

SIS-2010-04-07-01



Florida Radiochemistry Services, Inc.

Contact: Michael J. Naumann

5456 Hoffner Ave., Suite 201 Orlando, FL 32812

Phone: (407) 382-7733 Fax: (407) 382-7744

Certification I. D. # E83033

Work Order #: 1004089

Report Date: 04/30/10

Report to:

State of Florida DEP

2600 Blair Stone Road

Tallahassee, FL 32399-2400

Attention: Kate Brackett – MS 6510

I do hereby affirm that this record contains no willful misrepresentations and that this information given by me is true to the best of my knowledge and belief. I further certify that the methods and quality control measures used to produce these laboratory results were implemented in accordance with the requirements of this laboratory's certification and NELAC Standards. The test results in this report relate only to the samples received.

Signed


Michael J. Naumann - President

Date

4-30-10



Florida Radiochemistry Services, Inc.

Sample Login

Client:	State of Florida DEP	Date / Time Received	Work order #
		04/13/10 09:39	1004089
Client Contact:	Kate Brackett		
Client P.O.	A06603		
Project I.D.	FR160		

Lab Sample I.D.	Client Sample I.D.	Sample Date/Time	Analysis Requested
1004089-01	1262328	04/05/10 16:30	Gross Alpha / Beta
1004089-02	1262329	04/05/10 16:00	Gross Alpha / Beta
1004089-03	1262330	04/06/10 08:15	Gross Alpha / Beta
1004089-04	1262331	04/06/10 10:15	Gross Alpha / Beta
1004089-05	1262332	04/06/10 10:15	Gross Alpha / Beta
1004089-06	1262333	04/06/10 10:45	Gross Alpha / Beta
1004089-07	1262334	04/06/10 13:40	Gross Alpha / Beta
1004089-08	1262335	04/06/10 08:00	Gross Alpha / Beta
1004089-09	1262336	04/06/10 09:45	Gross Alpha / Beta
1004089-10	1262337	04/06/10 17:15	Gross Alpha / Beta
1004089-11	1262338	04/06/10 13:00	Gross Alpha / Beta
1004089-12	1262349	04/05/10 16:30	Ra226, Ra228
1004089-13	1262350	04/05/10 16:30	Ra226, Ra228
1004089-14	1262351	04/05/10 16:00	Ra226, Ra228
1004089-15	1262352	04/06/10 08:15	Ra226, Ra228
1004089-16	1262353	04/06/10 10:15	Ra226, Ra228



Florida Radiochemistry Services, Inc.

Sample Login

Client:	State of Florida DEP	Date / Time Received	Work order #
		04/13/10 09:39	1004089
Client Contact:	Kate Brackett		
Client P.O.	A06603		
Project I.D.	FR160		

Lab Sample I.D.	Client Sample I.D.	Sample Date/Time	Analysis Requested
1004089-17	1262354	04/06/10 10:15	Ra226, Ra228
1004089-19	1262355	04/06/10 10:45	Ra226, Ra228
1004089-19	1262356	04/06/10 13:40	Ra226, Ra228
1004089-20	1262357	04/06/10 08:35	Ra226, Ra228
1004089-21	1262358	04/06/10 08:00	Ra226, Ra228
1004089-22	1262359	04/06/10 10:05	Ra226, Ra228
1004089-23	1262360	04/06/10 09:45	Ra226, Ra228
1004089-24	1262361	04/06/10 16:35	Ra226, Ra228
1004089-25	1262362	04/06/10 17:15	Ra226, Ra228
1004089-26	1262363	04/06/10 13:00	Ra226, Ra228



Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D.	1004089-01	1004089-02	1004089-03	1004089-04	1004089-05	1004089-06
Client I.D.	1262328	1262329	1262330	1262331	1262332	1262333
Gross Alpha	1.1U	1.0U	2.3U	1.7U	2.1	1.6U
Error +/-	0.6	0.5	1.5	1.2	1.3	0.9
MDL	1.1	1.0	2.3	1.7	1.9	1.6
EPA Method	900.0	900.0	900.0	900.0	900.0	900.0
Prep Date	04/19/10	04/19/10	04/19/10	04/19/10	04/19/10	04/19/10
Prep Time	06:35	06:35	06:35	06:35	06:35	06:35
Analysis Date	04/20/10	04/20/10	04/20/10	04/20/10	04/20/10	04/20/10
Analysis Time	07:25	07:25	10:53	15:08	15:08	15:08
Analyst	MJN	MJN	MJN	MJN	MJN	MJN
Gross Beta	1.9U	1.6U	2.7U	2.3U	2.6	1.8U
Error +/-	1.1	1.0	1.6	1.4	1.2	1.1
MDL	1.9	1.6	2.7	2.3	1.9	1.8
EPA Method	900.0	900.0	900.0	900.0	900.0	900.0
Prep Date	04/19/10	04/19/10	04/19/10	04/19/10	04/19/10	04/19/10
Prep Time	06:35	06:35	06:35	06:35	06:35	06:35
Analysis Date	04/20/10	04/20/10	04/20/10	04/20/10	04/20/10	04/20/10
Analysis Time	07:25	07:25	10:53	15:08	15:08	15:08
Analyst	MJN	MJN	MJN	MJN	MJN	MJN
Units	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l



Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D. 1004089-07 1004089-08 1004089-09 1004089-10 1004089-11 1004089-12

Client I.D. 1262334 1262335 1262336 1262337 1262338 1262349

Gross Alpha	2.4U	1.9U	3.0	3.1U	0.8U
Error +/-	1.3	1.2	1.5	1.8	0.4
MDL	2.4	1.9	2.2	3.1	0.8
EPA Method	900.0	900.0	900.0	900.0	900.0
Prep Date	04/19/10	04/19/10	04/19/10	04/19/10	04/19/10
Prep Time	06:35	06:35	06:35	06:35	06:35
Analysis Date	04/20/10	04/20/10	04/20/10	04/20/10	04/20/10
Analysis Time	06:08	15:09	15:09	15:09	07:25
Analyst	MJN	MJN	MJN	MJN	MJN

Gross Beta	2.1U	1.9U	2.0U	3.1U	1.6U
Error +/-	1.2	1.1	1.2	1.9	1.0
MDL	2.1	1.9	2.0	3.1	1.6
EPA Method	900.0	900.0	900.0	900.0	900.0
Prep Date	04/19/10	04/19/10	04/19/10	04/19/10	04/19/10
Prep Time	06:35	06:35	06:35	06:35	06:35
Analysis Date	04/20/10	04/20/10	04/20/10	04/20/10	04/20/10
Analysis Time	06:08	15:09	15:09	15:09	07:25
Analyst	MJN	MJN	MJN	MJN	MJN

Radium 226	0.5
Error +/-	0.1
MDL	0.2
EPA Method	903.1
Prep Date	04/15/10
Prep Time	09:50
Analysis Date	04/27/10
Analysis Time	10:41
Analyst	MJN

Radium 228	0.8U
Error +/-	0.5
MDL	0.8
EPA Method	Ra-05
Prep Date	04/15/10
Prep Time	09:50
Analysis Date	04/27/10
Analysis Time	11:16
Analyst	PJ

Units	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l
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Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D. 1004089-13 1004089-14 1004089-15 1004089-16 1004089-17 1004089-19

Client I.D.	1262350	1262351	1262352	1262353	1262354	1262355
Radium 226	0.6	0.1	0.6	0.3	1.6	0.2
Error +/-	0.1	0.1	0.1	0.1	0.2	0.1
MDL	2.0	0.1	0.1	0.1	0.1	0.1
EPA Method	903.1	903.1	903.1	903.1	903.1	903.1
Prep Date	04/15/10	04/15/10	04/15/10	04/15/10	04/15/10	04/15/10
Prep Time	09:50	09:50	09:50	09:50	09:50	09:50
Analysis Date	04/27/10	04/27/10	04/27/10	04/27/10	04/27/10	04/27/10
Analysis Time	10:41	11:47	11:47	11:47	11:47	11:47
Analyst	MJN	MJN	MJN	MJN	MJN	MJN
Radium 228	0.9U	0.8U	0.9U	0.8U	0.8U	0.8U
Error +/-	0.6	0.5	0.6	0.5	0.6	0.5
MDL	0.9	0.8	0.9	0.8	0.8	0.8
EPA Method	Ra-05	Ra-05	Ra-05	Ra-05	Ra-05	Ra-05
Prep Date	04/15/10	04/15/10	04/15/10	04/15/10	04/15/10	04/15/10
Prep Time	09:50	09:50	09:50	09:50	09:50	09:50
Analysis Date	04/27/10	04/27/10	04/27/10	04/27/10	04/27/10	04/27/10
Analysis Time	11:16	11:16	11:16	12:18	12:18	12:18
Analyst	PJ	PJ	PJ	PJ	PJ	PJ
Units	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l



Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D.	1004089-19	1004089-20	1004089-21	1004089-22	1004089-23	1004089-24
Client I.D.	1262356	1262357	1262358	1262359	1262360	1262361
Radium 226	0.4	0.3	0.3	0.7	0.2	1.3
Error +/-	0.1	0.1	0.1	0.1	0.1	0.2
MDL	0.1	0.1	0.1	0.1	0.1	0.2
EPA Method	903.1	903.1	903.1	903.1	903.1	903.1
Prep Date	04/16/10	04/16/10	04/16/10	04/16/10	04/16/10	04/16/10
Prep Time	09:00	09:00	09:00	09:00	09:00	09:00
Analysis Date	04/28/10	04/28/10	04/28/10	04/28/10	04/28/10	04/28/10
Analysis Time	10:35	10:35	10:35	11:37	11:37	11:37
Analyst	MJN	MJN	MJN	MJN	MJN	MJN
Radium 228	0.7U	0.7U	0.7U	0.6U	0.8U	0.7U
Error +/-	0.5	0.4	0.5	0.4	0.5	0.4
MDL	0.7	0.7	0.7	0.6	0.8	0.7
EPA Method	Ra-05	Ra-05	Ra-05	Ra-05	Ra-05	Ra-05
Prep Date	04/16/10	04/16/10	04/16/10	04/16/10	04/16/10	04/16/10
Prep Time	09:00	09:00	09:00	09:00	09:00	09:00
Analysis Date	04/28/10	04/28/10	04/28/10	04/28/10	04/28/10	04/28/10
Analysis Time	11:07	11:07	11:07	11:07	11:07	12:13
Analyst	PJ	PJ	PJ	PJ	PJ	PJ
Units	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l

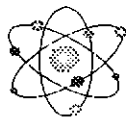


Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D. 1004089-25 1004089-26

Client I.D.	1262362	1262363
Radium 226	0.3	0.1
Error +/-	0.1	0.1
MDL	0.1	0.1
EPA Method	903.1	903.1
Prep Date	04/16/10	04/16/10
Prep Time	09:00	09:00
Analysis Date	04/28/10	04/28/10
Analysis Time	11:37	11:37
Analyst	MJN	MJN
Radium 228	0.7U	0.6U
Error +/-	0.4	0.4
MDL	0.7	0.6
EPA Method	Ra-05	Ra-05
Prep Date	04/16/10	04/16/10
Prep Time	09:00	09:00
Analysis Date	04/28/10	04/28/10
Analysis Time	12:13	12:13
Analyst	PJ	PJ
Units	pCi/l	pCi/l



Florida Radiochemistry Services, Inc.

QA Page

Analyte	Sample #	Date Analyzed	Sample Result	Amount Spiked	Spike Result	Spike /Dup Result	Spike % Rec.	Spike Dup % Rpd
Gross Alpha	1004089-01	04/20/10	<1.1	10.2	11.7	11.7	115	0.0
Gross Beta	1004089-01	04/20/10	<1.9	15.7	16.2	17.1	103	5.4
Radium 226	1004089-15	04/27/10	0.6	25.2	22.8	23.8	88	4.3
Radium 228	1004089-15	04/27/10	<0.9	4.9	5.3	5.3	108	0.0

Quality Control Limits

% RPD % Rec.

