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

Cell 3
Construction Completion Report
FDEP Permits: 177982-001-SC & 177982-002-SO

March 2007

Revised 5/24/07

Florida Department of Environmental Protection

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

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

June 27, 2007

RE: Enterprise Recycling & Disposal Class III Landfill
Permit Nos.: 177982-011-SC and 177982-010-SO, Pasco County
Certification of Construction Completion, Cell 3 (approx. 5.00 acres)

Dear Mr. Iafrate:

The Department has received the Certification of Construction Completion dated March 12, 2007 (received March 12, 2007) and the revised additional information dated May 23, 2007 (received May 24, 2007) prepared by John Arnold, P.E. and Universal Engineering Sciences, for the construction of Cell 3 of the Enterprise Recycling & Disposal Class III Landfill.

Based on the information submitted and an inspection of the facility by Department personnel on June 22, 2007, the Department approves the construction completion of Cell 3 and authorizes operation in Phase II, in accordance with the above referenced operation permit. If there are points, which must be discussed and resolved, please contact me at (813) 632-7600 ext. 385.

Sincerely,

Steven G. Morgan
Solid Waste Section
Southwest District

cc: John Arnold, P.E., 34924 Williams Cemetery Rd., Dade City, Florida 33525
Fred Wick, FDEP, Tallahassee
Susan Pelz, P.E., FDEP Tampa

Florida Department of Environmental Protection

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Charlie Crist
Governor

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Lt. Governor

Michael W. Sole
Secretary

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

April 17, 2007

RE: Enterprise Recycling & Disposal Class III Landfill
Permit Nos.: 177982-011-SC and 177982-010-SO, Pasco County
Certification of Construction Completion, Cell 3 (approximately 5.00 acres)

Dear Mr. Iafrate:

The Department has reviewed the Certification of Construction Completion for the Cell 3, prepared by John Arnold P.E., dated March 9, 2007 (received March 12, 2007). Based on the Department's review, the certification of construction is not approved for the following reasons:

1. The ASTM test method performed for clay permeability testing (ASTM D-2434) is specific to granular soils and according to the test method is limited to soils containing no more than 10% soil passing the No. 200 sieve. Although this test method has been used previously for determining clay layer permeability at this site, it is not an appropriate test method for clay and will not accepted for this and future cell certifications. Please provide revised permeability testing for the clay layer using the appropriate test method for clay soils (ASTM D-5084).

2. Corresponding lab results sheets were not provided in support of all of the density, moisture and 200 wash results and some of the permeability results provided on the Test Location Summary and Results tables and permeability lab results sheets were provided that were not reported on the summary tables. Please provide lab sheets for all tests and revise the tables accordingly to report all results as reported on the lab sheets (e.g. 4.54 E–09 vs. 10^{-9}).

3. The Test Location Maps for Lifts 1 and 2 indicate that Atterburg tests were conducted in grid B5 and grid B6 respectively, however no Atterburg test lab sheets were provided and no Atterburg test results were reported in the corresponding summary tables. Please provide the lab sheets for the Atterburg test results and revised test locations maps and/or summary sheets, as appropriate.

Therefore, please be advised that under the provisions of Specific Condition #9 of Permit Nos.: 177982-011-SC, operation/acceptance of waste in Cell 3 is not authorized at this time. If you have any questions, you may contact me at (813) 632-7600 ext. 385.

Sincerely,

Steven G. Morgan
Solid Waste Section
Southwest District

cc: John Arnold, P.E., 34924 Williams Cemetery Rd., Dade City, Florida 33525
Fred Wick, FDEP, Tallahassee
Susan Pelz, P.E., FDEP Tampa

March 12, 2007

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 3 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 3 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.

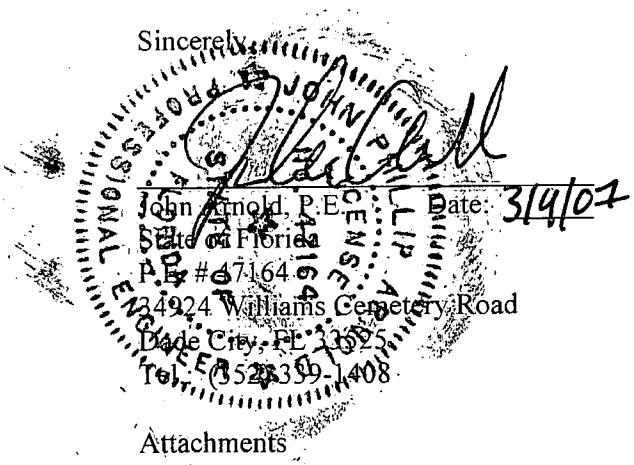
b. Prepare and submit Record Drawings showing all changes (i.e. additions, deletions, revisions to the plans previously approved by the Department including site grades and elevations). The Record Drawing is provided in Attachment B.

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 $1x10^{-6}$ 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 2007 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: 3/4/07
State of Florida
P.E. #47164
34924 Williams Cemetery Road
Dade City, FL 33525
Tel. (352) 339-1408

Attachments

cc: John Morris, P.G., FDEP
Dominic Iafrate, Angelo's Recycled Materials
Jeff Rogers, Angelo's Recycled Materials

Attachment A

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

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

DEP Application No. _____
(Filled by DEP)

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

Certification of Construction Completion of a Solid Waste Management Facility

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 12 2007
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 3 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: 7,500 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 min. elevations and 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: March 19, 2007

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: 05 OCT 2001 & Subsequent Amendments

Date: 3/9/07

3/9/07
Signature of Professional Engineer

John Arnold
FL PE No. 47640
34924 Williamsburg Rd
Dade City, FL 33525

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

Attachment B

Record Drawings
Simmons & Beall, Inc.

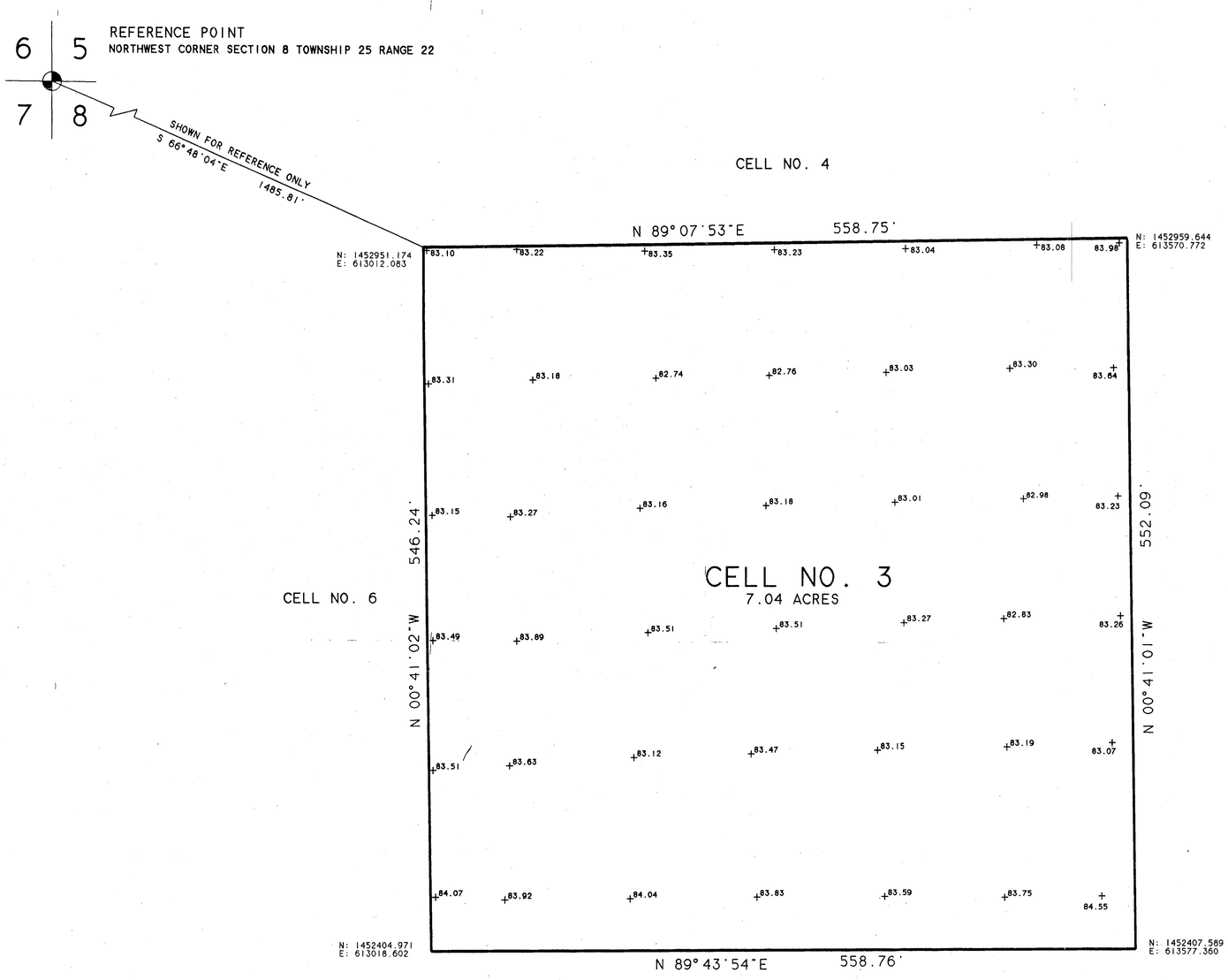
Topographic surveys, signed and sealed by a Florida registered Professional Surveyor and Mapper, of tops of both the over-excavated subgrade and the finished 3-foot thick confining layer are provided. The Surveyor of record is Simmons and Beall. The Surveyor also provided layout and grading control in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

ANGELO'S RECYCLED MATERIALS

ENTERPRISE ROAD FACILITIES 1573189(1)

SECTION 8 TOWNSHIP 25 SOUTH RANGE 22 EAST

PASCO COUNTY, FLORIDA



N

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 # 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
MAR 12 2007
Southwest District

I HEREBY CERTIFY THAT THE INFORMATION CONTAINED ON THIS PUBLICATION WAS OBTAINED UNDER MY DIRECTION ON JANUARY 31, 2007 AND IS A TRUE REPRESENTATION OF THE GROUND ELEVATIONS EXISTING ON SAID DATE.

PREPARED BY: _____ DATE: 3-21-20

BOBBY W. SIMMONS
PROFESSIONAL LAND SURVEYOR
FLORIDA PLS CERT. NO. 6975
FLORIDA LB CERT. NO. 6382

NOT VALID UNLESS IMPRINTED WITH RAISED SEAL

GENERAL LEGEND

ID	- Deed or Description		
CM	- Concrete Monument		
POB	- Point of Beginning		
PCP	- Permanent Control Point		
PRM	- Permanent Reference Monument		
R/W	- Right of Way		
RRS	- Railroad Spike		
N&D	- Nail and Disk		
(C)	- Computed Data		
P.C.	- Point of Curvature		
P.T.	- Point of Tangency		
IP	- Iron Pipe	(F)	- Field Data
IR	- Plat	(R)	- Iron Rod
FD	- Found	(L)	- Center Line
S	- Set	(R)	- Radial
		(NR)	- Non Radial

REVISIONS

SIMMONS & BEALL, INC

SURVEYING & MAPPING

FLORIDA LB. NO. 6382

P.O. BOX 1297
1228 HWY. 301 S.
DADE CITY, FLORIDA 33526
(352) 567 - 0046
FAX (352) 567 - 0675

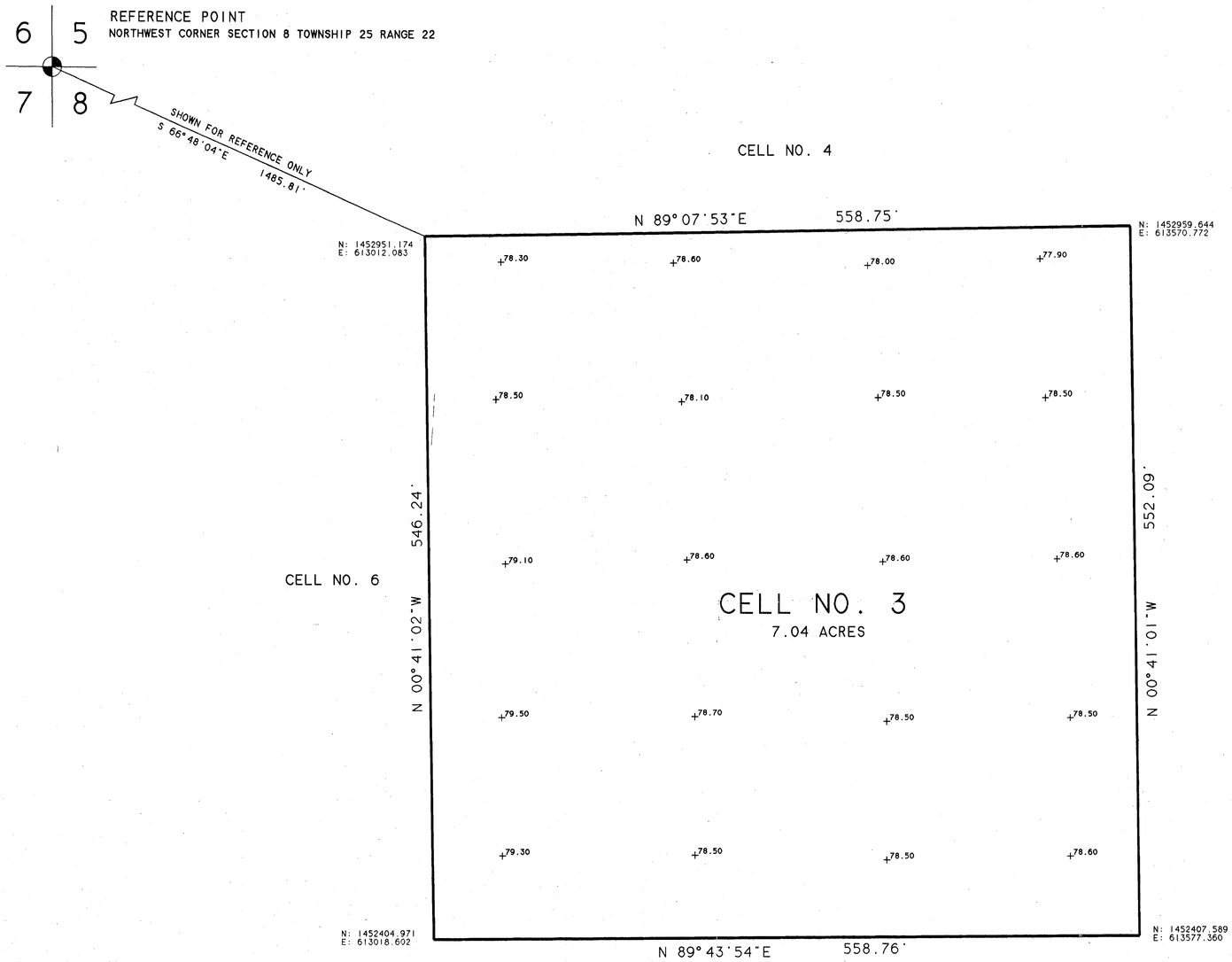
Date of Survey :	01-31-07	Drawn by :	CD
Date of Plat :	02-08-07	Checked by :	KH
Job Number :	06087-38	Sheet :	ONE OF ONE

CERTIFIED TO : ANGELO'S RECYCLED MATERIALS

ANGELO'S RECYCLED MATERIALS
ENTERPRISE ROAD FACILITIES

(2)

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



N

SCALE 1" = 50'

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 Environmen Protection
MAR 12 2007
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 DECEMBER 07, 2006 AND IS A TRUE REPRESENTATION OF THE GROUND ELEVATIONS AS THEY EXISTED DURING SAID TIME PERIOD.

02.12.07

PREPARED BY:

BOBBY W. SIMMONS
PROFESSIONAL LAND SURVEYOR
FLORIDA PLS CERT. NO. 4763
FLORIDA LB CERT. NO. 6382

NOT VALID UNLESS IMPRINTED WITH AN EMBOSSED SEAL

GENERAL LEGEND			
D&D	- Deed or Description		
C/M	- Concrete Monument		
POB	- Point of Beginning		
P.C.P.	- Permanent Control Point		
P.R.M.	- Permanent Reference Monument		
R/W	- Right of Way		
R.R.S.	- Railroad Spike		
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P.T.	- Point of Tangency		
I.P.	- Iron Pipe	(F)	- Field Data
(P)	- Plat	I.R.	- Iron Rod
F.D.	- Found	(L)	- Center Line
S.	- Set	(R)	- Radial
		(NR)	- Non Radial

REVISIONS

SIMMONS & BEALL, INC
SURVEYING & MAPPING
FLORIDA LB. NO. 6382

P.O. BOX 1297
6208 HWY. 301 S.
DADE CITY, FLORIDA 33526
(352) 567 - 0048
FAX (352) 567 - 0675

07-05-06
TO
12-07-06

Date of Survey: 12-07-06	Drawn by: CD
Date of Plat: 02-08-07	Checked by: KH
Job Number: 06087-3A	Sheet: ONE OF ONE

CERTIFIED TO: ANGELO'S RECYCLED MATERIALS

Attachment C

Construction Quality Assurance Report
Universal Engineering Sciences

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 #3
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

Mark K. Hardy P.E.
Tampa Branch Manager
Professional Engineer, No. 57233
Date: 5/23/07

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 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-5084

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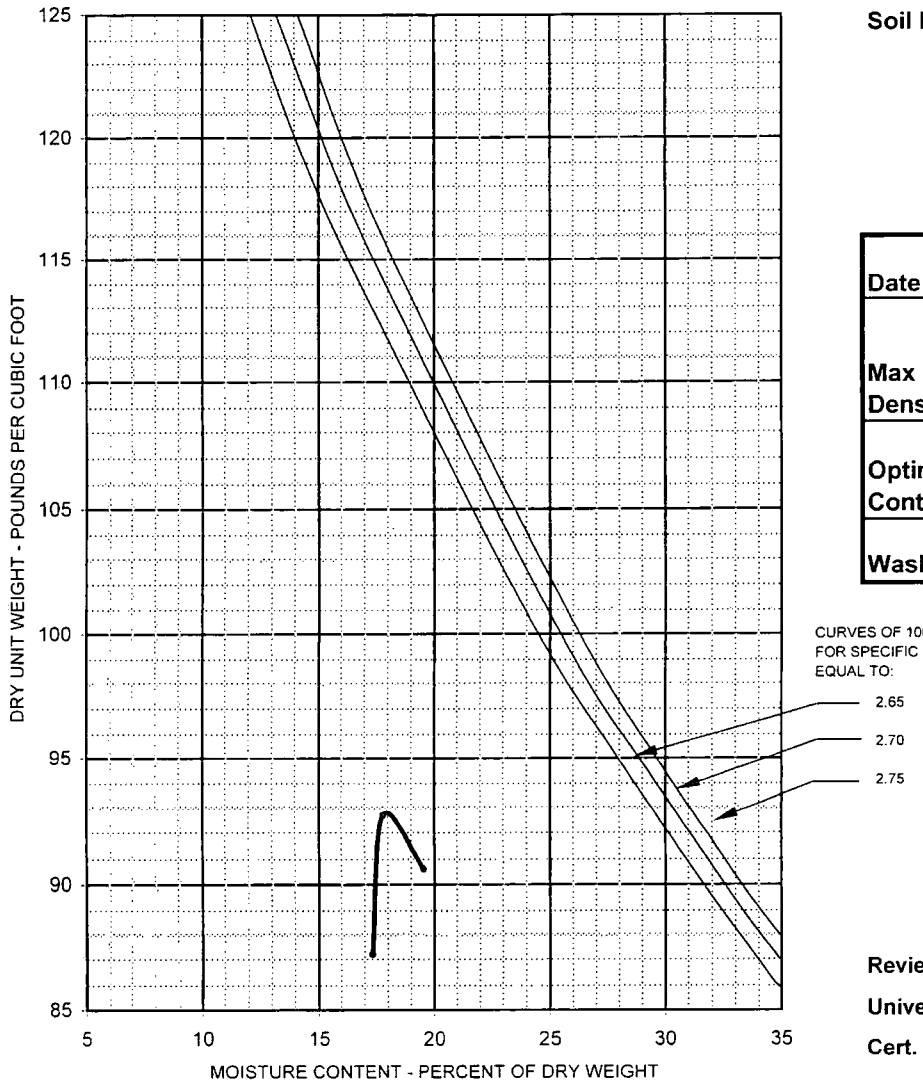
Consultants in: Geotechnical Engineering • Environmental Sciences
Construction Materials Testing • Threshold Inspection • Private Provider Inspection
9802 Palm River Road • Tampa, Fl 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Client : Angelo's Aggregate Materials
Project: Dade City Landfill
Sample Date: 09/19/05
Location: Cell 3

