



May 24, 2010

Ms. Kate Brackett
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399

Re: 2010 Soils Project
Work Order: 252194

Dear Ms. Brackett:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on May 04, 2010. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4422.

Sincerely,

Jake Crook
Project Manager

Purchase Order: A1CD73
Enclosures

List of current GEL Certifications as of 24 May 2010

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C-SC-01
Kansas – NELAP	E-10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis Report for

FLAD001 Florida DEP

Client SDG: 252194 GEL Work Order: 252194

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Jake Crook.

Reviewed by



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Florida Department of
Environmental Protection
Address : 2600 Blair Stone Road
Tallahassee, Florida 32399

Report Date: May 24, 2010

Contact: Ms. Kate Brackett
Project: **2010 Soils Project**

Client Sample ID: 1266649
Sample ID: 252194001
Matrix: Soil
Collect Date: 26-APR-10 20:00
Receive Date: 04-MAY-10
Collector: Client

Project: FLAD00110
Client ID: FLAD001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting											
<i>GFPC, Gross A/B, solid "Dry Weight Corrected"</i>											
Alpha	U	ND	+/-1.99	3.26	4.00	pCi/g	DXF3	05/23/10	1650	985982	1
Beta	U	ND	+/-1.99	3.78	10.0	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DRS1	05/05/10	1359	981005

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 900.0/SW846 9310/SM 7110B Modified	

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Certificate of Analysis

Company : Florida Department of
Environmental Protection
Address : 2600 Blair Stone Road
Tallahassee, Florida 32399

Report Date: May 24, 2010

Contact: Ms. Kate Brackett
Project: **2010 Soils Project**

Client Sample ID: 1266652
Sample ID: 252194002
Matrix: Soil
Collect Date: 26-APR-10 20:05
Receive Date: 04-MAY-10
Collector: Client

Project: FLAD00110
Client ID: FLAD001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting											
<i>GFPC, Gross A/B, solid "Dry Weight Corrected"</i>											
Alpha	U	ND	+/-1.10	2.94	4.00	pCi/g	DXF3	05/23/10	0947	985982	1
Beta	U	ND	+/-2.00	3.40	10.0	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DRS1	05/05/10	1359	981005

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 900.0/SW846 9310/SM 7110B Modified	

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Certificate of Analysis

Company : Florida Department of
Environmental Protection
Address : 2600 Blair Stone Road
Tallahassee, Florida 32399

Report Date: May 24, 2010

Contact: Ms. Kate Brackett
Project: **2010 Soils Project**

Client Sample ID: 1266653
Sample ID: 252194003
Matrix: Soil
Collect Date: 26-APR-10 20:10
Receive Date: 04-MAY-10
Collector: Client

Project: FLAD00110
Client ID: FLAD001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Rad Gas Flow Proportional Counting

GFPC, Gross A/B, solid "Dry Weight Corrected"

Alpha	5.43	+/-2.84	2.94	4.00	pCi/g		DXF3	05/23/10	0948	985982	1
Beta	3.85	+/-2.14	2.97	10.0	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DRS1	05/05/10	1359	981005

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 900.0/SW846 9310/SM 7110B Modified	

