02

Technician : Mario

Report # : SI#34

### Construction Activity Observed

Area Constructed : Cell #4 Excavation

Material Used : Clay

Lift # 1

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : \_\_\_\_\_ Other Equipment in Use : 1 - Trackhoe excavator

1 - Bull dozers

### Permeability and Density Test Performed

Location	% Compaction / Moisture	Permeability	200 wash

**Photographs ( explain activity for each )**

[illegible]



12



13





# 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 Aggregate Materials

Date: 10/16/2006

Project : Dade City Landfill

Work Order # : 17817

Project # : 80540-001-02

Technician : Mario

Report # : SI#35

### Construction Activity Observed

Area Constructed : Cell #4 Excavation

Material Used : \_\_\_\_\_

Lift # \_\_\_\_\_

Lift Thickness : \_\_\_\_\_

Weather : Clear

Compaction Equipment Used : \_\_\_\_\_ Other Equipment in Use : 2 - Trackhoe excavator

1 - Bull dozers

### 3 - End Dumps

### Permeability and Density Test Performed

Location	% Compaction / Moisture	Permeability	200 wash

**Photographs ( explain activity for each )**

[illegible]



14



15







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

Report # : SI#36

Weather : Clear

3 - End Dumps

Location	% Compaction / % Moisture	Permeability	200 wash

[illegible]







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

Report # : SI#37

Weather : Cloudy / Rain

Location	% Compaction / Moisture	Permeability	200 wash
C - 1	109% / 18.8%		
B - 1	111.8% / 19.2%		
A - 1	108% / 18.6%		

[illegible]



18



20



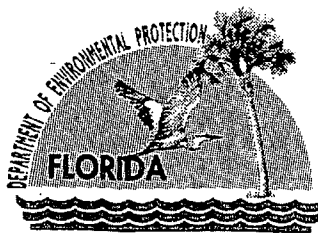
17



19







Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
13051 North Telecom Parkway  
Temple Terrace, FL 33637-0926  
Telephone: 813-632-7600

Colleen M. Castille  
Secretary

252573

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, FL 33771

November 16, 2006

RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County  
Certification of Construction Completion, Cell 4 (approximately 7.34 acres)

Dear Mr. Iafrate:

The Department has reviewed the Certification of Construction Completion for the Cell 4, prepared by Mr. John Arnold, P.E., dated October 27, 2006 (received October 27, 2006). The certification of Cell 4 is not approved, at this time. The following information is needed to fully evaluate the information submitted.

1. Please provide surveys that indicate which layer is included in the survey (i.e., subbase or top of confining/clay layer).
2. **Attachment C.**
  - a. Please provide the laboratory reports for the permeability testing.
  - b. Please provide photographs that are numbered and correspond to the appropriate daily reports. Several of the reports reference photographs that are not located with the report for that specific date.
  - c. The QA daily reports do not describe the activity observed, the occurrence of limestone or other problems encountered during construction. Some reports do not describe any observations, but only indicate "Cell #4."
  - d. The Department was notified of an occurrence of limestone encountered in June 2006 located at the central part near the eastern boundary. The notification indicated that the elevation of the limerock was from +84ft. to 95 ft. NGVD. Discussion of this limerock occurrence was not included in the QA report. Based on the surveys provided, it appears that this material was completely excavated during construction. Please provide photographs that demonstrate that the limestone in this area was completely excavated prior to placing the clay layer.
  - e. Please provide the dates that the clay layer was constructed for each of the grids shown in the Test Location Maps.
  - f. Please specify the white material shown in the background of photo #55 (?) on 9/25/06 and in the photos from 10/13/06 and 10/17/06.
  - g. Please explain why no photographs were taken from 10/5/06 through 10/10/06.

"More Protection, Less Process"

Please be advised that operation in Cell 4 is not authorized until the certification documentation is specifically approved by the Department. Please provide the requested information within 60 days of the date of this letter. If you have any questions, please contact me at: (813) 632-7600, ext. 386.

Sincerely,



Susan J. Pelz, P.E.  
Solid Waste Program Manager  
Southwest District

sjp  
cc:

John Arnold, P.E., 34924 Williams Cemetery Rd., Dade City, FL 33525  
Richard Tedder, P.E., FDEP Tallahassee  
Fred Wick, FDEP, Tallahassee  
Steve Morgan, FDEP Tampa  
John Morris, P.G., FDEP Tampa

~~252-573~~  
252-573  
THL

**Enterprise Class III Landfill  
Angelo's Aggregate Materials, Ltd.  
41111 Enterprise Road  
Dade City, FL 33525**

**Dept. of Environmental  
Protection**

OCT 27 2006

**Southwest District**

**Cell 4  
Construction Completion Report  
FDEP Permits: 177982-001-SC & 177982-002-SO**

Cell 4  
cert  
10/27/06

**October 2006**

(see 3-ring binder)



**Dept. of Environmental  
Protection**

**OCT 27 2006**

October 27, 2006

**Southwest District**

Susan Pelz, P.E.  
Solid Waste Section  
Florida Department of Environmental Protection - Southwest District  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926

RE: Enterprise Class III Landfill  
Cell 4 Construction Completion Report  
Angelo's Aggregate Materials, Ltd.  
FDEP Permit Nos. 177982-001-SC and 177982-002-SO  
Pasco County, Florida

Dear Ms. Pelz:

This report contains the Certification of Construction Completion (Certification) and Construction Quality Assurance (CQA) data for Cell 4 of the Enterprise Class III landfill and is being submitted to the Florida Department of Environmental Protection (Department) for review and approval.

The CQA program and certification reporting are based on the following requirements contained in Specific Condition 9.c. of FDEP Permit No. 177982-001-SC, as follows:


- a. Prepare and submit a Certification of Construction Completion, Form 62-701.900(2), signed and sealed by the professional engineer in charge of construction to the Department for approval. This information is provided in Attachment A.
- b. Prepare and submit Record Drawings showing all changes (i.e. additions, deletions, revisions to the plans previously approved by the Department including site grades and elevations). The Record Drawing is provided in Attachment B.
- c. Prepare and submit a narrative indicating all changes in plans and the cause of the deviations, and a report by the engineer of record to the Department to verify conformance with development of each cell. Each cell shall be over-excavated to approximately 3 feet below the approved excavation grade. Confining material, confirmed by laboratory testing to have a maximum hydraulic conductivity of

less than  $1 \times 10^{-6}$  cm/sec, shall be compacted over the floor of the cell in three 12-in lifts as described in the documents referenced in SC 2e. Universal Engineering Sciences (Universal) performed independent inspection, observation, and testing to comply with the requirements of this condition. The independent CQA report by Universal Earth Sciences is provided in Attachment C. The narrative report by the engineer of record is provided in Attachment D.

- d. Prepare and submit financial assurance for the facility in accordance with F.A.C. 62-701.630. The updated financial assurance documentation includes Cells 3 and 4 and is provided in Attachment E. The revised letter of credit is on file with Fred Wick in the Tallahassee office of the FDEP.

We trust this submittal, along with the financial assurance update, will satisfy the Department's certification requirements. Please call me at 352.339.1408 if you have any questions or require any additional information.

Sincerely,



John Arnold, P.E.

Date: 10/27/06

State of Florida

P.E. # 47164

34924 Williams Cemetery Road

Dade City, FL 33525

Attachments

cc: John Morris, P.G., FDEP  
Dominic Iafrate  
Jeff Rogers

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
OCT 27 2006  
SOUTHWEST DISTRICT  
TAMPA

**Attachment A**

**Certification of Construction Completion  
FDEP Form 62-701.900(2)**





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

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
OCT 27 2006  
SOUTHWEST DISTRICT  
TAMPA

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: John P. Arnold, P.E.  
Type of Project: Cell 4 of the Class III Landfill; Certification of As-Built Drawings by  
Simmons and Beall, Inc. Certification of clay and conformance testing Universal Engineering Sciences  
Cost: Estimate \$ 100,000 Actual \$ 100,000 Est.  
Site Design: Quantity: 7500 cy/day ton/day Site Acreage: 5 (nominal) refer to drawings Acres  
Deviations from Plans and Application Approved by DEP: The elevations indicated on the survey  
exceed the minimum elevations are in general accordance with the requirements of the construction  
permit. An off-road truck was used to compact the clay, rather than a dozer/roller, as was done for  
prior cells. The conformance test results from Universal indicate the installed material is in general  
accordance with the requirements of the construction permit.  
Address and Telephone No. of Site: 41111 Enterprise Road, Dade City, FL 33525  
(352) 567-7676  
Name(s) of Site Supervisor: Mr. Jeff Rogers  
Date Site inspection is requested: November 10, 2006  
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: 10/27/06

Signature of Professional Engineer 10/27/06

Page 1 of 1

John Arnold  
39924 Williams Cemetery Rd  
Dade City, FL 33525  
FL PE # 47164

**Attachment B**

**Record Drawings  
Simmons & Beall, Inc.**

Topographic surveys, signed and sealed by a Florida registered Professional Surveyor and Mapper, of tops of both the over-excavated subgrade and the finished 3-foot thick confining layer are provided. The Surveyor of record is Simmons and Beall. The Surveyor also provided layout and grading control in the field during construction of the cell to monitor and verify conformance with the Department approved requirements.





Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
13051 North Telecom Parkway  
Temple Terrace, FL 33637-0926  
Telephone: 813-632-7600

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, Fl. 33771

April 25, 2006

RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County  
Certification of Construction Completion, Cell 14 (5.78 acres), temporary stormwater pond

Dear Mr. Iafrate:

On March 8, 2006, an inspection of the above-referenced facility relative to construction completion and adherence to the permit issued by the Florida Department of Environmental Protection (FDEP) was made by Stephanie Watson, Jeff Glas and Mary Ellen Edwards (FDEP) and Jeff Rogers (Enterprise Landfill). Certification of Construction Completion dated September 19, 2005 (received September 20, 2005) and additional information dated December 9, 2005 (received December 16, 2005) and March 23, 2006 (received March 24, 2006), has been received by the Department. Based on the information submitted and the site inspection, the Department approves the construction certification for the use of Cell 14 as a temporary stormwater pond.

Please be reminded that prior to the proposed use of Cell 14 for waste disposal, a revised or updated Certification of Construction completion may be required by the Department based on the condition of the Cell 14 clay layer at that time.

Based on the site inspection and certification documentation, the Department approves the use of Cell 14 as a temporary stormwater pond in accordance with Operation Permit 177982-002-SO and the stormwater management permit (ERP) for the site (as appropriate). If you have any questions, you may contact me at (813) 632-7600 ext. 386.

Sincerely,

Susan J. Pelz, P.E.  
Solid Waste Program Manager  
Southwest District

sjp  
cc:

Jennifer Deal, P.E., Hartman & Associates, 201 E. Pine St., Ste. 1000, Orlando, FL 32801, w/attachment  
William Kutash, Waste Program Administrator, FDEP Tampa  
Fred Wick, FDEP, Tallahassee  
Douglas Hyman, P.E., FDEP Tampa, ERP

"More Protection, Less Process"

Printed on recycled paper.



TETRA TECH

Mark A. Rynning, PE, M.B.A.  
James E. Christopher, PE  
Charles W. Drake, PG  
William D. Musser, PE, PI  
Lawrence E. Jenkins, PSM  
Jon D. Fox, PE  
Jill M. Hudkins, PE

Roderick K. Cashe, PE  
Douglas P. Dufresne, PG  
Daniel M. Nelson, PE

Andrew T. Woodcock, PE, M.B.A.  
John P. Toomey, PE  
Jennifer L. Woodall, PE  
Valerie C. Davis, PG  
Charles M. Shultz, PE  
Sean M. Parks, AICP, QEP  
W. Bruce Lafrenz, PG  
James R. Warner, PE

March 23, 2006

**Via UPS Overnight**

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

**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).

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
MAR 24 2006  
SOUTHWEST DISTRICT  
TAMPA

201 East Pine Street, Suite 1000, Orlando, FL 32801  
Tel 407.839.3955 Fax 407.839.3790  
www.tetratech.com

(See Boring Report)



**TETRA TECH HAI**

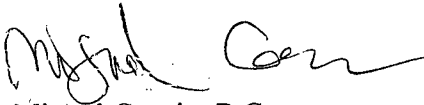
Ms. Susan J. Pelz, P.E.  
March 23, 2006  
Page 2

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,

**Tetra Tech HAI**

 3-23-06

Miguel Gargia, P.G.  
Project Hydrogeologist

MAG/sma/98.0104.023/corresp/pelz-2.jld.doc

cc: Jeff Rogers, Angelo's  
Joe Polito





**HARTMAN &  
ASSOCIATES, INC.**

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

## FIELD BORING LOG

NGA-CTA

AB-1

1 of 1

DEPTH (FT)	SAMPLE			BLOWS PER 6"	N-VALUE	BORING LOG	MATERIAL DESCRIPTION CLASSIFICATION	WELL	REMARKS	PROJECT	
	NO TYPE	SYMBOL	% REC.							NAME: ENTER PAGE	CLIENT: ANGEL
14							CLAYEY-SAND, LIGHT GRAY + DARK ORANGE, FINE TO SILT, VERY FIRM, 0.7'			LOCATION: DADE CITY	
20							STURDY-CLAYEY-SAND, ORANGE TO DARK ORANGE, FINE TO SILT, VERY FIRM TO FIRM, 1.3'			<b>BORING</b> GR. ELEV: DIA-TYPE: 3.5" BUCKET DEPTH: 3' AUGER DATE STARTED: 3-7-06 DATE ENDED: 3-7-06	
30							END @ 3'		FROM CEMENTED SANDSTONE @ 2.5'	<b>GROUNDWATER</b> DEPTH: TIME: DATE: REMARKS:	
0										<b>DRILLING</b> RIG TYPE: - CREW: - SUPERVISOR: -	
5										<b>PIEZOWELL</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

MOBILIA

AB - 3

L of (

[illegible]



# FIELD BORING LOG

M B N C T A

AB-4

1 of 1

[illegible]





**HARTMAN &  
ASSOCIATES, INC.**

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

## FIELD BORING LOG

MBKCEA

AD-5

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: ANCELOS
1							CURRY-SAND, ORANGE & LIGHT GRAY (MOTTLED), FINE TO SILT, V. FIRM, 0-0.5'			LOCATION: DATE CITY, FL	
2							SANDY-CLAY, LIGHT GRAY & ORANGE (MOTTLED), FINE TO SILT, LIGHT CLAY, LOW SAND: 0.5' - 1.75'			<b>BORING</b> GR. ELEV: DIA-TYPE: 3.5" - BA DEPTH: 3' DATE STARTED: 3-7-06 DATE ENDED: 3-7-06	
3							SILT-CLAY-SAND, ORANGE & GRAY (MOTTLED), FINE TO SILT, VERY FIRM, MOD. SANDS. 1.75' - 3.0'			<b>GROUNDWATER</b> DEPTH: TIME: DATE: REMARKS:	
4							FOR @ 3.0'			<b>DRILLING</b> RIG TYPE: CREW: SUPERVISOR:	
5										<b>PIEZWELL</b> CASING DIAM: CASING TYPE: CASING DEPTH: SCREEN DEPTH: SCREEN LENGTH: FILTER PACK: RISER HEIGHT ALS:	
6										T.O.C. ELEV: <b>REMARKS</b>	

CELL 14 WELL & TEST LOCATIONS

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

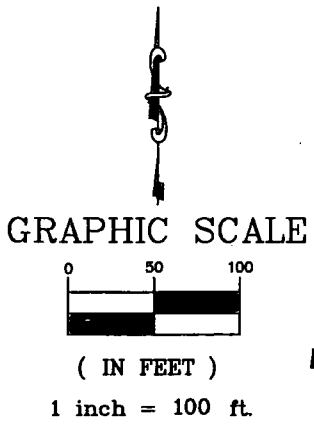
MW-4  
TOP CASING EL.=100.59  
CONC. EL.=97.35  
GROUND EL.=97.14

MW-3  
TOP CASING EL.=85.39  
CONC. 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.

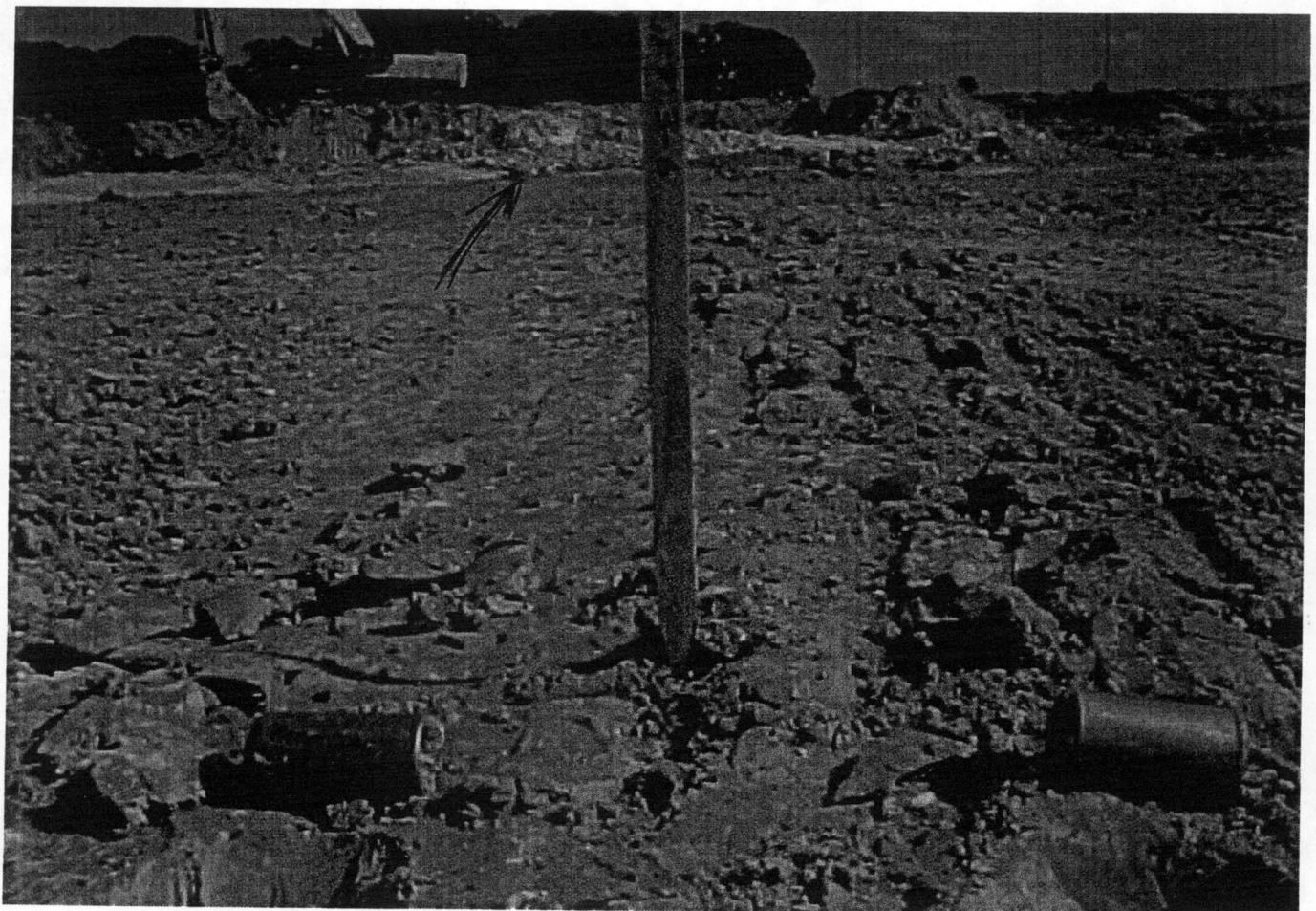
(Subject to any notes and notations listed or labeled hereon)  
This survey is not valid without the signature and original raised seal of a Florida licensed surveyor and mapper LB 5776



© FORESIGHT  
SURVEYORS, INC.

1277 KASS CIRCLE  
SPRING HILL, FLORIDA 34606  
PH. (352) 781-8808 FAX (352) 684-6052

FILE	CERTIFIED AS TO SURVEY	SCALE 1"=100'
DRAWN ARM	DATE 3/20/06	FIELD DATE 03/08/06
CHECKED	JOHN A. SNEAD, P.S.M. Fla. Surveyors Reg'n. No. 5070	PROJECT # 23196



Source of these  
photos unknown

4/25/06 J







**TETRA TECH HAI**

Mark A. Rynning, PE, M.B.A.  
James E. Christopher, PE  
Charles W. Drake, PG  
William D. Musser, PE, PH  
Lawrence E. Jenkins, P.S.M.

Roderick K. Cashe, PE  
Douglas P. Dufresne, PG  
Jon D. Fox, PE  
Daniel M. Nelson, PE

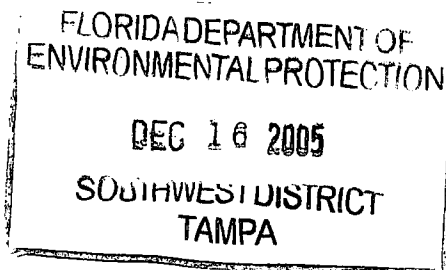
Andrew T. Woodcock, PE, M.B.A.  
John P. Toomey, PE  
Jennifer L. Woodall, PE  
Rafael A. Terrero, PE, DEE  
Jill M. Hudkins, PE  
Valerie C. Davis, PG  
Charles M. Shultz, PE  
Sean M. Parks, AICP QEP  
W. Bruce Lafrenz, PG  
Alexis K. Stewart, PE  
Christopher W. Hardin, PE  
James R. Warner, PE

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.