Project No.: 80540-001-02
Report No.: PR#1
Date: 7/25/2006
Lab # : 920
Test Method : D 698
Rammer Type: Mechanical
Soil Description: Clay



Date Tested :	7/24/2006
Max imum Dry Density(pcf)	93
Optimum Moisture Content (%)	18
Wash 200%	N/A

Reviewed By,
Universal Engineering Sciences, Inc.
Cert. of Authorization No. 0000549

Mark K. Hardy, P.E.
Tampa Branch Manager
Professional Engineer No. 57233
Date: 5/23/07

MARK K. HARDY LICENSE NO. 57233 STATE OF FLORIDA PROFESSIONAL ENGINEER

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAY 24 2007
SOUTHWEST DISTRICT
TAMPA

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 3 / Lift 1

Location	Density	Moisture	Perm.	200 Wash	Atterburg
A - 1	114%	19.1%	2.36 E-09	55.7%	
A - 2					
A - 3	123%	12.2%	1.60 E-09	40.7%	
A - 4	122%	11.8%	6.99 E-09	44.2%	
A - 5	123%	12.1%	1.17 E-09	47.1%	
A - 6			1.36 E-09	48.9%	
A - 7	123%	11.8%	4.95 E-09	49.4%	
A - 8					
B - 1	114%	19.6%			
B - 2	117%	14.1%	3.59 E-09	44%	
B - 3	118%	13.1%	4.53 E-09	45.5%	
B - 4	119%	12.6%	6.92 E-09	45.9%	
B - 5	120%	12.9%	5.73 E-09	44.8%	
B - 6	119%	13.3%			PI 44
B - 7	121%	13.9%	2.67 E-09		
B - 8	109%	20.4%	4.98 E-09	51.1%	
C - 1	107%	18.4%			
C - 2					
C - 3	109%	19.2%	2.27 E-09	50.4%	
C - 4	109%	12.6%			
C - 5	109%	12.1%			
C - 6	108%	20.2%	2.56 E-09	60%	
C - 7					
C - 8	110%	20.8%			

*** Permeability reported in cm/s**

Test Location Map
Cell 3 / Lift 1

	1	2	3	4	5	6	7	8
C	Density 10.13.06	10.13.06	Density Perm. 10.13.06	Density 8.28.06	Density 8.28.06	Density Perm. 9.13.06	9.13.06	Density 9.13.06
B	Density 10.2.06	Density Perm. 8.1.06	Density Perm. 8.1.06	Density Perm. 8.1.06	Density Perm. 8.1.06	Density Atterburg 8.1.06	Density Perm. 8.1.06	Density Perm. 8.3.06
A	Density Perm. 10.2.06	8.1.06	Density Perm. 8.1.06	Density Perm. 8.1.06	Density Perm. 8.1.06	Perm. 8.1.06	Density Perm. 8.1.06	8.1.06

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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 # 1
Date: May 25, 2007

IN-PLACE DENSITY REPORT

Client: Dominic Iafrate
Angelo's Aggregate Materials
1755 20th Ave. SE
Largo, FL 33771

Project: Dade City Landfill

Area Tested: Clay Liner

Reference Datum: Various Reference Data

Type of Test- **Field:** ASTM D-2397 Drive Sleeve Method **Date Tested:** Various
Laboratory: ASTM D698 - Standard Proctor

Remarks: The tests below met the minimum 100% relative soil compaction requirement of a Laboratory Proctor Maximum Dry Density.

TEST LOCATION			LAB RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
1	A 1	+1	93.0	18.0	106.5	19.1	114
2	A 3	+1	93.0	18.0	114.6	12.2	123
3	A 4	+1	93.0	18.0	113.8	11.8	122
4	A 5	+1	93.0	18.0	114.3	12.1	123
5	A 7	+1	93.0	18.0	114.7	11.8	123
6	B 1	+1	93.0	18.0	105.7	19.6	114
7	B 2	+1	93.0	18.0	109.2	14.1	117
8	B 3	+1	93.0	18.0	109.7	13.1	118
9	B 4	+1	93.0	18.0	111.0	12.6	119
10	B 5	+1	93.0	18.0	111.9	12.9	120
11	B 6	+1	93.0	18.0	111.1	13.3	119
12	B 7	+1	93.0	18.0	112.1	13.9	121
13	B 8	+1	93.0	18.0	101.6	20.4	109

Technician: M. Arroyo
Field CC: Jeff
cc:

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

Mark K. Hardy, P.E.
Tampa Branch Manager
Professional Engineer No. 57233
Date: 5/23/07

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 # 1
Date: May 25, 2007

IN-PLACE DENSITY REPORT

Client: Dominic Iafrate
Angelo's Aggregate Materials
1755 20th Ave. SE
Largo, FL 33771

Project: Dade City Landfill

Area Tested: Clay Liner

Reference Datum: Various Reference Data

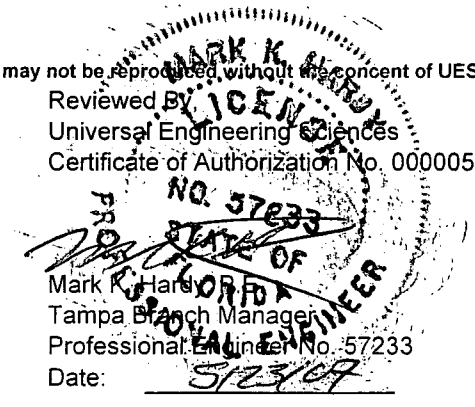
Type of Test- **Field:** ASTM D-2397 Drive Sleeve Method **Date Tested:** Various
Laboratory: ASTM D698 - Standard Proctor

Remarks: The tests below met the minimum 100% relative soil compaction requirement of a Laboratory Proctor Maximum Dry Density.

TEST LOCATION			LAB RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
14	C 1	+1	93.0	18.0	99.8	18.4	107
15	C 3	+1	93.0	18.0	101.1	19.2	109
16	C 4	+1	93.0	18.0	100.9	12.6	109
17	C 5	+1	93.0	18.0	102.4	11.9	110
18	C 6	+1	93.0	18.0	101.0	20.2	109
19	C 8	+1	93.0	18.0	109.9	20.8	118

Technician: M. Arroyo
Field CC: Jeff
cc:

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



Mark K. Hardy, P.E.
Tampa Branch Manager
Professional Engineer No. 57233
Date: 5/25/07

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

Moisture Content / Wash 200

Project: Dade City Landfill
Client: Angelo's
Requsted By: CH

Cell 3 / Lift 1
Tested By:CH
Project #: 80540-001-02

Sample #	A - 1	A - 3	A - 4	A - 5	A - 6	A - 7			
Tare #	B 102	G 11	K 6	C 11	G 2	C 12			
Tare Wt.	188.87	177.23	82.71	180.65	184.01	196.83			
Wt. Wet+Tare	271.62	230.6	159.6	257.13	252.29	290.31			
Wt.Dry+Tare	254.46	221.9	144.3	240.71	238.3	271.02			
Wt. Water	17.16	8.7	15.3	16.42	13.99	19.29			
Wt. Dry Soil	65.59	44.67	61.59	60.06	54.29	74.19			
% Moisture	26.2	19.5	24.8	27.3	25.8	26.0			

WASH 200

Wt. After Wash+Tare	217.94	203.7	117.1	212.42	211.77	234.37			
Wt. Passing #200	36.52	18.2	27.2	28.29	26.53	36.65			
% -200	55.7	40.7	44.2	47.1	48.9	49.4			

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Moisture Content / Wash 200

Project: Dade City Landfill

Client: Angelo's

Requsted By: CH

Cell 3 / Lift 1

Tested By:CH

Project #: 80540-001-02

Sample #	B - 2	B - 3	B - 4	B - 5	B - 8				
Tare #	G 6	C 8	GE 9	C 11	G 5				
Tare Wt.	193.32	181.54	82.64	195.2	189.21				
Wt. Wet+Tare	255.23	252.31	142	281.45	279.39				
Wt.Dry+Tare	244.35	238.64	131.6	266.31	261.3				
Wt. Water	10.88	13.67	10.4	15.14	18.09				
Wt. Dry Soil	51.03	57.1	48.96	71.11	72.09				
% Moisture	21.3	23.9	21.2	21.3	25.1				

WASH 200

Wt. After Wash+Tare	221.92	212.64	109.15	234.46	224.49				
Wt. Passing #200	22.43	26	22.45	31.85	36.81				
% -200	44.0	45.5	45.9	44.8	51.1				

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Moisture Content / Wash 200

Project: Dade City Landfill
Client: Angelo's
Requsted By: CH

Cell 3 / Lift 1
Tested By:CH
Project #: 80540-001-02

Sample #	C - 3	C - 6							
Tare #	F 5	A 14							
Tare Wt.	192.6	186.1							

Wt. Wet+Tare	246.9	246.8							
Wt.Dry+Tare	236.4	234.1							
Wt. Water	10.5	12.7							
Wt. Dry Soil	43.8	48							
% Moisture	24.0	26.5							

WASH 200

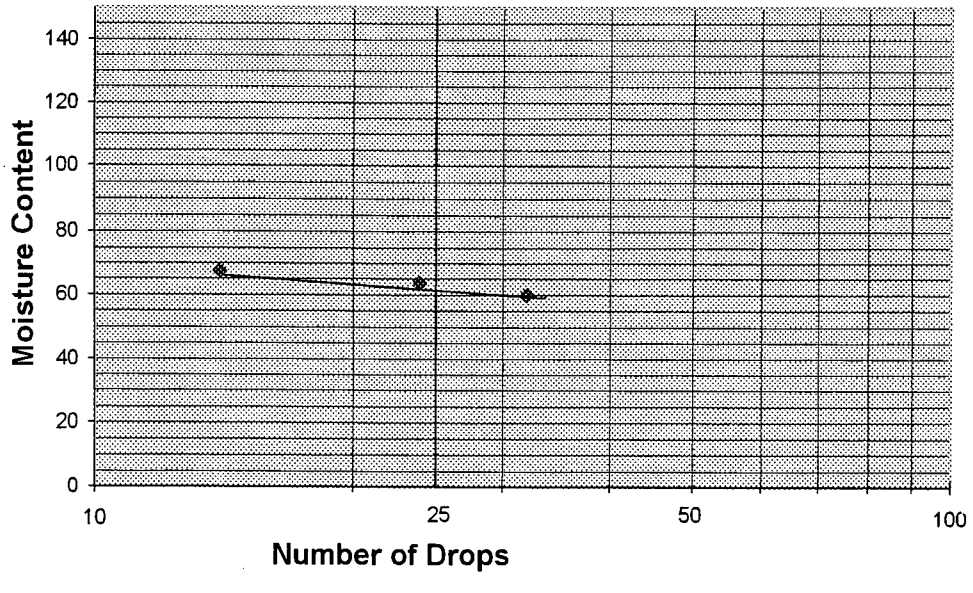
Wt. After Wash+Tare	214.5	205.3							
Wt. Passing #200	21.9	28.8							
% -200	50.0	60.0							

ATTERBURG LIMITS
LIQUID LIMIT / PLASTIC LIMIT / INDEX

Project Name: Dade City Landfill Date: 9/6/2006

Sample #: B-6 / Lift 1 Tested By: KS

	LIQUID LIMIT			PLASTIC LIMIT	
No. of Blows	32	24	14		
Container No.	G-20	G-13	G-24	G-7	G-38
Container + wet sample	29.14	30.38	30.89	30.02	27.59
Container + dry sample	25.98	26.61	26.81	28.46	26.54
Wt. of water lost	3.16	3.77	4.08	1.56	1.05
Container weight	20.70	20.67	20.75	20.60	20.89
Weight of dry soil	5.28	5.94	6.06	7.86	5.65
Percent Moisture	59.8	63.5	67.3	19.8	18.6



Liquid Limit	63
Plastic Limit	19
Plasticity Index	44

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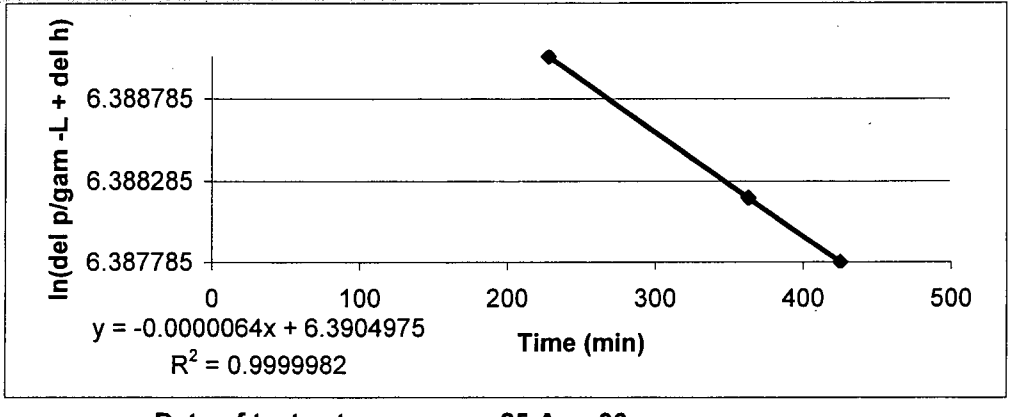
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- A-1/Cell 3
Depth of the Sample :- Lift 1

Time (min 10.33 am	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)
0	0.9	6.86	5.96	11.73226	596.2311	6.390628
60	0.98	6.78	5.8	11.4173	595.9162	6.3901
130	1.06	6.7	5.64	11.10234	595.6012	6.389571
228	1.12	6.6	5.48	10.78738	595.2863	6.389042
363	1.24	6.46	5.22	10.27557	594.7745	6.388182
425	1.3	6.4	5.1	10.03935	594.5382	6.387785



Date of test setup :-	**25-Aug-06**	
Sample length :-	**9.1**	**cm**
Sample cross sectional area :-	**41.061**	**cm^2**
Burette cross sectional area :-	**0.2**	**cm2**
Cell pressure :-	**25.19**	**psi**
Back pressure:-	**21.69**	**psi**
Burette 3 :-	**vent**	
Slope of the Best Fit Line :-	**0.0000064**	
K=	**1.41838E-07**	**cm/min**
K=	**2.36396E-09**	**cm/sec**
K=	**6.701E-06**	**ft/day**

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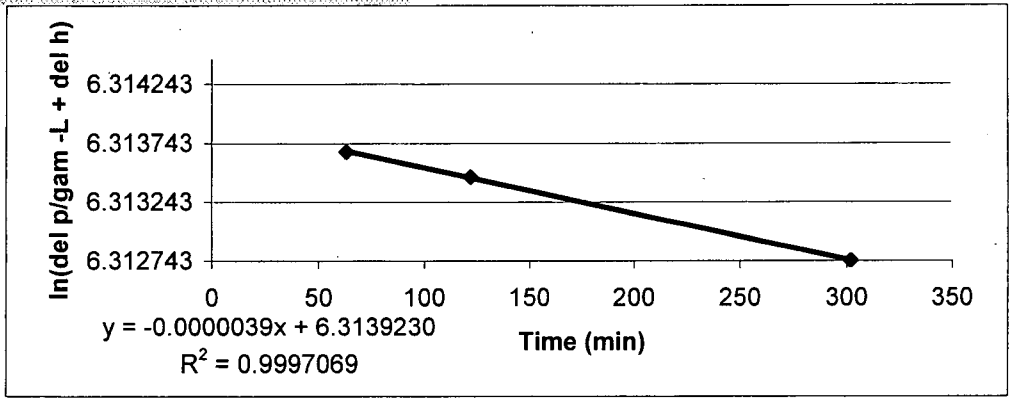
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- A-3/Cell 3
Depth of the Sample :- LIFT 1

Time (min 10.33 am	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)
0	1.08	8.6	7.52	14.80312	552.5006	6.314454
63	1.28	8.58	7.3	14.37005	552.0675	6.31367
122	1.34	8.58	7.24	14.25194	551.9494	6.313456
302	1.46	8.5	7.04	13.85824	551.5557	6.312743



Date of test setup :- 17-Aug-06
Sample length :- 10.16 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 25.22 psi
Back pressure:- 20 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000039
K= 9.65003E-08 cm/min
K= 1.60834E-09 cm/sec
K= 4.55907E-06 ft/day

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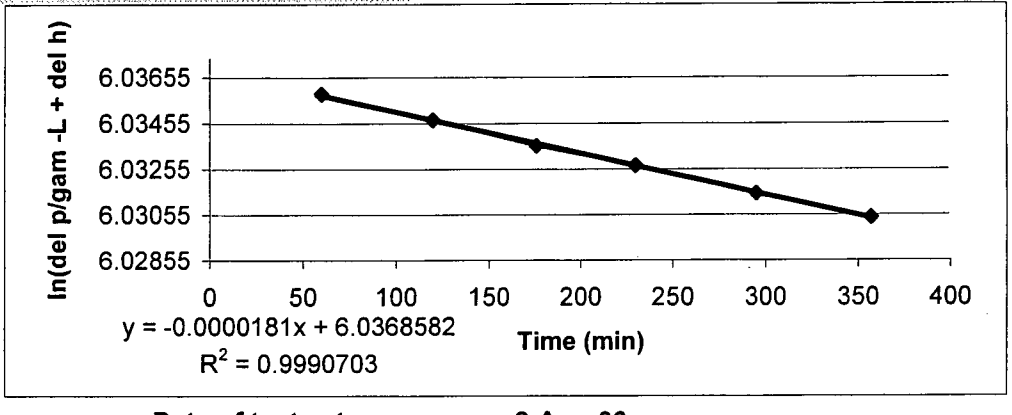
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- A-4/Cell 3
Depth of the Sample :- Lift 1

Time (min 10.33 am	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)
0	0.33	8.72	8.39	16.515715	418.7936	6.037378
60	0.64	8.7	8.06	15.86611	418.144	6.035826
120	0.84	8.66	7.82	15.39367	417.6716	6.034695
176	1.06	8.64	7.58	14.92123	417.1991	6.033564
230	1.2	8.6	7.4	14.5669	416.8448	6.032714
295	1.4	8.54	7.14	14.05509	416.333	6.031485
357	1.56	8.48	6.92	13.62202	415.8999	6.030445
475	1.86	8.38	6.52	12.83462	415.1125	6.02855