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QC Summary

Florida Department of Environmental Protection

2600 Blair Stone Road
Tallahassee, Florida

Contact: Ms. Kate Brackett

Workorder: 252194

Report Date: May 24, 2010

Page 1 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	985982										
QC1202121001	252194001	DUP									
Alpha	U	1.62	U	2.70	pCi/g	0.00		N/A	DXF3	05/23/10	16:50
	Uncertainty	+/-1.99		+/-2.27							
Beta	U	0.00267	U	0.792	pCi/g	0.00		N/A			
	Uncertainty	+/-1.99		+/-1.94							
QC1202121004	LCS										
Alpha	113			115	pCi/g		102	(75%-125%)		05/23/10	09:42
	Uncertainty			+/-11.6							
Beta	395			404	pCi/g		102	(75%-125%)			
	Uncertainty			+/-15.0							
QC1202121000	MB										
Alpha			U	-0.0457	pCi/g					05/23/10	09:47
	Uncertainty			+/-1.17							
Beta			U	0.135	pCi/g						
	Uncertainty			+/-2.01							
QC1202121002	252194001	MS									
Alpha	118 U	1.62		104	pCi/g		88.6	(75%-125%)		05/23/10	09:47
	Uncertainty	+/-1.99		+/-11.7							
Beta	413 U	0.00267		392	pCi/g		94.9	(75%-125%)			
	Uncertainty	+/-1.99		+/-15.3							
QC1202121003	252194001	MSD									
Alpha	120 U	1.62		129	pCi/g	20.8*	107	(0%-20%)		05/23/10	09:47
	Uncertainty	+/-1.99		+/-12.7							
Beta	421 U	0.00267		441	pCi/g	11.6	105	(0%-20%)			
	Uncertainty	+/-1.99		+/-16.3							

Notes:

The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- F Estimated Value
- H Analytical holding time was exceeded

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QC Summary

Workorder: 252194

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
J	Value is estimated										
M	M if above MDC and less than LLD										
M	Matrix Related Failure										
N/A	RPD or %Recovery limits do not apply.										
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.										
UI	Gamma Spectroscopy--Uncertain identification										
UJ	Gamma Spectroscopy--Uncertain identification										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

SIS-2010-04-27-01

252194

(850) 245-8085

(843) 556-8171

Task Assignment Number: GEL Maximum Cost: 180.00
Turnaround Time: 2 weeks unless gamma emitter
are added

ProjectName/Description: (include purpose, location, etc.)

Total: 180.00

QC Instructions: Use a sample from this set of 3 for the duplicate matrix spike.

* Please sign and return by FAX at (850) 412-0497 or e-mail to kathryn.brackett@dep.state.fl.us

Bureau of Labs

~~Please hold samples - pending PO approval~~

SAMPLE RECEIPT & REVIEW FORM

Client: FLAD		SDG/AR/COC/Work Order: 252194	
Received By: ty		Date Received: 05/04/10	
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		☒	Maximum Counts Observed*: 10
Classified Radioactive II or III by RSO?		☒	
COC/Samples marked containing PCBs?		☒	
Shipped as a DOT Hazardous?		☒	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		☒	

Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	☒			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Samples requiring cold preservation within (0 ≤ 6 deg. C)?	☒			21 Preservation Method: Ice bags Blue ice Dry ice <u>None</u> Other (describe)
2a	Daily check performed and passed on IR temperature gun?	☒			Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable):
3	Chain of custody documents included with shipment?	☒			
4	Sample containers intact and sealed?	☒			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5	Samples requiring chemical preservation at proper pH?	☒			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?	☒			Sample ID's and containers affected:
7	Are Encore containers present?	☒			(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	☒			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	☒			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	☒			Sample ID's affected:
11	Number of containers received match number indicated on COC?	☒			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	☒			
13	Carrier and tracking number.	☒			Circle Applicable: <u>FedEx Air</u> FedEx Ground UPS Field Service Courier Other 7935 0461 8460

Comments (Use Continuation Form if needed):

SIS-2010-04-27-01

TLH-2010-04-27-64

Acreage April 2010 GW & Soil

SAMPLE ID	FIELD ID	DATE SAMPLED	MATRIX	ANALYSIS
1266649	75-A	4/26/2010 20:00	S-OTHER	Gross Alpha/Gross Beta/Gamma Emitters
1266652	75-A DEEP	4/26/2010 20:05	S-OTHER	Gross Alpha/Gross Beta/Gamma Emitters
1266653	75-B	4/26/2010 20:10	S-OTHER	Gross Alpha/Gross Beta/Gamma Emitters

There are no "Data Exception Reports" associated with this analytical report.