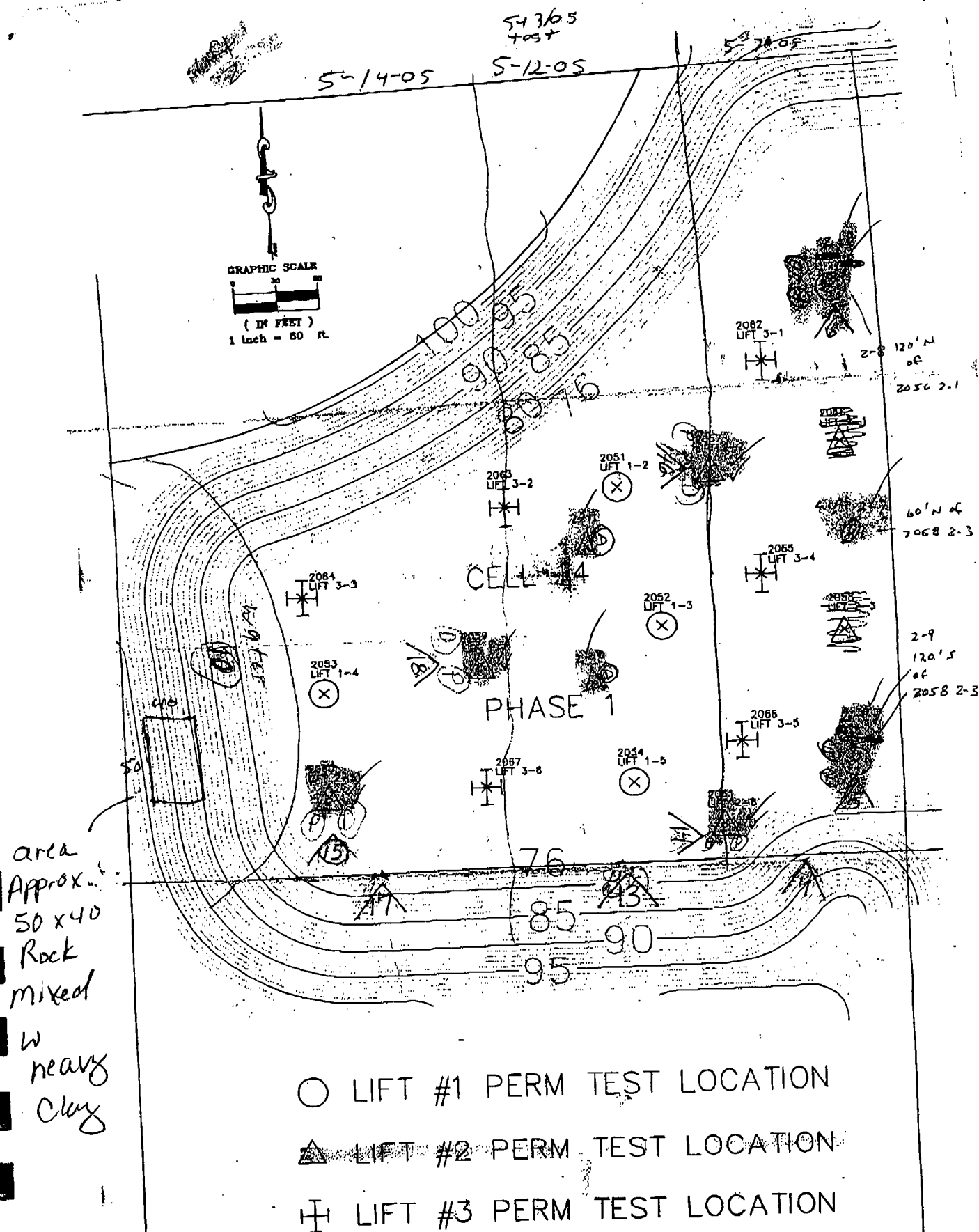
Very truly yours,

**Tetra Tech HAI**

Jennifer L. Deal, P.E.  
Project Manager

JLD/cr/99.0331.023/corresp/PELZ1

cc: Jeff Rogers, Angelo's







Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, FL 33771

December 5, 2005

RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County  
Certification of Construction Completion, Cell 14 clay layer only (approximately 5 acres)

Dear Mr. Iafrate:

The Department has reviewed the Certification of Construction Completion for the Cell 14 confining layer, prepared by Tetra Tech HAI dated September 19, 2005 (received September 20, 2005). The following information is needed to fully evaluate the information submitted.

1. Please provide a figure that shows the locations of permeability retests # RT-1, RT-2 and RT-3.
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 whit/gray material is. In the event that limestone was encountered during construction, please provide a figure that delineates the extent of the limestone encountered.

Please provide the requested information within 45 days of the date of this letter. As you may be aware, the Department's Southwest District office is relocating in mid-December. After December 12, 2005, correspondence should be sent to: **13051 North Telecom Parkway, Temple Terrace, FL 33637-0926**, and I may be contacted at: (813) 632-7600, ext. 386.

Sincerely,

Susan J. Pelz, P.E.  
Solid Waste Program Manager  
Southwest District

sjp  
Attachment

cc: Jennifer Deal, P.E., Tetra Tech HAI, 201 E. Pine St., Ste. 1000, Orlando, FL 32801, w/attachment  
Fred Wick, FDEP, Tallahassee  
Steve Morgan, FDEP Tampa, SW  
John Morris, P.G., FDEP Tampa, SW  
Douglas Hyman, P.E., FDEP Tampa, ERP



## TETRA TECH HAI

Mark A. Rynning, PE, M.B.A.  
James E. Christopher, PE  
Charles W. Drake, PG  
William D. Musser, PE, PH  
Lawrence E. Jenkins, P.S.M.

Roderick K. Cashe, PE  
Douglas P. Dufresne, PG  
Jon D. Fox, PE  
Daniel M. Nelson, PE

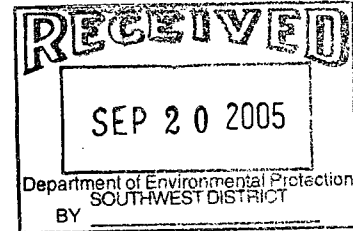
Andrew T. Woodcock, PE, M.B.A.  
John P. Toomey, PE  
Jennifer L. Woodall, PE  
Rafael A. Terrero, PE, DEE  
Jill M. Hudlins, PE  
Valerie C. Davis, PG  
Charles M. Shultz, PE  
Sean M. Parks, AICP, QEP  
W. Bruce Lafrenz, PG  
Alexis K. Stewart, PE  
Christopher W. Hardin, PE  
James R. Warner, PE

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:

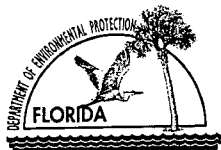
On behalf of Angelo's Aggregate Materials, Ltd. (Angelo's), Tetra Tech HAI (Tt HAI) is submitting this certification for the confining layer in Cell 14 at the above referenced facility. Confining layer construction activities were completed in May 2005. The certification form is included in Appendix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

(see Board Report) FILE



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 12, 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

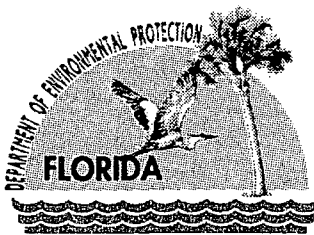
Permit No. 177982-001-SC :Dated: October 5, 2001

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

Signature of Professional Engineer

Page 1 of 1

Hartman & Associates, Inc.  
201 E. Pine St., Suite 1000  
Orlando, FL 32801  
Engineering Business #5814  
Jennifer L. Deal, P.E.  
  
Florida Registration 9/19/05  
0000058592



Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
13051 North Telecom Parkway  
Temple Terrace, FL 33637-0926  
Telephone: 813-632-7600

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, Fl. 33771

February 17, 2006

RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County  
Certification of Construction Completion, Cell 5 (approximately 7.34 acres)

Dear Mr. Iafrate:

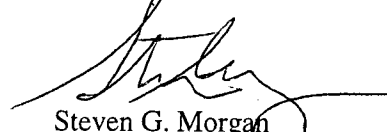
The Department has reviewed the Certification of Construction Completion for the Cell 5, prepared by Tetra Tech HAI dated February 2, 2006 (received February 3, 2006). The following information is needed to fully evaluate the information submitted.

1. The construction of Cell 5 was conducted contrary to the approved construction sequence in Permit No. 177982-001-SC. Approval of this construction certification is therefore pending issuance of permit modification No. 177982-010-SC and the Department's authorization to operate in Cell 5 is pending issuance of permit modification No. 177982-009-SO. Upon issuance of the permit modifications, the Department will issue approval of the construction certification of Cell 5 and authorization to operate.

**Please be advised that under no circumstances is the permittee to begin operation in Cell 5 prior to issuance of the pending permit modifications and receipt of approval of the certification of construction completion and authorization to operate from the Department.**

If you have any questions, you may contact me at (813) 632-7600 ext. 385.

Sincerely,



Steven G. Morgan  
Solid Waste Section  
Southwest District

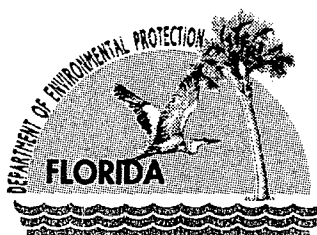
sgm  
cc:

Jennifer Deal, P.E., Tetra Tech HAI, 201 E. Pine St., Ste. 1000, Orlando, FL 32801, w/attachment  
Fred Wick, FDEP, Tallahassee  
Susan Pelz, P.E., FDEP Tampa, SW  
John Morris, P.G., FDEP Tampa, SW

"More Protection, Less Process"

Printed on recycled paper.





# Department of Environmental Protection

Jeb Bush  
Governor

Southwest District  
13051 North Telecom Parkway  
Temple Terrace, FL 33637-0926  
Telephone: 813-632-7600

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, FL 33771

February 17, 2006

RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County  
Certification of Construction Completion, Cell 15 (approximately 7.34 acres)

Dear Mr. Iafrate:

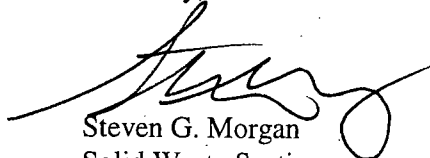
The Department has reviewed the Certification of Construction Completion for the Cell 15, prepared by Tetra Tech HAI dated February 2, 2006 (received February 3, 2006). The following information is needed to fully evaluate the information submitted.

1. The construction of Cell 15 was conducted contrary to the approved construction sequence in Permit No. 177982-001-SC. Approval of this construction certification is therefore pending issuance of permit modification No. 177982-010-SC and the Department's authorization to operate in Cell 15 is pending issuance of permit modification No. 177982-009-SO. Upon issuance of the permit modifications, the Department will issue approval of the construction certification of Cell 15 and authorization to operate.

**Please be advised that under no circumstances is the permittee to begin operation in Cell 15 prior to issuance of the pending permit modifications and receipt of approval of the certification of construction completion and authorization to operate from the Department.**


If you have any questions, you may contact me at (813) 632-7600 ext. 385.

Sincerely,

  
Steven G. Morgan  
Solid Waste Section  
Southwest District

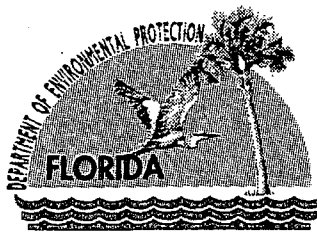
sgm  
cc:

Jennifer Deal, P.E., Tetra Tech HAI, 201 E. Pine St., Ste. 1000, Orlando, FL 32801, w/attachment  
Fred Wick, FDEP, Tallahassee  
Susan Pelz, P.E., FDEP Tampa, SW  
John Morris, P.G., FDEP Tampa, SW

REPLACEMENT LETTER  
CORRECTING TYPING  
Sent 2/21/06  


"More Protection, Less Process"

Printed on recycled paper.



Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Colleen M. Castille  
Secretary

Enterprise  
CON.

~~1000000~~  
252513

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, Fl. 33771

August 9, 2005

RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County  
Certification of Construction Completion, Cell 15 (6.23 acres)

Dear Mr. Iafrate:

On August 2, 2005, an inspection of the above-referenced facility relative to construction completion and adherence to the permit issued by the Florida Department of Environmental Protection (FDEP) was made by Susan Pelz, P.E., Lora Ross, Bret Galbraith (FDEP) and Jeff Rogers (Enterprise Landfill). Certification of Construction Completion dated June 20, 2005 (received June 21, 2005) and proof of financial assurance (received July 29, 2005), has been received by the Department. Based on the information submitted and the site inspection, the Department approves the construction certification for Cell 15.

The Department has also received photographs of Cell 15 taken on August 4, 2005 (received August 8, 2005) demonstrating that the ponded water observed in the Cell on August 2, 2005 has been removed. Based on the site inspection, certification documentation and the photographs provided, the Department **approves** the operation in Cell 15 in accordance with Operation Permit 177982-002-SO. If you have any questions, you may contact me at (813) 744-6100 ext. 386.

Sincerely,

Susan J. Pelz, P.E.  
Solid Waste Program Manager  
Southwest District

sjp  
cc:

Jennifer Deal, P.E., Hartman & Associates, 201 E. Pine St., Ste. 1000, Orlando, FL 32801, w/attachment  
William Kutash, Waste Program Administrator, FDEP Tampa  
Richard Tedder, P.E., FDEP Tallahassee (email)  
Fred Wick, FDEP, Tallahassee  
Douglas Hyman, P.E., FDEP Tampa, ERP

*Angelo's Aggregate Materials LTD.*

dba Angelo's Recycled Materials  
41111 Enterprise Rd  
Dade City, FL 33525  
(352)567-7676 FAX:(352)567-9448

August 4, 2005

FDEP Solid Waste Section  
Attn: Susan Pelz P.E. *8/9/05*  
3804 Coconut Palm Drive  
Tampa, FL 33619

Dear Susan,

Please find attached pictures of Cell 15. The cell had dried except for a few small puddles which we graded the surface with a dozer there is no ponding water. If you have any questions please call me anytime @ 352-302-8934.

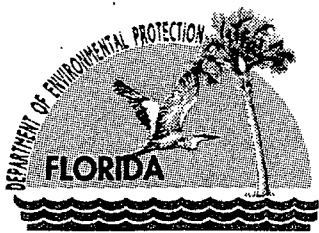
Thank you,

*Jeff Rogers*  
Jeff Rogers  
Landfill Manager









# Department of Environmental Protection

Jeb Bush  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, Fl. 33771

August 3, 2005

RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County  
Certification of Construction Completion, Cell 15 (6.23 acres)

Dear Mr. Iafrate:

On August 2, 2005, an inspection of the above-referenced facility relative to construction completion and adherence to the permit issued by the Florida Department of Environmental Protection (FDEP) was made by Susan Pelz, P.E., Lora Ross, Bret Galbraith (FDEP) and Jeff Rogers (Enterprise Landfill).

Certification of Construction Completion dated June 20, 2005 (received June 21, 2005) and proof of financial assurance (received July 29, 2005), has been received by the Department. Based on the information submitted and the site inspection, the Department approves the construction certification for Cell 15.

However, operation in Cell 15 is **not authorized** until the ponded water in the cell has been sufficiently removed. As discussed at the site inspection, please provide photographs of the cell after the water has been removed and prior to placement of waste for Department review and approval. Operation in Cell 15 shall not begin without specific written approval from the Department. If you have any questions, you may contact me at (813) 744-6100 ext. 386.

Sincerely,

Susan J. Pelz, P.E.  
Solid Waste Program Manager  
Southwest District

sjp  
cc:

Jennifer Deal, P.E., Hartman & Associates, 201 E. Pine St., Ste. 1000, Orlando, Fl. 32801, w/attachment  
William Kutash, Waste Program Administrator, FDEP Tampa  
Richard Tedder, P.E., FDEP Tallahassee (email)  
Fred Wick, FDEP, Tallahassee  
Douglas Hyman, P.E., FDEP Tampa, ERP

## Pelz, Susan

---

**From:** Jennifer L. Deal, P.E. [Jennifer.deal@tetrattech.com]  
**Sent:** Wednesday, July 27, 2005 8:13 AM  
**To:** Pelz, Susan  
**Subject:** RE: Enterprise Landfill

Susan,

Thank you for your quick reply. I will forward the information to Angelo's accordingly.

Jennifer

-----Original Message-----

From: Pelz, Susan [mailto:Susan.Pelz@dep.state.fl.us]  
Sent: Wednesday, July 27, 2005 8:09 AM  
To: Jennifer.deal@tetrattech.com  
Cc: Petro, Stephanie; Morgan, Steve; Morris, John R.; Wick, Fred; Cleary, James  
Subject: RE: Enterprise Landfill

Jennifer,

As your client should be aware, Specific Condition #7 of Operation Permit 177982-002-SO requires that "prior to operation/acceptance of waste into each new disposal area (cell), the activities described in the current construction permit shall be completed and submitted by the permittee, and approved by the Department."

As we discussed, the Department has reviewed the survey information you provided, and has no comments. However, to date, the Department has not received confirmation of adequate proof of financial assurance, and has not inspected and approved the newly constructed cell. Please note that the permit and Rule requires that proof of financial assurance not only be submitted to, but also be approved by, the Department. If the documentation is submitted on July 28, 2005, it is unlikely that it will be approved by August 1, 2005.

In the event that the permittee elects to proceed with waste disposal in this cell (Cell 15) prior to approval of the financial assurance mechanism and the certification documents, the facility will be out of compliance with its permit. Please be reminded that the Department may initiate enforcement actions to ensure compliance with the permit.

I trust you will forward this information on to your client.

Susan J. Pelz, P.E.  
Solid Waste Program Manager  
Southwest District  
813-744-6100 x 386  
susan.pelz@dep.state.fl.us

-----Original Message-----

From: Jennifer L. Deal, P.E. [mailto:Jennifer.deal@tetrattech.com]  
Sent: Tuesday, July 26, 2005 5:33 PM  
To: Pelz, Susan  
Subject: Enterprise Landfill

Susan,

At the request of Angelo's Aggregate Materials, Ltd. (Angelo's), I am

sending this notification that Angelo's intends to begin waste disposal operations in Cell 15 at their Enterprise Recycling and Disposal Facility on Monday, August 1, 2005. The updated financial assurance calculation has been approved and Mr. Iafrate informed me that the updated Letter of Credit should be received by the FDEP Solid Waste Financial Coordinator by Thursday, July 28, 2005.

Please feel free to contact me if you have any questions. Thank you.

Jennifer L. Deal, P.E.  
Tetra Tech HAI  
201 E. Pine Street, Ste. 1000  
Orlando, Florida 32801  
407-839-3955



**TETRA TECH HAI**

Mark A. Rynning, PE, M.B.A.  
James E. Christopher, PE  
Charles W. Drake, PG  
William D. Musser, PE, RH  
Lawrence E. Jenkins, BS, M.

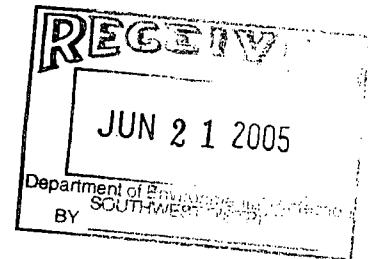
Roderick K. Cashe, PE  
Douglas R. Dufresne, PG  
Jon D. Fox, PE  
Daniel M. Nelson, PE

Andrew T. Woodcock, PE, M.B.A.  
John P. Toomey, PE  
Jennifer L. Woodall, PE  
Rafael A. Terrero, PE, DEE  
Jill M. Hudkins, PE  
Valerie C. Davis, PG  
Charles M. Shultz, PE  
Sean M. Parks, AICP, QEP  
W. Bruce Lafrenz, PG  
Alexis K. Stewart, PE  
Christopher W. Hardin, PE  
James R. Warner, PE

June 20, 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 15 Elevation Certification  
Enterprise Recycling & Disposal Facility  
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 cell floor elevation in Cell 15 at the above referenced facility. The confining layer for Cell 15 was previously certified and approved by the Department.

An as-built survey provided by Foresight Surveyors, Inc. is attached for your review. The elevations indicated on the survey are substantially in compliance with the approved construction plans. Photographs from an inspection by Tt-HAI personnel are also attached. Revised financial assurance calculations to include the acreage of Cell 15 were previously submitted for review by the Department.

We trust this submittal, along with the pending financial assurance update, will satisfy the Department's certification requirements and allow for use of the cell for waste disposal operations. Please call me if you have any questions or require additional information.

Very truly yours,

**Tetra Tech HAI**

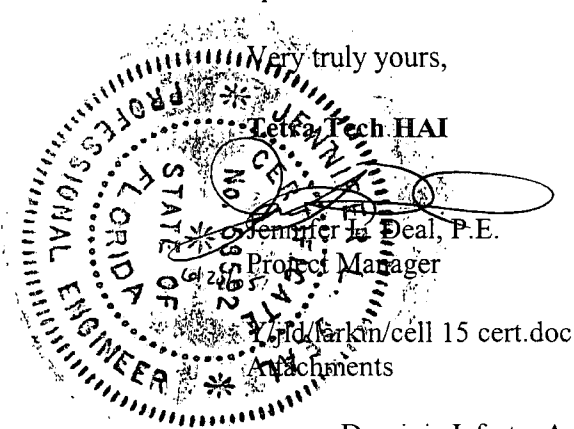
Jennifer La Deal, P.E.

Project Manager

Y:\jd\parkm/cell 15 cert.doc

Attachments

cc: Dominic Iafrate, Angelo's  
John Morris, P.G., FDEP







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: Cell floor elevation certification for Cell 15

See attached survey from Foresight Surveyors as-built elevations.

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

Site Design: Quantity: 1500 cy/day ton/day Site Acreage: 6.23 acres for Cell 15 Acres

Deviations from Plans and Application Approved by DEP: Construction is in substantial compliance  
with the approved construction plans.

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: June 24, 2005

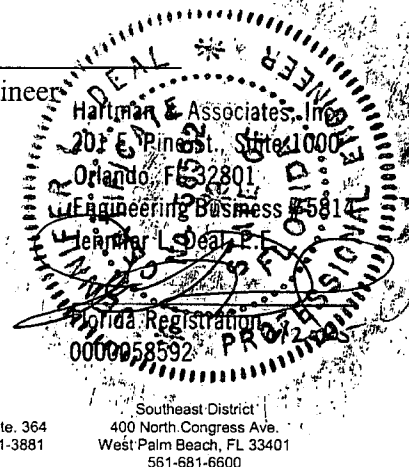
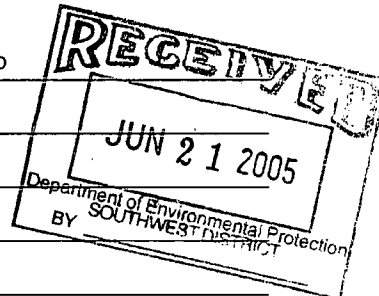
This is to certify that, with the exception of any deviation noted above, the construction of the project has been completed in substantial accordance with the plans authorized by Construction

Permit No. 177982-001-SC :Dated: October 5, 2001

Date: June 20, 2005

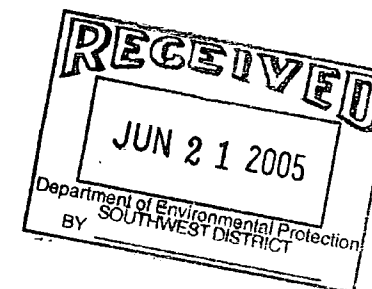
Signature of Professional Engineer

Page 1 of 1



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



CELL 15  
ASBUILT SURVEY



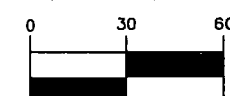
NOTES:

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

 <b>FORESIGHT SURVEYORS, INC.</b>		
773 PROVIDENCE BOULEVARD BROOKSVILLE, FLORIDA 34601		
PH. (352) 797-6306 FAX (352) 797-6308		
FILE	CERTIFIED AS BOUNDARY SURVEY	SCALE 1" = 60'
DRAWN ADM	DATE 6-21-05	FIELD DATE 6-3-05
CHECKED	DATE 6-21-05	PROJECT #
A. DANIEL MILLER, P.S.M. Fla. Surveyors Reg'n. No. 6294		23196

GRAPHIC SCALE



( IN FEET )  
1 inch = 60 ft.

