

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : MJW Corporation
 Address : 15 Hazelwood Drive
 Suite 112
 Buffalo, New York 14228

Report Date: January 19, 2016

Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes

Client Sample ID: 5.3.A.R.L.1
 Sample ID: 387899020
 Matrix: Soil
 Collect Date: 15-DEC-15
 Receive Date: 21-DEC-15
 Collector: Client
 Moisture: 27.2%

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids														
<i>ASTM D 2216 % Moisture "As Received"</i>														
Moisture		27.2						percent		LYT1	12/22/15	1007	1532997	1
Rad Alpha Spec Analysis														
<i>ASP Plutonium Isotopic, Solid "Dry Weight Corrected"</i>														
Plutonium-238	U	-0.0277	+/-0.0752	0.200	0.0643	+/-0.0753	1.00	pCi/g		HAKB	01/11/16	0941	1533905	2
Plutonium-239/240	U	0.0449	+/-0.122	0.226	0.0773	+/-0.122	1.00	pCi/g						
<i>ASP Uranium Isotopic, Solid "Dry Weight Corrected"</i>														
Uranium-232	U	-0.0224	+/-0.0607	0.162	0.052	+/-0.0608	1.00	pCi/g		HAKB	01/11/16	1029	1533902	3
Uranium-233/234		0.664	+/-0.266	0.144	0.033	+/-0.297	1.00	pCi/g						
Uranium-235/236	U	0.0198	+/-0.0744	0.125	0.0234	+/-0.0746	1.00	pCi/g						
Uranium-238		0.755	+/-0.280	0.0781	0.00	+/-0.317	1.00	pCi/g						
<i>Alphaspec Np237, Solid "Dry Weight Corrected"</i>														
Neptunium-237	U	0.133	+/-0.366	0.635	0.162	+/-0.366	1.00	pCi/g		HAKB	01/08/16	0854	1533904	4
<i>Alphaspec Th229 + 228,230,232 Solid "Dry Weight Corrected"</i>														
Thorium-228		0.420	+/-0.357	0.474	0.162	+/-0.364	1.00	pCi/g		HAKB	01/11/16	1350	1533901	5
Thorium-229		0.122	+/-0.195	0.269	0.0617	+/-0.195	1.00	pCi/g						
Thorium-230		0.378	+/-0.306	0.340	0.0973	+/-0.310	1.00	pCi/g						
Thorium-232		0.617	+/-0.356	0.232	0.0434	+/-0.366	1.00	pCi/g						
<i>Am241, Cm Solid "Dry Weight Corrected"</i>														
Americium-241	U	-0.00431	+/-0.0371	0.086	0.0161	+/-0.0372	1.00	pCi/g		HAKB	01/11/16	1545	1533903	6
Curium-242		0.00	+/-0.0401	0.0597	0.00	+/-0.0402	1.00	pCi/g						
Curium-243/244	U	-0.017	+/-0.0394	0.117	0.0318	+/-0.0395	1.00	pCi/g						
Curium-245/246	U	-0.00493	+/-0.0425	0.0984	0.0184	+/-0.0426	1.00	pCi/g						
<i>Liquid Scint Pu241, Solid "Dry Weight Corrected"</i>														
Plutonium-241	U	0.954	+/-4.97	8.52	4.15	+/-4.98	15.0	pCi/g		HAKB	01/14/16	0009	1533906	7
Rad Gamma Spec Analysis														
<i>Gamma I129, Solid "Dry Weight Corrected"</i>														
Iodine-129	U	-0.131	+/-0.238	0.407	0.170	+/-0.246	1.00	pCi/g		MJH1	01/13/16	0826	1533089	8
<i>Gammaspect, Gamma, Solid "Dry Weight Corrected"</i>														
Actinium-227	UI	0.00	+/-0.323	0.659	0.310	+/-0.378		pCi/g		RXF2	01/14/16	1048	1533152	9
Antimony-125	U	-0.0852	+/-0.141	0.230	0.106	+/-0.146		pCi/g						
Bismuth-212	UI	0.00	+/-0.821	1.37	0.626	+/-0.964		pCi/g						
Bismuth-214		0.967	+/-0.187	0.133	0.0585	+/-0.204		pCi/g						
Cesium-137		0.659	+/-0.119	0.0761	0.0336	+/-0.131	0.100	pCi/g						
Cobalt-60	U	-0.00315	+/-0.0431	0.0848	0.0356	+/-0.0431		pCi/g						
Europium-154	U	0.0421	+/-0.122	0.258	0.110	+/-0.124		pCi/g						
Lead-212		0.633	+/-0.125	0.127	0.0595	+/-0.135		pCi/g						
Lead-214		1.16	+/-0.211	0.392	0.190	+/-0.230		pCi/g						

