

Client Sample Results

Client: General Atomics
Project/Site: General Atomics

Job ID: 160-36685-1

Client Sample ID: GA-5-SOIL-01-06

Lab Sample ID: 160-36685-1

Date Collected: 10/14/19 08:30

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Cesium-137	2.66E-2	U G	1.27E-1	1.27E-1	2.00E-1	2.23E-1	pCi/g	12/23/19 17:34	12/26/19 17:44	1
Cadmium-113m	4.98E+2	U	9.82E+2	9.85E+2		1.67E+3	pCi/g	12/23/19 17:34	12/26/19 17:44	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Strontium-90	4.00E-1		1.99E-1	2.01E-1	3.00E+0	2.96E-1	pCi/g	12/17/19 12:09	12/26/19 11:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Sr Carrier	9.03E+1		40 - 110					12/17/19 12:09	12/26/19 11:24	1
Y Carrier	9.83E+1		40 - 110					12/17/19 12:09	12/26/19 11:24	1

Client Sample ID: GA-5-SOIL-02-06

Lab Sample ID: 160-36685-2

Date Collected: 10/14/19 08:40

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Cesium-137	1.32E+0		1.55E-1	2.07E-1	2.00E-1	8.08E-2	pCi/g	12/23/19 17:34	12/26/19 18:24	1
Cadmium-113m	1.44E+2	U	8.06E+2	8.08E+2		1.38E+3	pCi/g	12/23/19 17:34	12/26/19 18:24	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Strontium-90	7.29E-1		2.20E-1	2.28E-1	3.00E+0	2.82E-1	pCi/g	12/17/19 12:09	12/26/19 11:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Sr Carrier	8.64E+1		40 - 110					12/17/19 12:09	12/26/19 11:24	1
Y Carrier	9.46E+1		40 - 110					12/17/19 12:09	12/26/19 11:24	1

Client Sample ID: GA-5-SOIL-03-06

Lab Sample ID: 160-36685-3

Date Collected: 10/14/19 08:50

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Cesium-137	5.37E+0		4.05E-1	6.90E-1	2.00E-1	1.62E-1	pCi/g	12/23/19 17:34	12/26/19 18:25	1
Cadmium-113m	-8.98E+2	U	1.54E+3	1.54E+3		2.57E+3	pCi/g	12/23/19 17:34	12/26/19 18:25	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Strontium-90	2.05E+0		2.80E-1	3.28E-1	3.00E+0	2.53E-1	pCi/g	12/17/19 12:09	12/26/19 11:25	1

Eurofins TestAmerica, St. Louis

Client Sample Results

Client: General Atomics
Project/Site: General Atomics

Job ID: 160-36685-1

Client Sample ID: GA-5-SOIL-03-06

Lab Sample ID: 160-36685-3

Date Collected: 10/14/19 08:50

Matrix: Solid

Date Received: 12/12/19 09:15

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Sr Carrier	9.24E+1		40 - 110	12/17/19 12:09	12/26/19 11:25	1
Y Carrier	1.04E+2		40 - 110	12/17/19 12:09	12/26/19 11:25	1

Client Sample ID: GA-5-SOIL-04-06

Lab Sample ID: 160-36685-4

Date Collected: 10/14/19 09:00

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Cesium-137	6.08E-1		1.11E-1	1.28E-1	2.00E-1	7.42E-2	pCi/g	12/23/19 17:34	12/26/19 19:02	1
Cadmium-113m	9.31E+1	U	7.11E+2	7.11E+2		1.23E+3	pCi/g	12/23/19 17:34	12/26/19 19:02	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Strontium-90	1.47E+0		2.62E-1	2.88E-1	3.00E+0	2.78E-1	pCi/g	12/17/19 12:09	12/26/19 11:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Sr Carrier	9.03E+1		40 - 110					12/17/19 12:09	12/26/19 11:25	1
Y Carrier	9.64E+1		40 - 110					12/17/19 12:09	12/26/19 11:25	1

Client Sample ID: GA-5-SOIL-05-06

Lab Sample ID: 160-36685-5

Date Collected: 10/14/19 09:10

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Cesium-137	8.37E-1	G	1.86E-1	2.05E-1	2.00E-1	2.25E-1	pCi/g	12/23/19 17:34	12/26/19 19:03	1
Cadmium-113m	-3.78E+2	U	1.17E+3	1.17E+3		1.99E+3	pCi/g	12/23/19 17:34	12/26/19 19:03	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Strontium-90	9.97E-1		2.47E-1	2.60E-1	3.00E+0	3.03E-1	pCi/g	12/17/19 12:09	12/26/19 11:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Sr Carrier	8.92E+1		40 - 110					12/17/19 12:09	12/26/19 11:25	1
Y Carrier	9.31E+1		40 - 110					12/17/19 12:09	12/26/19 11:25	1