Date of test setup :- 8-Aug-06
Sample length :- 9.525 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 20.42 psi
Back pressure:- 15.11 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000181
K= 4.19869E-07 cm/min
K= 6.99782E-09 cm/sec
K= 1.98363E-05 ft/day

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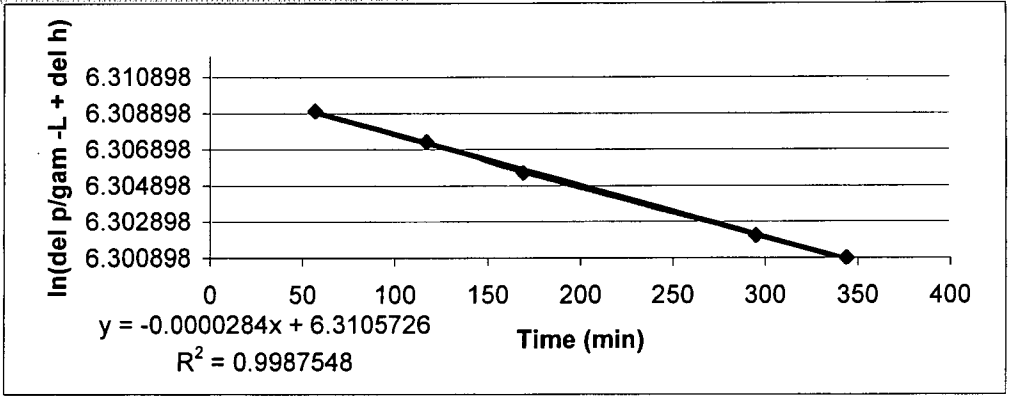
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- Lift 1/A-5/Cell 3
Depth of the Sample :- Lift 1

Time (min 10.33 am	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)
0	0.72	7.42	6.7	13.18895	551.1633	6.312031
57	1.2	7.06	5.86	11.53541	549.5098	6.309027
117	1.42	6.8	5.38	10.59053	548.5649	6.307306
169	1.6	6.5	4.9	9.64565	547.62	6.305582
295	2	5.94	3.94	7.75589	545.7303	6.302125
344	2.14	5.74	3.6	7.0866	545.061	6.300898



Date of test setup :- 8-Aug-06
Sample length :- 10.16 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 25.25 psi
Back pressure:- 20.01 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000284
K= 7.0272E-07 cm/min
K= 1.1712E-08 cm/sec
K= 3.31994E-05 ft/day

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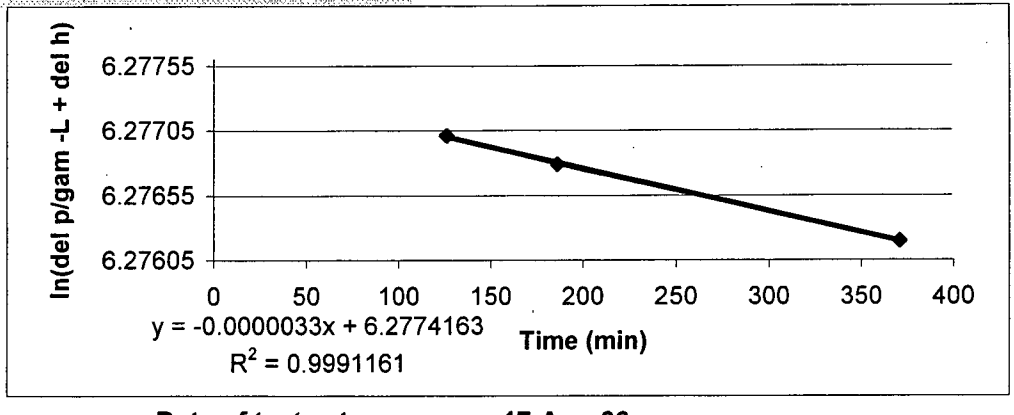
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- A-6/Cell 3
Depth of the Sample :- Lift 1

Time (min 10.33 am	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)
0	3.84	8.38	4.54	8.93699	532.5109	6.277603
126	4	8.38	4.38	8.62203	532.196	6.277012
186	4.06	8.38	4.32	8.50392	532.0779	6.27679
371	4.2	8.36	4.16	8.18896	531.7629	6.276198
436	4.22	8.34	4.12	8.11022	531.6842	6.27605



Date of test setup :- 17-Aug-06
Sample length :- 10.16 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 25.14 psi
Back pressure:- 19.49 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000033
K= 8.16541E-08 cm/min
K= 1.3609E-09 cm/sec
K= 3.85768E-06 ft/day

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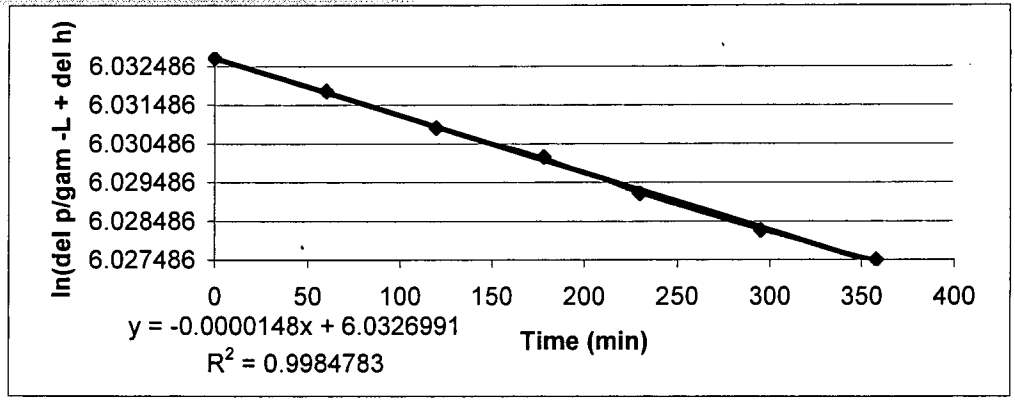
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- A-7/Cell 3
Depth of the Sample :- Lift 1

Time (min 10.33 am	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)
0	0.16	8.4	8.24	16.22044		416.8367	6.032695
60	0.32	8.38	8.06	15.86611		416.4824	6.031844
120	0.46	8.32	7.86	15.47241		416.0887	6.030898
178	0.58	8.28	7.7	15.15745		415.7738	6.030141
230	0.7	8.2	7.5	14.76375		415.3801	6.029194
295	0.82	8.12	7.3	14.37005		414.9864	6.028246
358	0.92	8.06	7.14	14.05509		414.6714	6.027486



Date of test setup :- 8-Aug-06
Sample length :- 8.255 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 20.42 psi
Back pressure:- 15.05 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000148
K= 2.97543E-07 cm/min
K= 4.95904E-09 cm/sec
K= 1.40571E-05 ft/day

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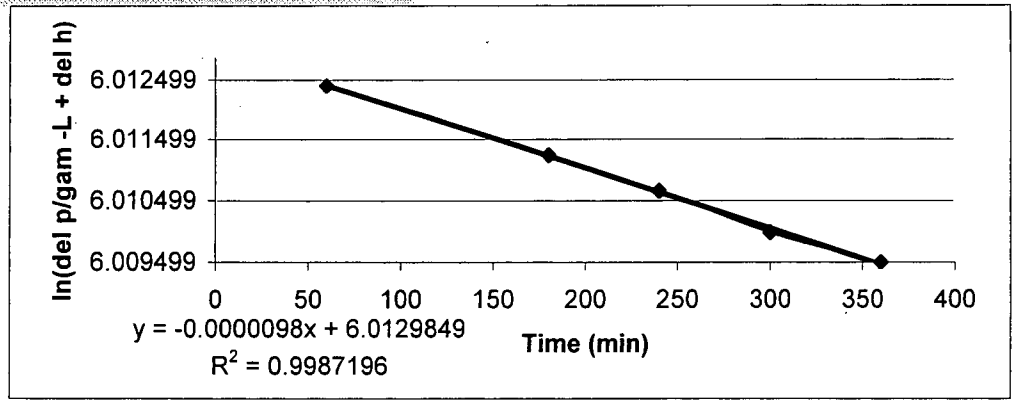
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-2/Cell 3
Depth of the Sample :- Lift 1

Time (min 10.33 am	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)
0	3.54	6.64	3.1	6.10235	408.6572	6.012877
60	3.62	6.62	3	5.9055	408.4603	6.012395
180	3.74	6.5	2.76	5.43306	407.9879	6.011237
240	3.8	6.44	2.64	5.19684	407.7517	6.010658
300	3.86	6.36	2.5	4.92125	407.4761	6.009982
360	3.9	6.3	2.4	4.7244	407.2792	6.009499



Date of test setup :- 8-Aug-06
Sample length :- 9.05 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 20.34 psi
Back pressure:- 15.12 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000098
K= 2.15996E-07 cm/min
K= 3.59993E-09 cm/sec
K= 1.02045E-05 ft/day

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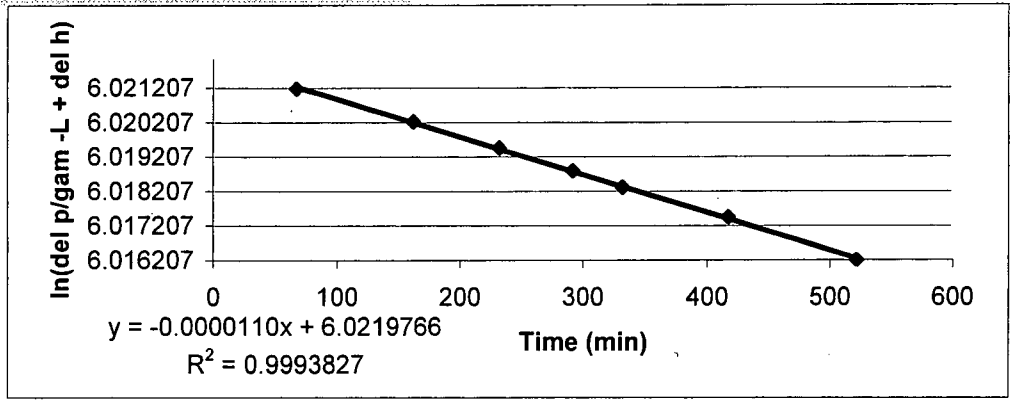
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-3/Cell 3
Depth of the Sample :- Lift 1

Time (min 10.33 am	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)
0	0.98	7.54	6.56	12.91336	412.4219	6.022047
67	1.1	7.48	6.38	12.55903	412.0676	6.021187
162	1.24	7.42	6.18	12.16533	411.6739	6.020232
232	1.34	7.36	6.02	11.85037	411.359	6.019466
292	1.42	7.3	5.88	11.57478	411.0834	6.018796
332	1.48	7.26	5.78	11.37793	410.8865	6.018317
417	1.58	7.18	5.6	11.0236	410.5322	6.017454
522	1.72	7.06	5.34	10.51179	410.0204	6.016207



Date of test setup :- 22-Aug-06
Sample length :- 10.16 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 20.77 psi
Back pressure:- 15.01 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.000011
K= 2.7218E-07 cm/min
K= 4.53634E-09 cm/sec
K= 1.28589E-05 ft/day

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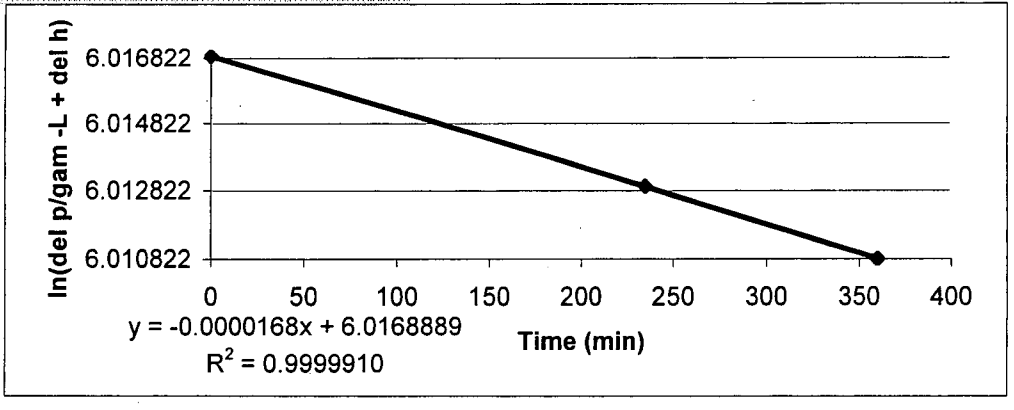
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-4/Cell 3
Depth of the Sample :- Lift 1

Time (min 10.33 am	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)
0	2.64	7.84	5.2	10.2362		410.2986	6.016885
235	3.36	7.74	4.38	8.62203		408.6845	6.012943
360	3.64	7.58	3.94	7.75589		407.8183	6.010822



Date of test setup :-	**8-Aug-06**	
Sample length :-	**10.16**	**cm**
Sample cross sectional area :-	**41.061**	**cm^2**
Burette cross sectional area :-	**0.2**	**cm2**
Cell pressure :-	**20.51**	**psi**
Back pressure:-	**15.03**	**psi**
Burette 3 :-	**vent**	
Slope of the Best Fit Line :-	**0.0000168**	
K=	**4.15694E-07**	**cm/min**
K=	**6.92823E-09**	**cm/sec**
K=	**1.96391E-05**	**ft/day**

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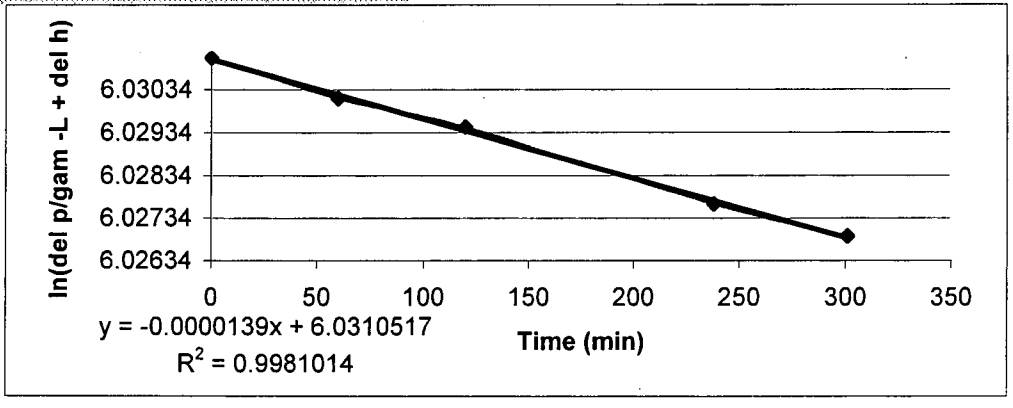
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-5/Cell 3
Depth of the Sample :- Lift 1

Time (min 10.33 am	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)
0	0.48	8.66	8.18	16.10233	416.1648	6.031081
60	0.68	8.66	7.98	15.70863	415.7711	6.030135
120	0.8	8.64	7.84	15.43304	415.4955	6.029472
238	1.1	8.56	7.46	14.68501	414.7475	6.02767
301	1.2	8.5	7.3	14.37005	414.4325	6.02691
364	1.28	8.46	7.18	14.13383	414.1963	6.02634



Date of test setup :- 8-Aug-06
Sample length :- 10.16 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 20.37 psi
Back pressure:- 15.03 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000139
K= 3.43937E-07 cm/min
K= 5.73228E-09 cm/sec
K= 1.6249E-05 ft/day

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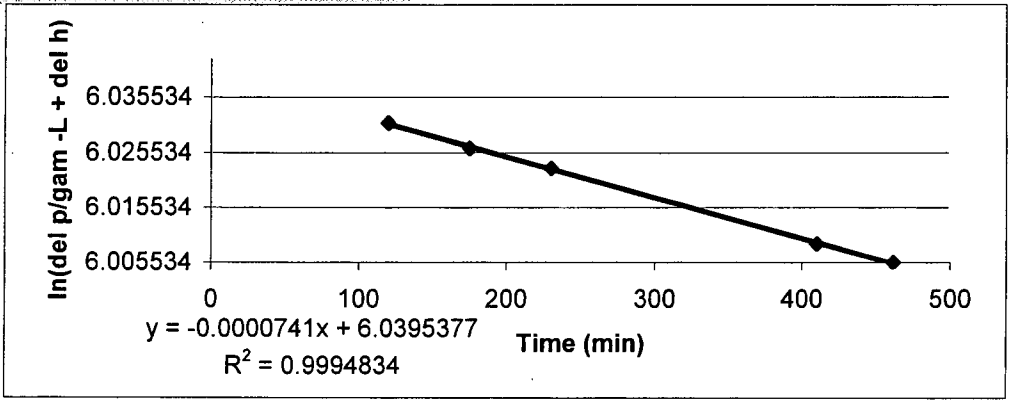
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-7/Cell 3
Depth of the Sample :- Lift 1

Time (min 10.33 am	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)
0	0.28	9.32	9.04	17.79524	420.9039	6.042405
60	1.04	8.84	7.8	15.3543	418.463	6.036588
120	1.66	8.24	6.58	12.95273	416.0614	6.030833
175	2.18	7.8	5.62	11.06297	414.1717	6.026281
230	2.6	7.46	4.86	9.56691	412.6756	6.022662
410	4.02	6.02	2	3.937	407.0457	6.008925
462	4.4	5.7	1.3	2.55905	405.6677	6.005534



Date of test setup :-	**8-Aug-06**	
Sample length :-	**8.89**	**cm**
Sample cross sectional area :-	**41.061**	**cm^2**
Burette cross sectional area :-	**0.2**	**cm2**
Cell pressure :-	**20.31**	**psi**
Back pressure:-	**15.14**	**psi**
Burette 3 :-	**vent**	
Slope of the Best Fit Line :-	**0.0000741**	
K=	**1.60432E-06**	**cm/min**
K=	**2.67386E-08**	**cm/sec**
K=	**7.57945E-05**	**ft/day**

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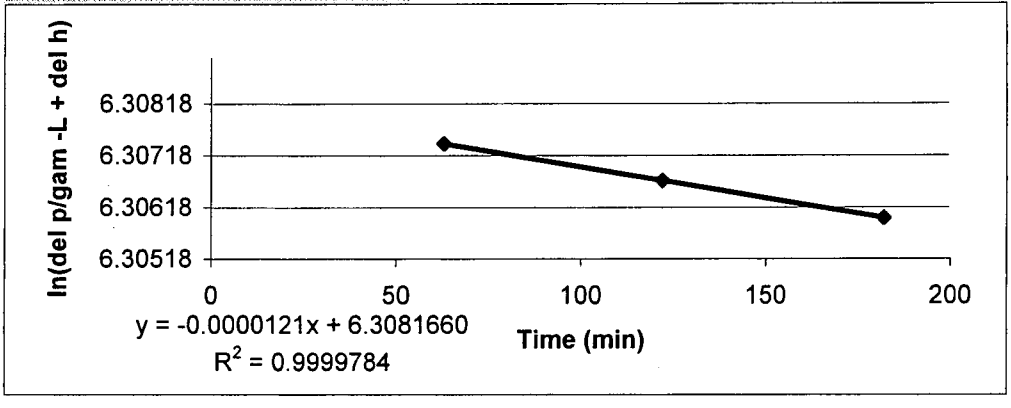
Project No :- 8540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-8/Cell 3
Depth of the Sample :- Lift 1

Time (min 10.33 am	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)
0	1.08	9.34	8.26	16.25981	549.5264	6.309057
63	1.32	9.12	7.8	15.3543	548.6208	6.307408
122	1.4	9	7.6	14.9606	548.2271	6.30669
182	1.46	8.86	7.4	14.5669	547.8334	6.305971
242	1.52	8.8	7.28	14.33068	547.5972	6.30554
302	1.56	8.74	7.18	14.13383	547.4004	6.30518