CELL 15  
PHASE 3

+ 82.2'

+ 81.0'

+ 80.8'

+ 80.7'

+ 81.0'

+ 80.1'

+ 80.5'

+ 80.9'

+ 81.1'

+ 80.8'

+ 80.6'

+ 80.5'

+ 80.6'

+ 81.1'

+ 80.8'

+ 80.7'

+ 81.0'

+ 80.8'

+ 80.8'

+ 81.2'

+ 80.8'

+ 80.9'

+ 81.2'

+ 80.6'

+ 80.7'

+ 81.3'

+ 80.4'

+ 80.7'

+ 81.0'

+ 80.9'





2





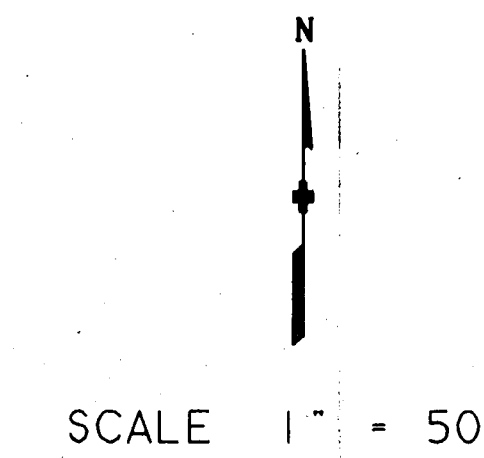
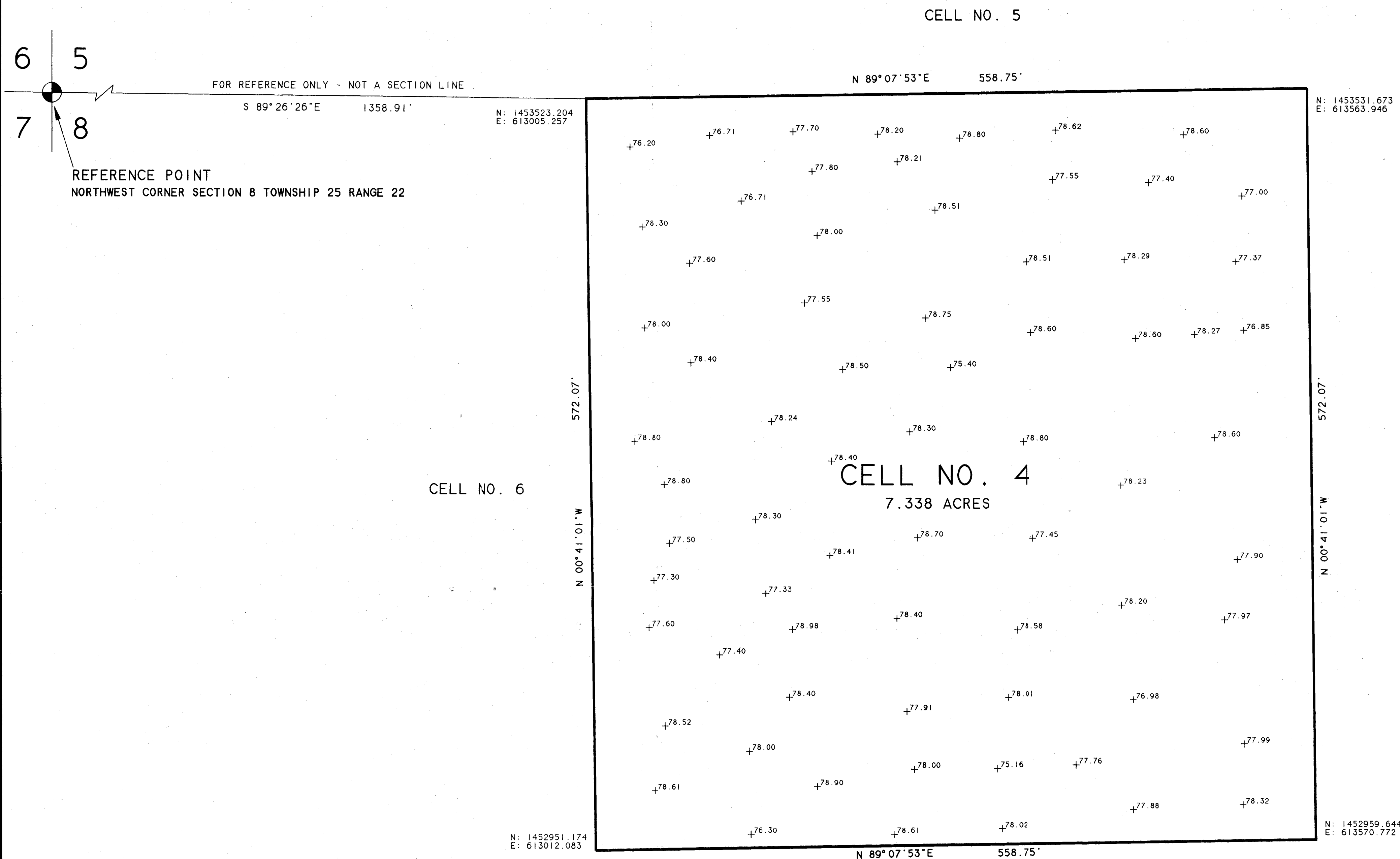
3





# ANGELO'S RECYCLED MATERIALS ENTERPRISE ROAD FACILITIES

SECTION 8 TOWNSHIP 25 SOUTH RANGE 22 EAST  
PASCO COUNTY, FLORIDA



## TOP OF SUB-GRADE SURVEY

THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 AND REFERENCED TO U.S.G.S. BENCHMARK # Q-56. SAID BENCHMARK BEING LOCATED ON THE NORTH SIDE OF JORDAN ROAD AND THE WEST RIGHT-OF-WAY LINE OF THE CSX RAILROAD APPROXIMATELY TWO MILES NORTH OF DADE CITY, FLORIDA.

THE SITE BENCHMARK IS LOCATED ON THE NORTH SIDE OF ENTERPRISE ROAD APPROXIMATELY 75 FEET WEST OF THE ENTRANCE TO ANGELO'S RECYCLED MATERIALS LAND FILL, BEING A 5/8" IRON ROD AND CAP NO. LB6382 IN THE CENTER OF AN AERIAL PANEL WITH AN ELEVATION OF 148.94 FEET.

BEARINGS AND COORDINATES SHOWN HEREON BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE.

Dept. of Environmental  
Protection

NOV 22 2006

Southwest District

I HEREBY CERTIFY THAT THE INFORMATION CONTAINED ON THIS PUBLICATION WAS OBTAINED UNDER MY DIRECTION BEGINNING ON JULY 5, 2006 AND TERMINATING ON OCTOBER 19, 2006 AND IS A TRUE REPRESENTATION OF THE GROUND ELEVATIONS AS THEY EXISTED DURING SAID TIME PERIOD.

PREPARED BY:

BOBBY W. SIMMONS  
PROFESSIONAL LAND SURVEYOR  
FLORIDA PLS CERT. NO. 12345  
FLORIDA LB CERT. NO. 12345

NOT VALID UNLESS IMPRINTED WITH

GENERAL LEGEND	
DI	- Dred or Description
CH	- Concrete Monument
PCB	- Point of Beginning
PCP	- Permanent Control Point
PRM	- Permanent Reference Monument
R/W	- Right of Way
R/S	- Railroad Spike
N & D	- Nail and Date
(C)	- Computed Data
P.C.	- Point of Curvature
P.T.	- Point of Tangency
IP	- Iron Pipe (F) - Field Data
PI	- Plat (R) - Iron Rod
FD	- Found (C) - Center Line
S	- Set (R) - Radial
(NR)	- Non Radial

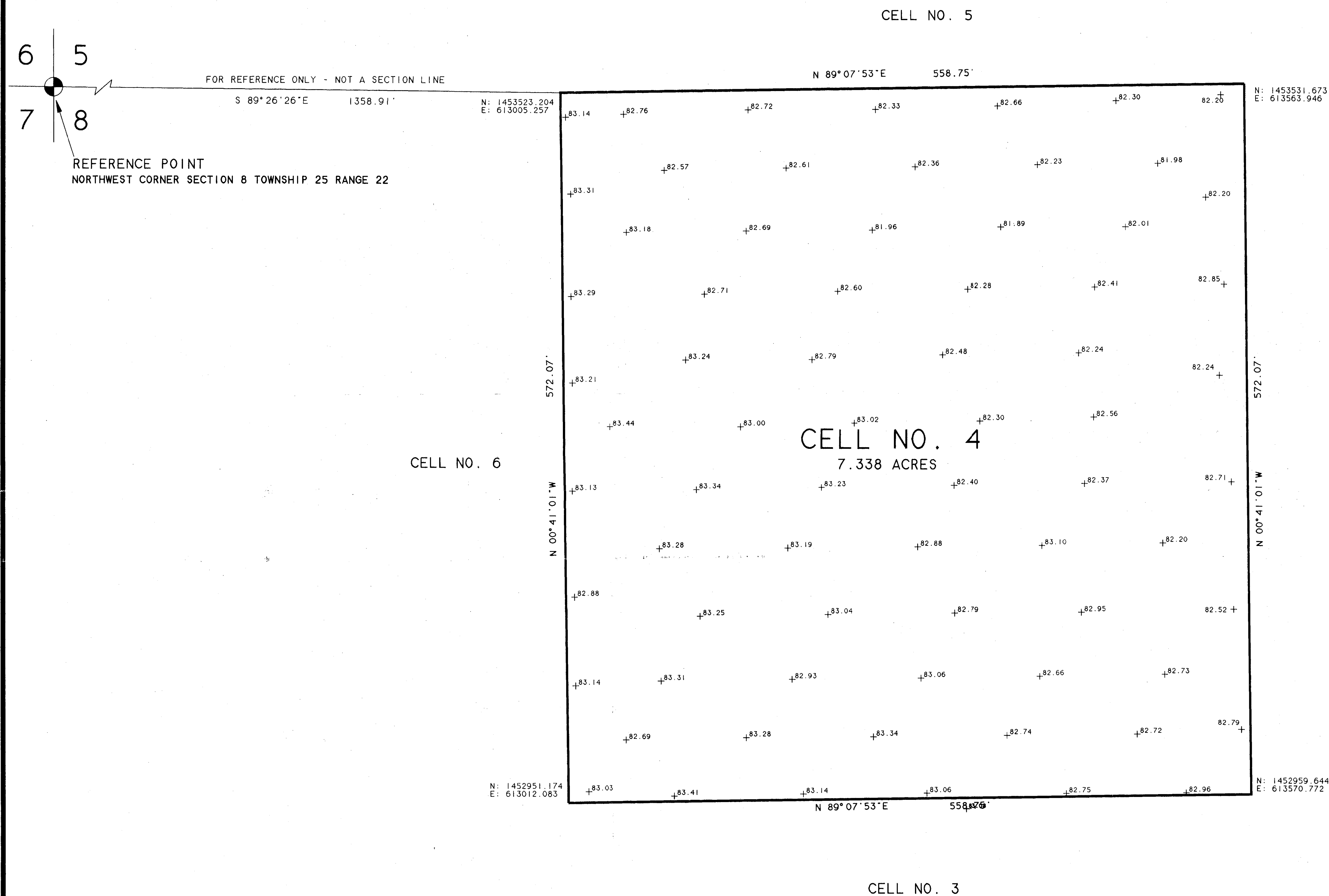
REVISIONS	
11-21-06	ADD CLAY SURVEY NOTE

SIMMONS & BEALL, INC.	
SURVEYING & MAPPING	
FLORIDA LB. NO. 6382	
P.O. BOX 1297	
1228 HWY. 301 S.	
DADE CITY, FLORIDA 33526	
(352) 567-0048	
FAX (352) 567-0675	
Date of Survey:	10-19-06
Drawn by:	CD
Date of Plot:	10-24-06
Checked by:	KH
Job Number:	06087-4A
Sheet:	ONE OF ONE
CERTIFIED TO: ANGELO'S RECYCLED MATERIALS	

# ANGELO'S RECYCLED MATERIALS<sup>2</sup>

## ENTERPRISE ROAD FACILITIES

SECTION 8 TOWNSHIP 25 SOUTH RANGE 22 EAST  
PASCO COUNTY, FLORIDA



SCALE 1" = 50'

TOP OF CLAY SURVEY

THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 AND REFERENCED TO U.S.G.S. BENCHMARK # 0-56. SAID BENCHMARK BEING LOCATED ON THE NORTH SIDE OF JORDAN ROAD AND THE WEST RIGHT-OF-WAY LINE OF THE CSX RAILROAD APPROXIMATELY TWO MILES NORTH OF DADE CITY, FLORIDA.

THE SITE BENCHMARK IS LOCATED ON THE NORTH SIDE OF ENTERPRISE ROAD APPROXIMATELY 75 FEET WEST OF THE ENTRANCE TO ANGELO'S RECYCLED MATERIALS LAND FILL, BEING A 5/8" IRON ROD AND CAP NO. LB6382 IN THE CENTER OF AN AERIAL PANEL WITH AN ELEVATION OF 148.94 FEET.

BEARINGS AND COORDINATES SHOWN HEREON BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE.

Dept. of Environmental  
Protection

NOV 22 2006

Southwest District

I HEREBY CERTIFY THAT THE INFORMATION CONTAINED ON THIS PUBLICATION WAS OBTAINED UNDER MY DIRECTION ON OCTOBER 25, 2006 AND IS A TRUE REPRESENTATION OF THE GROUND ELEVATIONS EXISTING ON SAID DATE.

PREPARED BY:

PROFESSIONAL LAND SURVEYOR  
FLORIDA PLS CERT. NO. 12345  
FLORIDA LB CERT. NO. 6382

NOT VALID UNLESS IMPRINTED WITH THIS SEAL

GENERAL LEGEND	
(DI)	- Dred on Description
CH	- Concrete Monument
POB	- Point of Beginning
PCP	- Permanent Control Point
PRM	- Permanent Reference Monument
R/W	- Right of Way
R/S	- Railroad Spine
N & D	- Nail and Drive
(CI)	- Computed Data
P.C.	- Point of Curvature
P.T.	- Point of Tangency
(P)	- Iron Pipe
(PI)	- Plot
FD	- Found
S	- Set
(NR)	- Non Radial
(F)	- Field Data
(IR)	- Iron Rod
(C)	- Center Line
(R)	- Road
(NR)	- Non Radial

REVISIONS	
11-21-06	ADD CLAY SURVEY NOTE

SIMMONS & BEALL, INC.	
SURVEYING & MAPPING	
P.O. BOX 1297 1228 HWY. 301 S. DADE CITY, FLORIDA 33526 (352) 567-0048 FAX (352) 567-0675	
Date of Survey: 10-19-06	Drawn by: CD
Date of Plot: 10-24-06	Checked by: KH
Job Number: 06087-48	Sheet: ONE OF ONE
CERTIFIED TO: ANGELO'S RECYCLED MATERIALS	



## TETRA TECH HAI

Mark A. Rynning, PE, M.B.A.  
James E. Christopher, PE  
Charles W. Drake, PG  
William D. Musser, PE, PH  
Lawrence E. Jenkins, PSM

Roderick K. Cashe, PE  
Douglas P. Dufresne, PG  
Jon D. Fox, PE  
Daniel M. Nelson, PE

Andrew T. Woodcock, PE, M.B.A.  
John P. Toomey, PE  
Jennifer L. Woodall, PE  
Rafael A. Terrero, PE, DEE  
Jill M. Hudkins, PE  
Valerie C. Davis, PG  
Charles M. Shultz, PE  
Sean M. Parks, AICP, QEP  
W. Bruce Lafrenz, PG  
Alexis K. Stewart, PE  
Christopher W. Hardin, PE  
James R. Warner, PE

June 20, 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 15 Elevation Certification  
Enterprise Recycling & Disposal Facility  
FDEP Permit Nos. 177982-001-SC, 177982-002-SO  
Pasco County, Florida**



Tt-HAI #99.0331.023  
File 12.0

Dear Ms. Pelz:

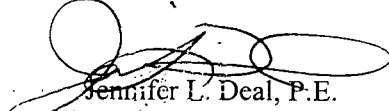
On behalf of Angelo's Aggregate Materials, Ltd. (Angelo's), Tetra Tech HAI (Tt-HAI) is submitting this certification for the cell floor elevation in Cell 15 at the above referenced facility. The confining layer for Cell 15 was previously certified and approved by the Department.

An as-built survey provided by Foresight Surveyors, Inc. is attached for your review. The elevations indicated on the survey are substantially in compliance with the approved construction plans. Photographs from an inspection by Tt-HAI personnel are also attached. Revised financial assurance calculations to include the acreage of Cell 15 were previously submitted for review by the Department.

We trust this submittal, along with the pending financial assurance update, will satisfy the Department's certification requirements and allow for use of the cell for waste disposal operations. 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  
6/20/05

Y/jld/larkin/cell 15 cert.doc  
Attachments

cc: Dominic Iafrate, Angelo's  
John Morris, P.G., FDEP

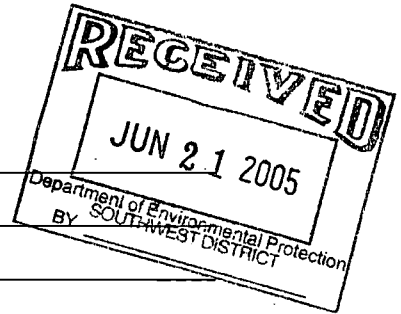




Florida Department of Environmental Protection  
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, FL 32399-2400

DEP Form # 62-701.900(2)  
Form Title Certification of Construction Completion  
Effective Date May 19, 1994  
DEP Application No. \_\_\_\_\_  
(Filed 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: Cell floor elevation certification for Cell 15  
See attached survey from Foresight Surveyors as-built elevations.

Cost: Estimate \$ 100,000 Actual \$ 150,000  
Site Design: Quantity: 1500 cy/day ton/day Site Acreage: 6.23 acres for Cell 15 Acres  
Deviations from Plans and Application Approved by DEP: Construction is in substantial compliance  
with the approved construction plans.

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: June 24, 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: June 20, 2005

Signature of Professional Engineer

Page 1 of 1

Hartman & Associates, Inc.  
201 E. Pine St., Suite 1090  
Orlando, FL 32801  
Engineering Business #5814  
Jennifer L. Deal, P.E.  
Florida Registration 6120105  
0000058592

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

Northeast District  
7825 Baymeadows Way, Ste. 8200  
Jacksonville, FL 32256-7590  
904-448-4300

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

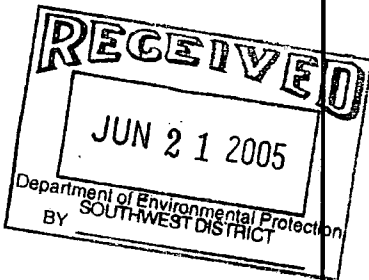
Southwest District  
3804 Coconut Palm Dr.  
Tampa, FL 33619  
813-744-6100

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

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

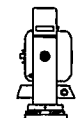

CELL 15  
ASBUILT SURVEY



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	CERTIFIED AS TO SURVEY	SCALE 1"=60'
DRAWN ADM	DATE	FIELD DATE 6-3-05
CHECKED	DATE	PROJECT #
A. DANIEL MILLER, R.S.M. Fla. Surveyor's Reg. No. 6294		23196

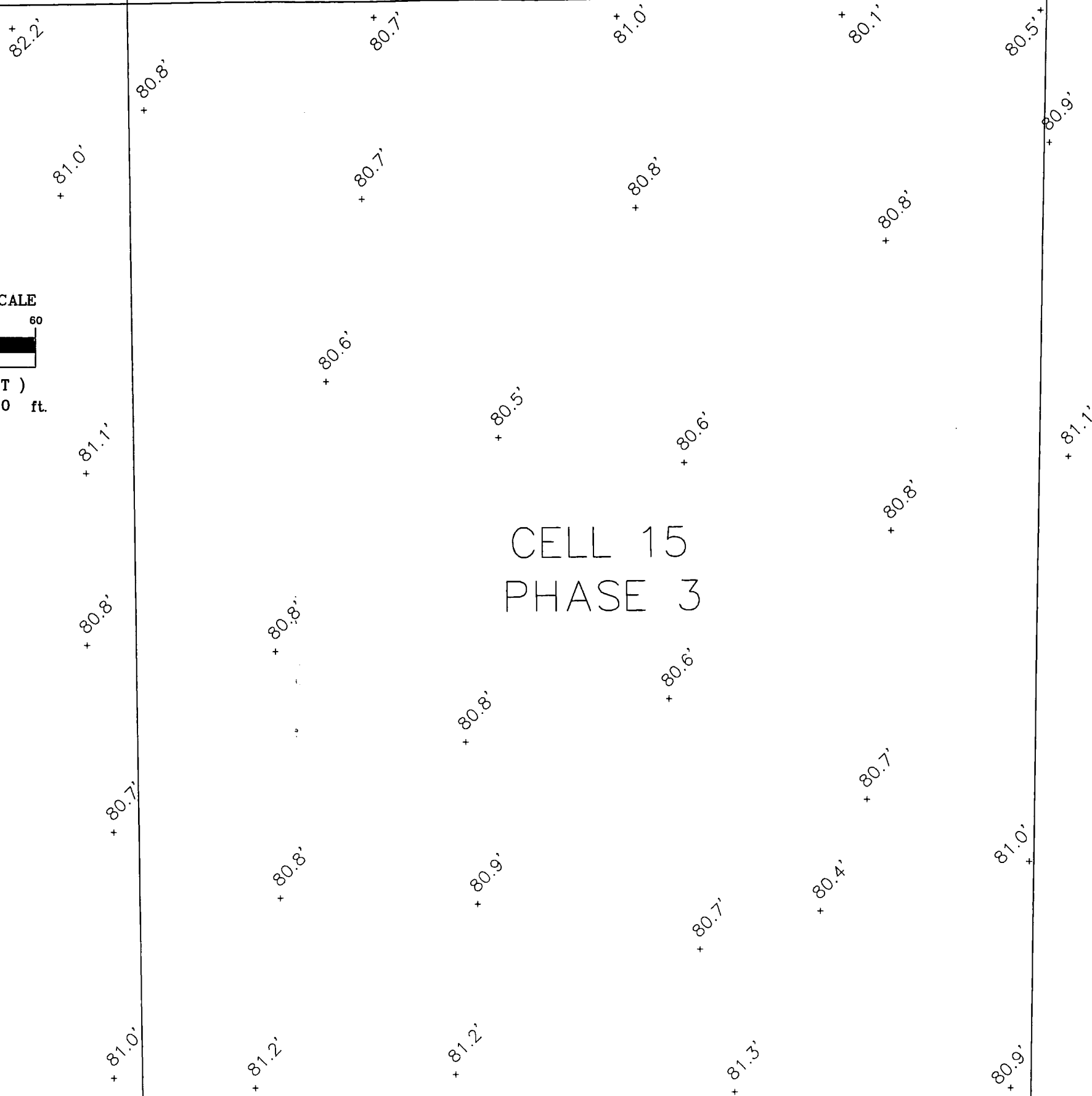
GRAPHIC SCALE



( IN FEET )

1 inch = 60 ft.

CELL 15  
PHASE 3







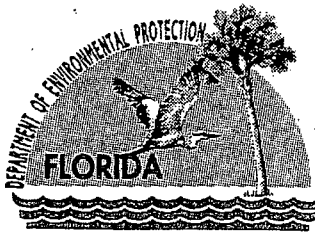
2





3





# Department of Environmental Protection

Jeb Bush  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, Fl. 33771

January 12, 2005

RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County  
Certification of Construction Completion,  
Cell 16 (temporary stormwater) and remainder of Cell 1

*Enterprise  
certification  
file*

Dear Mr. Iafrate:

On November 1, 2004, an inspection of the above-referenced facility relative to construction completion and adherence to the permit issued by the Florida Department of Environmental Protection (FDEP) was made by Simone Core, P.E. (FDEP) and Enterprise Landfill personnel.

Certification of Construction Completion dated October 14, 2004 (received October 15, 2004), and supplemental information dated November 23, 2004, November 24, 2004, December 16, 2004 and January 5, 2005 (received November 24, 2004 November 29, 2004, December 17, 2004, January 6, 2005 respectively), has been received by the Department.

Based on the information submitted and the site inspection, the Department **approves** the construction (confining layer) certification for the remainder of Cell 1 and Cell 16. Please be advised that Cell 16 is authorized only for use as a temporary stormwater pond. At the time that Cell 16 is anticipated to be used for disposal operations, additional confining material shall be constructed to bring the cell bottom to design grades and a certification of construction completion shall be submitted for Department approval.

The remainder of Cell 1 shall be operated in accordance with the conditions of Operation permit 177982-002-SO and the Department's certification approval letter dated March 8, 2004 (attached). If you have any questions, you may contact me at (813) 744-6100 ext. 386.

Sincerely,

Susan J. Pelz, P.E.  
Solid Waste Manager  
Southwest District

sjp

Attachment

cc: Jennifer Deal, P.E., Hartman & Associates, 201 E. Pine St., Ste. 1000, Orlando, Fl. 32801, w/attachment  
William Kutash, Waste Program Administrator, FDEP Tampa  
Fred Wick, FDEP, Tallahassee  
John Morris, P.G., FDEP Tampa  
Douglas Hyman, P.E., FDEP Tampa, ERP

"More Protection, Less Process"

Printed on recycled paper.