Client Sample Results

Client: General Atomics
Project/Site: General Atomics

Job ID: 160-36685-1

Client Sample ID: GA-5-SOIL-06-06

Lab Sample ID: 160-36685-6

Date Collected: 10/14/19 09:20

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Cesium-137	9.39E-1		1.75E-1	2.00E-1	2.00E-1	1.10E-1	pCi/g	12/23/19 17:34	12/26/19 19:05	1
Cadmium-113m	-1.34E+2	U	1.14E+3	1.14E+3		1.99E+3	pCi/g	12/23/19 17:34	12/26/19 19:05	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Strontium-90	6.64E+0		4.95E-1	7.36E-1	3.00E+0	3.10E-1	pCi/g	12/17/19 12:09	12/26/19 11:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Sr Carrier	8.60E+1		40 - 110					12/17/19 12:09	12/26/19 11:25	1
Y Carrier	9.31E+1		40 - 110					12/17/19 12:09	12/26/19 11:25	1

Client Sample ID: GA-5-SOIL-07-06

Lab Sample ID: 160-36685-7

Date Collected: 10/14/19 09:30

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Cesium-137	3.36E-1		1.01E-1	1.07E-1	2.00E-1	9.37E-2	pCi/g	12/23/19 17:34	12/26/19 19:08	1
Cadmium-113m	3.28E+1	U	6.46E+2	6.46E+2		1.15E+3	pCi/g	12/23/19 17:34	12/26/19 19:08	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Strontium-90	2.68E-1		1.74E-1	1.75E-1	3.00E+0	2.67E-1	pCi/g	12/17/19 12:09	12/26/19 11:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Sr Carrier	8.90E+1		40 - 110					12/17/19 12:09	12/26/19 11:25	1
Y Carrier	9.53E+1		40 - 110					12/17/19 12:09	12/26/19 11:25	1

Client Sample ID: GA-5-SOIL-08-06

Lab Sample ID: 160-36685-8

Date Collected: 10/14/19 09:40

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Cesium-137	-5.88E-2	U	9.34E-2	9.36E-2	2.00E-1	1.56E-1	pCi/g	12/23/19 17:34	12/26/19 19:46	1
Cadmium-113m	4.19E+2	U	7.18E+2	7.20E+2		1.20E+3	pCi/g	12/23/19 17:34	12/26/19 19:46	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Strontium-90	3.10E-1		1.95E-1	1.97E-1	3.00E+0	3.00E-1	pCi/g	12/17/19 12:09	12/26/19 11:25	1

Eurofins TestAmerica, St. Louis

Client Sample Results

Client: General Atomics
Project/Site: General Atomics

Job ID: 160-36685-1

Client Sample ID: GA-5-SOIL-08-06

Lab Sample ID: 160-36685-8

Date Collected: 10/14/19 09:40

Matrix: Solid

Date Received: 12/12/19 09:15

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Sr Carrier	8.74E+1		40 - 110	12/17/19 12:09	12/26/19 11:25	1
Y Carrier	9.61E+1		40 - 110	12/17/19 12:09	12/26/19 11:25	1

Client Sample ID: GA-10-CONC-01-02

Lab Sample ID: 160-36685-9

Date Collected: 12/05/19 08:30

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Cesium-137	2.31E+0		2.11E-1	3.16E-1	2.00E-1	8.18E-2	pCi/g	12/23/19 17:34	12/26/19 19:47	1
Cadmium-113m	2.11E+2	U	7.23E+2	7.23E+2		1.24E+3	pCi/g	12/23/19 17:34	12/26/19 19:47	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Strontium-90	6.16E-1		3.43E-1	3.47E-1	3.00E+0	5.17E-1	pCi/g	12/17/19 12:09	12/26/19 11:25	1
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
Sr Carrier	5.38E+1		40 - 110	12/17/19 12:09	12/26/19 11:25	1				
Y Carrier	8.93E+1		40 - 110	12/17/19 12:09	12/26/19 11:25	1				

Client Sample ID: GA-10-CONC-02-02

Lab Sample ID: 160-36685-10

Date Collected: 12/05/19 08:45

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Cesium-137	1.33E+1		5.72E-1	1.49E+0	2.00E-1	1.02E-1	pCi/g	12/23/19 17:34	12/26/19 19:48	1
Cadmium-113m	-9.36E+2	U	1.80E+3	1.80E+3		3.00E+3	pCi/g	12/23/19 17:34	12/26/19 19:48	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Strontium-90	4.79E+0		5.45E-1	6.72E-1	3.00E+0	4.05E-1	pCi/g	12/17/19 12:09	12/26/19 11:25	1
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
Sr Carrier	5.70E+1		40 - 110	12/17/19 12:09	12/26/19 11:25	1				
Y Carrier	9.35E+1		40 - 110	12/17/19 12:09	12/26/19 11:25	1				