Date of test setup :- 8-Aug-06
Sample length :- 10.16 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 24.99 psi
Back pressure:- 19.84 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000121
K= 2.99398E-07 cm/min
K= 4.98997E-09 cm/sec
K= 1.41448E-05 ft/day

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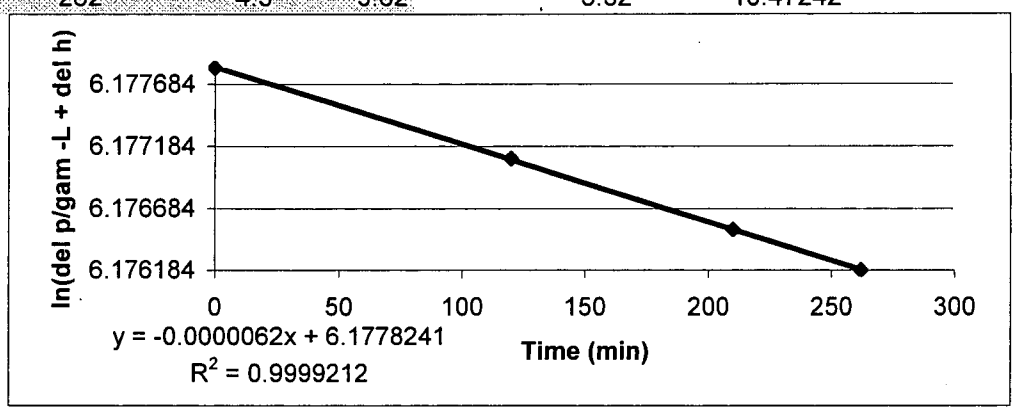
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- C-3/Cell 3
Depth of the Sample :- Lift1

Time (min 10.33 am	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)
0	4.04	9.76	5.72	11.25982	481.9398	6.177819
120	4.14	9.68	5.54	10.90549	481.5855	6.177084
210	4.24	9.64	5.4	10.6299	481.3099	6.176511
262	4.3	9.62	5.32	10.47242	481.1524	6.176184



Date of test setup :-	**19-Oct-06**	
Sample length :-	**9.03**	**cm**
Sample cross sectional area :-	**41.061**	**cm^2**
Burette cross sectional area :-	**0.2**	**cm2**
Cell pressure :-	**26.88**	**psi**
Back pressure:-	**17.58**	**psi**
Burette 3 :-	**vent**	
Slope of the Best Fit Line :-	**0.0000062**	
K=	**1.36365E-07**	**cm/min**
K=	**2.27275E-09**	**cm/sec**
K=	**6.44245E-06**	**ft/day**

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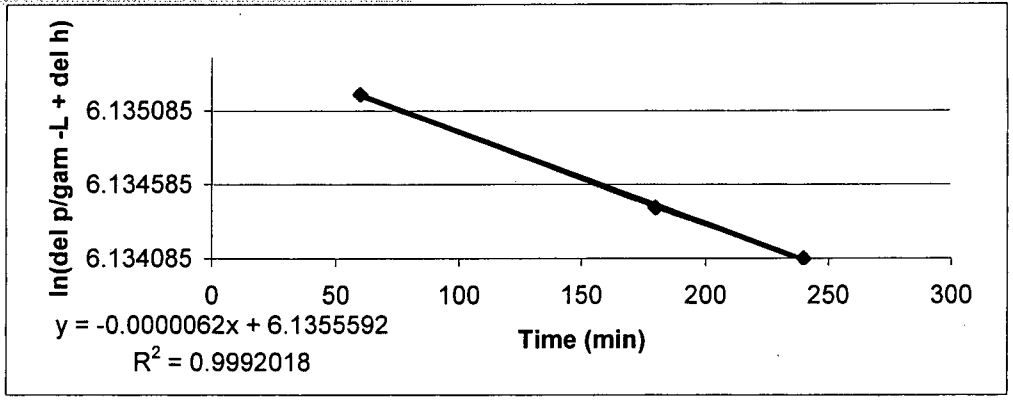
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- C-6/Cell 3
Depth of the Sample :- Lift 1

Time (min 10.33 am	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)
0	0.16	7.4	7.24	14.25194	461.9466	6.135449
60	0.2	7.38	7.18	14.13383	461.8285	6.135194
180	0.34	7.34	7	13.7795	461.4742	6.134426
240	0.4	7.32	6.92	13.62202	461.3167	6.134085



Date of test setup :-	**4-Oct-06**	
Sample length :-	**10.2**	**cm**
Sample cross sectional area :-	**41.061**	**cm^2**
Burette cross sectional area :-	**0.2**	**cm2**
Cell pressure :-	**22.12**	**psi**
Back pressure:-	**16.75**	**psi**
Burette 3 :-	**vent**	
Slope of the Best Fit Line :-	**0.0000062**	
K=	**1.54015E-07**	**cm/min**
K=	**2.56691E-09**	**cm/sec**
K=	**7.27629E-06**	**ft/day**

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Test Location Summary and Results
Cell 3 / Lift 2

Location	Density	Moisture	Perm.	200 Wash	Atterburg
A - 1	119%	10.6%			
A - 2	116%	20%	6.41 E-09		
A - 3			1.92 E-08		
A - 4	114%	20.3%			
A - 5	113%	13.3%			
A - 6	113%	20.6%	1.57 E-09		
A - 7	119%	13.5%			
A - 8	105%	23.2%			
B - 1	105%	23.2%	2.44 E-09	48.7%	
B - 2	124%	12.2%			
B - 3	129%	7.7%			
B - 4	126%	8.1%	8.69 E-09	43.6%	
B - 5	125%	7.9%	3.14 E-09	56.1	PI 56
B - 6	124%	7.2%	6.87 E-09	49.1	
B - 7	122%	12.4%	1.39 E-08	40.3%	
B - 8	107%	20.4%	1.73 E-09	44.6%	
C - 1					
C - 2	108%	20.4%			
C - 3					
C - 4	109%	12.4%	4.87 E-09	54.4%	
C - 5	107%	11.9%	4.88 E-09	50.2%	
C - 6	112%	20%			
C - 7					
C - 8	110%	20%	1.13 E-09	55.9%	

*** Permeability reported in cm/s**

Test Location Map
Cell 3 / Lift 2

	1	2	3	4	5	6	7	8
C	10.13.06	Density 10.13.06	10.13.06	Density Perm. 8.28.06	Density Perm. 8.28.06	Density 9.13.06	9.13.06	Density Perm. 9.13.06
B	Density Perm. 10.2.06	Density 8.2.06	Density 8.2.06	Density Perm. 8.2.06	Density Perm. Atterburg 8.2.06	Density 8.2.06	Density Perm. 8.2.06	Density Perm. 10.4.06
A	Density 10.2.06	Density 8.3.06	Perm. 8.3.06	Density 8.3.06	Density 8.10.06	Density Perm. 8.3.06	Density 8.10.06	Density 8.10.06

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Project No.: 80540-001-02
Report No.: DR # 1
Date: May 25, 2007

IN-PLACE DENSITY REPORT

Client: Dominic Iafrate
Angelo's Aggregate Materials
1755 20th Ave. SE
Largo, FL 33771

Project: Dade City Landfill

Area Tested: Clay Liner

Reference Datum: Top of Native

Type of Test- **Field:** ASTM D-2397 Drive Sleeve Method **Date Tested:** Various
Laboratory: ASTM D698 - Standard Proctor

Remarks: The tests below met the minimum 100% relative soil compaction requirement of a Laboratory Proctor Maximum Dry Density.

TEST LOCATION			LAB RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
20	A 1	+2	93.0	18.0	111.4	10.6	120
21	A 2	+2	93.0	18.0	108.0	20.0	116
22	A 4	+2	93.0	18.0	106.6	20.3	115
23	A 5	+2	93.0	18.0	105.5	13.3	113
24	A 6	+2	93.0	18.0	105.5	20.6	113
25	A 7	+2	93.0	18.0	110.5	13.5	119
26	A 8	+2	93.0	18.0	97.4	23.2	105
27	B 1	+2	93.0	18.0	97.8	23.2	105
28	B 2	+2	93.0	18.0	115.5	12.2	124
29	B 3	+2	93.0	18.0	119.9	7.7	129
30	B 4	+2	93.0	18.0	116.9	8.1	126
31	B 5	+2	93.0	18.0	115.8	7.9	125
32	B 6	+2	93.0	18.0	116.8	7.2	124

Technician: M. Arroyo
Field CC: Jeff
cc:

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

MARK K. HARDY
LICENSE NO. 57233
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Mark K. Hardy, P.E.
Tampa Branch Manager
Professional Engineer No. 57233
Date: 5/23/07

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Project No.: 80540-001-02
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IN-PLACE DENSITY REPORT

Client: Dominic Iafrate
Angelo's Aggregate Materials
1755 20th Ave. SE
Largo, FL 33771

Project: Dade City Landfill

Area Tested: Clay Liner

Reference Datum: Top of Native

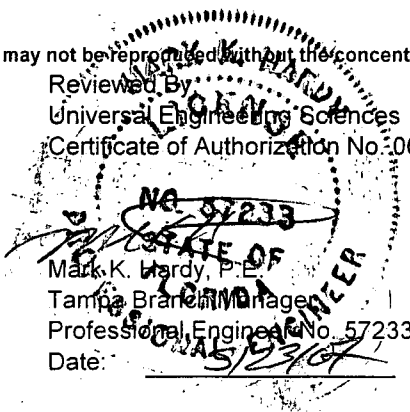
Type of Test- **Field:** ASTM D-2397 Drive Sleeve Method **Date Tested:** Various
Laboratory: ASTM D698 - Standard Proctor

Remarks: The tests below met the minimum 100% relative soil compaction requirement of a Laboratory Proctor Maximum Dry Density.

TEST LOCATION			LAB RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
33	B 7	+2	93.0	18.0	113.2	12.4	122
34	B 8	+2	93.0	18.0	101.2	20.4	109
35	C 2	+2	93.0	18.0	100.4	20.4	108
36	C 4	+2	93.0	18.0	101.3	12.6	109
37	C 5	+2	93.0	18.0	100.6	12.1	108
38	C 6	+2	93.0	18.0	104.3	19.9	112
39	C 8	+2	93.0	18.0	102.3	20.0	110

Technician: M. Arroyo
Field CC: Jeff
cc:

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



Mark K. Hardy, P.E.
Tampa Branch Manager
Professional Engineer No. 57233
Date: 5/23/07

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Moisture Content / Wash 200

Project: Dade City Landfill
Client: Angelo's
Requsted By: CH

Cell 3 / Lift 2
Tested By:CH
Project #: 80540-001-02

Sample #	B - 1	B - 4	B - 5	B - 6	B - 7	B - 8			
Tare #	L 10	C 2	C 9	L 8	L 10	D 15			
Tare Wt.	197.74	199.39	193.33	190.79	197.77	184			
Wt. Wet+Tare	282.29	271.06	248.24	250.55	253.99	258.1			
Wt.Dry+Tare	265.57	258.52	238.97	236.68	247.49	242.3			
Wt. Water	16.72	12.54	9.27	13.87	6.5	15.8			
Wt. Dry Soil	67.83	59.13	45.64	45.89	49.72	58.3			
% Moisture	24.6	21.2	20.3	30.2	13.1	27.1			

WASH 200

Wt. After Wash+Tare	232.54	232.75	213.37	214.16	227.46	216.3			
Wt. Passing #200	33.03	25.77	25.6	22.52	20.03	26			
% -200	48.7	43.6	56.1	49.1	40.3	44.6			

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Moisture Content / Wash 200

Project: Dade City Landfill
Client: Angelo's
Requsted By: CH

Cell 3 / Lift 2
Tested By:CH
Project #: 80540-001-02

Sample #	C - 4	C - 5	C - 8						
Tare #	L 14	M 6	H 8						
Tare Wt.	198.21	192.01	190.48						
Wt. Wet+Tare	246.49	261.6	293.91						
Wt.Dry+Tare	237.28	252.3	272.51						
Wt. Water	9.21	9.3	21.4						
Wt. Dry Soil	39.07	60.29	82.03						
% Moisture	23.6	15.4	26.1						

WASH 200

Wt. After Wash+Tare	216.03	222.03	226.67						
Wt. Passing #200	21.25	30.27	45.84						
% -200	54.4	50.2	55.9						

ATTERBURG LIMITS
LIQUID LIMIT / PLASTIC LIMIT / INDEX

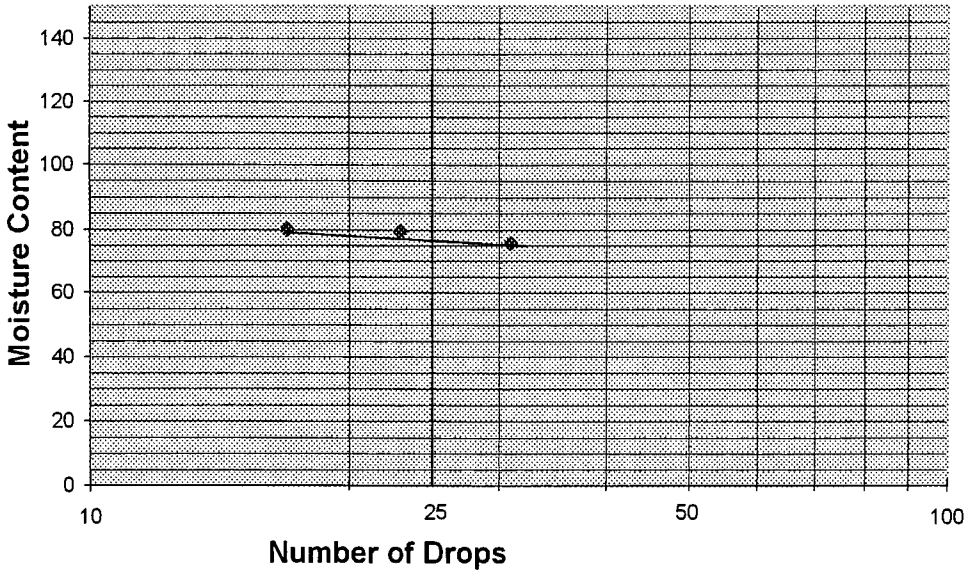
Project Name: Dade City Landfill

Date: 9/6/2006

Sample #: B-5 / LIFT 2

Tested By: KS

	LIQUID LIMIT			PLASTIC LIMIT	
No. of Blows	31	23	17		
Container No.	G-14	G-8	G-27	G-19	G-35
Container + wet sample	29.88	29.68	29.15	25.88	26.54
Container + dry sample	25.96	25.84	25.39	24.97	25.52
Wt. of water lost	3.92	3.84	3.76	0.91	1.02
Container weight	20.78	21.00	20.68	20.77	20.82
Weight of dry soil	5.18	4.84	4.71	4.20	4.70
Percent Moisture	75.7	79.3	79.8	21.7	21.7



Liquid Limit	78
Plastic Limit	22
Plasticity Index	56

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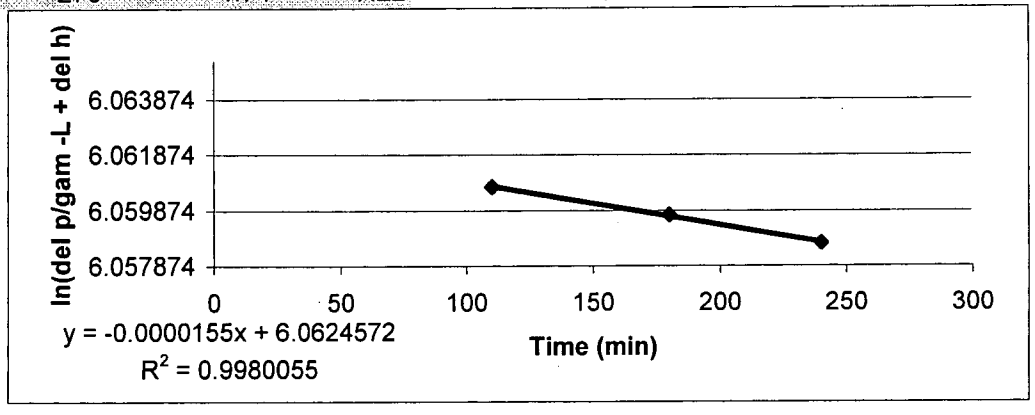
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- A-2/Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)
0	1.28	8.38	7.1	13.97635	430.6547	6.065307
110	1.5	7.6	6.1	12.00785	428.6862	6.060725
180	1.6	7.48	5.88	11.57478	428.2531	6.059714
240	1.7	7.36	5.66	11.14171	427.82	6.058703
270	1.74	7.22	5.48	10.78738	427.4657	6.057874



Date of test setup :- 9-Oct-06
Sample length :- 10.2 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 20.5 psi
Back pressure:- 15.63 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000155
K= 3.85037E-07 cm/min
K= 6.41728E-09 cm/sec
K= 1.81907E-05 ft/day

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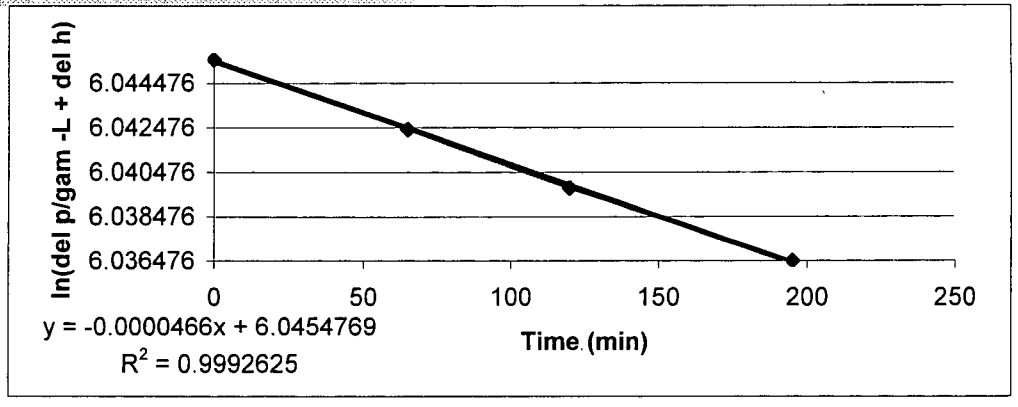
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- A-3 / Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)
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^2**
Burette cross sectional area :-	**0.2**	**cm2**
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**

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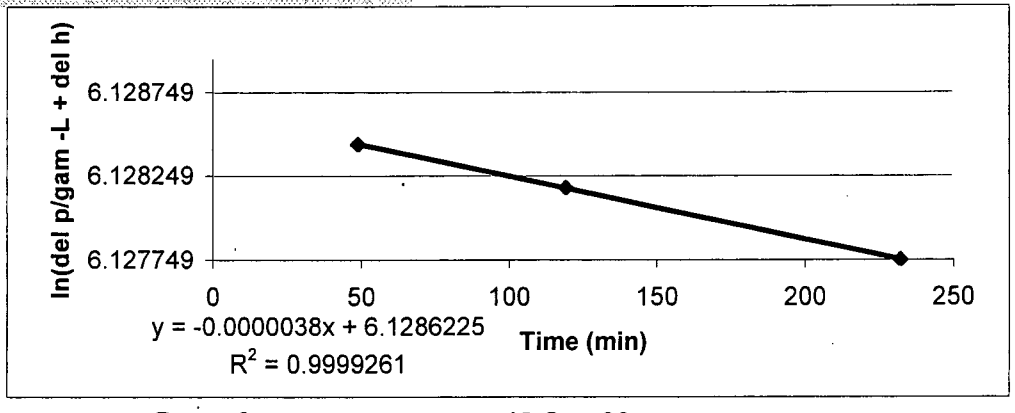
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- A-6 / Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)
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^2
Burette cross sectional area :- 0.2 cm2
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