*Remainder Cell 1  
Cell 16 (stormwater)  
Cert 3  
Approved 1/12/05*



# Department of Environmental Protection

Jeb Bush  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

David B. Struhs  
Secretary

Certified Mail 7003 1680 0006 6184 7917  
Return Receipt Requested

March 8, 2004

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, Fl. 33771

RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County

Dear Mr. Iafrate:

This letter is to acknowledge receipt of the following information prepared by Hartman and Associates, Inc. (HAI) (unless otherwise noted) concerning the construction certification of Cells 1 and 15 of the above-referenced facility:

1. Plan of Action for Cell Certification,... dated August 21, 2003 (received August 22, 2003);
2. Cell 1 Certification,... dated October 8, 2003 (received October 9, 2003);
3. Cell 1 Certification and Landfill Site Certification Addendum,... dated November 13, 2003 (received November 14, 2003);
4. Information transmitted via facsimile dated January 9, 2004 regarding permeability and % fines correlation;
5. Cell 1 and Landfill Site Certification Addendum 2 and Responses to Department's Certification Comments,... dated January 14, 2004 (received January 15, 2004);
6. Notification of Shallow Subsidence,... dated January 19, 2004 (received January 20, 2004);
7. Shallow Subsidence Clarification,... dated February 11, 2004 (received February 13, 2004);
8. Certification of Operations Cells 1 and 15,... dated February 18, 2004 (received February 23, 2004), prepared by HSA Golden; and
9. Information transmitted via facsimile dated February 25, 2004 regarding proposed grouting of subsidence in Cell 16.

"More Protection, Less Process"

Printed on recycled paper.



Other information was also reviewed in part or in its entirety during the evaluation of the Certification of Construction Completion for Cells 1 and 15. This information prepared by Hartman & Associates unless otherwise noted included, but is not limited to:

10. *Groundwater Monitoring Results*, dated December 18, 2003 (received December 19, 2003);
11. *Weekly Water Levels*, dated December 30, 2003 (received December 31, 2003);
12. Construction progress reports; and
13. Enterprise Recycling and Disposal Facility Class III Landfill Permit Application,... prepared by Hartman and Associates, dated November 2000 (received November 20, 2000).

Additionally, several meetings were held with, and site visits were made by, the Department, permittee and permittee's consultants. The conditions observed at the site and information needed for satisfactory completion of the Certification of the constructed areas were discussed at these site visits and meetings.

During permitting (2001), the applicant (Sid Larkin & Sons, Inc.) provided information that demonstrated that the construction and operation of the facility without a liner and leachate collection and removal system would not result in significant threat to the environment. The Department's acceptance of this demonstration was based in large part on the anticipated subsurface conditions at the site. The Hydrogeological Report provided as part of the permitting documentation included boring logs that generally showed "a consistent confining layer above the limestone" [ref. #13, above, page 3-14]. Additionally, the design required a continuous 3-foot layer of  $1 \times 10^{-6}$  cm/sec permeability material to be below or at the cell design bottom elevation to further mitigate any impacts from leachate into groundwater. If the test data did not indicate that this layer was present, the area would be "reworked or reconstructed so that it [would] meet these requirements" [ref. #13, Operations Plan, page 24]. The boring logs provided during permitting included inconsistent descriptions between some Universal Engineering Sciences logs in Section 4 and Hartman & Associates, Inc. logs in Section 5, but generally showed limestone below the proposed cell bottom elevations in Cell 1.

However, during construction of Cell 1 limestone was encountered at higher elevations than anticipated based on the hydrogeological and geotechnical investigations conducted at the time of permitting. In areas with limerock or sandy soils at the design bottom elevation of Cell 1, the unsuitable materials (limerock and sandy soils) were overexcavated and clayey soils which met the permeability requirements were placed and compacted in the excavated areas to meet the requirements of the permit and design. To confirm the presence of a 3-foot continuous clayey layer of the specified permeability ( $1 \times 10^{-6}$  cm/sec), shallow and deep borings were completed, and a correlation between % fines in the clayey material and permeability test results was developed. In addition to clay and sandy clay materials meeting the permeability requirements, the correlation concluded that clayey sand materials with a minimum % fines of 30% would also be reasonably expected to meet the permeability requirements of the permit. The Department concurs with this conclusion based on the data provided.

The cross-sections show "limestone fragments" in many locations throughout the cell bottom and underlying strata. Although this does not appear to correlate with the original design intent or permit supporting documentation, the information provided with the Certification indicates that these "fragments" do not appear to be connected to the Floridan aquifer.



Subsequent to the completion of construction of Cells 1 and 15, the Department was notified by the permittee's consultant of a "Shallow Subsidence" that occurred in Cell 16, approximately 30 feet north of the temporary berm between Cells 15 and 16. Since Cell 16 was intended for temporary stormwater use only, and due to the occurrence of subsurface anomalies (e.g., sandy areas, irregular limestone surface, deep depression which is possibly a relic sinkhole), the permittee agreed to isolate the Cell 15 temporary stormwater management area from Cell 16 to allow the approval of Cells 1 and 15 while continuing to investigate the conditions in Cell 16. This isolation of Cell 16 was accomplished by constructing a temporary berm between Cells 15 and 16. As reported by HAI, in the area of the subsidence "a layer of loose or raveling material" was discovered in two locations. Additional borings were completed to confirm the extent of these areas, and a proposal for grouting the affected areas was submitted to the Department [ref. #7, 8 and 9]. It is the Department's understanding that this grouting activity is taking place the week of March 1, 2004.

**Conclusion:**

Based on the information provided for the Certification and the Department's review of relevant documents continued in the Department's files, the Department **does not object** to the operation of Cell 1 for waste disposal and Cell 15 for temporary stormwater management in accordance with the conditions of Operation permit #177982-002-SO and the following conditions:

1. This authorization does not include Cell 16.
2. The limerock "fragments" observed at the Cell 1 bottom elevation during the Department's January 21, 2004 inspection shall be removed and replaced with a minimum 3 feet of clayey material at the specified permeability of  $1 \times 10^{-6}$  cm/sec. Photographic documentation shall be submitted to the Department upon completion and prior to operation.
3. Repair of the subsidence in Cell 16 shall be completed prior to acceptance of waste in Cell 1. A report documenting the repair activities shall be submitted to the Department upon completion. The report shall document that the subsidence was repaired in accordance with the procedures provided [ref. #7, 8 and 9] and that the stability of the affected area has been restored. Photographic documentation, borings logs, or other suitable documentation shall be provided. The report shall be signed and sealed by a registered professional engineer or geologist as appropriate.
4. As required by modified stormwater management permit #51-0172489-003, the permittee shall notify the Department of any subsequent sinkhole development in the surface water management system within 48 hours after discovery and must submit a detailed sinkhole evaluation and repair plan for approval by the Department within 30 days of discovery.
5. In the event of subsidence or other subsurface instability in Cells 1 or 15, waste disposal operations (Cell 1) or stormwater management (Cell 15) shall cease in the affected area and the Department shall be notified in accordance with Specific Conditions #5 and 40 of Operation Permit #177982-002-SO. Operations or stormwater management shall not resume until the condition has been adequately evaluated and remediated if necessary.

Although the conditions observed do not necessarily preclude the construction and operation of future cells, it is the Southwest District's position that the subsurface conditions observed during the construction and certification of Cells 1, 15 and 16 are a substantial deviation from the original permitted design. As such, the construction of subsequent cells and the completion of Cell 16 requires a modification of construction permit #177982-001-SC to update and revise the design as appropriate based on currently available information.

If you have any questions, you may contact me at (813) 744-6100 ext. 386.

Sincerely,



Susan J. Pelz, P.E.  
Solid Waste Manager  
Southwest District

sjp

cc: Jennifer Deal, P.E., Hartman & Associates, 201 E. Pine St., Ste. 1000, Orlando, FL 32801  
William Kutash, Waste Program Administrator, FDEP Tampa  
Richard Tedder, P.E., Solid Waste Program Administrator, FDEP Tallahassee  
Chris McGuire, OGC  
Fred Wick, FDEP, Tallahassee, w/attachment  
Kim Ford, P.E., FDEP Tampa  
John Morris, P.G., FDEP Tampa  
David Smith, P.E., FDEP Tampa, ERP

# TETRA TECH, INC.

## HARTMAN & ASSOCIATES, INC.

engineers, hydrogeologists, surveyors & management consultants

### OFFICERS:

Mark A. Rynning, P.E., M.B.A.  
Harold E. Schmidt, Jr., P.E., DEE  
James E. Christopher, P.E.  
Charles W. Drake, P.G.  
William D. Musser, P.E., P.H.  
Lawrence E. Jenkins, P.S.M.

### SENIOR ASSOCIATES:

Marco H. Rocca, C.M.C.  
Roderick K. Cashe, P.E.  
Douglas P. Duffresne, P.G.  
Jon D. Fox, P.E.  
Daniel M. Nelson, P.E.

### ASSOCIATES:

Lcs H. Porterfield, P.E.  
Andrew T. Woodcock, P.E., M.B.A.  
John P. Toomey, P.E.  
Jennifer L. Woodall, P.E.  
Rafael A. Terrero, P.E., DEE  
Jill M. Hudkins, P.E.  
Valerie C. Davis, P.G.  
Charles M. Shultz, P.E.  
Sean M. Parks, AICP, QEP  
W. Bruce Lafrenz, P.G.  
Alexis K. Stewart, P.E.  
Christopher W. Hardin, P.E.  
James R. Warner, P.E.

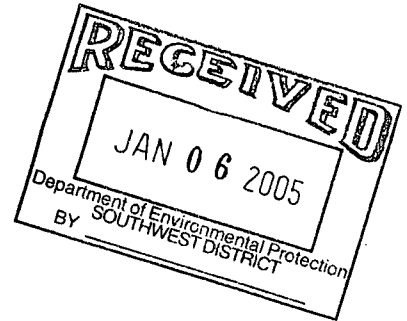
January 5, 2005

HAI #99.0331.017

File 12.0

### Via UPS Overnight

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



**Subject: Response to Cell 16 and Cell 1 Certification Comments  
Enterprise Recycling & Disposal Facility  
Angelo's Aggregate Materials, Ltd.  
FDEP Permit Nos. 177982-001-SC, 177982-002-SO  
Pasco County, Florida**

Dear Ms. Core:

On behalf of Angelo's Aggregate Materials, Ltd., Hartman & Associates, Inc. (HAI) is providing responses to your request for additional information regarding the certification documentation for Cells 1 and 16 at the Enterprise Recycling and Disposal Facility in Dade City, Florida. Your comments are stated first with our responses following.

1. Please provide revised site inspection reports for July 7 and 8, 2004 indicating that the required IPD and permeability tests were conducted for Sections 3 and 4. As of the date of this letter, UES has not submitted revised site inspection reports.

**Response:** Please see the attached revised reports.

2. Please note that Appendix E does not indicate that permeability tests were conducted on July 26, 2004. Please clarify further.

**Response:** Please see the attached letter from HAI.

3. Cell 15 was approved only for stormwater management. Therefore, in order for Cell 15 to be approved for waste disposal, IPD and permeability tests must be conducted on the additional confining material required to raise the cell floor to an elevation of 80 feet NGVD. The IPD and permeability tests are to be conducted in accordance with the minor modification to the construction permit currently in-house.

*See Band Report*

Ms. Simone Core, P.E.

January 5, 2005


Page 2

**Response:** Additional discussion will be necessary between HAI and the Department to clarify the intent of the confining layer certification previously submitted for Cell 15. However, approval of the certification of Cells 1 and 16 should not be dependent on the resolution of this comment since the comment addresses Cell 15.

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

Very truly yours,

**Hartman & Associates, Inc.**

  
Jennifer L. Deal, P.E. 1/5/05  
Project Manager

N/hydro/jld/larkin/cell 1 and 16 response.doc

**Attachments**

cc: Dominic Iafrate, Angelo's  
Jeff Rogers, Angelo's  
Susan Pelz, P.E., FDEP – Southwest District





# 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

Project No.: 80540-001-02  
Report No.: SI #2  
Date: July 12, 2004  
Revised: 12/07/04

## WEEKLY REPORT ON SITE INSPECTIONS

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

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

**Scope of Field Work:** Monitor Placement and Compaction of Clay Liner; to Include IPD's and Permeability Sample Pickup

**Inspected By:** Vince Simmons

### July 6, 2004

Monitored track hoe loading end jumps from section #3 of cell and hauling to stockpile area at east end of cell areas outside of construction zone. At end of excavation in section #3 D-7 dozer compacted clay liner at 12" lifts and grading while sheep's foot roller compacted graded clay liner. Three density test performed in section #2 at locations on density test report form. Also 3 permeability samples were taken at one sample per lift at location noted on density report form and sent to Orlando lab for testing. Surveyors not on site today. Area cleared in section #3 measured at 315' long and 73' wide. No test were ready for section #3 today.

### July 7, 2004

Monitored track hoe loading two end dumps from section #4 cell and hauling excavates fill to stockpile area at east end of cell areas outside of construction zone. Clay liner fill hauled back in section #4 and graded with day dozer and compacted with sheep's foot roller at 12" lifts. Dimension of section #4 is 315' long and 68' wide. Goodwin Construction stop working at 12:30 p.m. due to rain showers and lightening which lasted about 45 minutes. 3 IPD's and perm samples taken for section #3. At present time about 50% of first lift completed and excavated..


### July 8, 2004

Arrived on site Goodwin Brother's Construction working on excavating materials out of section #5 and loading into end dumps. Sheep's front roller and dozer are working in section #4 on first lift. End dumps unloading excavated fill at stockpile areas at east end of construction zone. Took two IPD's and two permeability tests in section #4. Excavation at 70%.

### July 9, 2004

Arrived on site and monitored excavation of material in section #6. Materials loaded in two end dumps and transported off site to stockpile area at east end of construction zone. Goodwin Brother's will continue excavating in area before backfilling jeff with Angelo's didn't require me to be on site for excavation remaining area in section #6. Good win Brothers Construction will begin backfilling on 7/12/04. Job excavation at 95%. Left site at 12:00 p.m.

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

  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 12/21/04

cc: Client (1)

jd

# TETRA TECH, INC.

## HARTMAN & ASSOCIATES, INC.

engineers, hydrogeologists, surveyors & management consultants

### OFFICERS:

Mark A. Rynning, P.E., M.B.A.  
Harold E. Schmidt, Jr., P.E., DEE  
James E. Christopher, P.E.  
Charles W. Drake, P.G.  
William D. Musser, P.E., P.H.  
Lawrence E. Jenkins, P.S.M.

### SENIOR ASSOCIATES:

Marco H. Rocca, C.M.C.  
Roderick K. Cashe, P.E.  
Douglas P. Dufresne, P.G.  
Jon D. Fox, P.E.  
Daniel M. Nelson, P.E.

### ASSOCIATES:

Les H. Porterfield, P.E.  
Andrew T. Woodcock, P.E., M.B.A.  
John P. Toomey, P.E.  
Jennifer L. Woodall, P.E.  
Rafael A. Terrero, P.E., DEE  
Jill M. Hudkins, P.E.  
Valerie C. Davis, P.G.  
Charles M. Shultz, P.E.  
Sean M. Parks, AICP, QEP  
W. Bruce Lafrenz, P.G.  
Alexis K. Stewart, P.E.  
Christopher W. Hardin, P.E.  
James R. Warner, P.E.

January 3, 2005

HAI #99.0331.013

File 12.0

### Via Facsimile and U.S. Mail

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

**Subject: Cell 16 Certification Clarification  
Enterprise Recycling & Disposal Facility  
Angelo's Aggregate Materials, Ltd.  
FDEP Permit Nos. 177982-001-SC, 177982-002-SO  
Pasco County, Florida**

Dear Ms. Core:

In accordance with our conversation on December 21, 2004, Hartman & Associates, Inc. (HAI) is submitting this letter as a clarification to the confining layer certification for Cell 16 at the above referenced facility. Specifically, this letter is to clarify the discrepancy regarding the permeability test samples collected by Universal Engineering Sciences (UES) on July 26, 2004.

HAI has confirmed with Mr. Mark Hardy, P.E. of UES that the referenced samples were collected from Cell 16. However, since UES had collected approximately double the number of required permeability samples for Cell 16, and passing in-place density tests were conducted in these referenced test locations, UES and Angelo's decided not to perform the last three laboratory permeability tests.

We trust this clarification will satisfy the Department. Please call me if you have any questions or require additional information.

Very truly yours,

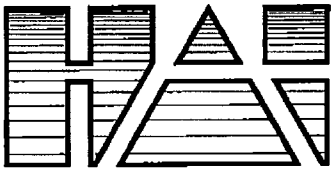
**Hartman & Associates, Inc.**

  
Jennifer L. Deal, P.E.  
Project Manager

1/4/05

N/hydro/jld/larkin/core.doc

cc: Dominic Iafrate, Angelo's  
Jeff Rogers, Angelo's  
Susan Pelz, P.E., FDEP, Southwest District

**HARTMAN & ASSOCIATES, INC.**

engineers, hydrogeologists, surveyors &amp; management consultants

201 EAST PINE STREET - SUITE 1000 - ORLANDO, FL 32801  
TELEPHONE (407) 839-3955 - FAX (407) 481-8447**FAX**

Job Number: 99.0331.013

Date: 01/04/05

No. of pages incl. cover page: 3

To: Simone Core  
FDEP Southwest District Office  
Phone: (813) 744-6100, ext. 382  
Fax: (813) 744-6125  
cc:  
Re: Enterprise Landfill

From: Jennifer L. Deal, P.E.  
Hartman & Associates, Inc.  
Phone: (407) 839-3955 ext. 153  
Fax: (407) 839-2066

REMARKS: ☐ Urgent ☒ For your review ☐ As Requested ☐ Please comment

Simone,

Following are the clarification letter regarding Cell 1/16 certification, and a revised report from UES. Originals will be sent to you. Please call me if you have any questions regarding these documents. Thank you.

Jennifer



# 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: July 12, 2004  
Revised: 12/07/04

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 Iafrate  
26400 Sherwood Street  
Warren, MI 48091

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

**Scope of Field Work:** Monitor Placement and Compaction of Clay Liner; to Include IPD's and Permeability Sample Pickup

**Inspected By:** Vince Simmons

### July 6, 2004

Monitored track hoe loading end jumps from section #3 of cell and hauling to stockpile area at east end of cell areas outside of construction zone. At end of excavation in section #3 D-7 dozer compacted clay liner at 12" lifts and grading while sheep's foot roller compacted graded clay liner. Three density test performed in section #2 at locations on density test report form. Also 3 permeability samples were taken at one sample per lift at location noted on density report form and sent to Orlando lab for testing. Surveyors not on site today. Area cleared in section #3 measured at 315' long and 73' wide. No test were ready for section #3 today.

### July 7, 2004

Monitored track hoe loading two end dumps from section #4 cell and hauling excavates fill to stockpile area at east end of cell areas outside of construction zone. Clay liner fill hauled back in section #4 and graded with day dozer and compacted with sheep's foot roller at 12" lifts. Dimension of section #4 is 315' long and 68' wide. Goodwin Construction stop working at 12:30 p.m. due to rain showers and lightening which lasted about 45 minutes. 3 IPD's and perm samples taken for section #3. At present time about 50% of first lift completed and excavated..

### July 8, 2004

Arrived on site Goodwin Brother's Construction working on excavating materials out of section #5 and loading into end dumps. Sheep's front roller and dozer are working in section #4 on first lift. End dumps unloading excavated fill at stockpile areas at east end of construction zone. Took two IPD's and two permeability tests in section #4. Excavation at 70%.

### July 9, 2004

Arrived on site and monitored excavation of material in section #6. Materials loaded in two end dumps and transported off site to stockpile area at east end of construction zone. Goodwin Brother's will continue excavating in area before backfilling jeff with Angelo's didn't require me to be on site for excavation remaining area in section #6. Good win Brothers Construction will begin backfilling on 7/12/04. Job excavation at 95%. Left site at 12:00 p.m.

Reviewed By:  
Universal Engineering Sciences, Inc.  
Certificate of Authorization No. 00000649

*Mark K. Hardy*  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 12/21/04

cc: Client (1)

jd



# TETRA TECH, INC.

## HARTMAN & ASSOCIATES, INC.

engineers, hydrogeologists, surveyors & management consultants

### OFFICERS:

Mark A. Rynning, P.E., M.B.A.  
Harold E. Schmidt, Jr., P.E., DEE  
James E. Christopher, P.E.  
Charles W. Drake, P.G.  
William D. Mussett, P.E., P.H.  
Lawrence E. Jenkins, P.S.M.

### SENIOR ASSOCIATES:

Marco H. Rocca, C.M.C.  
Roderick K. Cashie, P.E.  
Douglas F. Dufresne, P.G.  
Jon D. Fox, P.E.  
Daniel M. Nelson, P.E.

### ASSOCIATES:

Les H. Porterfield, P.E.  
Andrew T. Woodcock, P.E., M.B.A.  
John F. Toomey, P.E.  
Jennifer L. Woodall, P.E.  
Rafael A. Terrero, P.E., DEE  
Jill M. Hudkins, P.E.  
Valerie C. Davis, P.G.  
Charles M. Shultz, P.E.  
Sean M. Parks, AICP, QEP  
W. Bruce Lafreaz, P.G.  
Alexis K. Stewart, P.E.  
Christopher W. Hardin, P.E.  
James R. Warner, P.E.

January 3, 2005

HAI #99.0331.013

File 12.0

### Via Facsimile and U.S. Mail

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

**Subject: Cell 16 Certification Clarification  
Enterprise Recycling & Disposal Facility  
Angelo's Aggregate Materials, Ltd.  
FDEP Permit Nos. 177982-001-SC, 177982-002-SO  
Pasco County, Florida**

Dear Ms. Core:

In accordance with our conversation on December 21, 2004, Hartman & Associates, Inc. (HAI) is submitting this letter as a clarification to the confining layer certification for Cell 16 at the above referenced facility. Specifically, this letter is to clarify the discrepancy regarding the permeability test samples collected by Universal Engineering Sciences (UES) on July 26, 2004.

HAI has confirmed with Mr. Mark Hardy, P.E. of UES that the referenced samples were collected from Cell 16. However, since UES had collected approximately double the number of required permeability samples for Cell 16, and passing in-place density tests were conducted in these referenced test locations, UES and Angelo's decided not to perform the last three laboratory permeability tests.

We trust this clarification will satisfy the Department. Please call me if you have any questions or require additional information.

Very truly yours,

Hartman & Associates, Inc.

  
Jennifer L. Deal, P.E.  
Project Manager

N/hydro/jld/larkin/core.doc

cc: Dominic Iafrate, Angelo's  
Jeff Rogers, Angelo's  
Susan Pelz, P.E., FDEP, Southwest District



Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

January 4, 2005

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Avenue SE  
Largo, Florida 33771

Re: Enterprise Recycling & Disposal Facility  
Certification for Cell 16 and portion of Cell 1  
Permit No. 177982-001-SC  
Pasco County

Dear Mr. Iafrate:

This is to acknowledge receipt of the additional information prepared by Hartman & Associates, Inc., dated December 16, 2004, (received December 17, 2004), to certify Cell 16 and a portion of Cell 1 of a Class III landfill. Please be advised that based on the information submitted, the certification is not approved.