Gross Alpha	25.0	60-125
Gross Beta	17.8	82-125
Radium 226	23.4	78-125
Radium 228	23.9	67-125

SIS-2010-090701

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
TASK ASSIGNMENT/NOTIFICATION FORM: DEP PURCHASE ORDER NO A06603

Contract Manager: Kate Brackett, MS 6510
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400

(850) 245-8085

Contractor: Florida Radiochemistry Services
5456 Hoffner Avenue, Suite 201
Orlando, FL 32812

(407) 382-7733

State Approval By: [Signature]
Project Manager

Contractor Approval By: [Signature]
Project Manager

Contractor Representative Contacted: M. A. [Signature] Date: 4/9/10

Means of Contact: phone

Task Assignment Number: FR 160 Maximum Cost: \$2568.00
Turnaround Time: 2 weeks if possible

Sample Delivery Date: shipped 4/12/10

Project Name/Description: (include purpose, location, etc.) SIS

Parameter Group/ Method	Sample Matrix	# of Samples	# of QC Samples	DEP ID #	Unit Cost	%mark-up (if any)	Cost
<u>Env. Mph / Rm C-</u>		<u>11</u>		<u>1262325 338</u>	<u>32.00</u>		<u>360.00</u>
<u>Rm 226/228 C-</u>		<u>15</u>	<u>1</u>	<u>1262349 343</u>	<u>138.00</u>		<u>2208.00</u>
							Total: <u>\$2568.00</u>

Total Number of Containers Shipped: 41

QC Instructions: Run duplicate matrix spike in 1262325 for alph/beta
Run duplicate matrix spike in 1262352 for radon 226/228

Samples released to Contract Lab by: Frank Rush / Deliver Method: Fed X Nextday

Accepted by: [Signature] 4/13/10 9:39 *

* Please sign and return by FAX at (850) 245-8218 412-0497

Xerox copy Sent To:

Contracts-MS #93

F&A-MS #78

Bureau of Labs

SIS-2010-04-07-01

TLH-2010-04-07-76

SAMPLE ID	FIELD ID	DATE SAMPLED	MATRIX	ANALYSIS	SPEC. COND.
1262328	36-POST	4/5/2010 16:30	W-GROUND	OV-ALPHA/BETA	
1262329	25-RO	4/5/2010 16:00	W-GROUND	OV-ALPHA/BETA	
1262330	32-POST	4/6/2010 8:15	W-GROUND	OV-ALPHA/BETA	
1262331	38-PRE	4/6/2010 10:15	W-GROUND	OV-ALPHA/BETA	
1262332	38-PRE DUP	4/6/2010 10:15	W-GROUND	OV-ALPHA/BETA	
1262333	38-POST	4/6/2010 10:45	W-GROUND	OV-ALPHA/BETA	
1262334	37-POST	4/6/2010 13:40	W-GROUND	OV-ALPHA/BETA	
1262335	33-POST	4/6/2010 8:00	W-GROUND	OV-ALPHA/BETA	
1262336	35-POST	4/6/2010 9:45	W-GROUND	OV-ALPHA/BETA	
1262337	34-POST	4/6/2010 17:15	W-GROUND	OV-ALPHA/BETA	
1262338	FIELD BLANK	4/6/2010 13:00	W-FIELD-BK	OV-ALPHA/BETA	
1262349	36-PRE	4/5/2010 16:30	W-GROUND	OV-RADIUM	
1262350	36-POST	4/5/2010 16:30	W-GROUND	OV-RADIUM	
1262351	25-RO	4/5/2010 16:00	W-GROUND	OV-RADIUM	
1262352	32-POST	4/6/2010 8:15	W-GROUND	OV-RADIUM	
1262353	38-PRE	4/6/2010 10:15	W-GROUND	OV-RADIUM	
1262354	38-PRE DUP	4/6/2010 10:15	W-GROUND	OV-RADIUM	
1262355	38-POST	4/6/2010 10:45	W-GROUND	OV-RADIUM	
1262356	37-POST	4/6/2010 13:40	W-GROUND	OV-RADIUM	
1262357	33-PRE	4/6/2010 8:35	W-GROUND	OV-RADIUM	
1262358	33-POST	4/6/2010 8:00	W-GROUND	OV-RADIUM	
1262359	35-PRE	4/6/2010 10:05	W-GROUND	OV-RADIUM	
1262360	35-POST	4/6/2010 9:45	W-GROUND	OV-RADIUM	
1262361	34-PRE	4/6/2010 16:35	W-GROUND	OV-RADIUM	
1262362	34-POST	4/6/2010 17:15	W-GROUND	OV-RADIUM	
1262363	FIELD BLANK	4/6/2010 13:00	W-FIELD-BK	OV-RADIUM	