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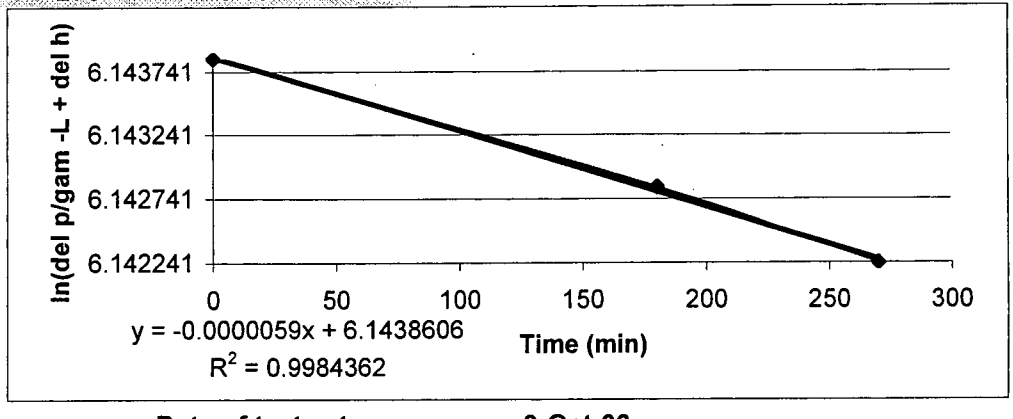
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-1/Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)		
0	0.38	9.74	9.36	18.42516	465.8429	6.143848	
180	0.58	9.7	9.12	17.95272	465.3705	6.142834	
270	0.68	9.66	8.98	17.67713	465.0949	6.142241	



Date of test setup :-	**9-Oct-06**	
Sample length :-	**10.2**	**cm**
Sample cross sectional area :-	**41.061**	**cm^2**
Burette cross sectional area :-	**0.2**	**cm2**
Cell pressure :-	**21.73**	**psi**
Back pressure:-	**16.74**	**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**

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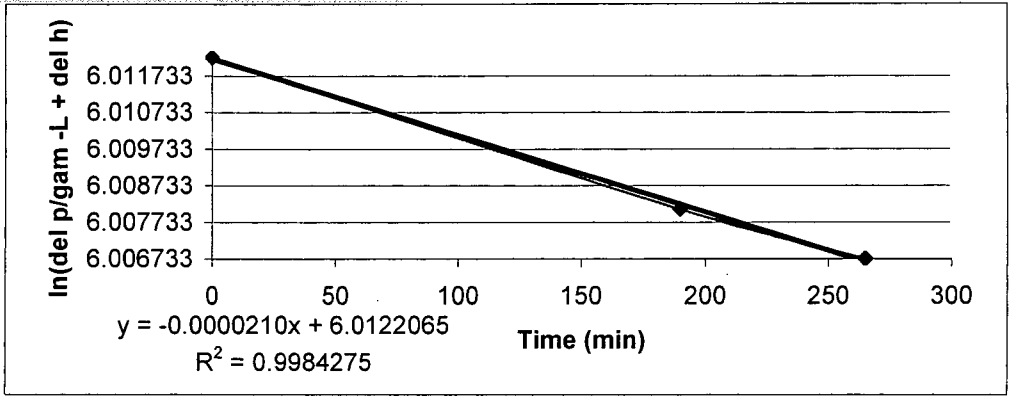
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-4/Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)
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^2
Burette cross sectional area :- 0.2 cm2
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

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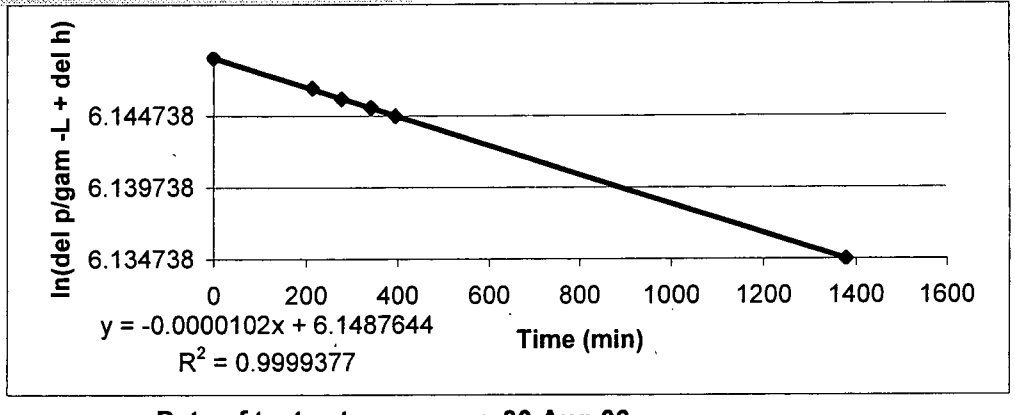
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-5/Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)
0	2.2	7.8	5.6	11.0236	468.134	6.148754
214	2.58	7.68	5.1	10.03935	467.1497	6.14665
278	2.68	7.6	4.92	9.68502	466.7954	6.145891
342	2.76	7.54	4.78	9.40943	466.5198	6.1453
395	2.84	7.48	4.64	9.13384	466.2442	6.14471
1378	4.31	6.6	2.29	4.507865	461.6182	6.134738



Date of test setup :- 30-Aug-06
Sample length :- 7.6 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 20.57 psi
Back pressure:- 17.09 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000102
K= 1.88792E-07 cm/min
K= 3.14654E-09 cm/sec
K= 8.91932E-06 ft/day

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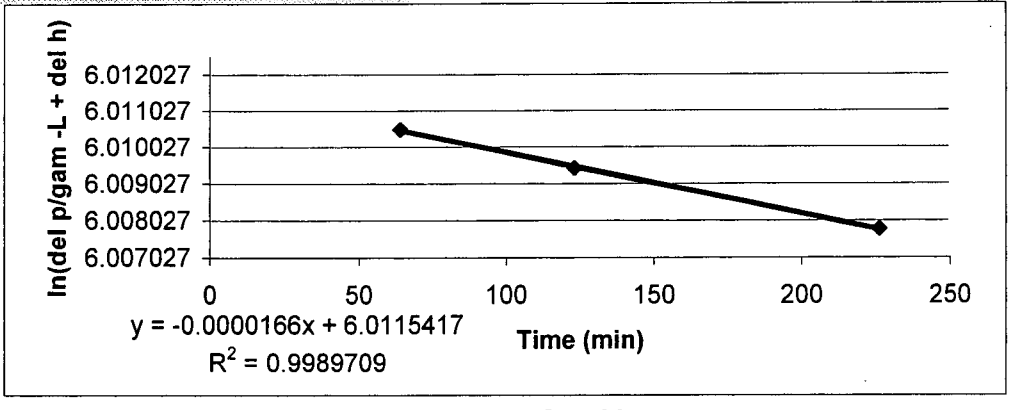
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-6/Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)
0	3.12	8.4	5.28	10.39368	408.5176	6.012535
64	3.16	8.02	4.86	9.56691	407.6908	6.010509
123	3.2	7.84	4.64	9.13384	407.2578	6.009446
226	3.26	7.56	4.3	8.46455	406.5885	6.007802
284	3.3	7.44	4.14	8.14959	406.2735	6.007027



Date of test setup :-	**1-Sep-06**	
Sample length :-	**10.2**	**cm**
Sample cross sectional area :-	**41.061**	**cm^2**
Burette cross sectional area :-	**0.2**	**cm2**
Cell pressure :-	**20.07**	**psi**
Back pressure:-	**14.96**	**psi**
Burette 3 :-	**vent**	
Slope of the Best Fit Line :-	**0.0000166**	
K=	**4.12362E-07**	**cm/min**
K=	**6.8727E-09**	**cm/sec**
K=	**1.94817E-05**	**ft/day**

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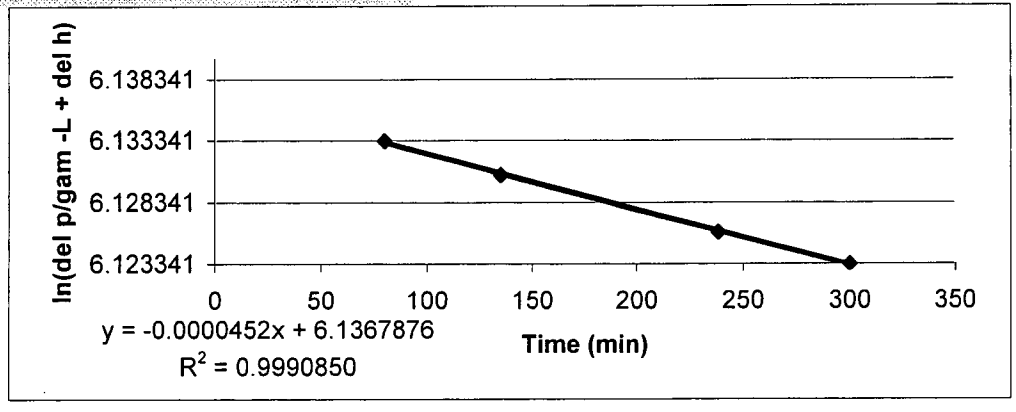
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-7/Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)
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^2
Burette cross sectional area :- 0.2 cm2
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

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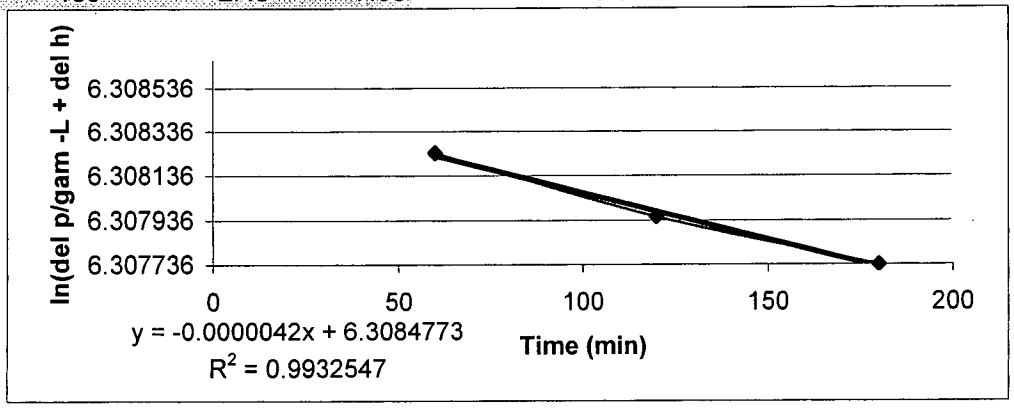
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-8/Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)
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-Oct-06
Sample length :- 10.2 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
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

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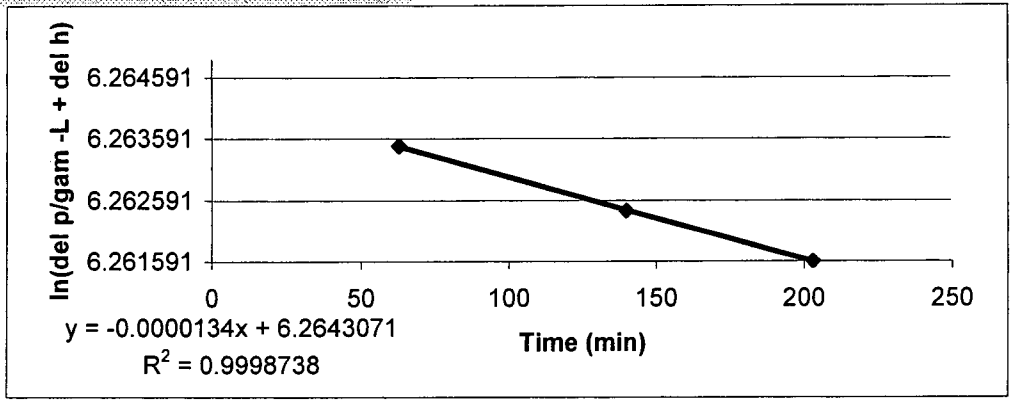
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- C-4/Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)
0	2.38	7.02	4.64	9.13384	525.7845	6.264891
63	2.54	6.8	4.26	8.38581	525.0365	6.263468
140	2.66	6.64	3.98	7.83463	524.4853	6.262417
203	2.76	6.52	3.76	7.40156	524.0522	6.261591



Date of test setup :-	**13-Sep-06**	
Sample length :-	**8.96**	**cm**
Sample cross sectional area :-	**41.061**	**cm^2**
Burette cross sectional area :-	**0.2**	**cm2**
Cell pressure :-	**25.26**	**psi**
Back pressure:-	**19.24**	**psi**
Burette 3 :-	**vent**	
Slope of the Best Fit Line :-	**0.0000134**	
K=	**2.92404E-07**	**cm/min**
K=	**4.8734E-09**	**cm/sec**
K=	**1.38144E-05**	**ft/day**

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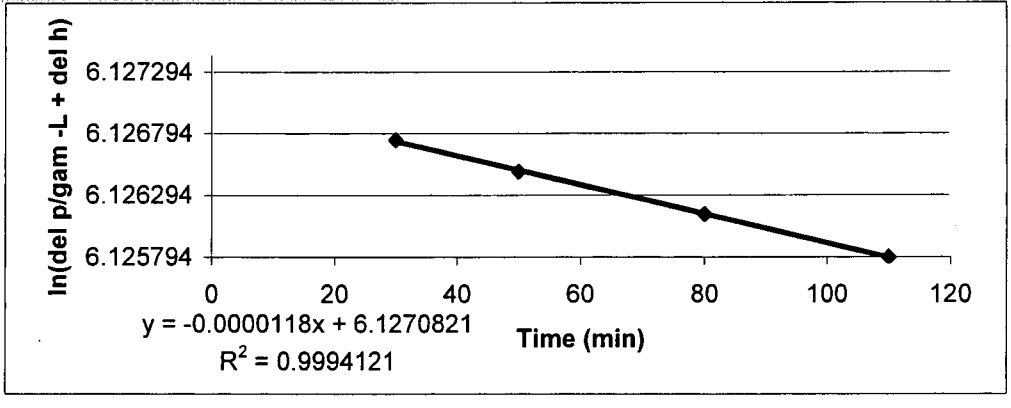
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- C-5/Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)
0	0.44	8.9	8.46	16.65351	458.2557	6.127427
30	0.52	8.82	8.3	16.33855	457.9407	6.12674
50	0.54	8.78	8.24	16.22044	457.8226	6.126482
80	0.58	8.74	8.16	16.06296	457.6651	6.126138
110	0.62	8.7	8.08	15.90548	457.5077	6.125794



Date of test setup :- 5-Oct-06
Sample length :- 10.2 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 22.22 psi
Back pressure:- 16.53 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000118
K= 2.93125E-07 cm/min
K= 4.88541E-09 cm/sec
K= 1.38484E-05 ft/day

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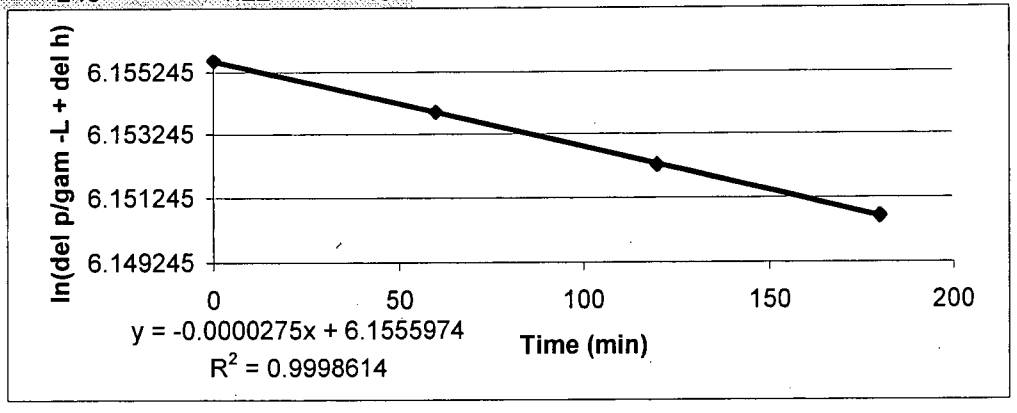
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- C-8/Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)
0	0.72	8.66	7.94	15.62989	471.3556	6.155613
60	0.86	8.4	7.54	14.84249	470.5682	6.153941
120	1	8.14	7.14	14.05509	469.7808	6.152266
180	1.12	7.88	6.76	13.30706	469.0328	6.150673
240	1.22	7.64	6.42	12.63777	468.3635	6.149245



Date of test setup :- 4-Oct-06
Sample length :- 10.2 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 21.56 psi
Back pressure:- 17.04 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000275
K= 6.8313E-07 cm/min
K= 1.13855E-08 cm/sec
K= 3.22739E-05 ft/day

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Test Location Summary and Results
Cell 3 / Lift 3

Location	Density	Moisture	Perm.	200 Wash	Atterburg
A - 1	112%	19%			
A - 2	102%	20.2%	6.41 E-09	56.1%	
A - 3	101%	20%			
A - 4	100%	19.2%			
A - 5	112%	19.5%	4.51 E-08	50.9%	
A - 6	106%	19.9%			
A - 7	112%	19%			
A - 8	106%	19.6%			
B - 1	112%	19.8%			
B - 2	103%	19.9%			
B - 3	105%	19.6%	2.27 E-09	49.1%	
B - 4	100%	19.4%			
B - 5	109%	19.8%			
B - 6	109%	19.2%	7.49 E-09	42.5%	
B - 7	112%	19%			
B - 8	109%	19.1%			
C - 1	110%	19.8%	2.85 E-09	34.3%	
C - 2	106%	19.5%			
C - 3					
C - 4	100%	19.9%	2.41 E-09	52.3%	
C - 5					
C - 6	102%	19.4%			
C - 7	109%	20%	2.02 E-08	37.3%	
C - 8	104%	19.6%			

*** Permeability reported in cm/s**

Test Location Map
Cell 3 / Lift 3

	1	2	3	4	5	6	7	8
C	Density Perm. 10.14.06	Density 10.14.06	10.14.06	Density Perm. 10.14.06	10.14.06	Density 10.14.06	Density Perm 10.14.06	Density 10.14.06
B	Density 10.2.06	Density 10.3.06	Density Perm. 10.3.06	Density 10.3.06	Density 10.4.06	Density Perm. 10.4.06	Density 10.4.06	Density 10.4.06
A	Density 10.2.06	Density Perm. 10.3.06	Density 10.3.06	Density 10.3.06	Density Perm. 10.4.06	Density 10.4.06	Density 10.4.06	Density Perm. 10.4.06

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Project No.: 80540-001-02
Report No.: DR # 1
Date: May 25, 2007

IN-PLACE DENSITY REPORT

Client: Dominic Iafrate
Angelo's Aggregate Materials
1755 20th Ave. SE
Largo, FL 33771

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAY 24 2007
SOUTHWEST DISTRICT TAMPA

Project: Dade City Landfill

Area Tested: Clay Liner

Reference Datum: Various Reference Data

Type of Test- **Field:** ASTM D-2397 Drive Sleeve Method **Date Tested:** Various
Laboratory: ASTM D698 - Standard Proctor

Remarks: The tests below met the minimum 100% relative soil compaction requirement of a Laboratory Proctor Maximum Dry Density.