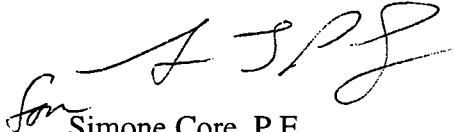
Your submittal is incomplete. Please provide the information listed below promptly. Details are as follow:

1. Please provide revised site inspection reports for July 7 and 8, 2004 indicating that the required IPD and permeability tests were conducted for Sections 3 and 4. As of the date of this letter, UES has not submitted revised site inspection reports.
2. Please note that Appendix E does not indicate that permeability tests were conducted on July 26, 2004. Please clarify further.
3. Cell 15 was approved only for stormwater management. Therefore, in order for Cell 15 to be approved for waste disposal, IPD and permeability tests must be conducted on the additional confining material required to raise the cell floor to an elevation of 80 feet NGVD. The IPD and permeability tests are to be conducted in accordance with the minor modification to the construction permit currently in-house.

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
Certification of Construction Completion - 0177982-001-SC  
Page 2 of 2

You are requested to submit four (4) copies of your response to this letter as one complete package with an original and three copies of all correspondence (with one copy sent to Ms. Susan Pelz). Please contact me at (813) 744-6100, Extension 382, should you have any question.

Sincerely,

A handwritten signature in black ink, appearing to read 'Simone Core', with a stylized flourish at the end.

Simone Core, P.E.  
Solid Waste Section  
Southwest District

cc: Jennifer L. Deal, P.E., [Hartman & Associates, Inc., 201 East Pine Street,  
Suite 1000, Orlando, FL 32801-2723]  
Mark Hardy, P.E., [Universal Engineering Sciences]  
Susan Pelz, P.E., [FDEP - SWD]  
Douglas Hyman, P.E., [FDEP-IW/Stormwater]  
Fred Wick, [FDEP - Tallahassee]

## Pelz, Susan

---

**From:** Pelz, Susan  
**Sent:** Tuesday, January 04, 2005 4:54 PM  
**To:** Jennifer Deal (E-mail)  
**Cc:** Core, Simone; Wick, Fred; Morgan, Steve; Petro, Stephanie; Cleary, James  
**Subject:** Enterprise Certifications

Jennifer,

Please find attached letters with comments concerning the Cell 2 & Cell1/Cell 16 certifications. These letters were mailed today. Please note also that we have received your letter dated January 3, 2005 that indicated that Angelos would begin operation in Cell 2 as of January 4, 2005.

Rule 62-701.630(2)(b), F.A.C., requires that the financial assurance mechanism be fully funded 60 days prior to the receipt of waste. It does not appear that the Department has received proof of financial assurance for Cell 2. Therefore, operation in Cell 2 is **not authorized** at this time. Please be advised that in the event that the permittee elects to operate in Cell 2 prior to the Department's receipt of acceptable proof of funding for the financial assurance, the Department may initiate enforcement action to ensure compliance with the facility's permit and Department rules.

Susan J. Pelz, P.E.  
Solid Waste Program Manager  
Southwest District  
813-744-6100 x 386  
susan.pelz@dep.state.fl.us



0177982-001 0177982-001  
XC cell 2 RAI EnC RAI3 Enterpri

### Tracking:

#### Recipient

Jennifer Deal (E-mail)  
Core, Simone  
Wick, Fred  
Morgan, Steve  
Petro, Stephanie  
Cleary, James

#### Read

Read: 1/5/2005 9:32 AM  
  
Read: 1/5/2005 9:51 AM  
Read: 1/5/2005 7:05 AM



## Pelz, Susan

---

**From:** Jennifer L. Deal, P.E. [Jennifer.deal@tetrattech.com]  
**Sent:** Tuesday, January 04, 2005 5:12 PM  
**To:** Pelz, Susan  
**Subject:** Read: Enterprise Certifications



ATT840394.txt

Your message

To: Jennifer Deal (E-mail)  
Cc: Core, Simone; Wick, Fred; Morgan, Steve; Petro, Stephanie;  
Cleary, James  
Subject: Enterprise Certifications  
Sent: 1/4/05 4:53 PM

was read on 1/4/05 5:10 PM.

# TETRA TECH, INC.

## HARTMAN & ASSOCIATES, INC.

engineers, hydrogeologists, surveyors & management consultants

### OFFICERS:

Mark A. Rynning, P.E., M.B.A.  
Harold E. Schmidt, Jr., P.E., DEE  
James E. Christopher, P.E.  
Charles W. Drake, P.G.  
William D. Musser, P.E., P.H.  
Lawrence E. Jenkins, P.S.M.

### SENIOR ASSOCIATES:

Marco H. Rocca, C.M.C.  
Roderick K. Cashe, P.E.  
Douglas P. Dufresne, P.G.  
Jon D. Fox, P.E.  
Daniel M. Nelson, P.E.

### ASSOCIATES:

Les H. Porterfield, P.E.  
Andrew T. Woodcock, P.E., M.B.A.  
John P. Toomey, P.E.  
Jennifer L. Woodall, P.E.  
Rafael A. Terrero, P.E., DEE  
Jill M. Hudkins, P.E.  
Valerie C. Davis, P.G.  
Charles M. Shultz, P.E.  
Sean M. Parks, AICP, QEP  
W. Bruce Lafrenz, P.G.  
Alexis K. Stewart, P.E.  
Christopher W. Hardin, P.E.  
James R. Warner, P.E.

December 16, 2004

HAI #99.0331.017

File 12.0

### Via UPS Overnight

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

**Subject: Enterprise Recycling & Disposal Facility  
Certification for Cell 16 and Portion of Cell 1  
Permit No. 177982-001-SC  
Pasco County**

Dear Ms. Core:

On behalf of Angelo's Aggregate Materials, Ltd., Hartman & Associates, Inc. (HAI) is submitting responses to your comments regarding the above referenced certification submittal. Your comments are stated first with our responses following.

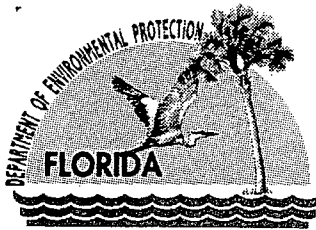
1. The pictures in Appendix F were not labeled. Please label these pictures and provide a plan view that shows the general location and re-submit to the Department. On November 29, 2004, the Department received correspondence from Universal Engineering Sciences indicating that this item is still incomplete.

**Response:** Photos from UES have been renumbered (CD enclosed) and locations indicated on the attached Photograph Location Map. The photos from Appendix F have been labeled and, the general locations have been hand entered on the attached Figure 1A.

2. Please provide revised site inspection reports for July 7 and 8, 2004 indicating that the required IPD and permeability tests were conducted for Sections 3 and 4.

**Response:** HAI has confirmed that three IPD and permeability tests were conducted in Section 3 on July 7, 2004 and that two IPD and permeability tests were conducted in Section 4

*See Board Report*



Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

December 2, 2004

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Avenue SE  
Largo, Florida 33771

Re: Enterprise Recycling & Disposal Facility  
Certification for Cell 16 and portion of Cell 1  
Permit No. 177982-001-SC  
Pasco County

Dear Mr. Iafrate:

This is to acknowledge receipt of the additional information prepared by Hartman & Associates, Inc., dated November 23, 2004, (received November 24, 2004) and Universal Engineering Sciences dated November 24, 2004, (received November 29, 2004), to certify Cell 16 and a portion of Cell 1 of a Class III landfill. Please be advised that based on the information submitted, the certification is not approved.

Your submittal is incomplete. Please provide the information listed below promptly. Details are as follow:

- ✓ 1. The pictures in Appendix F were not labeled. Please label these pictures and provide a plan view that shows the general location and re-submit to the Department. On November 29, 2004, the Department received correspondence from Universal Engineering Sciences indicating that this item is still incomplete.
2. Please provide revised site inspection reports for July 7 and 8, 2004 indicating that the required IPD and permeability tests were conducted for Sections 3 and 4.
3. Appendix E does not show that permeability tests were conducted on June 30, 2004. Please clarify the June 30, 2004 inspection report.
4. July 26, 2004 of the site inspection report indicates that "test will be done at a later date". There was no site inspection report indicating that additional tests were done for Cell 16 after July 26, 2004. On November 29, 2004, the Department received correspondence from Universal Engineering Sciences stating that the tests for Cell 16 were completed.

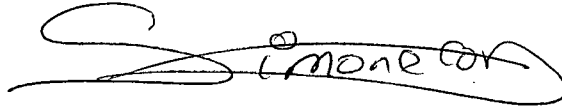
Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
Certification of Construction Completion - 0177982-001-SC  
Page 2 of 2

Please note that Appendix E does not indicate that IPD and permeability tests were conducted on July 26, 2004. Please clarify further.

5. Please note that certification of Cell 15 for waste disposal will require that IPD and permeability tests be conducted on the additional confining material required to raise the cell floor to an elevation of 80 feet NGVD. The IPD and permeability tests are to be conducted in accordance with the minor modification to the construction permit currently in-house.

You are requested to submit four (4) copies of your response to this letter as one complete package with an original and three copies of all correspondence (with one copy sent to Ms. Susan Pelz). Please contact me at (813) 744-6100, Extension 382, should you have any question.

Sincerely,

A handwritten signature in black ink, appearing to read "Simone Core", with a stylized flourish at the end.

Simone Core, P.E.  
Solid Waste Section  
Southwest District

cc: Jennifer L. Deal, P.E., [Hartman & Associates, Inc., 201 East Pine Street,  
Suite 1000, Orlando, FL 32801-2723]  
Mark Hardy, P.E., [Universal Engineering Sciences]  
Susan Pelz, P.E., [FDEP - SWD]  
Fred Wick, [FDEP - Tallahassee]



# TETRA TECH, INC.

**HARTMAN & ASSOCIATES, INC.**

**engineers, hydrogeologists, surveyors & management consultants**

**OFFICERS:**

Mark A. Rynning, P.E., M.B.A.  
Harold E. Schmidt, Jr., P.E., DEE  
James E. Christopher, P.E.  
Charles W. Drake, P.G.  
William D. Musser, P.E., P.H.  
Lawrence E. Jenkins, P.S.M.

**SENIOR ASSOCIATES:**

Marco H. Rocca, C.M.C.  
Roderick K. Cashe, P.E.  
Douglas P. Dufresne, P.G.  
Jon D. Fox, P.E.  
Daniel M. Nelson, P.E.

**ASSOCIATES:**

Les H. Porterfield, P.E.  
Andrew T. Woodcock, P.E., M.B.A.  
John P. Toomey, P.E.  
Jennifer L. Woodall, P.E.  
Rafael A. Terrero, P.E., DEE  
Jill M. Hudkins, P.E.  
Valerie C. Davis, P.G.  
Charles M. Shultz, P.E.  
Sean M. Parks, AICP, QEP  
W. Bruce Lafrenz, P.G.  
Alexis K. Stewart, P.E.  
Christopher W. Hardin, P.E.  
James R. Warner, P.E.

November 23, 2004

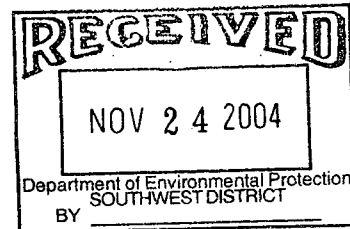
HAI #99.0331.017

File 12.0

**Via UPS Ground**

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

**Subject: Enterprise Recycling & Disposal Facility  
Certification for Cell 16 and Portion of Cell 1  
Permit No. 177982-001-SC  
Pasco County**



Dear Ms. Core:

On behalf of Angelo's Aggregate Materials, Ltd., Hartman & Associates, Inc. (HAI) is submitting responses to your comments regarding the above referenced certification submittal. Your comments are stated first with our responses following.

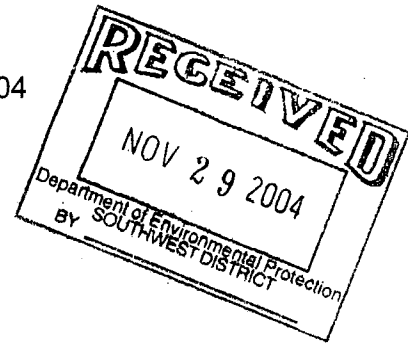
1. The summary of deviations indicates that the slope on the west side of Cell 1 was constructed steeper than 6(H):1(V). Please indicate the slope at which the west side of Cell 1 was constructed.

**Response:** The side slopes on the west side of Cell 1 were not surveyed, however, based on a field inspection of the facility, the slopes appear to be near vertical. Hence, the erosion control measures outlined in the Operations Plan must be implemented on an as needed basis.

2. The bottom elevation of cell 16 was constructed at approximately 76 ft NGVD. The minor modification currently in-house indicates an elevation of 80 NGVD for Cell 16. Please indicate the type of material that will be utilized for backfilling Cell 16 to 80 NGVD prior to waste disposal. Also please note that the remainder of Cell 1 will be approved for waste disposal, however Cell 16 will only be approved for temporary stormwater management and will require re-certification prior to disposal of waste in the cell.

*See Band Report*

November 24, 2004



Florida DEP  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Attention: Simone Core

Reference: Response to FDEP comments  
Angelo's Aggregate Materials, Ltd.  
Enterprise Landfill, Dade City, Florida  
UES Project No. 80540-001-02

Dear Ms. Core:

In response to your comments items 4, 6 and 9 to Hartman & Associates, Inc., we are providing the following responses as follows:

Comment 4: We are in the process of finalizing the pictures in appendix F and completing a general location plan.

Comment 6: The density and permeability tests from July 7, 2004 were for Section 3 but were omitted from the site inspection report. Likewise, the two permeability tests taken for Section 4 on July 8, 2004 were also omitted from the site inspection report.

Comment 9: The July 26, 2004 site inspection report indicated that tests will be done at a later date, however, testing for Cell 16 had been completed and the contractor was beginning cell 1, but due to wet soils, the contractor decided to stop work. Weather did not permit the contractor to start for about a month.

If you have additional comments or need additional information, please do not hesitate to contact us.

Respectfully submitted,  
**Universal Engineering Sciences, Inc.**

Mark Hardy, P.E.  
Tampa Manager

Cc: Hartmann and Associates, Inc.



# UNIVERSAL ENGINEERING SCIENCES

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

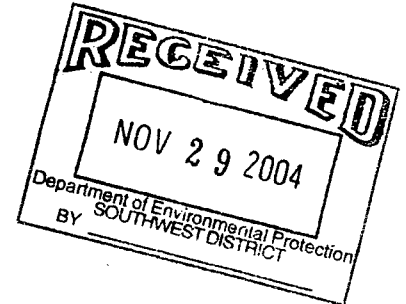
7/12/11

November 24, 2004

Florida DEP  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Attention: Simone Core

Reference: Response to FDEP comments  
Angelo's Aggregate Materials, Ltd.  
Enterprise Landfill, Dade City, Florida  
UES Project No. 80540-001-02



Dear Ms. Core:

In response to your comments items 4, 6 and 9 to Hartman & Associates, Inc., we are providing the following responses as follows:


Comment 4: We are in the process of finalizing the pictures in appendix F and completing a general location plan.

Comment 6: The density and permeability tests from July 7, 2004 were for Section 3 but were omitted from the site inspection report. Likewise, the two permeability tests taken for Section 4 on July 8, 2004 were also omitted from the site inspection report.

Comment 9: The July 26, 2004 site inspection report indicated that tests will be done at a later date, however, testing for Cell 16 had been completed and the contractor was beginning cell 1, but due to wet soils, the contractor decided to stop work. Weather did not permit the contractor to start for about a month.

If you have additional comments or need additional information, please do not hesitate to contact us.

Respectfully submitted,  
Universal Engineering Sciences, Inc.

  
Mark Hardy, P.E.  
Tampa Manager

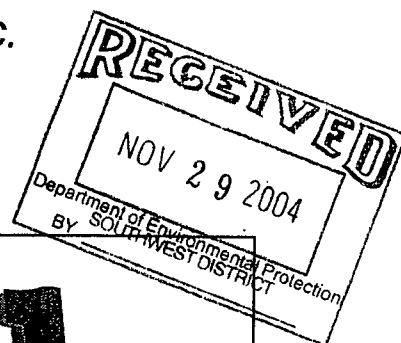
Cc: Hartmann and Associates, Inc.

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

OFFICES IN: • Clermont • Daytona Beach • DeBary • Fort Myers • Gainesville • Hollywood • Jacksonville • Ocala • Orlando • Palm Coast  
• Rockledge • Sarasota • St. Augustine • Tampa • West Palm Beach



UNIVERSAL ENGINEERING SCIENCES, INC.  
9802 Palm River Road  
Tampa, Florida 33619  
Telephone: (813) 740-8506 Fax: (813) 740-8706



# Facsimile

Date: 11-24-04 Time: 5:00 Pages: 2

**TO:**

Company: Florida DEP  
Attention: Jeff Rogers  
Fax #: 352-567-9448  
Subject: \_\_\_\_\_

**FROM:**

Name: Mark Hardy  
Transmitted: Andrea Fleege

REMARKS:

---

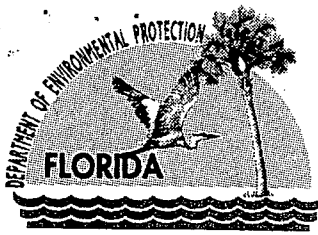
---

---

---

~Have a Great Day~





Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

November 19, 2004

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Avenue SE  
Largo, Florida 33771

Re: Enterprise Recycling & Disposal Facility  
Certification for Cell 16 and portion of Cell 1  
Permit No. 177982-001-SC  
Pasco County

Dear Mr. Iafrate:

This is to acknowledge receipt of the certification of construction completion prepared by Hartman & Associates, Inc., dated October 14, 2004, (received October 15, 2004), to certify Cell 16 and a portion of Cell 1 of a Class III landfill. Please be advised that based on the information submitted, the certification is not approved.

Your submittal is incomplete. Please provide the information listed below promptly. Details are as follow:

- ① The summary of deviations indicates that the slope on the west side of Cell 1 was constructed steeper than 6(H):1(V). Please indicate the slope at which the west side of Cell 1 was constructed.
2. The bottom elevation of cell 16 was constructed at approximately 76 ft NGVD. The minor modification currently in-house indicates an elevation of 80 NGVD for Cell 16. Please indicate the type of material that will be utilized for backfilling Cell 16 to 80 NGVD prior to waste disposal. Also please note that the remainder of Cell 1 will be approved for waste disposal, however Cell 16 will only be approved for temporary stormwater management and will require re-certification prior to disposal of waste in the cell.
3. Please note that Cell 15 was approved only for temporary stormwater management. Therefore, Cell 15 will require re-certification prior to waste disposal occurring in that cell.

Mr. Dominic Iafrate

Angelo's Aggregate Materials, Ltd.

Certification of Construction Completion - 0177982-001-SC

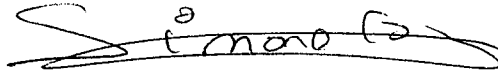
Page 2 of 3

4. The pictures in Appendix F were not labeled. Please label these pictures and provide a plan view that shows the general location and re-submit to the Department.
5. June 30, 2004 of the site inspection report indicates that only 1 foot of clay liner was compacted on that day. The Department is unclear how three permeability samples were taken (one sample per lift) when only one lift was completed that day and the area was less than an acre. Please clarify.
6. July 6, 2004 to July 8, 2004 site inspections do not indicate whether permeability tests were conducted for Section 4 and whether IPD and permeability tests were conducted for Section 3. Please address.
7. July 13, 2004 to July 15, 2004 site inspections. It is not clear whether one permeability test was conducted per acre per lift during the backfilling for all sections.
8. July 15, 2004 of the site inspection report indicates that "backfilling will resume on 7/19/04". However, a report was not included for July 19, 2004.
9. July 26, 2004 of the site inspection report indicates that "test will be done at a later date". There is no site inspection report indicating that additional tests were done for Cell 16 after July 26, 2004.
10. September 14, 2004 of the site inspection report indicates that the density and permeability tests for Cell 1 will be done at a later date. A site inspection report after September 14, 2004 was not provided.
11. Appendix E. Please note that the Density Test Location Plan does not show test nos. 64 through 69. Please address.
12. Please note also that since Cell #2 is not included with this certification. Density test nos. 50, 63, 59, 51, 62, 58, 61, 60 and 57 have not been reviewed.
13. Please clarify if limerock or soft ground was encountered in Cell 16 during excavation. If so, please provide a plan sheet showing the affected areas.
14. Your email dated November 9, 2004 indicated the possibility of further revision to the sequence of fill outlined under the modification currently in-house. Please clarify your proposed sequence of fill.
15. Financial assurance has only been provided for cell 1 (see attached letter). Proof of funding for financial assurance will be needed prior to moving to another cell.

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
Certification of Construction Completion - 0177982-001-SC  
Page 3 of 3

You are requested to submit four (4) copies of your response to this letter as one complete package with an original and three copies of all correspondence (with one copy sent to Ms. Susan Pelz). Please contact me at (813) 744-6100, Extension 382, should you have any question.

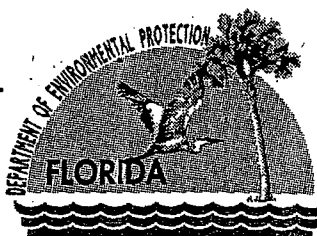
Sincerely,

A handwritten signature in black ink, appearing to read "Simone Core", with a stylized flourish at the end.

Simone Core, P.E.  
Solid Waste Section  
Southwest District

Attachment

cc: Jennifer L. Deal, P.E., [Hartman & Associates, Inc., 201 East Pine Street,  
Suite 1000, Orlando, FL 32801-2723]  
Susan Pelz, P.E., [FDEP - SWD]  
Fred Wick, [FDEP - Tallahassee]



Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Colleen M. Castille  
Secretary

252513

Mr. Dominic lafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, Fl. 33771

April 9, 2004

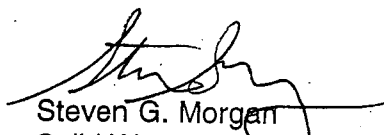
RE: Enterprise Recycling & Disposal Class III Landfill  
Located west of Auton Road, Dade City, Fl.  
Financial Assurance Cost Estimates  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County

Dear Mr. lafrate:

This letter is to acknowledge receipt of the inflation-adjusted cost estimates dated March 1, 2004 (received March 2, 2004), for closing and long-term care of the Enterprise Recycling Class III Landfill. The cost estimates received March 2, 2004 (total closing \$456,612.14 and \$52,723.38/year x 30 years = \$1,581,701.51 total long-term care), are **APPROVED for 2004**. The approved cost estimates are for closing and long-term care of **6.08 acres** (Cell 1, Phase 4) only. The next annual update (revised or inflation-adjusted estimates) is due no later than March 1, 2005.

A copy of these estimates will be forwarded to Mr. Fred Wick, Solid Waste Section, FDEP, 2600 Blair Stone Road, Tallahassee, Florida 32399-2407. Please work with him directly to assess the facility's compliance with the funding mechanism requirements of Rule 62-701.630, F.A.C. If you have any questions, you may contact me at (813) 744-6100 ext. 386.

Sincerely,

  
Steven G. Morgan  
Solid Waste Section  
Southwest District

sgm

cc:

Jennifer Deal, P.E., Hartman & Associates, 201 E. Pine St., Ste. 1000, Orlando, Fl. 32801  
Fred Wick, FDEP, Tallahassee, w/attachment  
Kim Ford, P.E., FDEP Tampa

"More Protection, Less Process"

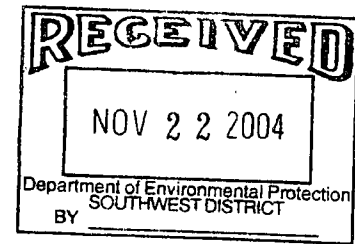
Printed on recycled paper.



