



November 14, 2014

Mr. Gregory Hisel
St. Francis Hospital
62 Kibbe Rd
Ellington, Connecticut 06029

Re: Total Activity Wipes
Work Order: 359240

Dear Mr. Hisel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 16, 2014. 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. 4443.

Sincerely,

Erin Trent for
Lindsay Fabra
Project Manager

Purchase Order: 0100320614
Enclosures



Certificates of Analysis and QC Summary

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

STFR001 St. Francis Hospital

Client SDG: 359240 GEL Work Order: 359240

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** 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 limit as defined in the 'U' qualifier above.

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, Lindsay Fabra.

Reviewed by



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-2	Project:	STFR00100
Sample ID:	359240001	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.108	+/-1.40	2.45	5.00	pCi/Filter		GXR1	10/29/14	0841	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-3	Project:	STFR00100
Sample ID:	359240002	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.0531	+/-1.40	2.45	5.00	pCi/Filter		GXR1	10/29/14	0857	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-4	Project:	STFR00100
Sample ID:	359240003	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.15	+/-1.40	2.45	5.00	pCi/Filter		GXR1	10/29/14	0913	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-5	Project:	STFR00100
Sample ID:	359240004	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.253	+/-1.39	2.45	5.00	pCi/Filter		GXR1	10/29/14	0930	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

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Certificate of Analysis

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Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-6	Project:	STFR00100
Sample ID:	359240005	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-1.01	+/-1.36	2.45	5.00	pCi/Filter		GXR1	10/29/14	0946	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

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Certificate of Analysis

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Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-7	Project:	STFR00100
Sample ID:	359240006	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.335	+/-1.39	2.45	5.00	pCi/Filter		GXR1	10/29/14	1002	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

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Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-8	Project:	STFR00100
Sample ID:	359240007	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.362	+/-1.42	2.45	5.00	pCi/Filter		GXR1	10/29/14	1018	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

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Company : St. Francis Hospital
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Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-9	Project:	STFR00100
Sample ID:	359240008	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.185	+/-1.40	2.46	5.00	pCi/Filter		GXR1	10/29/14	1034	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

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Company : St. Francis Hospital
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Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-10	Project:	STFR00100
Sample ID:	359240009	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.932	+/-1.36	2.45	5.00	pCi/Filter		GXR1	10/29/14	1050	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

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Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-11	Project:	STFR00100
Sample ID:	359240010	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.123	+/-1.41	2.45	5.00	pCi/Filter		GXR1	10/29/14	1106	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

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Certificate of Analysis

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Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-12	Project:	STFR00100
Sample ID:	359240011	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.282	+/-1.41	2.45	5.00	pCi/Filter		GXR1	10/29/14	1123	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

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

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Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-13	Project:	STFR00100
Sample ID:	359240012	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	1.53	+/-1.47	2.46	5.00	pCi/Filter		GXR1	10/29/14	1139	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

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

Certificate of Analysis

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Company : St. Francis Hospital
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Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-14	Project:	STFR00100
Sample ID:	359240013	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.0581	+/-1.40	2.45	5.00	pCi/Filter		GXR1	10/29/14	1155	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-15	Project:	STFR00100
Sample ID:	359240014	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.00992	+/-1.41	2.46	5.00	pCi/Filter		GXR1	10/29/14	1211	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-16	Project:	STFR00100
Sample ID:	359240015	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.0582	+/-1.41	2.46	5.00	pCi/Filter		GXR1	10/29/14	1227	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-17	Project:	STFR00100
Sample ID:	359240016	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.176	+/-1.40	2.46	5.00	pCi/Filter		GXR1	10/29/14	1243	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-18	Project:	STFR00100
Sample ID:	359240017	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.535	+/-1.38	2.45	5.00	pCi/Filter		GXR1	10/29/14	1259	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-3-19	Project:	STFR00100
Sample ID:	359240018	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.397	+/-1.42	2.45	5.00	pCi/Filter		GXR1	10/29/14	1316	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

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Certificate of Analysis

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Company : St. Francis Hospital
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Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-1	Project:	STFR00100
Sample ID:	359240019	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.797	+/-1.36	2.45	5.00	pCi/Filter		GXR1	10/29/14	1332	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

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Company : St. Francis Hospital
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Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-2	Project:	STFR00100
Sample ID:	359240020	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.0296	+/-1.41	2.46	5.00	pCi/Filter		GXR1	10/29/14	1348	1430974	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