TEST LOCATION			LAB RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
40	A 1	+3	93.0	18.0	102.0	19.0	110
41	A 2	+3	93.0	18.0	94.9	20.2	102
42	A 3	+3	93.0	18.0	93.6	20.0	101
43	A 4	+3	93.0	18.0	92.7	19.2	100
44	A 5	+3	93.0	18.0	104.2	19.5	112
45	A 6	+3	93.0	18.0	98.9	19.9	106
46	A 7	+3	93.0	18.0	104.3	19.0	112
47	A 8	+3	93.0	18.0	98.8	19.6	106
48	B 1	+3	93.0	18.0	104.3	19.0	112
49	B 2	+3	93.0	18.0	95.9	19.9	103
50	B 3	+3	93.0	18.0	98.1	19.6	105
51	B 4	+3	93.0	18.0	93.3	19.4	100
52	B 5	+3	93.0	18.0	101.7	19.8	109

Technician: M. Arroyo
Field CC: Jeff
cc:

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

MARK K. HARDY LICENSE NO. 57233 STATE OF FLORIDA PROFESSIONAL ENGINEER

Mark K. Hardy, P.E.
Tampa Branch Manager
Professional Engineer No. 57233
Date: 5/23/07

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Project No.: 80540-001-02
Report No.: DR # 1
Date: May 25, 2007

IN-PLACE DENSITY REPORT

Client: Dominic Iafrate
Angelo's Aggregate Materials
1755 20th Ave. SE
Largo, FL 33771

Project: Dade City Landfill

Area Tested: Clay Liner

Reference Datum: Top of Native

Type of Test- **Field:** ASTM D-2397 Drive Sleeve Method **Date Tested:** Various
Laboratory: ASTM D698 - Standard Proctor

Remarks: The tests below met the minimum 100% relative soil compaction requirement of a Laboratory Proctor Maximum Dry Density.

TEST LOCATION			LAB RESULTS		FIELD TEST RESULTS		
Test No.	Description of Test Location	Depth (ft.)	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
53	B 6	+3	93.0	18.0	101.1	19.2	109
54	B 7	+3	93.0	18.0	104.4	20.2	112
55	B 8	+3	93.0	18.0	101.9	19.1	110
56	C 1	+3	93.0	18.0	102.1	19.8	110
57	C 2	+3	93.0	18.0	98.9	19.5	106
58	C 4	+3	93.0	18.0	93.3	19.4	100
59	C 6	+3	93.0	18.0	95.2	19.4	102
60	C 7	+3	93.0	18.0	101.9	20.0	110
61	C 8	+3	93.0	18.0	96.9	19.6	104

Technician: M. Arroyo
Field CC: Jeff
cc:

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

Mark K. Hardy, P.E.
Tampa Branch Manager
Professional Engineer No. 57233
Date: 5/25/07

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Moisture Content / Wash 200

Project: Dade City Landfill
Client: Angelo's
Requsted By: CH

Cell 3 / Lift 3
Tested By:CH
Project #: 80540-001-02

Sample #	A - 2	A - 5							
Tare #	LL 11	H 8							
Tare Wt.	183.53	190.48							
Wt. Wet+Tare	288.1	274.1							
Wt.Dry+Tare	264.13	256.7							
Wt. Water	23.97	17.4							
Wt. Dry Soil	80.6	66.22							
% Moisture	29.7	26.3							

WASH 200

Wt. After Wash+Tare	218.91	223.02							
Wt. Passing #200	45.22	33.68							
% -200	56.1	50.9							

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Moisture Content / Wash 200

Project: Dade City Landfill
Client: Angelo's
Requsted By: CH

Cell 3 / Lift 3
Tested By:CH
Project #: 80540-001-02

Sample #	B - 3	B - 6							
Tare #	G 9	L 3							
Tare Wt.	181.6	192.84							
Wt. Wet+Tare	249.7	307.88							
Wt.Dry+Tare	234.6	285.02							
Wt. Water	15.1	22.86							
Wt. Dry Soil	53	92.18							
% Moisture	28.5	24.8							

WASH 200

Wt. After Wash+Tare	208.6	245.86							
Wt. Passing #200	26	39.16							
% -200	49.1	42.5							

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Moisture Content / Wash 200

Project: Dade City Landfill
Client: Angelo's
Requsted By: CH

Cell 3 / Lift 3
Tested By:CH
Project #: 80540-001-02

Sample #	C - 1	C - 4	C - 7						
Tare #	L 4	LL 41	G 7						
Tare Wt.	198.12	192.8	182.96						
Wt. Wet+Tare	366.52	286.25	314.62						
Wt.Dry+Tare	336	264.94	289.18						
Wt. Water	30.52	21.31	25.44						
Wt. Dry Soil	137.88	72.14	106.22						
% Moisture	22.1	29.5	24.0						

WASH 200

Wt. After Wash+Tare	288.77	227.19	249.51						
Wt. Passing #200	47.23	37.75	39.67						
% -200	34.3	52.3	37.3						

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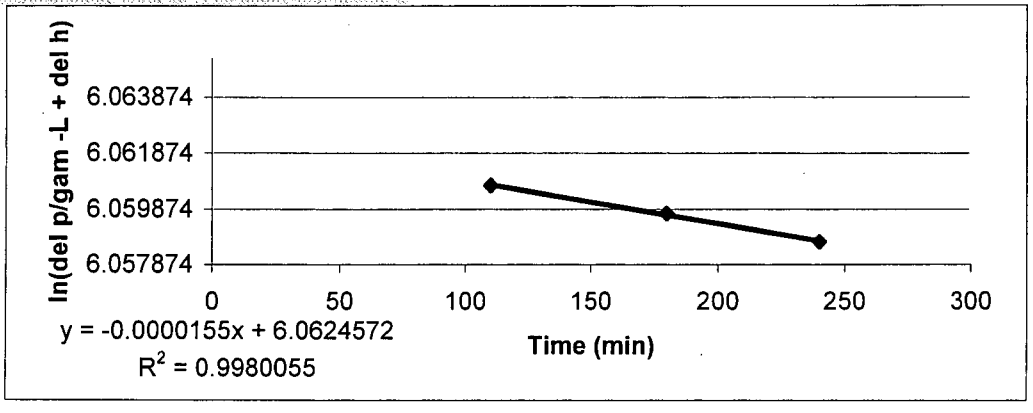
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- A-2/Cell 3
Depth of the Sample :- Lift 2

Time (min 10.33 am	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)
0	1.28	8.38	7.1	13.97635	430.6547	6.065307
110	1.5	7.6	6.1	12.00785	428.6862	6.060725
180	1.6	7.48	5.88	11.57478	428.2531	6.059714
240	1.7	7.36	5.66	11.14171	427.82	6.058703
270	1.74	7.22	5.48	10.78738	427.4657	6.057874



Date of test setup :- 9-Oct-06
Sample length :- 10.2 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 20.5 psi
Back pressure:- 15.63 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000155
K= 3.85037E-07 cm/min
K= 6.41728E-09 cm/sec
K= 1.81907E-05 ft/day

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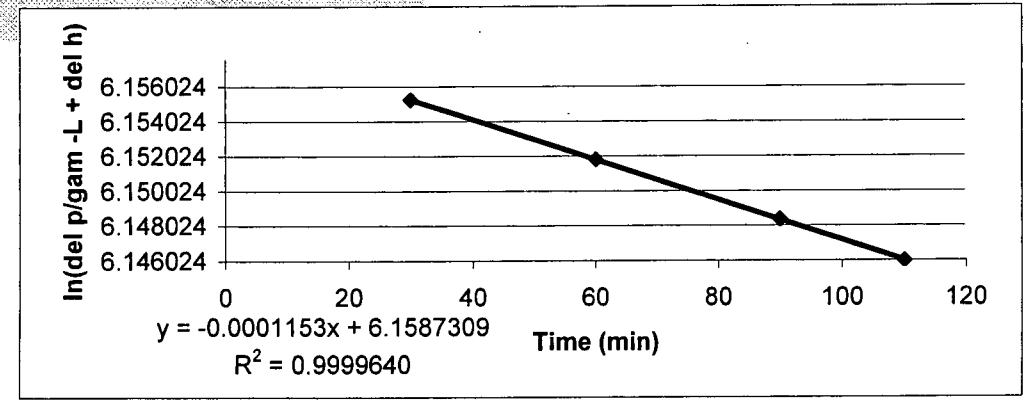
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- A-5/Cell 3
Depth of the Sample :- Lift 3

Time (min 10.33 am	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)
0	4.06	9.38	5.32	10.47242	472.2906	6.157594
30	4.16	8.92	4.76	9.37006	471.1882	6.155258
60	4.62	8.56	3.94	7.75589	469.5741	6.151826
90	4.9	8.02	3.12	6.14172	467.9599	6.148383
110	5.1	7.66	2.56	5.03936	466.8575	6.146024



Date of test setup :- 9-Oct-06
Sample length :- 9.652 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 21.43 psi
Back pressure:- 17.26 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0001153
K= 2.7103E-06 cm/min
K= 4.51716E-08 cm/sec
K= 0.000128046 ft/day

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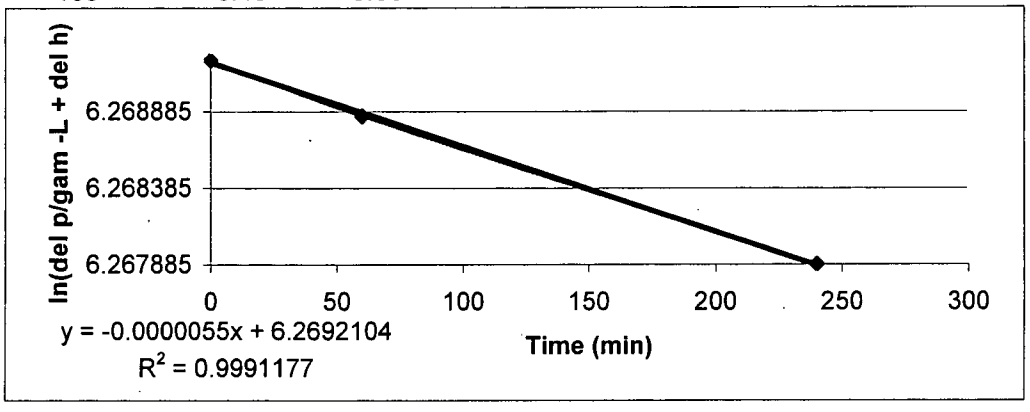
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-3/Cell 3
Depth of the Sample :- Lift 3

Time (min 10.33 am	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)
0	0.34	6	5.66	11.14171	528.0693	6.269228
60	0.4	5.96	5.56	10.94486	527.8724	6.268855
240	0.54	5.84	5.3	10.43305	527.3606	6.267885
120	0.44	5.9	5.46	10.74801	527.6756	6.268482
185	0.48	5.88	5.4	10.6299	527.5575	6.268258



Date of test setup :-	**13-Oct-06**	
Sample length :-	**10.2**	**cm**
Sample cross sectional area :-	**41.061**	**cm^2**
Burette cross sectional area :-	**0.2**	**cm2**
Cell pressure :-	**26.2**	**psi**
Back pressure:-	**19.25**	**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**

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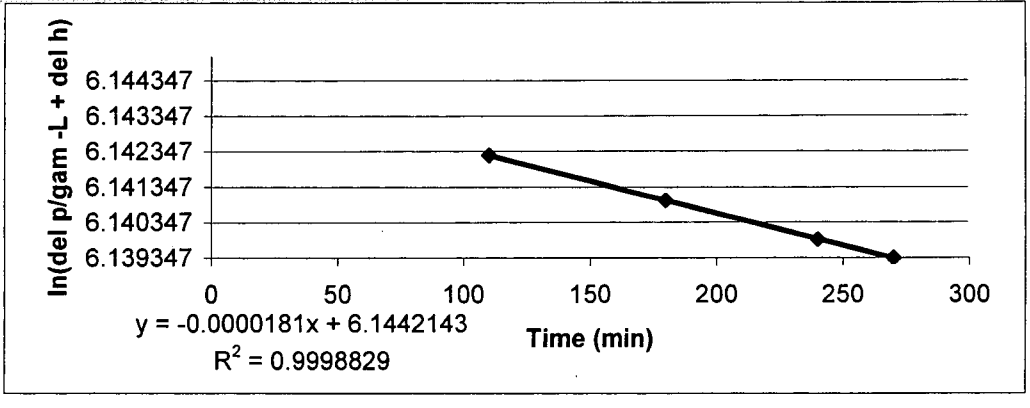
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- B-6/Cell 3
Depth of the Sample :- Lift 3

Time (min 10.33 am	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)
0	0.36	6.48	6.12	12.04722	466.3883	6.145018
110	0.52	5.98	5.46	10.74801	465.089	6.142229
180	0.62	5.78	5.16	10.15746	464.4985	6.140958
240	0.72	5.62	4.9	9.64565	463.9867	6.139856
270	0.76	5.54	4.78	9.40943	463.7505	6.139347



Date of test setup :-	**9-Oct-06**	
Sample length :-	**10.2**	**cm**
Sample cross sectional area :-	**41.061**	**cm^2**
Burette cross sectional area :-	**0.2**	**cm2**
Cell pressure :-	**22.02**	**psi**
Back pressure:-	**16.99**	**psi**
Burette 3 :-	**vent**	
Slope of the Best Fit Line :-	**0.0000181**	
K=	**4.49624E-07**	**cm/min**
K=	**7.49373E-09**	**cm/sec**
K=	**2.12421E-05**	**ft/day**

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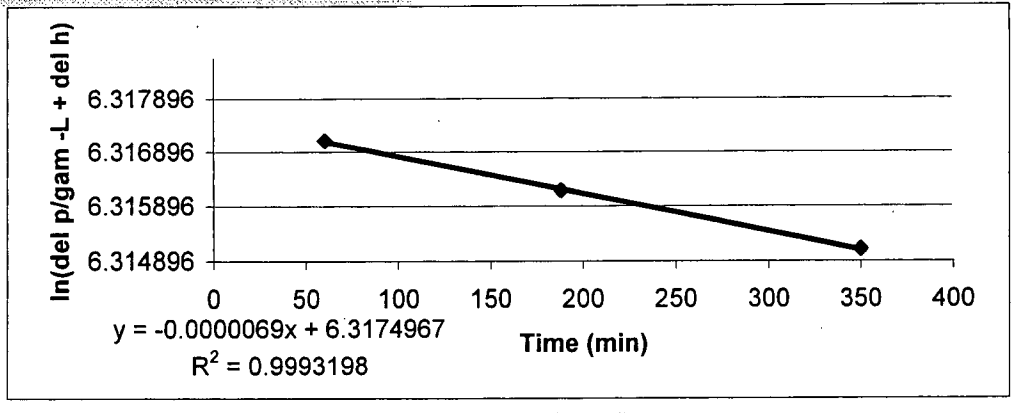
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- C-1/Cell 3
Depth of the Sample :- Lift 3

Time (min 10.33 am	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)
0	1.54	9.4	7.86	15.47241	554.8314	6.318664
60	1.66	9.08	7.42	14.60627	553.9653	6.317102
188	1.78	8.94	7.16	14.09446	553.4535	6.316178
350	1.9	8.76	6.86	13.50391	552.8629	6.31511
410	1.94	8.74	6.8	13.3858	552.7448	6.314896



Date of test setup :- 23-Oct-06
Sample length :- 10.2 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 25.95 psi
Back pressure:- 20.06 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000069
K= 1.71404E-07 cm/min
K= 2.85673E-09 cm/sec
K= 8.0978E-06 ft/day

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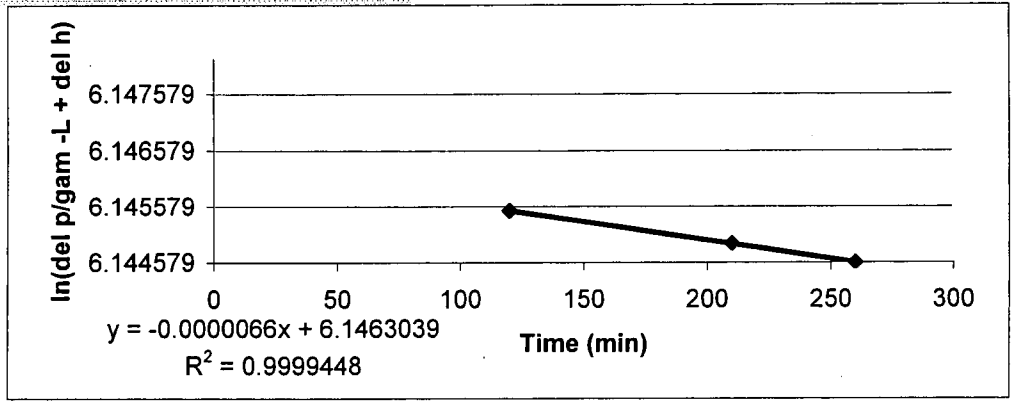
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- C-4/Cell 3
Depth of the Sample :- Lift 3

Time (min 10.33 am	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)
0	0.68	8.4	7.72	15.19682	467.8763	6.148204
45	0.7	8.06	7.36	14.48816	467.1676	6.146688
120	0.74	7.82	7.08	13.93698	466.6164	6.145508
210	0.78	7.72	6.94	13.66139	466.3408	6.144917
260	0.82	7.68	6.86	13.50391	466.1834	6.144579



Date of test setup :- 19-Oct-06
Sample length :- 9.03 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 24.48 psi
Back pressure:- 16.93 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000066
K= 1.45163E-07 cm/min
K= 2.41938E-09 cm/sec
K= 6.85809E-06 ft/day

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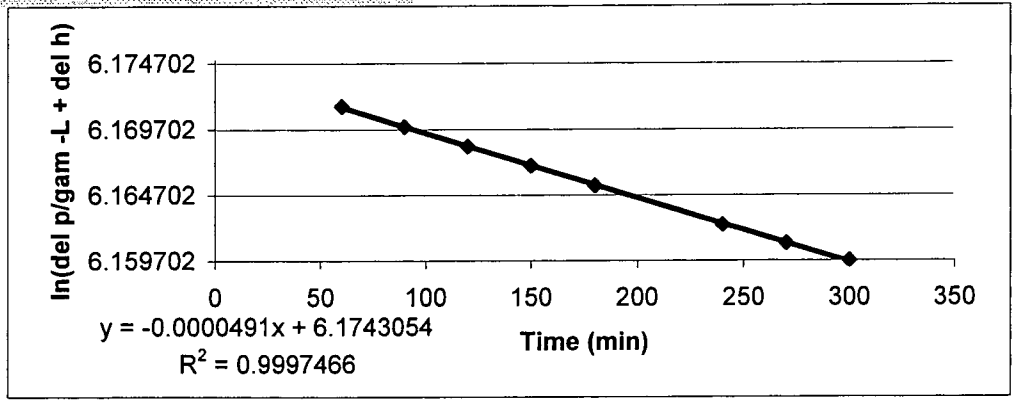
Project No :- 80540-001-02
Project Name :- Dade City Landfill
Sample Number :- Cell3/C-7
Depth of the Sample :- Lift 3

Time (min 10.33 am	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)
0	1.12	9.38	8.26	16.25981	480.5704	6.174974
60	1.34	8.74	7.4	14.5669	478.8775	6.171445
90	1.46	8.48	7.02	13.81887	478.1294	6.169881
120	1.58	8.24	6.66	13.11021	477.4208	6.168398
150	1.7	8	6.3	12.40155	476.7121	6.166913
180	1.82	7.76	5.94	11.69289	476.0035	6.165425
240	2.1	7.32	5.22	10.27557	474.5861	6.162443
270	2.24	7.12	4.88	9.60628	473.9169	6.161032
300	2.38	6.94	4.56	8.97636	473.2869	6.159702



Date of test setup :- 24-Oct-06
Sample length :- 10.16 cm
Sample cross sectional area :- 41.061 cm^2
Burette cross sectional area :- 0.2 cm2
Cell pressure :- 26.87 psi
Back pressure:- 17.35 psi
Burette 3 :- vent
Slope of the Best Fit Line :- 0.0000491
K= 1.21491E-06 cm/min
K= 2.02486E-08 cm/sec
K= 5.73975E-05 ft/day

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/1/2006
Work Order # : 16887
Technician : Mario
Report # : 1

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 1
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover, 1 - Trackhoe Excavator, 2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 2	117% / 14.1%	10 -9	44%
B - 3	118% / 13.1%	10 -9	45.5%
B - 4	119% / 12.6%	10 -9	45.9%
B - 5	120% / 12.9%	10 - 9	44.8%
B - 6	119% / 13.3%		
B - 7	121% / 13.9%	10 -8	
A - 3	123% / 12.2%	10 -9	40.7%
A - 4	122% / 11.8%	10 -9	44.2%
A - 5	123% / 12.1	10 -8	47.1%
A - 6		10 -9	48.90%
A - 7	123% / 11.8%	10 -9	49.4%

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/2/2006
Work Order # : 16887
Technician : Mario
Report # : 2

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover, 1 - Trackhoe Excavator, 2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 4	126% / 8.1%	10 -9	43.6%
B - 7	122% / 12.4%	10 -8	40.3%
B - 2	124% / 12.2%		
B - 3	129% / 7.7%		
B - 5	125% / 7.9%	10 -9	56.1%
B - 6	124% / 7.2%	10 -8	49.1%

Photographs (explain activity for each)

Photo #	1	End Dump Unloading Material.
Photo #	2	Trackhoe Loading End Dump.
Photo #	3	Bull Dozer pushing material.
Photo #	4	Fully loaded end dump compacting lift 2.