Enterprise constn  
permit  
SC one

November 18, 2004

Ms. Susan Pelz, P.E. *11/23*  
Southwest District Solid Waste Manager  
Florida Department of Environmental Protection  
3804 Coconut Palm Drive  
Tampa, Florida 33619



Re: Certification of Construction Completion – Cell 1 – South and West  
Sections – Enterprise Recycling and Disposal Facility – Pasco County

Dear Ms. Pelz;

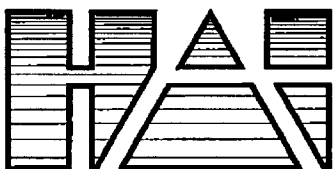
Hartman and Associates, Inc. submitted a Certification of Construction Completion Form # 62-701.900 (2) on behalf of Enterprise Recycling and Disposal Facility prior to placement of solid waste in the west and south areas of Cell 1. This Certification was hand carried to your office on October 15<sup>th</sup>, 2004. Enterprise Recycling and Disposal Facility provided the fourteen day advanced notice to the Department so that the Department had the opportunity to inspect the balance of Cell 1 in accordance with FAC 62-701.320 (9)(a). The Facility was inspected on November 1<sup>st</sup>, 2004, three days beyond the 14 day required notice, at which time Mr. Jeff Rogers was informed the letter authorizing disposal would be received in a couple of days.

Due to Enterprise Recycling and Disposal Facility attempt to comply with the permitted fill sequence in the active portion of the cell as well as the need to continue to provide disposal for our clients and our transfer facility Enterprise Recycling and Disposal Facility will commence disposal of waste in the west and south portions of Cell 1 on November 19<sup>th</sup>, 2004. In addition a review of the FAC 62-701.320 provides no requirement of a letter approving certification. If you have any questions relating to this letter you may contact Jennifer Deal, P.E. or myself @ 407-839-3955, Ext. 153 and 810-217-0726 respectively.

Sincerely,

*[Signature]*  
Dominic Iafrate

Cc: William Kutash, Program Administrator  
Jennifer Deal, P.E., Hartman & Associates, Inc.

**HARTMAN & ASSOCIATES, INC.**

engineers, hydrogeologists, surveyors &amp; management consultants

201 EAST PINE STREET - SUITE 1000 - ORLANDO, FL 32801  
TELEPHONE (407) 839-3955 - FAX (407) 481-8447**FAX**

Job Number: 99.0331.017, File 12.0

Date: 11/18/04

No. of pages incl. cover page: 2

To: Susan J. Pelz, P.E.

FDEP

Phone: (813) 744-6100, ext. 386

Fax: (813) 744-6125

cc:

Re: Letter from Dominic Iafrate

From: Jennifer L. Deal, P.E.

Hartman &amp; Associates, Inc.

Phone: (407) 839-3955 ext. 153

Fax: (407) 839-2066

**REMARKS:**☐

Urgent

☒

For your review

☐

As Requested

☐

Please comment

Susan,

I am forwarding the following letter on behalf of Dominic Iafrate of Angelo's.

Jennifer

The information contained in this facsimile transmission may be legally privileged and is intended for the use of the individual(s) or entity(ies) named above. If you are not the intended recipient, you are hereby notified that any use dissemination, distribution or copying of this facsimile or its information is strictly prohibited. If you have received this facsimile in error, please immediately notify the sender by telephone or facsimile using the above referenced number to arrange for the return of the original documents.

November 18, 2004

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

Re: Certification of Construction Completion – Cell 1 – South and West  
Sections – Enterprise Recycling and Disposal Facility – Pasco County

Dear Ms. Pelz;

Hartman and Associates, Inc. submitted a Certification of Construction Completion Form # 62-701.900 (2) on behalf of Enterprise Recycling and Disposal Facility prior to placement of solid waste in the west and south areas of Cell 1. This Certification was hand carried to your office on October 15<sup>th</sup>, 2004. Enterprise Recycling and Disposal Facility provided the fourteen day advanced notice to the Department so that the Department had the opportunity to inspect the balance of Cell 1 in accordance with FAC 62-701.320 (9)(a). The Facility was inspected on November 1<sup>st</sup>, 2004, three days beyond the 14 day required notice, at which time Mr. Jeff Rogers was informed the letter authorizing disposal would be received in a couple of days.

Due to Enterprise Recycling and Disposal Facility attempt to comply with the permitted fill sequence in the active portion of the cell as well as the need to continue to provide disposal for our clients and our transfer facility Enterprise Recycling and Disposal Facility will commence disposal of waste in the west and south portions of Cell 1 on November 19<sup>th</sup>, 2004. In addition a review of the FAC 62-701.320 provides no requirement of a letter approving certification. If you have any questions relating to this letter you may contact Jennifer Deal, P.E. or myself @ 407-839-3955, Ext. 153 and 810-217-0726 respectively.

Sincerely,



Dominic Iafrate

Cc: William Kutash, Program Administrator  
Jennifer Deal, P.E., Hartman & Associates, Inc.

# TETRA TECH / HARTMAN & ASSOCIATES, INC.

## EXECUTIVE TEAM:

Gerald C. Hartman, P.E., DEE  
Harold E. Schmidt, Jr., P.E., DEE  
James E. Christopher, P.E.  
Charles W. Drake, P.G.  
Mark A. Rynning, P.E., M.B.A.  
William D. Musser, P.E., P.H.  
Lawrence E. Jenkins, P.S.M.

## SENIOR ASSOCIATES:

Marco H. Rocca, C.M.C.  
Roderick K. Cashe, P.E.  
Douglas P. Dufresne, P.G.  
Jon D. Fox, P.E.  
Troy E. Layton, P.E., DEE  
Daniel M. Nelson, P.E.

engineers, hydrogeologists, surveyors & management consultants

## ASSOCIATES:

Les H. Porterfield, P.E.  
Andrew T. Woodcock, P.E., M.B.A.  
John P. Toomey, P.E.  
Jennifer L. Woodall, P.E.  
Rafael A. Terrero, P.E., DEE  
Jill M. Hudkins, P.E.  
Valerie C. Davis, P.G.  
Charles M. Shultz, P.E.  
Sean M. Parks, AICP, QEP  
C. Michelle Gaylord  
Tara L. Hollis, C.P.A., M.B.A.  
W. Bruce Lafrenz, P.G.  
Alexis K. Stewart, P.E.  
Christopher W. Hardin, P.E.  
James R. Warner, E.I.

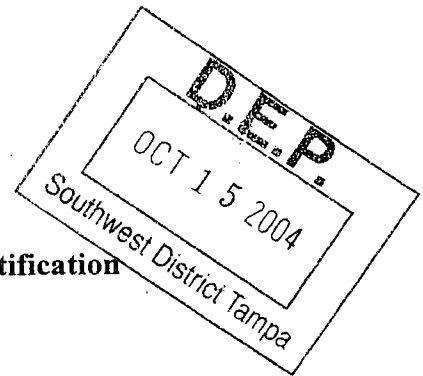
October 14, 2004

HAI #99.0331.017  
File 12.0

## Via UPS Ground

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

**Subject: Cell 16 and Remainder of Cell 1 Confining Layer Certification  
Enterprise Recycling & Disposal Facility  
Angelo's Aggregate Materials, Ltd.  
FDEP Permit Nos. 177982-001-SC, 177982-002-SO  
Pasco County, Florida**



Dear Ms. Pelz:

On behalf of Angelo's Aggregate Materials, Ltd. (Angelo's), Hartman & Associates, Inc. (HAI) is submitting this confining layer certification for Cell 16 and the remainder of Cell 1 at the above referenced facility. Confining layer construction activities were completed in Cell 16 on July 23, 2004 and in Cell 1 on September 14, 2004. The certification form and referenced summary of deviations are included in Appendix A. Certification of Cell 16 will allow removal of the temporary berm between Cells 15 and 16, and will allow run-off from the disposal area into Cell 16.

Specific Condition 9.c. of the construction permit, 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 16 began on June 30, 2004. A representative of Universal Engineering Sciences (UES) was on-site on behalf of HAI to photograph and document all work performed at the site, and to conduct in-place density testing on the new confining layer lifts. The contractor used a track hoe to excavate the cell. Foresight Surveyors, Inc. verified the excavation grades to ensure that the appropriate base elevation was achieved.

*See board report File*





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: Hartman & Associates, Inc.

Type of Project: Confining layer certification for Cell 16, and the west and south areas of Cell 1,

see attached surveys from Foresight Surveyors for areas.

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

Site Design: Quantity: 1500 cy/day ton/day Site Acreage: 6.7 Acres

Deviations from Plans and Application Approved by DEP: Please see the attached summary.

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: October 22, 2004

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: 10/14/04

Signature of Professional Engineer

Hartman & Associates, Inc.  
201 E. Pine St., Suite 1000  
Orlando, FL 32801  
Engineering Business #5814  
Jennifer L. Deal, P.E.  
Florida Registration  
0000058592

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

# TETRA TECH, INC.

## HARTMAN & ASSOCIATES, INC.

engineers, hydrogeologists, surveyors & management consultants

### OFFICERS:

Mark A. Rynning, P.E., M.B.A.  
Harold E. Schmidt, Jr., P.E., DEE  
James E. Christopher, P.E.  
Charles W. Drake, P.G.  
William D. Musser, P.E., P.H.  
Lawrence E. Jenkins, P.S.M.

### SENIOR ASSOCIATES:

Marco H. Rocca, C.M.C.  
Roderick K. Cashe, P.E.  
Douglas P. Dufresne, P.G.  
Jon D. Fox, P.E.  
Daniel M. Nelson, P.E.

### ASSOCIATES:

Les H. Porterfield, P.E.  
Andrew T. Woodcock, P.E., M.B.A.  
John P. Toomey, P.E.  
Jennifer L. Woodall, P.E.  
Rafael A. Terrero, P.E., DEE  
Jill M. Hudkins, P.E.  
Valerie C. Davis, P.G.  
Charles M. Shultz, P.E.  
Sean M. Parks, AICP, QEP  
W. Bruce Lafrenz, P.G.  
Alexis K. Stewart, P.E.  
Christopher W. Hardin, P.E.  
James R. Warner, P.E.

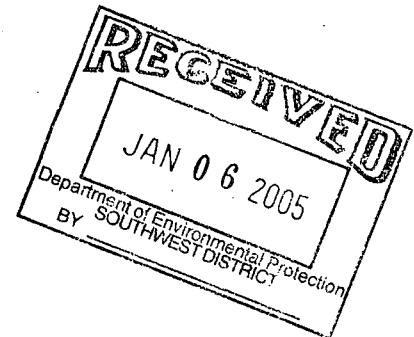
January 5, 2005

HAI #99.0331.017

File 12.0

### Via UPS Overnight

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



**Subject: Response to Cell 16 and Cell 1 Certification Comments  
Enterprise Recycling & Disposal Facility  
Angelo's Aggregate Materials, Ltd.  
FDEP Permit Nos. 177982-001-SC, 177982-002-SO  
Pasco County, Florida**

Dear Ms. Core:

On behalf of Angelo's Aggregate Materials, Ltd., Hartman & Associates, Inc. (HAI) is providing responses to your request for additional information regarding the certification documentation for Cells 1 and 16 at the Enterprise Recycling and Disposal Facility in Dade City, Florida. Your comments are stated first with our responses following.

1. Please provide revised site inspection reports for July 7 and 8, 2004 indicating that the required IPD and permeability tests were conducted for Sections 3 and 4. As of the date of this letter, UES has not submitted revised site inspection reports.

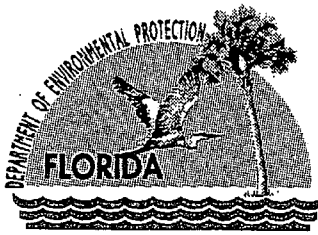
**Response:** Please see the attached revised reports.

2. Please note that Appendix E does not indicate that permeability tests were conducted on July 26, 2004. Please clarify further.

**Response:** Please see the attached letter from HAI.

3. Cell 15 was approved only for stormwater management. Therefore, in order for Cell 15 to be approved for waste disposal, IPD and permeability tests must be conducted on the additional confining material required to raise the cell floor to an elevation of 80 feet NGVD. The IPD and permeability tests are to be conducted in accordance with the minor modification to the construction permit currently in-house.

See  
File Copy



# Department of Environmental Protection

Jeb Bush  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, Fl. 33771

January 12, 2005

RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County  
Certification of Construction Completion, Cell 2 (5.57 acres)

Dear Mr. Iafrate:

On November 1, 2004, an inspection of the above-referenced facility relative to construction completion and adherence to the permit issued by the Florida Department of Environmental Protection (FDEP) was made by Simone Core, P.E. (FDEP) and Enterprise Landfill personnel.

Certification of Construction Completion dated December 15, 2004 (received December 16, 2004), and supplemental information dated December 15, 2004, December 21, 2004 and January 5, 2005 (received December 16, 2004, December 23, 2004, and January 6, 2005 respectively), has been received by the Department.

Based on the information submitted and the site inspection, the Department **approves** the construction certification (cell bottom) for Cell 2. Proof of financial assurance was received on January 10, 2005. Cell 2 shall be operated in accordance with the conditions of Operation permit 177982-002-SO. If you have any questions, you may contact me at (813) 744-6100 ext. 386.

Sincerely,

Susan J. Pelz, P.E.  
Solid Waste Manager  
Southwest District

sjp  
cc:

Jennifer Deal, P.E., Hartman & Associates, 201 E. Pine St., Ste. 1000, Orlando, Fl. 32801, w/attachment  
William Kutash, Waste Program Administrator, FDEP Tampa  
Fred Wick, FDEP, Tallahassee  
John Morris, P.G., FDEP Tampa  
Douglas Hyman, P.E., FDEP Tampa, ERP

Cell 2 Cert  
& Approval  
1/12/05

"More Protection, Less Process"

Printed on recycled paper.

**HARTMAN & ASSOCIATES, INC.**

engineers, hydrogeologists, surveyors &amp; management consultants

201 EAST PINE STREET, SUITE 1000, ORLANDO, FLORIDA 32801

TELEPHONE (407) 839-3955

HYDROGEOLOGY FAX - (407) 839-2066

ADMIN./UTILITY ENGINEERING FAX - (407) 839-3790

CIVIL ENG./SURVEY/FINANCE FAX - (407) 481-8447

**FACSIMILE TRANSMITTAL**

TO: Susan Pelz, P.E. FROM: Jennifer Deal  
FAX: 813-744-6125 DATE: 1/11/05  
RE: Enterprise LF PROJECT: HAI# 99.0331.013

We are sending you 3 pages, including this cover sheet. These pages are being transmitted as indicated below:

- ☐ As requested  
☒ For your use  
☐ For your comments  
☐ For your approval

## HARD COPY:

- ☒ Will be sent via regular mail  
☐ Will be sent via overnight mail  
☐ Will be sent by facsimile only  
☐ Will be sent via hand delivery

## MESSAGE:

Susan,  
Please see the following regarding the  
Enterprise facility. Feel free to call me  
if you would like to discuss. Thank you.  
Jennifer

IF THERE ARE ANY PROBLEMS WITH THIS TRANSMISSION  
PLEASE CALL (407) 839-3955



**TETRA TECH, INC.****HARTMAN & ASSOCIATES, INC.****engineers, hydrogeologists, surveyors & management consultants****OFFICERS:**

Mark A. Rynning, P.E., M.B.A.  
 Harold E. Schmidt, Jr., P.E., DEE  
 James E. Christopher, P.E.  
 Charles W. Drake, P.G.  
 William D. Musser, P.E., P.H.  
 Lawrence E. Jenkins, P.E.M.

**SENIOR ASSOCIATES:**

Marco H. Roosa, C.M.C.  
 Rodrick K. Cash, P.E.  
 Douglas P. Dykeman, P.G.  
 Jon D. Fox, P.E.  
 Daniel M. Nelson, P.E.

**ASSOCIATES:**

Les H. Porterfield, P.E.  
 Andrew T. Woodcock, P.E., M.B.A.  
 John P. Troncy, P.E.  
 Jennifer L. Woodall, P.E.  
 Rafael A. Terneru, P.E., DEE  
 Jill W. Hudkins, P.E.  
 Valerie C. Davis, P.G.  
 Charles M. Shultz, P.E.  
 Sean M. Parks, AICP, QEP  
 W. Bruce Litzenz, P.G.  
 Alexis K. Stewart, P.E.  
 Christopher W. Hardin, P.E.  
 James R. Warner, P.E.

January 11, 2005

HAI #99.0331.013

File 12.0

**Via Facsimile and U.S. Mail**

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

**Subject: Disposal Operations in Cell 2  
 Enterprise Recycling & Disposal Facility  
 FDEP Permit No. 177982-002-SO  
 Pasco County, Florida**

Dear Ms. Pelz:

At the request of Angelo's Aggregate Materials, Ltd. (Angelo's), Hartman & Associates, Inc. is submitting this notification to inform you that disposal operations in Cell 2 have been postponed until Thursday, January 13, 2005 at the above facility.

Disposal operations were originally scheduled to begin on Tuesday, January 4, 2005. However, you notified HAI that the updated financial assurance documentation had not yet been submitted to the Department for review. Angelo's was unaware that this documentation had not yet been submitted. Upon notification, Angelo's took action to ensure that the updated documentation was received by the Department on January 6, 2005. We are in receipt of the approval letter from Mr. Chad Fetrow.

Angelo's understands that the Solid Waste Section has been short-handed in Ms. Core's absence and this puts a lot of pressure on you to complete the submittal reviews. It is our understanding that the Department is now in receipt of the additional information submitted by HAI and Universal Engineering Sciences, and that the Solid Waste Financial Coordinator has issued approval of the updated financial assurance mechanism for this facility. Based on our conversation today, we understand that these items are next on your list for review. We are confident that the information submitted will sufficiently address Ms. Core's comments.

The need for the additional disposal area in Cell 2 prior to receipt of the Department's written approval is necessary in order to prevent filling Cell 1 higher than permitted. Cell 2 is the next disposal area to be filled in accordance with the Operations Plan and construction and operation permits. At this time, Angelo's intends to dispose of solid waste in the northern portion of Cell

Ms. Susan Pelz, P.E.

January 11, 2005


Page 2

2, building on the southern slope of the filled Cell 1, and will utilize the smallest footprint feasible until your written approval is issued.

Thank you for your understanding in this matter. Please call me if you have any questions.

Very truly yours,

**Hartman & Associates, Inc.**



Jennifer L. Deal, P.E.  
Project Manager

N/hydro/jld/larkin/pelz2.doc

cc: Dominic Iafrate, Angelo's  
Jeff Rogers, Angelo's

# TETRA TECH, INC.

HARTMAN & ASSOCIATES, INC.

engineers, hydrogeologists, surveyors & management consultants

OFFICERS:

Mark A. Rynning, P.E., M.B.A.  
Harold E. Schmidt, Jr., P.E., DEE  
James E. Christopher, P.E.  
Charles W. Drake, P.G.  
William D. Musser, P.E., P.H.  
Lawrence E. Jenkins, P.S.M.

SENIOR ASSOCIATES:

Marco H. Rocca, C.M.C.  
Roderick K. Cashe, P.E.  
Douglas P. Dufresne, P.G.  
Jon D. Fox, P.E.  
Daniel M. Nelson, P.E.

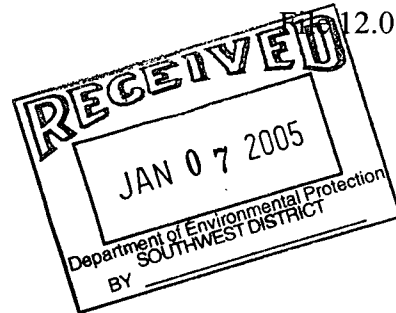
ASSOCIATES:

Les H. Porterfield, P.E.  
Andrew T. Woodcock, P.E., M.B.A.  
John P. Toomey, P.E.  
Jennifer L. Woodall, P.E.  
Rafael A. Terrero, P.E., DEE  
Jill M. Hudkins, P.E.  
Valerie C. Davis, P.G.  
Charles M. Shultz, P.E.  
Sean M. Parks, AICP, QEP  
W. Bruce Lafrenz, P.G.  
Alexis K. Stewart, P.E.  
Christopher W. Hardin, P.E.  
James R. Warner, P.E.

January 3, 2005

HAI #99.0331.013

Rev 12.0



**Via Facsimile and UPS Ground**

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

**Subject: Initiation of Disposal Operations in Cell 2  
Enterprise Recycling & Disposal Facility  
FDEP Permit No. 177982-002-SO  
Pasco County, Florida**

Dear Ms. Pelz:

At the request of Angelo's Aggregate Materials, Ltd. (Angelo's), Hartman & Associates, Inc. is submitting this notification to inform you that disposal operations in Cell 2 are scheduled to begin on Tuesday, January 4, 2005 at the above facility.

Certification documentation for Cell 2 was submitted to the Department on December 16, 2004, and the cell floor was inspected by Ms. Simone Core on November 1, 2004. In accordance with FAC Rule 62-701.320(9)(a), it is Angelo's intent to begin disposal operations in this area since it has been longer than 14 days since the Department received the submittal, and no Department comments have been received to date.

Please call us if you have any questions.

Very truly yours,

**Hartman & Associates, Inc.**

  
Jennifer L. Deal, P.E.  
Project Manager

N/hydro/jld/larkin/pelz2.doc

cc: Dominic Iafrate, Angelo's  
Jeff Rogers, Angelo's

# TETRA TECH, INC.

## HARTMAN & ASSOCIATES, INC.

engineers, hydrogeologists, surveyors & management consultants

### OFFICERS:

Mark A. Rynning, P.E., M.B.A.  
Harold E. Schmidt, Jr., P.E., DEE  
James E. Christopher, P.E.  
Charles W. Drake, P.G.  
William D. Musser, P.E., P.H.  
Lawrence E. Jenkins, P.S.M.

### SENIOR ASSOCIATES:

Marco H. Rocca, C.M.C.  
Roderick K. Cashe, P.E.  
Douglas P. Dufresne, P.G.  
Jon D. Fox, P.E.  
Daniel M. Nelson, P.E.

### ASSOCIATES:

Les H. Porterfield, P.E.  
Andrew T. Woodcock, P.E., M.B.A.  
John P. Toomey, P.E.  
Jennifer L. Woodall, P.E.  
Rafael A. Terrero, P.E., DEE  
Jill M. Hudkins, P.E.  
Valerie C. Davis, P.G.  
Charles M. Shultz, P.E.  
Sean M. Parks, AICP, QEP  
W. Bruce Lafrenz, P.G.  
Alexis K. Stewart, P.E.  
Christopher W. Hardin, P.E.  
James R. Warner, P.E.

January 5, 2005

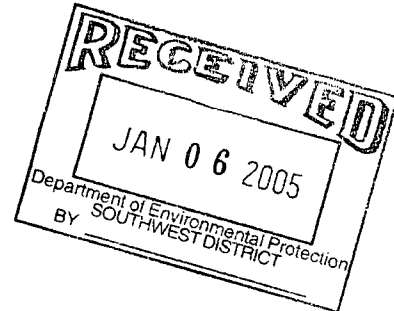
HAI #99.0331.013

File 12.0

### Via UPS Overnight

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

**Subject: Response to Cell 2 Certification Comments  
Enterprise Recycling & Disposal Facility  
Angelo's Aggregate Materials, Ltd.  
FDEP Permit Nos. 177982-001-SC, 177982-002-SO  
Pasco County, Florida**



Dear Ms. Core:

On behalf of Angelo's Aggregate Materials, Ltd., Hartman & Associates, Inc. (HAI) is providing responses to your request for additional information regarding the certification documentation for Cell 2 at the Enterprise Recycling and Disposal Facility in Dade City, Florida. Your comments are stated first with our responses following.

1. The cover letter indicates that construction activities were completed on September 29, 2004. Please note that during the Department's site inspection on November 1, 2004, final construction activities on Cell 2 were still in progress. Please clarify.