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Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-3	Project:	STFR00100
Sample ID:	359240021	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.580	+/-2.16	3.69	5.00	pCi/Filter		GXR1	10/29/14	0401	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

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Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-4	Project:	STFR00100
Sample ID:	359240022	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.0165	+/-2.14	3.69	5.00	pCi/Filter		GXR1	10/29/14	0417	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

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Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-5	Project:	STFR00100
Sample ID:	359240023	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.376	+/-2.13	3.69	5.00	pCi/Filter		GXR1	10/29/14	0433	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-6	Project:	STFR00100
Sample ID:	359240024	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-1.11	+/-2.11	3.69	5.00	pCi/Filter		GXR1	10/29/14	0450	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-7	Project:	STFR00100
Sample ID:	359240025	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.206	+/-2.14	3.71	5.00	pCi/Filter		GXR1	10/29/14	0506	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-8	Project:	STFR00100
Sample ID:	359240026	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	2.01	+/-2.20	3.69	5.00	pCi/Filter		GXR1	10/29/14	0522	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-9	Project:	STFR00100
Sample ID:	359240027	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.478	+/-2.16	3.69	5.00	pCi/Filter		GXR1	10/29/14	0538	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-10	Project:	STFR00100
Sample ID:	359240028	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.169	+/-2.14	3.69	5.00	pCi/Filter		GXR1	10/29/14	0555	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-11	Project:	STFR00100
Sample ID:	359240029	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.145	+/-2.13	3.69	5.00	pCi/Filter		GXR1	10/29/14	0611	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-12	Project:	STFR00100
Sample ID:	359240030	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.0165	+/-2.14	3.69	5.00	pCi/Filter		GXR1	10/29/14	0627	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-13	Project:	STFR00100
Sample ID:	359240031	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	1.52	+/-2.18	3.69	5.00	pCi/Filter		GXR1	10/29/14	0644	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-14	Project:	STFR00100
Sample ID:	359240032	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.180	+/-2.15	3.69	5.00	pCi/Filter		GXR1	10/29/14	0700	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-15	Project:	STFR00100
Sample ID:	359240033	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.169	+/-2.14	3.69	5.00	pCi/Filter		GXR1	10/29/14	0717	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-16	Project:	STFR00100
Sample ID:	359240034	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.890	+/-2.17	3.69	5.00	pCi/Filter		GXR1	10/29/14	0733	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-17	Project:	STFR00100
Sample ID:	359240035	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-2.05	+/-2.08	3.69	5.00	pCi/Filter		GXR1	10/29/14	0749	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-18	Project:	STFR00100
Sample ID:	359240036	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	-0.414	+/-2.13	3.69	5.00	pCi/Filter		GXR1	10/29/14	0805	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-19	Project:	STFR00100
Sample ID:	359240037	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.812	+/-2.16	3.69	5.00	pCi/Filter		GXR1	10/29/14	0822	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-20	Project:	STFR00100
Sample ID:	359240038	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.235	+/-2.15	3.69	5.00	pCi/Filter		GXR1	10/29/14	0838	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-4-21	Project:	STFR00100
Sample ID:	359240039	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 15:30		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.258	+/-2.15	3.69	5.00	pCi/Filter		GXR1	10/29/14	0854	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: November 14, 2014

Company : St. Francis Hospital
Address : 62 Kibbe Rd

Ellington, Connecticut 06029

Contact: Mr. Gregory Hisel
Project: Total Activity Wipes

Client Sample ID:	S-5-1	Project:	STFR00100
Sample ID:	359240040	Client ID:	STFR001
Matrix:	Filter		
Collect Date:	12-OCT-14 16:00		
Receive Date:	16-OCT-14		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint. Total activity "As Received"												
Total Activity	U	0.639	+/-2.17	3.70	5.00	pCi/Filter		GXR1	10/29/14	0911	1430975	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	GL-RAD-A-041	

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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