Picture 1

Picture 2

Picture 3

Picture 4

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/3/2006
Work Order # : 16916
Technician : Mario
Report # : 3

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
A - 2	116% / 20%		
A - 3		10 -9	
A - 4	114% / 20.3%		
A - 6	113% / 20.6%	10 -9	

Photographs (explain activity for each)

Photo #	5	Bull dozer pushing material for lift 2.
Photo #	6	End dump unloading material.
Photo #	7	Trackhoe loading material in end dump.
Photo #		

Picture 5

Picture 6

Picture 7

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/3/2006
Work Order # : 16916
Technician : Mario
Report # : 4

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 1
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 8	109% / 20.4%	10 -9	51.1%

Photographs (explain activity for each)

Photo #	9	Trackhoe loading end dump with material.
Photo #	10	Bull dozer pushing material, contractor checking grade.
Photo #		
Photo #		

Picture 9

Picture 10

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/3/2006
Work Order # : 16916
Technician : Mario
Report # : 5

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 3
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover, 1 - Trackhoe Excavator, 2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

Photographs (explain activity for each)

Photo #		
Photo #		
Photo #		
Photo #		

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/3/2006
Work Order # : 16916
Technician : Mario
Report # : 6

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 3
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

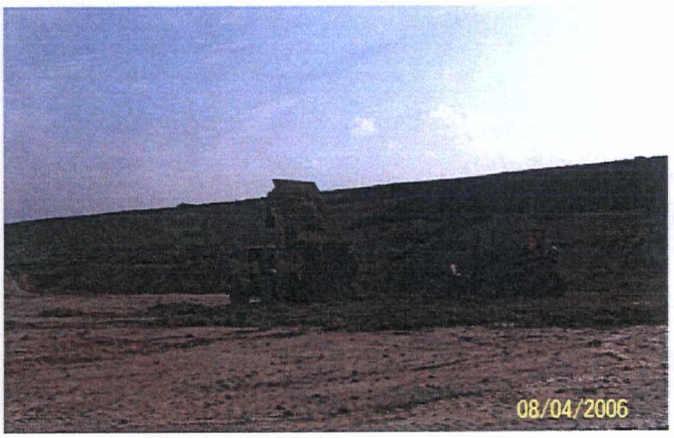
Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

Photographs (explain activity for each)

Photo #	18	Bull dozer pushing material, contractor checking grade.
Photo #	19	End dump unloading material.
Photo #	20	Trackhoe loading end dump with material.
Photo #		

Picture 18



Picture 19

Picture 20

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/3/2006
Work Order # : 16916
Technician : Mario
Report # : 7

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

Photographs (explain activity for each)

Photo #	14	End dump compacting lift 2.
Photo #	15	Bull dozer pushing material, Contractor checking grade.
Photo #	16	End dump unloading material.
Photo #	17	Trackhoe loading end dump with material.

Picture 14

Picture 15

Picture 16

Picture 17

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/10/2006
Work Order # : 16916
Technician : Mario
Report # : 8

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 1	105% / 23.2%		
A - 8	105% / 23.2%		

Photographs (explain activity for each)

Photo #		
Photo #		
Photo #		
Photo #		

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/10/2006
Work Order # : 16976
Technician : Mario
Report # : 9

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
A - 1	119% / 10.6%		
A - 5	113% / 13.3%		
A - 7	119% / 13.5%		
B - 3	112% / 12.9%		
B - 6	111% / 13.6%		

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/10/2006
Work Order # : 16976
Technician : Mario
Report # : 10

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 3
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

Photographs (explain activity for each)

Photo #	21	Trackhoe loading end dump with material.
Photo #	22	End dump unloading material, Bull dozer pushing material.
Photo #	23	End dump compacting lift 3.
Photo #		

Picture 21

Picture 22

Picture 23

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/11/2006
Work Order # : 17008
Technician : Mario
Report # : 11

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 3
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

Photographs (explain activity for each)

Photo #	24	Bull dozer pushing material.
Photo #	25	Trackhoe loading material in end dump.
Photo #	26	End dump compacting lift 3.
Photo #		

Picture 24

Picture 25

Picture 26

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/17/2006
Work Order # : 17082
Technician : Mario
Report # : 12

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 1
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover, 1 - Trackhoe Excavator, 2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

Photographs (explain activity for each)

Photo #	27	Trackhoe loading end dump with material.
Photo #	28	End dump unloading material.
Photo #	29	End dump unloading material, bull dozer pushing material.
Photo #		

Picture 27

Picture 28

Picture 29

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/17/2006
Work Order # : 17082
Technician : Mario
Report # : 13

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

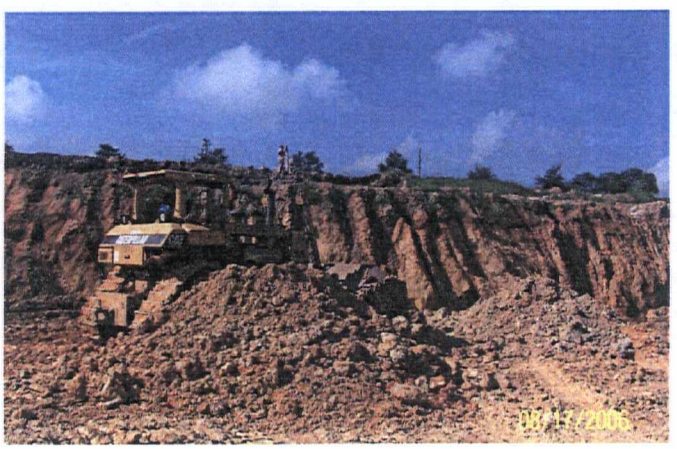
Location	% Compaction / % Moisture	Permeability	200 wash

Photographs (explain activity for each)

Photo #	30	Trackhoe loading end dump with material.
Photo #	31	End dump unloading material.
Photo #	32	Bull dozer pushing material.
Photo #		

Picture 30

Picture 31



Picture 32

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/18/2006
Work Order # : 17092
Technician : Mario
Report # : 14

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

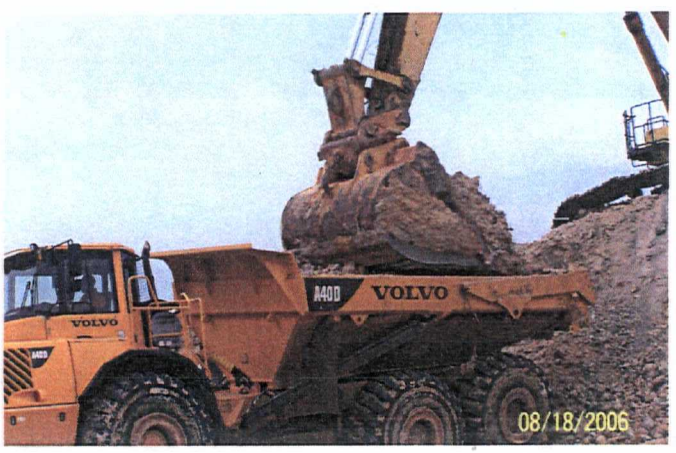
Location	% Compaction / % Moisture	Permeability	200 wash

Photographs (explain activity for each)

Photo #	33	Bull dozer pushing Material.
Photo #	34	End dump unloading material.
Photo #	35	Trackhoe loading material in end dump.
Photo #		

Picture 33

Picture 34



Picture 35

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/21/2006
Work Order # :
Technician : Mario
Report # : 15

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover, 1 - Trackhoe Excavator, 2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 5	110% / 9.8%		
B - 7	106% / 12.1%		

Photographs (explain activity for each)

Photo #		
Photo #		
Photo #		
Photo #		

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/21/2006
Work Order # :
Technician : Mario
Report # : 16

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 1
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 8	108% / 10.3%		
B - 6	108% / 11.2%		

Photographs (explain activity for each)

Photo #		
Photo #		
Photo #		
Photo #		

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/24/2006
Work Order # :
Technician : Mario
Report # : 17

Construction Activity Observed

Area Constructed : Cell # 3 / Excavation
Material Used : Clay
Lift #
Lift Thickness :
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/25/2006
Work Order # :
Technician : Mario
Report # : 18

Construction Activity Observed

Area Constructed : Cell # 3 / Excavation
Material Used : Clay
Lift #
Lift Thickness :
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

Photographs (explain activity for each)

Photo #		
Photo #		
Photo #		
Photo #		

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/28/2006
Work Order # :
Technician : Mario
Report # : 19

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
C - 4	109% / 12.4%	10 -9	54.4%
C - 5	107% / 11.9%	10 -9	50.2%

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 8/28/2006
Work Order # : 17178
Technician : Mario
Report # : 20

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 1
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover, 1 - Trackhoe Excavator, 2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
C - 4	109% / 12.6%		
C - 5	109% / 12.1%		

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 9/6/2006
Work Order # : 17303
Technician : Mario
Report # : 21

Construction Activity Observed

Area Constructed : Cell # 3 / Excavation
Material Used : Clay
Lift #
Lift Thickness :
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 9/13/2006
Work Order # : 17349
Technician : Mario
Report # : 22

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover, 1 - Trackhoe Excavator, 2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
C - 5	110% / 21.4%	10 -9	
C - 6	112% / 20%		
C - 8	110% / 20%	10 -8	55.9%

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 9/13/2006
Work Order # : 17349
Technician : Mario
Report # : 23

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 1
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
C - 5	113% / 19.8%		
C - 6	108% / 20.2	10 -9	60%
C - 8	110% / 20.8%		

Photographs (explain activity for each)

Photo #		
Photo #		
Photo #		
Photo #		

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 10/2/2006
Work Order # : 17635
Technician : Mario
Report # : 24

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 1
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 3 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
3 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
A - 1	114% / 19.1%	10 -9	55.7%
B - 1	114% / 19.6%		

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 10/2/2006
Work Order # : 17635
Technician : Mario
Report # : 25

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 3 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
3 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
A - 1	111% / 18.8%		
B - 1	111% / 19.2%	10 -9	48.7%

Photographs (explain activity for each)

Photo #		
Photo #		
Photo #		
Photo #		

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 10/2/2006
Work Order # : 17635
Technician : Mario
Report # : 26

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 3
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 3 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
3 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
A - 1	112% / 19%		
B - 1	112% / 19.8%		

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 10/3/2006
Work Order # : 17636
Technician : Mario
Report # : 27

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 3
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 3 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
3 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 2	103% / 19.9%		
A - 2	102% / 20.2%	10 -9	56.1%
B - 3	105% / 19.6%	10 -9	49.1%
A - 3	101% / 20%		
B - 4	100% / 19.4%		
A - 4	100% / 19.2%		

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 10/4/2006
Work Order # : 17637
Technician : Mario
Report # : 28

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 3 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
3 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 8	107% / 20.4%	10 -9	44.6%
A - 8	106% / 20%		

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 10/4/2006
Work Order # : 17637
Technician : Mario
Report # : 29

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 3
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 3 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
3 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
B - 5	109% / 19.8%		
B - 6	109% / 19.2%	10 -9	42.5%
A - 5	112% / 19.5%	10 -8	50.9%
A - 6	106% / 19.9%		
B - 7	112% / 19%		
A - 7	112% / 19%		
B - 8	109% / 19.1%		
A - 8	106% / 19.6%		

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 10/13/2006
Work Order # : 17749
Technician : Mario
Report # : 30

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 1
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
C - 3	109% / 19.2%	10 -9	50.4%
C - 1	107% / 18.4%		

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 10/13/2006
Work Order # : 17749
Technician : Mario
Report # : 31

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 2
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
C - 4	104% / 20.2%		
C - 2	108% / 20.4%		

Photographs (explain activity for each)

Photo #
Photo #
Photo #
Photo #

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Client : Angelo's Aggregate Materials
Project : Dade City Landfill
Project # : 80540-001-02

Date: 10/14/2006
Work Order # : 17879
Technician : Mario
Report # : 32

Construction Activity Observed

Area Constructed : Cell # 3
Material Used : Clay
Lift # 3
Lift Thickness : 12"
Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps
Other Equipment in Use : 1 - Bull Dover
1 - Trackhoe Excavator
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction / % Moisture	Permeability	200 wash
C - 1	110% / 19.8%	10 -9	34.3%
C - 2	106% / 19.5%		
C - 4	100% / 19.9%	10 -9	52.3%
C - 6	102% / 19.4%		
C - 7	109% / 20%	10 -8	37.3%
C - 8	104% / 19.6%		

Photographs (explain activity for each)

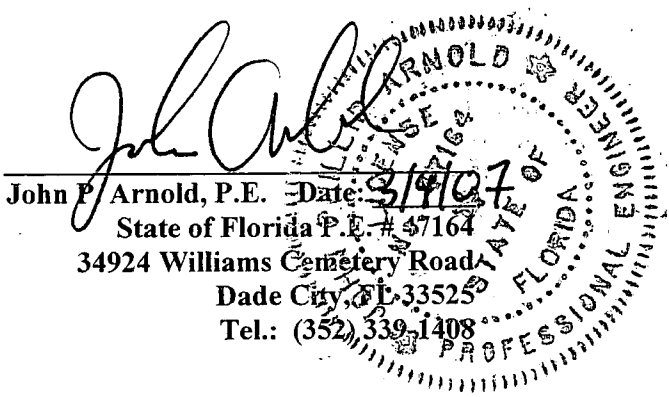
Photo #		
Photo #		
Photo #		
Photo #		

Attachment D

Engineer of Record Narrative Report

Engineer of Record Narrative Report
Cell 3 Construction

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



Engineer of Record: John P. Arnold, P.E. Date: 3/4/07
State of Florida P.E. # 47164
34924 Williams Cemetery Road
Dade City, FL 33525
Tel.: (352) 339-1408

Background

This report documents the activities and methods of construction for Cell 3, which is approximately 5 acres in size in accordance with Specific Condition 9.c. of FDEP Permit No. 177982-001-SC.

Record Drawings of the tops of both the subgrade and confining layer were performed by the Surveyor and evaluated by Universal Engineering Sciences (Universal) and the Engineer for conformance with the Departments requirements. The Record Drawings are provided in Attachment B. The surveys show that the subgrade was over-excavated a minimum of 3-feet and backfilled with clay to the prescribed minimum finished grades, or higher. The clay was placed in three (3) 12-inch thick compacted lifts. Tests for each completed clay lift were performed to ensure compliance with the Department requirements. The top of the finished clay layer is generally higher than the minimum elevations shown on the approved plans. Based on a review of the surveys, soil test results, and report from Universal, the construction appears to be in general accordance with the Department requirements.

A representative of Universal was on-site to document construction activities and to verify that the work was performed in accordance with the Construction Quality Assurance (CQA) criteria approved by the Department. Universal, serving as the independent CQA engineer, evaluated materials conformance, observed and monitored construction methods/activities, coordinated with Simmons and Beall Land Surveyors (Surveyor) for documentation of the excavation and fill elevations, and prepared the signed and sealed CQA Report documenting that construction is in general accordance with the Department's requirements. The on-site Universal representative, in addition to monitoring construction activities, collected and tested in-place materials to evaluate conformance with the Department approved requirements. Photographs of construction activities taken by the Universal resident observer are provided in the CQA Report. Conformance testing included in-place density, permeability, and moisture content tests. The CQA Report is provided in Attachment C.

Confining Layer Construction

Cell 3 was over-excavated by a minimum of 3 feet below the finished grade of the top of the confining layer. This was accomplished as part of the mining activities associated with this site. The over-excavation was performed using tracked excavating equipment. The Surveyor provided grade stakes and performed field layout services to verify that the excavation was sufficient to meet the 3-foot over-excavation criteria. Clay was placed and compacted in the over-excavated cell area using 12-inch lifts to construct the confining layer. Signed and Sealed drawings documenting the As-Built conditions of the tops of both the over-excavation and confining layer are provided in Attachment B.

Clay from on-site was used to construct the confining layer. The clay was installed and compacted to within at least 95% of the maximum dry density in accordance with ASTM D698. The clay for each lift was spread with a bull dozer and compacted with multiple passes of loaded off-road (articulating) dump trucks. The in-place density and moisture content for each lift of the confining layer was evaluated by the Universal representative using nuclear-density testing and Speedy Moisture Content devices, respectively. The locations of all tests are shown on the Test Location Maps in the Universal CQA Report. The cell was subdivided into 24 sections, by lift, to identify the location of each test. Lifts were designated as Lift 1, 2, or 3 (from bottom to top). A coordinate system was used with A, B, and C being the north-south running columns with 1 thru 8 rows running east-west. For example, a test listed as B-4 Lift 2 would be located in the grid at the intersection of the B column and row 4, on lift 2.

The Universal representative collected undisturbed Shelby tube samples for each completed lift of the confining layer to evaluate that the installed permeability met or exceeded the Department approved criteria. Permeability testing was performed on the undisturbed Shelby tube samples in the laboratory using a triaxial-permeameter device.

Results of the density, permeability, and moisture content tests, including the testing plan key map, Universal Observation Log, and construction photographs are in the Universal CQA Report provided as Attachment C.

Field Inspection, Review, Conformance Assessment, and Major Deviations

John Arnold, P.E., serving as the Engineer of Record, reviewed the CQA Report, As-Built (Record) drawings, performed field inspections, and prepared and submitted this report and Certification of Construction Completion to the Department for review and approval.

Review of the Universal CQA Report, As-Built (Record) Drawings, and an inspection of the site indicate that Cell 3 has been constructed in general accordance with the Departments requirements. The Certification of Construction Completion is included in Attachment A.