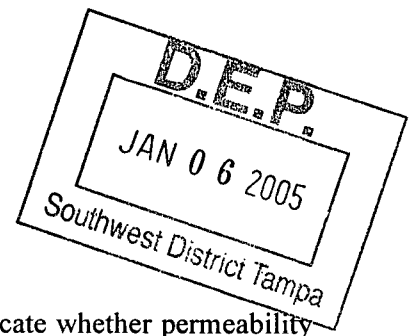
**Response:** According to Angelo's Project Manager, Mr. Jeff Rogers, the cell floor construction was completed on September 29, 2004. However, after cell construction was completed, Angelo's compacted additional confining material into the side slopes of the cell for additional coverage. The cell was then fine graded to eliminate the equipment tracks and Foresight Surveyors completed the fill survey. Mr. Rogers stated that these were the activities observed by the FDEP inspector on November 1, 2004.

2. Appendix D, page 1 contains a typographic error. It appears that the last sentence of the paragraph should state 87 ft NGVD on the south end of cell 2 rather than the north end. Please correct.

**Response:** The error has been corrected and a revised page is attached.

*See Board report*





3. September 29, 2004 site inspection report [Appendix D] does not indicate whether permeability and IPD tests were taken on the second and third lifts of Cell 2. Please provide a revised September 29, 2004 site inspection report.

**Response:** A revised page is attached.

4. The majority of test location descriptions on the In-place Density Test Report do not correspond to the Figure from UES. Please provide a figure drawn to scale showing IPD test locations accurately reflecting the test location descriptions. For example, test nos. 50 and 51 correspond to the northern end of Cell 2 on the figure provided by UES, however the test report indicates that test nos. 50 and 51 are to the south and east of the SW corner of Cell 2. Please clarify.

**Response:** HAI has requested that UES prepare a response and submit directly to the Department.

5. The majority of test location descriptions on the Permeability Test Report do not correspond to the Figure from UES. Please provide a figure drawn to scale showing permeability test locations accurately reflecting the test location descriptions.

**Response:** HAI has requested that UES prepare a response and submit directly to the Department.

6. Please provide more detailed location descriptions for test nos. 37, 39, 42 through 45 and 47 through 53 on the Permeability Test Report.

**Response:** HAI has requested that UES prepare a response and submit directly to the Department.

7. Please indicate on the IPD and Permeability Test Reports which test nos. correspond to the first, second and third lift.

**Response:** HAI has requested that UES prepare a response and submit directly to the Department.

8. It appears that an insufficient number of permeability tests were conducted. At 5.57 acres, a minimum of 18 permeability tests should have been conducted. In addition, the figure provided by UES shows that tests were not conducted along the eastern and southern boundary of Cell 2. Please address.

**Response:** Fifteen permeability tests were conducted in Cell 2. HAI determined this to be an appropriate number of tests based on prior discussions regarding the required tests for Cell 16. HAI and the Department agreed that 15 tests would be adequate for Cell 16, with acreage of 5.75 acres. Therefore, 15 tests for Cell 2, which is slightly smaller with 5.57 acres, should be adequate.

UES selected the locations of the permeability tests based on the field conditions at the time of sample collection for the first lift. These field conditions include temporary storage locations of confining material to be spread and compacted, equipment locations, and areas completed. The test locations for

Ms. Simone Core, P.E.  
January 5, 2005  
Page 3

the second and third lifts were completed near to the first lift test locations. Since in-place density tests were also conducted during construction, the permeability tests were completed for confirmation of the field test results. Based on the consistent quality of the in-place density test and laboratory permeability test results, we are confident the entire cell has an adequate confining layer.

However, during construction of the next disposal cell, HAI will predetermine a more disperse pattern for confining layer lift permeability testing in order to cover a larger area of the cell floor.

9. Please note that future cells must be constructed with side slopes of 6(H):1(V) in accordance with the construction permit.

**Response:** Angelo's will construct the future cells with appropriate side slopes unless a modification to the construction permit is issued.

10. UES Photograph Location Plan does not show the location of photos 16 and 17 that were on the CD. Please provide a revised Photograph Location Plan.

**Response:** Photos 16 and 17 were not intended for Cell 2 certification purposes and were not taken within the boundaries of the Photograph Location Plan. Please disregard Photos 16 and 17.


11. The financial assurance funding must be approved by Fred Wick in Tallahassee. Please notify the Department once the funding has been approved.

**Response:** The updated financial assurance mechanism should be received by Fred Wick on Thursday, January 6, 2005.

We trust this submittal, along with the forthcoming approval of the updated financial assurance mechanism and information from UES, will satisfy the Department's requirements. Please call me if you have any questions.

Very truly yours,

**Hartman & Associates, Inc.**

  
Jennifer L. Deal, P.E.  
Project Manager 1/5/05

JLD/cr/99.0331.013/corresp/cell 2 cert response  
Attachments

cc: Dominic Iafrate, Angelo's  
Jeff Rogers, Angelo's  
Susan Pelz, P.E., FDEP – Southwest District

***Angelo's Recycles Materials***  
41111 Enterprise Rd.  
Dade City, FL 33525

## **Cell #2 Construction**

**Project Manager: Jeff Rogers**

**Construction Equipment : Cat D5 Dozer, Cat D8 Dozer, Komatsu PC1100 Excavator;  
New Holland sheepsfoot roller, (4) Terex 35 ton dump trucks, Volvo 35 ton dump truck**

**Construction Plan: Cell #2 will be excavated to a bottom grade of 82' NGVD on the north end of the cell sloping up to 84' NGVD on the South end of the cell. Once the bottom grade has been surveyed, three feet of clay will then be compacted in the cell in three 1 foot lifts. Each lift will then be tested at the rate of 1 test per lift for density and permeability. The density test pass 95% and the permeability must meet at least  $1 \times 10^{-6}$  cm per second .The test will be conducted by Universal Engineering. Cell #2 elevation will then be 85' NGVD on the north end sloping up to 87'NGVD on the south end.**

Sept 14 , 2004 Began placing and compacting the north west corner of cell #2 while working on cell #1. Clay was hauled with 5 dump trucks and spread with D5 and D8 dozer and compacted with sheepsfoot roller and at the end of the day all trucks were loaded and drove over compacted area to ensure density was achieved. Called Universal to test 2<sup>nd</sup> lift area in cell #1 and take test on completed area of 1<sup>st</sup> lift in cell #2.

Sept 15, 2004 Universal engineering performed test on cell #1 2<sup>nd</sup> lift and cell #2 1<sup>st</sup> lift. Once test were taken began filling and compacting 3<sup>rd</sup> lift in cell #1 using 5 dump trucks , D5 and D8 dozer as well as sheepsfoot roller. Completed 3<sup>rd</sup> lift in cell #1 .

Sept 16, 2004 received 2.2 inches of rain will try to resume placing and compacting clay on 20<sup>th</sup>.

Sept 20, 2004. Rain on the 18 resume re-compaction on 22<sup>nd</sup>. Univesal tested 3<sup>rd</sup> lift on cell #1

Sept 22, 2004 resumed placing 1<sup>st</sup> lift on north and west sections of Cell #2 using 5 dump trucks , D5 and D8 dozer , and sheepsfoot roller. Called Universal to schedule tech for 23<sup>rd</sup> to perform density test as well as permeability test on compacted area in the north and west end of cell. Completed approximately 65 percent of 1<sup>st</sup> lift in Cell #2 and began placing clay on the second lift in Cell#2 on the area where the 1<sup>st</sup> lift had been tested

Sept 23, 2004 Universal arrived on site and tested 1<sup>st</sup> lift. Using 5 dump trucks , D5 and D8 dozer , and sheepsfoot roller. Completed the northern and western 65% of lift #2 and tested and also the northern approximate 65% of the 3<sup>rd</sup> lift and Universal tested

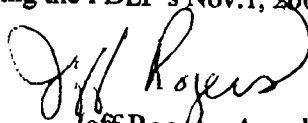
September 24, 2004 began placing and compacting clay on the first lift on the remaining south and east 35% of cell #2 Stopped by rain will resume construction on 28<sup>th</sup>.

September 28, 2004 resumed 1<sup>st</sup> lift on remaining 35% of Cell#2 placing and compacting clay using 5 dump trucks , D5 and D8 dozer , and sheepsfoot roller completed 1<sup>st</sup> lift and arranged for Universal to do testing all day on the 29<sup>th</sup>.

Sept 29, 2004 Universal tested remainder of the 1<sup>st</sup> lift in cell # 2 . We placed and compacted the remaining 2<sup>nd</sup> and 3<sup>rd</sup> lifts in cell #2 using 5 dump trucks , D5 and D8 dozer , and sheepsfoot roller. Universal then preformed density and permeability test on the first and second lifts.

Sept 30<sup>th</sup> Cell #2 final graded and Foresight called for final top survey.

Note: After final cell construction Angello's compacted additional clay material into the side slopes of the cell for additional clay coverage. Fine grading was then preformed to clear equipment tracks. Foresight surveyed cell #2 after fine grading was completed. Some of these additional activities were still ongoing during the FDEP's Nov.1, 2004 inspection.



Jeff Rogers, Angelo's Project Manager



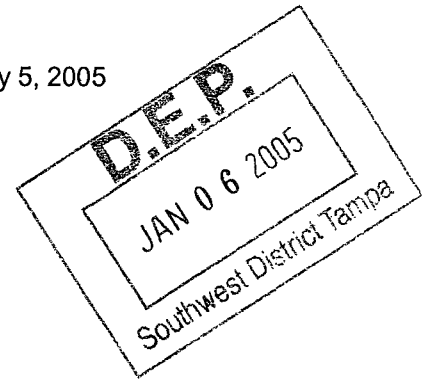


# UNIVERSAL ENGINEERING SCIENCES

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

January 5, 2005

Mr. Dominic Iafrate  
Angelo's Aggregate Materials  
1755 20th Avenue SE  
Largo, Florida 33771



RE: Enterprise Recycling and Disposal Facility  
Cell #2 Certification

Dear Mr. Iafrate:

In response to the letter from Simone Core, P.E. of the Solid Waste Section of FDEP, dated January 4, 2005, we offer the following response to items 4, 5, 6, and 7.

4. Density reports DR#10 and DR#12 have been revised. The in-place density location plan has also been revised showing accurate locations of tests. Revisions are included with this package.
5. The permeability location plan has been revised and a test location summary developed with locations for all permeability tests taken for cell #2. All revisions are included.
6. A summary report of test locations is included in this package.
7. Revisions to the density test reports and permeability summary have been made and are included.

We hope that this information is helpful in addressing the concerns of the FDEP and apologize for any inconvenience. Please do not hesitate to contact our office with any additional questions or concerns.

Sincerely,

Universal Engineering Sciences

David Barnett  
Construction Services Manager

enclosures: DR#10 r1  
DR#12 r1  
DR#13  
PWSUM cell2  
revised density test location plan  
revised permeability test location plan

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

OFFICES IN: • Clermont • Daytona Beach • DeBary • Fort Myers • Gainesville • Hollywood • Jacksonville • Ocala • Orlando • Palm Coast  
• Rockledge • Sarasota • St. Augustine • Tampa • West Palm Beach

(See barrel report)



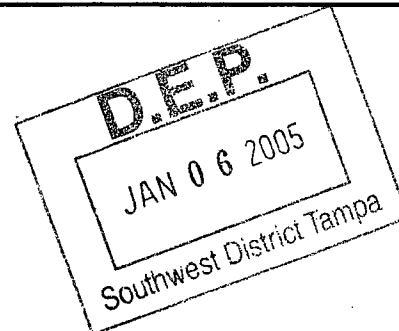
# UNIVERSAL ENGINEERING SCIENCES

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

Object No.: 80540-001-02  
Report No.: DR #10  
Date: September 14, 2004  
Revision: January 6, 2005

## IN-PLACE DENSITY TEST REPORT



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

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

**Area Tested:** Clay Liner Fill in Cell #1 and #2, Fill

### Reference

**Datum:** 0 = Top of Native

**Type of Test - Field:** ASTM D-2937 Drive Cylinder Method  
**Laboratory:** ASTM D-698 Standard Proctor

**Date Tested:** 9/15/04

**Remarks:** The tests below meet the minimum 95 percent 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 (%)
47	70' N 150' W From SW Corner of Cell #1	+2	108.6	16.5	110.0	10.1	101.2
48	70' N 215' W From SW Corner of Cell #1	+2	108.6	16.5	109.2	12.1	100.5
49	130' N 300' W From SW Corner of Cell #1	+2	108.6	16.5	108.8	12.6	100.1
50	50' South and 80' East of NW corner of Cell #2	+1	108.6	16.5	112.1	14.1	103.2
51	50' South and 110' West of NE cnr of cell #2	+1	108.6	16.5	109.9	15.1	101.2

**Technician:** Vince Simmons

**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: 1/6/05



# 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

Project No.: 80540-001-02  
Report No.: DR #12  
Date: September 27, 2004  
Revision: January 6, 2005

## IN-PLACE DENSITY TEST REPORT

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

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

**Area Tested:** Clay Liner, Backfill

**Reference**

**Datum:** 0 = Top of Native

**Type of Test - Field:** ASTM D-2937 Drive Cylinder Method  
**Laboratory:** ASTM D-698 Standard Proctor

**Date Tested:** 9/23/04


**Remarks:** The tests below meet the minimum 98 percent 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 (%)
57	290' South and 200' East of NW cnr of cell #2	+1	108.6	16.5	107.6	12.1	99.1
58	70' South and 100' East of NW cnr of cell #2	+2	108.6	16.5	111.8	11.6	102.9
59	70' South and 100' West of NE cnr of cell #2	+2	108.6	16.5	110.8	12.2	102.0
60	250' West and 280' South of NE cnr of cell #2	+2	108.6	16.5	110.1	11.6	101.4
61	105' East and 60' South of NW cnr of cell #2	+3	108.6	16.5	111.9	11.0	103.1
62	100' South and 100' West of NE cnr of cell #2	+3	108.6	16.5	108.7	11.4	100.1
63	270' South and 250' West of NE cnr of cell #2	+3	108.6	16.5	112.4	14.1	103.8

**Technician:** Vince Simmons

**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: 1/6/05



# 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 #13  
Date: October 4, 2004

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, 5 acre Clay Liner

**Area Tested:** Clay Liner in Landfill Cell #2, Backfill

**Reference**

**Datum:** 0 = Top of Native

**Type of Test - Field:** ASTM D-2937 Drive Cylinder Method  
**Laboratory:** ASTM D-698 Standard Proctor

**Date Tested:** 9/29/04


**Remarks:** The tests below meet the minimum 95 percent 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 (%)
64	100' NE from SW Corner of Cell #2	+2	108.6	16.5	107.8	15.7	99.3
65	150' NW from SE Corner of Cell #2	+2	108.6	16.5	109.5	16.3	100.8
66	120' NE from SW Corner of Cell #2	+1	108.6	16.5	107.5	15.6	99.0
67	140' NW from SE Corner of Cell #2	+1	108.6	16.5	107.9	16.8	99.4
68	150' NW from SE Corner of Cell #2	+3	108.6	16.5	108.0	15.1	99.4
69	160' NE from SW Corner of Cell #2	+3	108.6	16.5	107.6	16.3	99.1

**Technician:** Vince Simmons

**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: 10/05





# 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

Project No: 80540-001-02  
Report No.: PWSUM Cell2  
Date: January 6, 2005

## SUMMARY OF 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 #2

**Tested By:** Greg Kemp


**Ordered By:** David Barnett

Test #	Location	Elev.	Percent passing No. 200 Sieve	Permeability	
				K (cm/s)	K ft/day
36	50' South and 80' East of NW cnr of Cell #2	+1	60.2	5.6 E-09	1.59 E-05
37	50' South and 110' West of NE cnr of cell #2	+1	54.3	1.8 E-08	5.0 E-05
39	290' South and 200' East of NW cnr of cell #2	+1	47.7	2.0 E-08	5.6 E-05
42	70' South and 100' West of NW cnr of cell #2	+2	45.5	2.7 E-08	7.5 E-05
43	70' South and 100' West of NE cnr of cell #2	+2	45.7	6.6 E-08	1.9 E-04
44	250' West and 280' South of NE cnr of cell #2	+2	48.1	6.0 E-08	1.7 E-04
45	105' East and 60' South of NW cnr of cell #2	+3	48.9	1.3 E-07	3.8 E-04
46	100' South and 100' West of NE cnr of cell #2	+3	52.4	6.1 E-08	1.73 E-04
47	270' South and 250' West of NE cnr of cell #2	+3	61.1	1.2 E-08	3.4 E-05
48	100' NE of SW corner of cell #2	+2	48.9	2.5 E-08	7.0 E-05
49	150' NW of SE corner of cell #2	+2	54.4	9.5 E-08	2.7 E-04
50	120' NE of SW corner of cell #2	+1	60.4	7.1 E-09	2.0 E-05
51	140' NW of SE corner of cell #2	+1	46.2	3.3 E-07	9.5 E-04
52	150' NW of SE corner of cell #2	+3	53.9	1.98 E-08	5.6 E-05
53	160' NE of SW corner of cell #2	+3	49.7	1.2 E-08	3.3 E-05

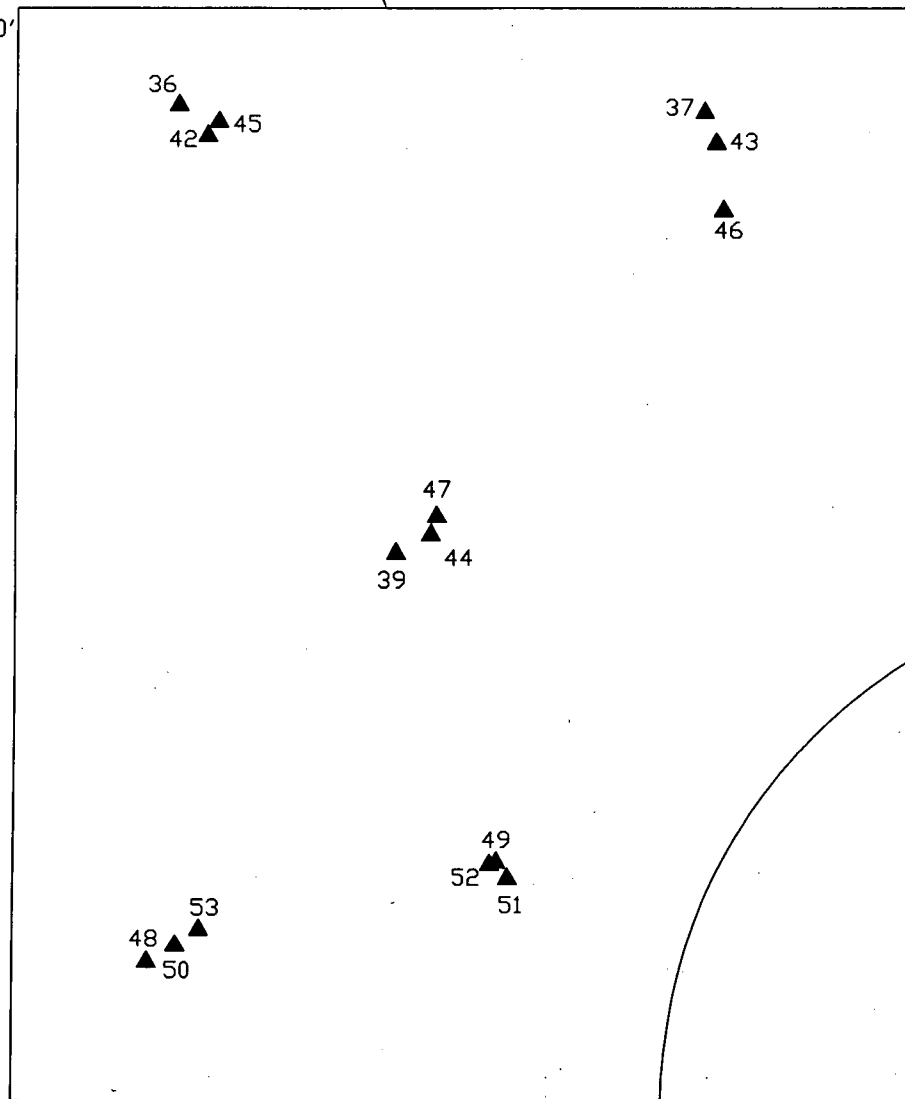
Reviewed By,  
**Universal Engineering Sciences, Inc.**  
Certificate of Authorization No. 00000549

  
Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 1/6/05

Technician: N/A

  
 SCALE: 1" = 100'

approx. limits of cell #2



UNIVERSAL  
ENGINEERING SCIENCES

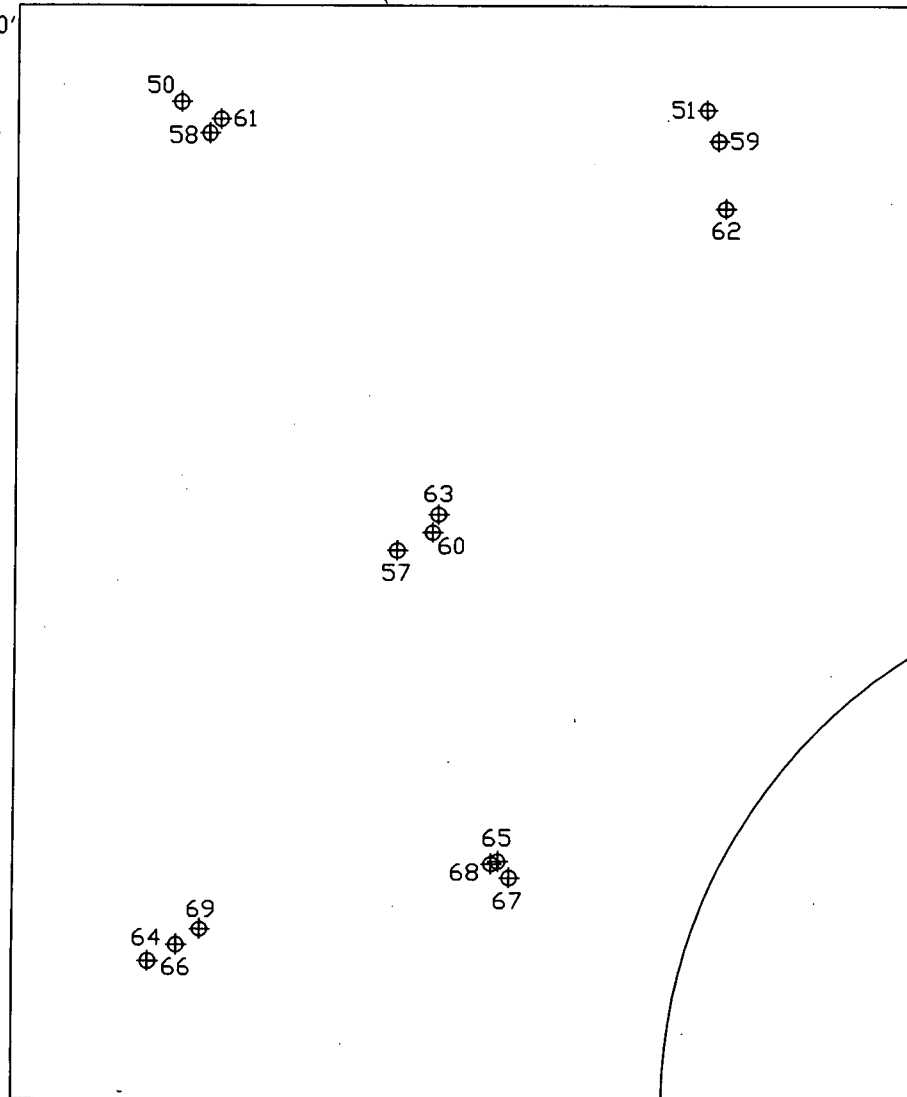
ANGELO'S AGGREGATE MATERIALS  
PERMIABILITY TEST LOCATION PLAN  
CLAY LINED CELL #2

DRAWN BY: D.B.	DATE: JAN 6, 2005	CHECKED BY: D.B.	DATE: JAN 6, 2005
SCALE: 1 : 100	PROJECT NO: 80540-001-02	REPORT NO:	PAGE NO:



SCALE: 1" = 100'

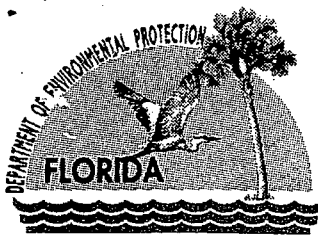
approx. limits of cell #2



UNIVERSAL  
ENGINEERING SCIENCES

ANGELO'S AGGREGATE MATERIALS  
DENSITY TEST LOCATION PLAN  
CLAY LINED CELL #2

DRAWN BY: D.B.	DATE: JAN 6, 2005	CHECKED BY: D.B.	DATE: JAN 6, 2005
SCALE: 1 : 100	PROJECT NO: 80540-001-02	REPORT NO:	PAGE NO:



Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Colleen M. Castille  
Secretary

January 4, 2005

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Avenue SE  
Largo, Florida 33771

Re: Enterprise Recycling & Disposal Facility  
Certification for Cell 2  
Permit No. 177982-001-SC  
Pasco County

Dear Mr. Iafrate:

This is to acknowledge receipt of the certification of construction completion prepared by Hartman & Associates, Inc., dated December 15, 2004, (received December 16, 2004), to certify Cell 2 of a Class III landfill. Please be advised that based on the information submitted, the certification is not approved.