QC Summary

Report Date: November 14, 2014

Page 1 of 2

St. Francis Hospital
62 Kibbe Rd
Ellington, Connecticut

Contact: Mr. Gregory Hisel

Workorder: 359240

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Liquid Scintillation											
Batch	1430974										
QC1203196641	LCS										
Total Activity	86.9			84.4	pCi/Filter		97.1	(75%-125%)	GXR1	10/29/14	14:20
	Uncertainty			+/-3.51							
QC1203196642	LCSD										
Total Activity	86.9			85.2	pCi/Filter	1.00	98.1	(0%-20%)		10/29/14	14:36
	Uncertainty			+/-3.53							
QC1203196640	MB										
Total Activity			U	-0.454	pCi/Filter					10/29/14	14:04
	Uncertainty			+/-1.39							
Batch	1430975										
QC1203196645	LCS										
Total Activity	86.9			86.6	pCi/Filter		99.6	(75%-125%)	GXR1	10/29/14	09:43
	Uncertainty			+/-3.90							
QC1203196646	LCSD										
Total Activity	86.9			83.9	pCi/Filter	3.16	96.5	(0%-20%)		10/29/14	10:00
	Uncertainty			+/-3.86							
QC1203196644	MB										
Total Activity			U	0.371	pCi/Filter					10/29/14	09:27
	Uncertainty			+/-2.14							

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

- ** Analyte is a Tracer compound
- < Result is less than value reported
- > Result is greater than value reported
- BD Results are either below the MDC or tracer recovery is low
- FA Failed analysis.
- H Analytical holding time was exceeded
- J Value is estimated
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- M M if above MDC and less than LLD
- M REMP Result > MDC/CL and < RDL
- N/A RPD or %Recovery limits do not apply.
- N1 See case narrative
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

GEL LABORATORIES LLC

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

QC Summary

Workorder: 359240

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.										
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										
UL	Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	Other specific qualifiers were required to properly define the results. Consult case narrative.										
^	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 or %RPD not applicable.

^ 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.

Chain of Custody and Supporting Documentation

GEL Chain of Custody and Analytical Request				GEL Laboratories, LLC 2040 Savage Road Charleston, SC 29407 Phone: (843) 556-8171 Fax: (843) 766-1178			
Project #: <u>6-E4 P14-0945</u>		GEL Work Order Number: <u>359240</u>		Sample Analysis Requested ⁽⁵⁾ (Fill in the number of containers for each test)			
Client Name: <u>St. Francis Hospital</u>		Phone #: <u>518-755-7465</u>					
Project/Site Name: <u>860-856-6333</u>		Fax #: <u>860-856-6333</u>					
Address:							
Collected by:		Send Results To:					
Sample ID		*Time Collected (Military) (hhmm)		*Date Collected (mm-dd-yy)		*Time Collected (Military) (hhmm)	
* For composites - indicate start and stop date/time		QC Code ^(b)		Field Filtered ^(b)		Sample Matrix ^(b)	
S-3-2		N		N		P	
S-3-3							
S-3-4							
S-3-5							
S-3-6							
S-3-7							
S-3-8							
S-3-9							
S-3-10							
S-3-11							
TAT Requested: Normal: <input checked="" type="checkbox"/> Rush: <input type="checkbox"/> Specify: <input type="checkbox"/>		(Subject to Surcharge)		Fax Results: <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No		Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4	
Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards						Sample Collection Time Zone Eastern Pacific Other _____ Mountain	
Chain of Custody Signatures				Sample Shipping and Delivery Details			
Relinquished By (Signed)		Date		Received by (signed)		Date	
1. <u>Bob M</u>		10/17/14		1. <u>Federal</u>		Date Shipped:	
2. <u>Janet Williams</u>		10.16.14		2. <u>10.16.14</u>		Method of Shipment:	
3. <u></u>				3. <u></u>		Airbill #:	
Chain of Custody Number = Client Determined				For Lab Receiving Use Only			
1.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite				Custody Seal Intact?			
2.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.				YES NO			
3.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal				Cooler Temp:			
4.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).				C			
5.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank							
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank							