Client Sample Results

Client: General Atomics
Project/Site: General Atomics

Job ID: 160-36685-1

Client Sample ID: GA-10-CONC-03-02

Lab Sample ID: 160-36685-11

Date Collected: 12/05/19 09:00

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Cesium-137	4.22E-1		1.22E-1	1.29E-1	2.00E-1	1.06E-1	pCi/g	12/23/19 17:34	12/26/19 19:49	1
Cadmium-113m	-5.75E+2	U	1.01E+3	1.01E+3		1.68E+3	pCi/g	12/23/19 17:34	12/26/19 19:49	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Strontium-90	1.84E-1	U	1.91E-1	1.91E-1	3.00E+0	3.14E-1	pCi/g	12/17/19 12:09	12/26/19 11:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Sr Carrier	7.70E+1		40 - 110					12/17/19 12:09	12/26/19 11:25	1
Y Carrier	9.42E+1		40 - 110					12/17/19 12:09	12/26/19 11:25	1

Client Sample ID: GA-10-CONC-04-02

Lab Sample ID: 160-36685-12

Date Collected: 12/05/19 09:15

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Cesium-137	1.67E+1		5.41E-1	1.82E+0	2.00E-1	9.46E-2	pCi/g	12/23/19 17:34	12/27/19 06:21	1
Cadmium-113m	7.08E+2	U	1.38E+3	1.38E+3		2.30E+3	pCi/g	12/23/19 17:34	12/27/19 06:21	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Strontium-90	9.26E-1		2.87E-1	2.97E-1	3.00E+0	3.86E-1	pCi/g	12/17/19 12:09	12/26/19 11:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Sr Carrier	7.08E+1		40 - 110					12/17/19 12:09	12/26/19 11:25	1
Y Carrier	9.83E+1		40 - 110					12/17/19 12:09	12/26/19 11:25	1

Client Sample ID: GA-5-SOIL-09-06

Lab Sample ID: 160-36685-13

Date Collected: 12/03/19 09:30

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Cesium-137	4.01E-1		9.33E-2	1.02E-1	2.00E-1	5.84E-2	pCi/g	12/23/19 17:34	12/27/19 06:22	1
Cadmium-113m	4.62E+2	U	8.19E+2	8.22E+2		1.37E+3	pCi/g	12/23/19 17:34	12/27/19 06:22	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Strontium-90	1.18E+0		2.80E-1	2.96E-1	3.00E+0	3.54E-1	pCi/g	12/17/19 12:09	12/26/19 11:27	1

Eurofins TestAmerica, St. Louis

Client Sample Results

Client: General Atomics
Project/Site: General Atomics

Job ID: 160-36685-1

Client Sample ID: GA-5-SOIL-09-06

Lab Sample ID: 160-36685-13

Date Collected: 12/03/19 09:30

Matrix: Solid

Date Received: 12/12/19 09:15

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Sr Carrier	8.62E+1		40 - 110	12/17/19 12:09	12/26/19 11:27	1
Y Carrier	9.61E+1		40 - 110	12/17/19 12:09	12/26/19 11:27	1

Client Sample ID: GA-5-SOIL-10-06

Lab Sample ID: 160-36685-14

Date Collected: 12/03/19 09:40

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Cesium-137	8.27E+0		3.46E-1	9.27E-1	2.00E-1	7.24E-2	pCi/g	12/23/19 17:34	12/27/19 06:31	1
Cadmium-113m	-8.96E+2	U	1.19E+3	1.20E+3		1.99E+3	pCi/g	12/23/19 17:34	12/27/19 06:31	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Strontium-90	2.02E+0		3.13E-1	3.54E-1	3.00E+0	3.21E-1	pCi/g	12/17/19 12:09	12/26/19 11:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Sr Carrier	8.78E+1		40 - 110					12/17/19 12:09	12/26/19 11:27	1
Y Carrier	9.38E+1		40 - 110					12/17/19 12:09	12/26/19 11:27	1

Client Sample ID: GA-5-SOIL-11-06

Lab Sample ID: 160-36685-15

Date Collected: 12/03/19 09:50

Matrix: Solid

Date Received: 12/12/19 09:15

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Cesium-137	1.07E+0		1.84E-1	1.98E-1	2.00E-1	1.07E-1	pCi/g	12/23/19 17:34	12/27/19 08:30	1
Cadmium-113m	4.73E+2	U	9.69E+2	9.71E+2		1.63E+3	pCi/g	12/23/19 17:34	12/27/19 08:30	1

Method: SR-03-RC - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Strontium-90	1.80E+0		3.08E-1	3.41E-1	3.00E+0	3.37E-1	pCi/g	12/17/19 12:09	12/26/19 11:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Sr Carrier	8.48E+1		40 - 110					12/17/19 12:09	12/26/19 11:27	1
Y Carrier	9.61E+1		40 - 110					12/17/19 12:09	12/26/19 11:27	1