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 Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes
 Client Sample ID: 5.3.A.R.1.J
 Sample ID: 387899020

Report Date: January 19, 2016

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gamma Spec Analysis														
<i>Gammascpec, Gamma, Solid "Dry Weight Corrected"</i>														
Potassium-40		9.68	+/-1.46	0.758	0.311	+/-1.69		pCi/g						
Protactinium-231	U	0.376	+/-0.656	1.18	0.551	+/-0.683		pCi/g						
Radium-226		0.967	+/-0.187	0.133	0.0585	+/-0.204		pCi/g						
Radium-228		0.665	+/-0.330	0.319	0.141	+/-0.341		pCi/g						
Thallium-208		0.194	+/-0.0657	0.0934	0.0427	+/-0.0677		pCi/g						
Tin-126	U	0.0722	+/-0.175	0.217	0.103	+/-0.176		pCi/g						
Rad Gas Flow Proportional Counting														
<i>GFPC, Gross A.B, solid "Dry Weight Corrected"</i>														
Alpha		9.56	+/-2.14	2.70	1.25	+/-2.90	4.00	pCi/g		KXB2	01/11/16	1957	1534757	10
Beta		21.6	+/-2.06	2.66	1.30	+/-3.68	10.0	pCi/g						
<i>GFPC, Sr90, solid "Dry Weight Corrected"</i>														
Strontium-90	U	-0.293	+/-0.520	1.06	0.470	+/-0.520	2.00	pCi/g		KSD1	01/11/16	0857	1534758	11
Rad Liquid Scintillation Analysis														
<i>LSC, Tritium Dist, Solid "Dry Weight Corrected"</i>														
Tritium	U	-3.33	+/-3.13	5.72	2.75	+/-3.13	6.00	pCi/g		TXJ1	01/08/16	1144	1534917	12
<i>Liquid Scint C14, Solid "Dry Weight Corrected"</i>														
Carbon-14	U	0.335	+/-0.859	1.46	0.713	+/-0.859	2.00	pCi/g		TXJ1	01/14/16	2352	1534934	13
<i>Liquid Scint Te99, Solid "Dry Weight Corrected"</i>														
Technetium-99	U	-1.57	+/-2.34	4.21	2.02	+/-2.34	5.00	pCi/g		MYM	01/12/16	0837	1534637	14

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	LYT1	12/22/15	1007	1532997

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified
4	ASTM C 1476-00 Modified
5	DOE EML HASL-300, Th-01-RC Modified
6	DOE EML HASL-300, Am-05-RC Modified
7	DOE EML HASL-300, Pu-11-RC Modified
8	DOE EML HASL-300, I-01 Modified
9	DOE HASL 300, 4.5.2.3/Ga-01-R
10	EPA 900.0/SW846 9310/SM 7110B Modified
11	EPA 905.0 Modified/DOE RPS01 Rev 1 Modified
12	EPA 906.0 Modified
13	EPA EERF C-01 Modified

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Project: Soil Radioisotopes

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Sample ID: 387899020

Project: MJWC00115
Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
14	DOE EML HASL-300	Tc-02-RC	Modified											