WHITE = LABORATORY

YELLOW = FILE

PINK = CLIENT

GEL Chain of Custody and Analytical Request				GEL Laboratories, LLC 2040 Savage Road Charleston, SC 29407 Phone: (843) 556-8171 Fax: (843) 766-1178			
GEL Work Order Number:				Sample Analysis Requested ⁽⁵⁾ (Fill in the number of containers for each test)			
Client Name: <i>St. Francis Hospital</i>				Should this sample be considered:			
Project/Site Name:				Total number of containers			
Address:				Radiative			
Collected by:				TSCA Regulated			
Send Results To:				Sample Matrix ⁽⁴⁾			
Sample ID				Field Filtered ⁽⁴⁾			
* For composites - Indicate start and stop date/time				QC Code ⁽⁴⁾			
S-3-12				Time Collected (hhmm)			
S-3-13				Date Collected (mm-dd-yy)			
S-3-14				Sample Matrix ⁽⁴⁾			
S-3-15				Field Filtered ⁽⁴⁾			
S-3-16				QC Code ⁽⁴⁾			
S-3-17				Time Collected (hhmm)			
S-3-18				Date Collected (mm-dd-yy)			
S-3-19				Sample Matrix ⁽⁴⁾			
S-4-1				Field Filtered ⁽⁴⁾			
S-4-2				QC Code ⁽⁴⁾			
TAT Requested: Normal: <input checked="" type="checkbox"/> Rush: <input type="checkbox"/> Specify: (Subject to Surcharge)				Fax Results: <input checked="" type="checkbox"/> Yes / No			
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4				Sample Collection Time Zone			
Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards				Eastern Pacific Other			
Chain of Custody Signatures				Sample Shipping and Delivery Details			
Relinquished By (Signed) Date Time				GEL PM:			
1 <i>S. R. 10/14/17</i>				Method of Shipment:			
2 <i>St. Francis Hospital 10/16/17</i>				Date Shipped:			
3				Airbill #:			
Chain of Custody Number = Client Determined				For Lab Receiving Use Only			
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Duplicate Sample, G = Grab, C = Composite				Custody Seal Intact?			
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.				YES NO			
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal				Cooler Temp:			
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).				C			
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank							

PINK = CLIENT

YELLOW = FILE

WHITE = LABORATORY

GEL Chain of Custody and Analytical Request				GEL Laboratories, LLC 2040 Savage Road Charleston, SC 29407 Phone: (843) 556-8171 Fax: (843) 766-1178			
GEL Work Order Number:				Sample Analysis Requested ⁽⁵⁾ (Fill in the number of containers for each test)			
Client Name: <u>St. Francis Hospital</u> Phone #: _____							
Project/Site Name: _____							
Address: _____							
Collected by: _____							
Send Results To:							
Sample ID				Should this sample be considered:			
* For composites - indicate start and stop date/time				Radiative			
* Date Collected (mm-dd-yy)				TSCA Regulated			
* Time Collected (Military) (hhmm)				Total number of containers			
* QC Code (b)				Preservative Type (6)			
* Field Filtered (a)				Comments			
* Sample Matrix (a)				Note: extra sample is required for sample specific QC			
S-4-3				Total Activity			
S-4-4							
S-4-5							
S-4-6							
S-4-7							
S-4-8							
S-4-9							
S-4-10							
S-4-11							
S-4-12							
TAT Requested: Normal: <input checked="" type="checkbox"/> Rush: _____ Specify: _____ (Subject to Surcharge) Fax Results: <input checked="" type="checkbox"/> Yes / No				Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4			
Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards				Sample Collection Time Zone Eastern Pacific Central Other Mountain			
Chain of Custody Signatures				Sample Shipping and Delivery Details			
Relinquished By (Signed) Date Time				GEL PM: _____			
1. <u>[Signature]</u> 10/17/17				Method of Shipment: _____ Date Shipped: _____			
2. <u>[Signature]</u>				Airbill #: _____			
3. <u>[Signature]</u>				Airbill #: _____			
Chain of Custody Number = Client Determined				For Lab Receiving Use Only			
1.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite				Custody Seal Intact?			
2.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.				YES NO			
3.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, WO=Water, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal				Cooler Temp: _____			
4.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).							
5.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Sulfate. If no preservative is added = leave field blank.							
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Sulfate. If no preservative is added = leave field blank.							