Attachment E

Financial Assurance Funding Mechanism and Cost Estimate
Cells 3 & 4

A copy of the Financial Assurance Cost Estimate previously submitted to the FDEP is provided herein. The Financial Assurance is for Cells 1, 2, 15, 5, 3, and 4 of the Enterprise Class III Landfill. The existing bank letter of credit has been increased to add Cells 3 and 4 and has been submitted to the Financial Assurance Section of the Department in Tallahassee.

February 28, 2007

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
Annual Cost Estimate Adjustment
Angelo's Aggregate Materials, Ltd.
FDEP Permit Nos. 177982-001-SC and 177982-002-SO
Pasco County, Florida

Dear Ms. Pelz:

The FDEP approved 2006 financial assurance cost estimates for closure and long-term care for this facility have been inflation adjusted for 2007 using the FDEP approved multiplier of 1.03. The revised estimates on FDEP form 62-701.900(28) are enclosed for your review. A copy has also been mailed to Mr. Wick, Environmental Manger.

Please call me at 352.339.1408 if you have any questions or require any additional information.

Sincerely,

John Arnold
Engineer

Attachment

cc: Fred J. Wick, Environmental Manager, Solid Waste Section
Dominic Iafrate, Angelo's Recycled Materials
Jeff Rogers, Angelo's Recycled Materials
Gary Bucholz, Angelo's Recycled Materials

DEP Form # 62-701.900(28)
Form Title Financial Assurance Cost Estimate Form
Effective Date 05-27-01

DEP Application No. _____ (Filled by DEP)

Florida Department of Environmental Protection

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, FL 32399-2400

FINANCIAL ASSURANCE COST ESTIMATE FORM

Date: 28 FEB 2007 Date of DEP Approval: _____

I. GENERAL INFORMATION:

Facility Name: Enterprise CL III Landfill & Rec. Fac. WACS or GMSID #: SWD-53-87895

Permit / Application No.: 177982-001-SC, 177982-002-SO Expiration Date: 10/5/06

Facility Address: 41111 ENTERPRISE RD, DADE CITY, FL 33525

Permittee: ANGELO'S AGGREGATE MATERIALS, LTD.

Mailing Address: P.O. BOX 1493 LARGO, FL 33779

Latitude: 29 19 53 Longitude: 82 08 16 or UTM: _____

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Design Life of Unit From Date of Initial Receipt of Waste
1	6.08	2004	1.38
2	5.57	2005	1.38
15	6.23	2005	1.33
4	7.34	2006	1.29
3	7.04	2007 est.	1.29
		2007 est.	1.38

Total Landfill Acreage included in this estimate. _____ Closure 39.6 Long-Term Care

Type of landfill: _____ Class I ✓ Class III _____ C&D Debris

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check Type)

✓ Letter of Credit*

_____ Surety Bond*

_____ Trust Fund Agreement

_____ Insurance Certificate

_____ Escrow Account

_____ Financial Test

*Indicates mechanisms that require use of a Standby Trust Fund Agreement

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 3340
561-681-6600

III. ESTIMATE ADJUSTMENT

40 CFR Part 264 Subpart H as adopted by reference in Rule 62-701.630, Florida Administrative Code sets forth the method of annual cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of closure in current dollars. Select one of the methods of cost estimate adjustment below.

☑ **(a) Inflation Factor Adjustment**

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste Financial Coordinator at (850)-245-8732.

This adjustment is based on the Department approved closure cost estimate dated: _____

Latest Department Approved Closure Cost Estimate:		Current Year Inflation Factor		Inflation Adjusted Closure Cost Estimate:
$2,271,241.33	X	1.030	=	$2,339,378.57

This adjustment is based on the Department approved long-term care cost estimate dated: _____

Latest Department Approved Annual Long-Term Care Cost Estimate:		Current Year Inflation Factor		Inflation Adjusted Annual Long-Term Care Cost Estimate:
$114,778.33	X	1.030	=	$118,221.68

Number of Years of Long Term Care Remaining:		30
Inflation Adjusted Long-Term Care Cost Estimate:	=	3,546,650.40

☐ **(b) Recalculate Estimates** (see section V)

IV. CERTIFICATION BY ENGINEER

This is to certify that the Financial Assurance Cost Estimates pertaining to the engineering features of the this solid waste management facility have been examined by me and found to conform to engineering principals applicable to such facilities. In my professional judgement, the Cost Estimates are a true, correct and complete representation of the financial liabilities for closing and long-term care of the facility and comply with the requirements of Florida Administrative Code (F.A.C.), Rule 62-701.630 and all other Department of Environmental Protection rules, and statutes of the State of Florida. It is understood that the Financial Assurance Cost Estimates shall be submitted to the Department **annually**, revised or adjusted as required by Rule 62-701.630(4), F.A.C.

Signature of Engineer

Name & Title (please type)

Florida Registration Number (affix seal) &Date

Mailing Address

Telephone Number

John Arnold

Signature of Owner/Operator

John Arnold, Engineer

Name & Title (please type)

(352) 339-1408

Telephone Number

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

October 30, 2006

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

RE: Enterprise Recycling & Disposal Class III Landfill
Financial Assurance Cost Estimates
Pending Permit Nos.: 177982-008-SC and 177982-007-SO

Dear Mr. Iafrate:

This letter is to acknowledge receipt of the revised cost estimates dated September 18, 2006 (received September 26, 2006), for closing and long-term care of the Enterprise Recycling Class III Landfill. The cost estimates received September 26, 2006 (total closing $2,271,241.33 and $114,778.33/year x 30 years = $3,443,349.75 total long-term care), are **APPROVED for 2006**. The approved cost estimates are for closing and long-term care of **39.6 acres** (Cells 1, 2, 3, 4, 5 & 15) only. The next annual update (revised or inflation-adjusted estimates) is due no later than **March 1, 2007.**

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) 632-7600 ext. 385.

Sincerely,

Steven G. Morgan
Solid Waste Section
Southwest District

sgm
cc: John Arnold, P.E., 34924 Williams Cemetery Rd., Dade City, Florida 33525
Fred Wick, FDEP, Tallahassee, w/attachment
Susan Pelz, P.E., FDEP Tampa

DEP Form # 62-701.900(28)
Form Title Financial Assurance Cost Estimate Form
Effective Date 05-27-01

DEP Application No. _____ (Filled by DEP)

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

FINANCIAL ASSURANCE COST ESTIMATE FORM

Date: 9/18/06 Date of DEP Approval: _____

I. GENERAL INFORMATION:

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Permit / Application No.: 177982-001-SC, 177982-002-SO Expiration Date: 10/5/06

Facility Address: 41111 ENTERPRISE RD, DADE CITY, FL 33525

Permittee: ANGELO'S AGGREGATE MATERIALS, LTD.

Mailing Address: P.O. BOX 1493 LARGO, FL 33779

Latitude: 29 19 53 Longitude: 82 08 16 or UTM: _____

Solid Waste Disposal Units Included in Estimate:

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15	6.23	2005	1.33
5	7.34	2006	1.29
4	7.34	2006 est.	1.29
3	7.04	2006 est.	1.38

Total Landfill Acreage included in this estimate. 39.6 Closure 39.6 Long-Term Care

Type of landfill: _____ Class I ✓ Class III _____ C&D Debris

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check Type)

✓ Letter of Credit*

_____ Surety Bond*

_____ Trust Fund Agreement

_____ Insurance Certificate

_____ Escrow Account

_____ Financial Test

*Indicates mechanisms that require use of a Standby Trust Fund Agreement

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
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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

III. ESTIMATE ADJUSTMENT

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☐ **(a) Inflation Factor Adjustment**

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste Financial Coordinator at (850)-245-8732.

This adjustment is based on the Department approved closure cost estimate dated: _____

Latest Department Approved Closure Cost Estimate:		Current Year Inflation Factor		Inflation Adjusted Closure Cost Estimate:
_____	X	_____	=	$0.00

This adjustment is based on the Department approved long-term care cost estimate dated: _____

Latest Department Approved Annual Long-Term Care Cost Estimate:		Current Year Inflation Factor		Inflation Adjusted Annual Long-Term Care Cost Estimate:
_____	X	_____	=	$0.00

Number of Years of Long Term Care Remaining: X _____

Inflation Adjusted Long-Term Care Cost Estimate: = 0.00

☑ **(b) Recalculate Estimates** (see section V)

IV. CERTIFICATION BY ENGINEER*

This is to certify that the Financial Assurance Cost Estimates pertaining to the engineering features of the this solid waste management facility have been examined by me and found to conform to engineering principals applicable to such facilities. In my professional judgement, the Cost Estimates are a true, correct and complete representation of the financial liabilities for closing and long-term care of the facility and comply with the requirements of Florida Administrative Code (F.A.C.), Rule 62-701.630 and all other Department of Environmental Protection rules, and statutes of the State of Florida. It is understood that the Financial Assurance Cost Estimates shall be submitted to the Department **annually**, revised or adjusted as required by Rule 62-701.630(4), F.A.C.*

Signature of Engineer

John P. Arnold, P.E., Engineer
Name & Title (please type)

FL P.E. No.: 47164
Florida Registration Number (affix seal) &Date

34924 Williams Cemetery RD, Dade Cty, 1
Mailing Address

(352) 339-1408
Telephone Number

Signature of Owner/Operator

Jeff Rogers, Landfill Manager/Operator
Name & Title (please type)

(352) 302-8934
Telephone Number

* These estimates are based on the FDEP Approved 2006 Financial Assurance Cost Estimate data, with quantaties increased from a 25.22 acres to 39.60 acre Class III Landfill.

V. RECALCULATE ESTIMATED CLOSING COST (Increasing Quantities from 25.22 ac to 39.60 ac)

For the time period in the landfill operation when the extent and manner of its operation makes closing **most expensive**.

**** Third Party Estimate / Quote must be provided for each item**

**** Costs must be for a third party providing all material and labor**

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1. Proposed Monitoring Wells	(Do not include wells already in existence.)			
	EA			$0.00
2. Slope and Fill (bedding layer between waste and barrier layer):				
Excavation	CY			$0.00
Placement and Spreading (Grading & Sloping Waste)	CY	191,665	$0.75	$143,748.75
Compaction	CY			$0.00
Off-Site Material	CY			$0.00
Delivery	CY			$0.00
			Subtotal Slope and Fill:	**$143,748.75**
3. Cover Material (Barrier Layer): (18" Clay on 39.60 ac plus allowance for compaciton)				
Off-Site Clay	CY	124,583	$5.00	$622,915.00
Synthetics - 40 mil	SY			$0.00
Synthetics - GCL	SY			$0.00
Synthetics - Geonet	SY			$0.00
Synthetics - Other	SY			$0.00
			Subtotal Barrier Layer Cover:	**$622,915.00**
4. Top Soil Cover: (18" protective soil cover on 39.60 ac plus allowance for compaction)				
Off-Site Material	CY	124,583	$7.50	$934,372.50
Delivery	CY			$0.00
Spread	CY			$0.00
			Subtotal Top Soil Cover:	**$934,372.50**

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
5. Vegetative Layer (Applied to 39.60 ac plus 2 ac of sod as necessary				
Sodding	SY	12,562	$1.25	$15,702.50
Hydroseeding	AC	40	$1,500.00	$60,000.00
Fertilizer	AC			$0.00
Mulch	AC			$0.00
Other	SY	4	$4,620.00	$18,480.00
			Subtotal Vegetative Layer:	**$94,182.50**
6. Stormwater Control System:				
Earthwork	CY	7,950	$8.50	$67,575.00
Grading	SY			$0.00
Piping	LF	90	$26.50	$2,385.00
Ditches	LF	1,950	$5.30	$10,335.00
Berms	LF			$0.00
Control Structures	EA			$0.00
Other	LS			$0.00
			Subtotal Stormwater Controls:	**$80,295.00**
7. Gas Controls: Passive				
Wells	EA	7	$700.00	$4,900.00
Pipe and Fittings	LF			$0.00
Monitoring Probes	EA			$0.00
NSPS/Title V requirements	LS			$0.00
			Subtotal Passive Gas Control:	**$4,900.00**

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
8. Gas Control: Active Extraction				
Traps	EA			$0.00
Sump	EA			$0.00
Flare Assembly	EA			$0.00
Flame Arrestor	EA			$0.00
Mist Eliminator	EA			$0.00
Flow Meter	EA			$0.00
Blowers	EA			$0.00
Collection System	LF			$0.00
Other (describe)				$0.00
			Subtotal Active Gas Extraction:	**$0.00**
9. Security System:				
Fencing	LF			$0.00
Gate(s)	EA			$0.00
Sign(s)	EA			$0.00
			Subtotal Security System:	**$0.00**
10. Engineering:				
Closure Plan report	LS			$7,500.00
Certified Engineer	LS			$20,000.00
NSPS/Title V Air Permit	LS			
Final Survey	LS			$2,877.00
Certification of Closure (Including Closure Permit)	LS			$18,000.00
Other (CQA Plan)				$2,500.00
			Subtotal Engineering:	**$50,877.00**

11. Professional Services

	Contract Management		Quality Assurance		
	Hours	LS	Hours	LS	Total
P.E. Supervisor	48	$5,760.0	48	$5,760.0	$11,520.00
On-Site Engineer			95	$8,075.0	$8,075.00
Office Engineer	63	$6,300.0	189	$18,900.	$25,200.00
On-Site Technician			566	$28,300.	$28,300.00
Other (explain)			5	$66.00	$66.00

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
Quality Assurance Testing	LS	1	$31,404.	$31,404.00

Subtotal Professional Services: **$104,565.00**

Subtotal of 1-11 Above: **$2,035,855.75**

12. Contingency — % of Total (example. enter .1 for 10%): 10%

Closing Cost Subtotal: 2,239,441.33

13. Site Specific Costs (explain)

Mobilization	$1,800.00
Waste Tire Facility	
Materials Recovery Facility	
Special Wastes	
Leachate Management System Modification	
Other (Construction Rework & CQA Test Cont.)	$30,000.00

Subtotal Site Specific Costs: $31,800.00

TOTAL CLOSING COSTS **$2,271,241.33**

VI. ANNUAL COST FOR LONG-TERM CARE
(Increasing Quantities from 25.22 ac to 39.60 ac)

(Check Term Length)

_____ 5 Years _____ 20 Years ✓ 30 Years _____ Other

See 62-701.600(1)a.1., 62-701.620(1), 62-701.630(3)a. and 62-701.730(11)b. F.A.C. for required term length. For landfills certified closed and Department accepted, enter the remaining long-term care length as "Other" and provide years remaining.

**** Third Party Estimate / Quote must be provided for each item**
**** Costs must be for a third party providing all material and labor**

All items must be addressed. Attach a detailed explanation for all items marked not applicable (N/A)

Description	Sampling Frequency (events/yr.)	Number of Wells	$ / Well / Event	$ / Year
1. Groundwater Monitoring (62-701.510(6), and (8)(a))				
Monthly	12			$0.00
Quarterly	4			$0.00
Semi-Annual	2	14	$875.00	$24,500.00
Annual	1			$0.00
			Subtotal Groundwater Monitoring:	$24,500.00
2. Surface Water Monitoring (62-701.510(4), and (8)(b)				
Monthly	12			$0.00
Quarterly	4			$0.00
Semi-Annual	2			$0.00
Annual	1			$0.00
			Subtotal Surface Water Monitoring:	$0.00
3. Gas Monitoring				
Monthly	12			$0.00
Quarterly	4	10	$75.00	$3,000.00
Semi-Annual	2			$0.00
Annual	1			$0.00
			Subtotal Gas Monitoring:	$3,000.00

Description	Sampling Frequency (events/yr.)	Number of Locations	$/Location/Event	$ / Year
4. Leachate Monitoring (62-701.510(5), (6)(b) and 62-701.510(8)(c)				
Monthly	12			$0.00
Quarterly	4			$0.00
Semi-Annual	2			$0.00
Annual	1			$0.00
Other				$0.00
			Subtotal Leachate Monitoring:	$0.00

DESCRIPTION	UNIT	QUANTITY	UNIT COST	ANNUAL COST
5. Leachate Collection/Treatment Systems Maintenance				
Maintenance				
Collection Pipes	LF			$0.00
Sumps, Traps	EA			$0.00
Lift Stations	EA			$0.00
Cleaning	LS			$0.00
Tanks	EA			$0.00
Impoundments				
Liner Repair	SY			$0.00
Sludge Removal	CY			$0.00
Aeration Systems	CY			$0.00
Floating Aerators	EA			$0.00
Spray Aerators	EA			$0.00
Disposal				
Off-site (Include Transportation and Disposal)	1000 gallon			$0.00
				$0.00

6. Leachate Collection/Treatment Systems Operation

Operation		Hours	$/Hour	Total
P.E. Supervisor	HR			$0.00
On-Site Engineer	HR			$0.00
Office Engineer	HR			$0.00
OnSite Technician	HR			$0.00
Materials	LS			

Subtotal Leachate Collection/Treatment System Maintenance & Operation: $0.00

7. Maintenance of Groundwater Monitoring Wells

Monitoring Wells	LF	5	$100.00	$500.00
Replacement	EA			$0.00
Abandonment	EA			$0.00

Subtotal Groundwater Monitoring Well Maintenance: $500.00

DESCRIPTION	UNIT	QUANTITY	UNIT COST	ANNUAL COST
8. Gas System Maintenance				
Piping, Vents	LF	4	$200.00	$800.00
Probes	EA	1	$100.00	$100.00
Flaring Units	EA			$0.00
Meters, Valves	EA			$0.00
Compressors	EA			$0.00
Flame Arrestors	EA			$0.00
Operation	LS			

SubTotal Gas System: $900.00

9. Landscape (Based on $25/ac @ 4 times per year)

Mowing	AC	40	$100.00	$4,000.00
Fertilizer	AC	40	$45.00	$1,800.00

Subtotal Landscape Maintenance: $5,800.00

DESCRIPTION	UNIT	QUANTITY	UNIT COST	ANNUAL COST
10. Erosion Control & Cover Maintenance (Apprx. 1.25 ac revegetation, 2.0 ac repair, & 0.8 ac erosion repair)				
Sodding	SY	9,579	$1.25	$11,973.75
Regrading	AC	4	$1,550.00	$6,200.00
Liner Repair	SY			$0.00
Clay	CY	6,228	$5.00	$31,140.00
		Subtottal Erosion Control and Cover Maintenance:		$49,313.75
11. Storm Water Management System Maintenance				
Conveyance Maintenance	LS			$4,000.00
		Subtotal Storm Water System Maintenance:		$4,000.00
12. Security System Maintenance				
Fences	LF	380	$7.00	$2,660.00
Gate(s)	EA	1	$600.00	$600.00
Sign(s)	EA	1	$200.00	$200.00
		Subtotal Security System:		$3,460.00
13. Utilities	LS			
14. Administrative		Hours	$/Hour	Total
P.E. Supervisor	HR	12	$106.00	$1,272.00
On-Site Engineer	HR	20	$69.00	$1,380.00
Office Engineer	HR	80	$69.00	$5,520.00
OnSite Technician	HR	60	$48.00	$2,880.00
Other (explain)				$0.00
		Subtotal Administrative:		$11,052.00
15. Contingency	% of Total			10%
	$102,525.75	Subtotal Contingency:		$10,252.58

16. Site Specific Costs (explain)	UNIT COST	
	LS	$2,000.00
	LS	
	LS	

ANNUAL LONG-TERM CARE COST ($/Year): $114,778.33

NUMBER OF YEARS OF LONG-TERM CARE 30.00

TOTAL LONG-TERM CARE COST ($) $3,443,349.75