Your submittal is incomplete. Please provide the information listed below promptly. Details are as follow:

1. The cover letter indicates that construction activities were completed on September 29, 2004. Please note that during the Department's site inspection on November 1, 2004, final construction activities on Cell 2 were still in progress. Please clarify.
2. Appendix D, page 1 contains a typographic error. It appears that the last sentence of the paragraph should state 87 ft NGVD on the south end of cell 2 rather than the north end. Please correct.
3. September 29, 2004 site inspection report [Appendix D] does not indicate whether permeability and IPD tests were taken on the second and third lifts of Cell 2. Please provide a revised September 29, 2004 site inspection report.
4. The majority of test location descriptions on the In-place Density Test Report do not correspond to the Figure from UES. Please provide a figure drawn to scale showing IPD test locations accurately reflecting the test location descriptions. For example, test nos. 50 and 51 correspond to the northern end of Cell 2 on the figure provided by UES, however the test report indicates that test nos. 50 and 51 are to the south and east of the SW corner of Cell 2. Please clarify.
5. The majority of test location descriptions on the Permeability Test Report do not correspond to the Figure from UES. Please provide a figure drawn to scale showing permeability test locations accurately reflecting the test location descriptions.

*"More Protection, Less Process"*

*Printed on recycled paper.*



Mr. Dominic Iafrate

Angelo's Aggregate Materials, Ltd.

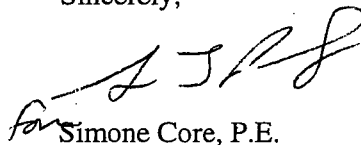
Certification of Construction Completion - 0177982-001-SC (Cell 2)

Page 2 of 2

6. Please provide more detailed location descriptions for test nos. 37, 39, 42 through 45 and 47 through 53 on the Permeability Test Report.
7. Please indicate on the IPD and Permeability Test Reports which test nos. correspond to the first, second and third lift.
8. It appears that an insufficient number of permeability tests were conducted. At 5.57 acres, a minimum of 18 permeability tests should have been conducted. In addition, the figure provided by UES shows that tests were not conducted along the eastern and southern boundary of Cell 2. Please address.
9. Please note that future cells must be constructed with side slopes of 6(H):1(V) in accordance with the construction permit.
10. UES Photograph Location Plan does not show the location of photos 16 and 17 that were on the CD. Please provide a revised Photograph Location Plan.
11. The financial assurance funding must be approved by Fred Wick in Tallahassee. Please notify the Department once the funding has been approved.

You are requested to submit four (4) copies of your response to this letter as one complete package with an original and three copies of all correspondence (with one copy sent to Ms. Susan Pelz). Please contact me at (813) 744-6100, Extension 382, should you have any question.

Sincerely,



Simone Core, P.E.  
Solid Waste Section  
Southwest District

cc: Jennifer L. Deal, P.E., [Hartman & Associates, Inc., 201 East Pine Street,  
Suite 1000, Orlando, FL 32801-2723]  
Susan Pelz, P.E., [FDEP - SWD]  
Douglas Hyman, P.E., [FDEP-IW/Stormwater]  
Fred Wick, [FDEP - Tallahassee]

# TETRA TECH, INC.

## HARTMAN & ASSOCIATES, INC.

engineers, hydrogeologists, surveyors & management consultants

### OFFICERS:

Mark A. Rynning, P.E., M.B.A.  
Harold E. Schmidt, Jr., P.E., DEE  
James E. Christopher, P.E.  
Charles W. Drake, P.G.  
William D. Musser, P.E., P.H.  
Lawrence E. Jenkins, P.S.M.

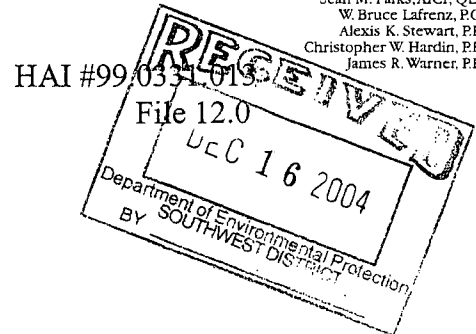
### SENIOR ASSOCIATES:

Marco H. Rocca, C.M.C.  
Roderick K. Cashe, P.E.  
Douglas P. Dufresne, P.G.  
Jon D. Fox, P.E.  
Daniel M. Nelson, P.E.

### ASSOCIATES:

Les H. Porterfield, P.E.  
Andrew T. Woodcock, P.E., M.B.A.  
John P. Toomey, P.E.  
Jennifer L. Woodall, P.E.  
Rafael A. Terrero, P.E., DEE  
Jill M. Hudkins, P.E.  
Valerie C. Davis, P.G.  
Charles M. Shultz, P.E.  
Sean M. Parks, AICP, QEP  
W. Bruce Lafrenz, P.G.  
Alexis K. Stewart, P.E.  
Christopher W. Hardin, P.E.  
James R. Warner, P.E.

December 15, 2004



### Via UPS Overnight

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

**Subject: Cell 2 Certification  
Enterprise Recycling & Disposal Facility  
Angelo's Aggregate Materials, Ltd.  
FDEP Permit Nos. 177982-001-SC, 177982-002-SO  
Pasco County, Florida**

Dear Ms. Pelz:

On behalf of Angelo's Aggregate Materials, Ltd. (Angelo's), Hartman & Associates, Inc. (HAI) is submitting this certification for Cell 2 at the above referenced facility. Confining layer construction activities were completed on September 29, 2004. The certification form and referenced summary of deviations are included in Appendix A.

Specific Condition 9.c. of the construction permit, 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 2 was performed in concurrence with construction activities for the remainder of Cell 1. Mr. Jeff Rogers, the facility manager and Angelo's Project Manager for the landfill construction, was on-site to oversee all construction and verify that the work was performed to HAI's criteria. This included verification of the use of appropriate stockpiled confining material and compaction equipment, coordination with Foresight Surveyors, Inc. (Foresight) for documentation of the excavation and fill elevations, and coordination with Universal Engineering Sciences (UES) for on-site soil testing and permeability test sample collection. The contractor used a track hoe to excavate the cell. Foresight verified the

See Band Report file



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 12, 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: Hartman & Associates, Inc.

Type of Project: Certification for Cell 2

see attached surveys from Foresight Surveyors for areas.

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

Site Design: Quantity: 1500 cy/day ton/day Site Acreage: 5.57 Acres

Deviations from Plans and Application Approved by DEP: Please see the attached summary.

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: Facility manager stated FDEP inspected Cell 2 at previous site visit

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: 12/15/04

Signature of Professional Engineer

Page 1 of 1

Hartman & Associates, Inc.  
201 E. Pine St., Suite 1000  
Orlando, FL 32801  
Engineering Business #5814  
Jennifer L. Deal, P.E.  
Florida Registration  
0000058592 12/15/04



# 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

Project No: 80540-001-02  
Report No.: PW #11  
Date: December 7, 2004

## 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, 5 acre Clay Liner

Tested By: Greg Kemp

Ordered By: David Barnett

### TEST RESULTS

Test #	Date Tested	Location	Percent passing No. 200 Sieve	Permeability	
				K (cm/s)	K ft/day
50	11/23/04	Cell 2	60.4	7.1 E-09	2.0 E-05

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

Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 12/21/04

Technician: N/A

Inserted into App E - doc dpt  
12/16/04





# UNIVERSAL ENGINEERING SCIENCES

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

Project No.: 80540-001-02  
Report No.: SI #8  
Date: December 13, 2004

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:** Compaction & Permeability Clay Liner

**Inspected By:** Vince Simmons

### September 15, 2004

Arrived on site, performed eight in place density's on cell 1 lifts 2 and 3, two in place density's on cell 2. Sampled for permeability at eight locations for cell 1 and 2 for cell 2.

### September 23, 2004

Arrive on site, performed seven in place density's on cell 2 liner. Seven permeability samples taken at in place density locations.

### September 29, 2004

Arrived on site, performed six in place density's on cell 2 liner. Six permeability samples taken and sent to Orlando for testing.

cc: Client (1)

jd

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

Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 12/21/04



# UNIVERSAL ENGINEERING SCIENCES

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

Project No.: 80540-001-02  
Report No.: SI #2  
Date: July 12, 2004  
Revised: 12/07/04

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 lafrate  
26400 Sherwood Street  
Warren, MI 48091

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

**Scope of Field Work:** Monitor Placement and Compaction of Clay Liner; to Include IPD's and Permeability Sample Pickup

**Inspected By:** Vince Simmons

### July 6, 2004

Monitored track hoe loading end jumps from section #3 of cell and hauling to stockpile area at east end of cell areas outside of construction zone. At end of excavation in section #3 D-7 dozer compacted clay liner at 12" lifts and grading while sheep's foot roller compacted graded clay liner. Three density test performed in section #2 at locations on density test report form. Also 3 permeability samples were taken at one sample per lift at location noted on density report form and sent to Orlando lab for testing. Surveyors not on site today. Area cleared in section #3 measured at 315' long and 73' wide. No test were ready for section #3 today.

### July 7, 2004

Monitored track hoe loading two end dumps from section #4 cell and hauling excavates fill to stockpile area at east end of cell areas outside of construction zone. Clay liner fill hauled back in section #4 and graded with day dozer and compacted with sheep's foot roller at 12" lifts. Dimension of section #4 is 315' long and 68' wide. Goodwin Construction stop working at 12:30 p.m. due to rain showers and lightening which lasted about 45 minutes. 3 IPD's and perm samples taken for section #3. At present time about 50% of first lift completed and excavated..

### July 8, 2004

Arrived on site Goodwin Brother's Construction working on excavating materials out of section #5 and loading into end dumps. Sheep's front roller and dozer are working in section #4 on first lift. End dumps unloading excavated fill at stockpile areas at east end of construction zone. Took two IPD's and two permeability tests in section #4. Excavation at 70%.

### July 9, 2004

Arrived on site and monitored excavation of material in section #6. Materials loaded in two end dumps and transported off site to stockpile area at east end of construction zone. Goodwin Brother's will continue excavating in area before backfilling jeff with Angelo's didn't require me to be on site for excavation remaining area in section #6. Good win Brothers Construction will begin backfilling on 7/12/04. Job excavation at 95%. Left site at 12:00 p.m.

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

Mark K. Hardy, P.E.  
Tampa Branch Manager  
Professional Engineer No. 57233  
Date: 12/21/04

cc: Client (1)

## Pelz, Susan

---

**From:** Pelz, Susan  
**Sent:** Tuesday, January 04, 2005 4:54 PM  
**To:** Jennifer Deal (E-mail)  
**Cc:** Core, Simone; Wick, Fred; Morgan, Steve; Petro, Stephanie; Cleary, James  
**Subject:** Enterprise Certifications

Jennifer,

Please find attached letters with comments concerning the Cell 2 & Cell1/Cell 16 certifications. These letters were mailed today. Please note also that we have received your letter dated January 3, 2005 that indicated that Angelos would begin operation in Cell 2 as of January 4, 2005.

Rule 62-701.630(2)(b), F.A.C., requires that the financial assurance mechanism be fully funded 60 days prior to the receipt of waste. It does not appear that the Department has received proof of financial assurance for Cell 2. Therefore, operation in Cell 2 is **not authorized** at this time. Please be advised that in the event that the permittee elects to operate in Cell 2 prior to the Department's receipt of acceptable proof of funding for the financial assurance, the Department may initiate enforcement action to ensure compliance with the facility's permit and Department rules.

Susan J. Pelz, P.E.  
Solid Waste Program Manager  
Southwest District  
813-744-6100 x 386  
susan.pelz@dep.state.fl.us



0177982-001 0177982-001  
IC cell 2 RAI EnC RAI3 Enterpri

### Tracking:

#### Recipient

Jennifer Deal (E-mail)  
Core, Simone  
Wick, Fred  
Morgan, Steve  
Petro, Stephanie  
Cleary, James

#### Read

Read: 1/5/2005 9:32 AM  
  
Read: 1/5/2005 9:51 AM  
Read: 1/5/2005 7:05 AM

## Pelz, Susan

---

**From:** Jennifer L. Deal, P.E. [Jennifer.deal@tetrattech.com]  
**Sent:** Tuesday, January 04, 2005 5:12 PM  
**To:** Pelz, Susan  
**Subject:** Read: Enterprise Certifications



ATT840394.txt

Your message

To: Jennifer Deal (E-mail)  
Cc: Core, Simone; Wick, Fred; Morgan, Steve; Petro, Stephanie;  
Cleary, James  
Subject: Enterprise Certifications  
Sent: 1/4/05 4:53 PM

was read on 1/4/05 5:10 PM.

**HARTMAN & ASSOCIATES, INC.**

engineers, hydrogeologists, surveyors &amp; management consultants

201 EAST PINE STREET - SUITE 1000 - ORLANDO, FL 32801  
TELEPHONE (407) 839-3955 - FAX (407) 481-8447**FAX**

Job Number: 99.0331.013

Date: 01/03/05

No. of pages incl. cover page: 2

To: Susan Pelz, P.E.

FDEP - Southwest District

Phone: (813) 744-6100, ext. 386

Fax: (813) 744-6125

cc:

Re: Angelo's Enterprise Landfill

From: Jennifer L. Deal, P.E.

Hartman &amp; Associates, Inc.

Phone: (407) 839-3955 ext. 153

Fax: (407) 839-2066

REMARKS: ☐ Urgent ☒ For your review ☐ As Requested ☐ Please comment

Susan,

Please see the following letter regarding disposal operations at the Angelo's Enterprise Landfill in Pasco County. Please give me a call if you have any questions. Thank you.

Jennifer

The information contained in this facsimile transmission may be legally privileged and is intended for the use of the individual(s) or entity(ies) named above. If you are not the intended recipient, you are hereby notified that any use dissemination, distribution or copying of this facsimile or its information is strictly prohibited. If you have received this facsimile in error, please immediately notify the sender by telephone or facsimile using the above referenced number to arrange for the return of the original documents.



**TETRA TECH, INC.****HARTMAN & ASSOCIATES, INC.****engineers, hydrogeologists, surveyors & management consultants****OFFICERS:**

Mark A. Rynning, P.E., M.B.A.  
 Harold E. Schmidt, Jr., P.E., DEE  
 James E. Christopher, P.E.  
 Charles W. Drake, P.E.  
 William D. Mauer, P.E., P.H.  
 Lawrence F. Jenkins, P.S.M.

**SENIOR ASSOCIATES:**

MASSA H. Roven, C.M.C.  
 Rodrick K. Cusick, P.E.  
 Douglas P. Dufrasse, P.G.  
 Jon D. Fox, P.E.  
 Duziel M. Nelson, P.E.

**ASSOCIATES:**

Lee H. Porterfield, P.E.  
 Andrew T. Woodcock, P.E., M.B.A.  
 John P. Toomey, P.E.  
 Jennifer L. Woodall, P.E.  
 Rafael A. Terrero, P.E., DEE  
 Jill M. Huddins, P.E.  
 Valerie C. Davis, P.E.  
 Charles M. Shultz, P.E.  
 Sean M. Parks, AICP, QEP  
 W. Bruce LaFrance, P.G.  
 Alexis K. Stewart, P.E.  
 Christopher W. Hanlin, P.E.  
 James R. Warner, P.E.

January 3, 2005

HAI #99.0331.013

File 12.0

**Via Facsimile and UPS Ground**

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

**Subject: Initiation of Disposal Operations in Cell 2  
 Enterprise Recycling & Disposal Facility  
 FDEP Permit No. 177982-002-SO  
 Pasco County, Florida**

Dear Ms. Pelz:

At the request of Angelo's Aggregate Materials, Ltd. (Angelo's), Hartman & Associates, Inc. is submitting this notification to inform you that disposal operations in Cell 2 are scheduled to begin on Tuesday, January 4, 2005 at the above facility.

Certification documentation for Cell 2 was submitted to the Department on December 16, 2004, and the cell floor was inspected by Ms. Simone Core on November 1, 2004. In accordance with FAC Rule 62-701.320(9)(a), it is Angelo's intent to begin disposal operations in this area since it has been longer than 14 days since the Department received the submittal, and no Department comments have been received to date.

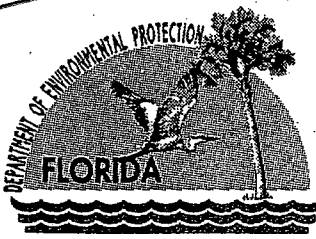
Please call us if you have any questions.

Very truly yours,

**Hartman & Associates, Inc.**
  
 Jennifer L. Deal, P.E.  
 Project Manager

N/hydro/jld/larkin/pelz2.doc

cc: Dominic Iafrate, Angelo's  
 Jeff Rogers, Angelo's



Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, Fl. 33771

January 12, 2005

RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County  
Certification of Construction Completion,  
Cell 16 (temporary stormwater) and remainder of Cell 1

Dear Mr. Iafrate:

On November 1, 2004, an inspection of the above-referenced facility relative to construction completion and adherence to the permit issued by the Florida Department of Environmental Protection (FDEP) was made by Simone Core, P.E. (FDEP) and Enterprise Landfill personnel.

Certification of Construction Completion dated October 14, 2004 (received October 15, 2004), and supplemental information dated November 23, 2004, November 24, 2004, December 16, 2004 and January 5, 2005 (received November 24, 2004 November 29, 2004, December 17, 2004, January 6, 2005 respectively), has been received by the Department.

Based on the information submitted and the site inspection, the Department **approves** the construction (confining layer) certification for the remainder of Cell 1 and Cell 16. Please be advised that Cell 16 is authorized only for use as a temporary stormwater pond. At the time that Cell 16 is anticipated to be used for disposal operations, additional confining material shall be constructed to bring the cell bottom to design grades and a certification of construction completion shall be submitted for Department approval.

The remainder of Cell 1 shall be operated in accordance with the conditions of Operation permit 177982-002-SO and the Department's certification approval letter dated March 8, 2004 (attached). If you have any questions, you may contact me at (813) 744-6100 ext. 386.

Sincerely,

Susan J. Pelz, P.E.  
Solid Waste Manager  
Southwest District

sjp  
Attachment

cc: Jennifer Deal, P.E., Hartman & Associates, 201 E. Pine St., Ste. 1000, Orlando, Fl. 32801, w/attachment  
William Kutash, Waste Program Administrator, FDEP Tampa  
Fred Wick, FDEP, Tallahassee  
John Morris, P.G., FDEP Tampa  
Douglas Hyman, P.E., FDEP Tampa, ERP

"More Protection, Less Process"

Printed on recycled paper.



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. \_\_\_\_\_  
(Filed 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: Hartman & Associates, Inc.

Type of Project: Confining layer certification for Cell 16, and the west and south areas of Cell 1,  
see attached surveys from Foresight Surveyors for areas.

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

Site Design: Quantity: 1500 cy/day ton/day Site Acreage: 6.7 Acres

Deviations from Plans and Application Approved by DEP: Please see the attached summary.

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: October 22, 2004

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

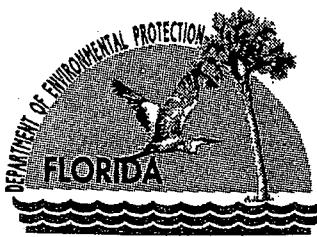
Permit No. 177982-001-SC :Dated: October 5, 2001

Date: 10/14/04

Signature of Professional Engineer

Hartman & Associates, Inc.  
201 E. Pine St., Suite 1000  
Orlando, FL 32801  
Engineering Business #5814  
Jennifer L. Deal, P.E.  
Florida Registration  
0000058592

Page 1 of 1



Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Colleen M. Castille  
Secretary

Mr. Dominic Iafrate  
Angelo's Aggregate Materials, Ltd.  
1755 20<sup>th</sup> Ave. S.E.  
Largo, Fl. 33771

January 12, 2005

RE: Enterprise Recycling & Disposal Class III Landfill  
Permit Nos.: 177982-001-SC and 177982-002-SO, Pasco County  
Certification of Construction Completion, Cell 2 (5.57 acres)

Dear Mr. Iafrate:

On November 1, 2004, an inspection of the above-referenced facility relative to construction completion and adherence to the permit issued by the Florida Department of Environmental Protection (FDEP) was made by Simone Core, P.E. (FDEP) and Enterprise Landfill personnel.

Certification of Construction Completion dated December 15, 2004 (received December 16, 2004), and supplemental information dated December 15, 2004, December 21, 2004 and January 5, 2005 (received December 16, 2004, December 23, 2004, and January 6, 2005 respectively), has been received by the Department.

Based on the information submitted and the site inspection, the Department **approves** the construction certification (cell bottom) for Cell 2. Proof of financial assurance was received on January 10, 2005. Cell 2 shall be operated in accordance with the conditions of Operation permit 177982-002-SO. If you have any questions, you may contact me at (813) 744-6100 ext. 386.

Sincerely,

Susan J. Pelz, P.E.  
Solid Waste Manager  
Southwest District

sjp  
cc:

Jennifer Deal, P.E., Hartman & Associates, 201 E. Pine St., Ste. 1000, Orlando, Fl. 32801, w/attachment  
William Kutash, Waste Program Administrator, FDEP Tampa  
Fred Wick, FDEP, Tallahassee  
John Morris, P.G., FDEP Tampa  
Douglas Hyman, P.E., FDEP Tampa, ERP

"More Protection, Less Process"

Printed on recycled paper.



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. \_\_\_\_\_  
(Filed 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: Hartman & Associates, Inc.

Type of Project: Certification for Cell 2

see attached surveys from Foresight Surveyors for areas.

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

Site Design: Quantity: 1500 cy/day ton/day Site Acreage: 5.57 Acres

Deviations from Plans and Application Approved by DEP: Please see the attached summary.

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: Facility manager stated FDEP inspected Cell 2 at previous site visit

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: 12/15/04

Signature of Professional Engineer

Page 1 of 1

Hartman & Associates, Inc.  
201 E. Pine St., Suite 1000  
Orlando, FL 32801  
Engineering Business #5814  
Jennifer L. Deal, P.E.  
Florida Registration  
0000058592 12/15/04

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