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Page: 8 of 16
Project #: 64-6445
GEL Quote #: 64-6445
GEL Work Order Number: 64-6445
PO Number: 64-6445

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

GEL Chain of Custody and Analytical Request

Client Name: St Francis Hospital
Project/Site Name:
Address:
Phone #:
Fax #:
GEL Work Order Number:
PO Number:
Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID	Date Collected (mm-dd-yy)	Time Collected (Military) (hhmm)	QC Code (a)	Field Filtered (b)	Sample Matrix (c)	Should this sample be considered:		Total number of containers	Preservative Type (6)	Comments
						Radioactive	TSCA Regulated			
S-4-13	10-12-14	1530	N	N	P			1		Total Activity
S-4-14										
S-4-15										
S-4-16										
S-5-4-17										
S-4-18										
S-4-19										
S-4-20										
S-4-21										
S-5-1		1600								

TAT Requested: Normal: ☒ Rush: ☐ Specify: (Subject to Surcharge) Fax Results: ☒ Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Sample Collection Time Zone: Eastern Pacific Central Other

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Chain of Custody Signatures

Relinquished By (Signed)	Date	Received by (signed)	Date	Time
1. [Signature]	10/14/14	1. [Signature]		
2. [Signature]		2. [Signature]	10.16.14	0840
3. [Signature]		3. [Signature]		

GEL PM:
Method of Shipment:
Date Shipped:
Airbill #:
Airbill #:

Chain of Custody Number = Client Determined

1.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

2.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.

3.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

4.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

5.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only

Custody Seal Intact? YES NO

Cooler Temp: C

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SAMPLE RECEIPT & REVIEW FORM

Client: <u>St. Francis</u>		SDG/AR/COC/Work Order: <u>359240</u>	
Received By: <u>SE</u>		Date Received: <u>10.16.14</u>	
Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
COC/Samples marked as radioactive?		<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u>
Classified Radioactive II or III by RSO?		<input checked="" type="checkbox"/>	If yes, Were swipes taken of sample containers < action levels?
COC/Samples marked containing PCBs?		<input checked="" type="checkbox"/>	
Package, COC, and/or Samples marked as beryllium or asbestos containing?		<input checked="" type="checkbox"/>	If yes, samples are to be segregated as Safety Controlled Samples, and opened by the GEL Safety Group.
Shipped as a DOT Hazardous?		<input checked="" type="checkbox"/>	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		<input checked="" type="checkbox"/>	

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*		<input checked="" type="checkbox"/>		Preservation Method: Ice bags Blue ice Dry ice <u>None</u> Other (describe) *all temperatures are recorded in Celsius <u>19</u>
2a Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>			Temperature Device Serial #: <u>130462902</u> Secondary Temperature Device Serial # (If Applicable):
3 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			
4 Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5 Samples requiring chemical preservation at proper pH?		<input checked="" type="checkbox"/>		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?		<input checked="" type="checkbox"/>		Sample ID's and containers affected:
7 Are Encore containers present?		<input checked="" type="checkbox"/>		(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	<input checked="" type="checkbox"/>			ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?		<input checked="" type="checkbox"/>		Sample ID's affected: <u>none on samples</u>
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Sample ID's affected:
12 Are sample containers identifiable as GEL provided?		<input checked="" type="checkbox"/>		
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			
14 Carrier and tracking number.				Circle Applicable: FedEx Air <u>FedEx Ground</u> UPS Field Services Courier Other <u>9622 0019 0</u> <u>(000 448 3673 4)</u> <u>00 7714 8934 0330</u>

Comments (Use Continuation Form if needed):

Data Package Qualifier Definitions

Data Review Qualifier Definitions

Qualifier	Explanation
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*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
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
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	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
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

P Organics-The concentrations between the primary and confirmation columns/detectors is >40% difference.
For HPLC, the difference is >70%.

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Laboratory Certifications

List of current GEL Certifications as of 14 November 2014

State	Certification
Alaska	UST-110
Arkansas	88-0651
CLIA	42D0904046
California NELAP	01151CA
Colorado	SC00012
Connecticut	PH-0169
Delaware	SC000122013-10
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-12-00283, P330-12-00284
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC000122013-10
Idaho Chemistry	SC00012
Idaho Radiochemistry	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky	90129
Louisiana NELAP	03046 (AI33904)
Louisiana SDWA	LA130005
Maryland	270
Massachusetts	M-SC012
Michigan	9976
Mississippi	SC000122013-10
Nebraska	NE-OS-26-13
Nevada	SC000122014-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
Oklahoma	9904
Pennsylvania NELAP	68-00485
Plant Material Permit	PDEP-12-00260
South Carolina Chemistry	10120001
South Carolina GVL	23611001
South Carolina Radiochemi	10120002
Tennessee	TN 02934
Texas NELAP	T104704235-14-9
Utah NELAP	SC000122014-16
Vermont	VT87156
Virginia NELAP	460202
Washington	C780-12
Wisconsin	999887790