Surrogate/Tracer	Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Plutonium-242 Tracer		ASP Plutonium Isotopic, Solid "Dry Weight Corrected"	1533905	59.6	(15%-125%)
Uranium-232 Tracer		ASP Uranium Isotopic, Solid "Dry Weight Corrected"	1533902	55.8	(15%-125%)
Uranium-235/236 Tracer		ASP Uranium Isotopic, Solid "Dry Weight Corrected"	1533902	75.4	(15%-125%)
Americium-243 Tracer		Alphaspec Np237, Solid "Dry Weight Corrected"	1533904	63.3	(15%-125%)
Actinium-227 Tracer		Alphaspec Th229 + 228,230,232 Solid "Dry Weight Corrected"	1533901	99.2	(15%-125%)
Americium-243 Tracer		Am241, Cm Solid "Dry Weight Corrected"	1533903	85.3	(15%-125%)
Plutonium-242 Tracer		Liquid Scint Pu241, Solid "Dry Weight Corrected"	1533906	59.6	(15%-125%)
Strontium Carrier		GFPC, Sr90, solid "Dry Weight Corrected"	1534758	84.6	(25%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Solid "Dry Weight Corrected"	1534637	92.7	(15%-125%)

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

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Report Date: March 8, 2016

Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes

Project: MJWC00115
 Client ID: MJWC001

Client Sample ID: 5.3.A.R.1.2
 Sample ID: 392062019
 Matrix: Soil
 Collect Date: 15-DEC-15
 Receive Date: 25-FEB-16
 Collector: Client
 Moisture: 14.1%

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gamma Spec Analysis														
<i>Gamma with Ingrowth "Dry Weight Corrected"</i>														
Actinium-227	UI	0.00	+/-0.242	0.462	0.220	+/-0.279		pCi/g		MXR1	03/07/16	1416	1547923	1
Antimony-125	U	-0.0292	+/-0.0883	0.161	0.0754	+/-0.0894		pCi/g						
Bismuth-212	UI	0.00	+/-0.849	1.08	0.508	+/-1.01		pCi/g						
Bismuth-214		0.996	+/-0.135	0.104	0.0482	+/-0.160		pCi/g						
Cesium-137	UI	0.00	+/-0.0369	0.0804	0.0379	+/-0.055	0.100	pCi/g						
Cobalt-60	U	0.0308	+/-0.0345	0.0729	0.033	+/-0.0373		pCi/g						
Europium-154	U	-0.0928	+/-0.129	0.217	0.0989	+/-0.136		pCi/g						
Lead-212		0.978	+/-0.114	0.0985	0.0468	+/-0.137		pCi/g						
Lead-214		1.17	+/-0.169	0.277	0.135	+/-0.192		pCi/g						
Potassium-40		11.7	+/-1.18	0.286	0.109	+/-1.55		pCi/g						
Protactinium-231	UI	0.00	+/-0.782	0.802	0.379	+/-0.801		pCi/g						
Radium-226		0.996	+/-0.135	0.104	0.0482	+/-0.160		pCi/g						
Radium-228		0.899	+/-0.220	0.247	0.114	+/-0.239		pCi/g						
Thallium-208		0.288	+/-0.0522	0.0647	0.0303	+/-0.0577		pCi/g						
Tin-126	UI	0.00	+/-0.128	0.142	0.0684	+/-0.129		pCi/g						

Rad Gas Flow Proportional Counting

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

Alpha		17.1	+/-4.02	3.95	1.70	+/-5.19	4.00	pCi/g		JXB7	03/02/16	1629	1548369	2
Beta		18.3	+/-2.68	2.85	1.34	+/-3.97	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	CXC1	02/26/16	1449	1547874

The following Analytical Methods were performed

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 900.0/SW846 9310/SM 7110B Modified

Surrogate/Tracer Recovery Test

Batch ID Recovery% Acceptable Limits

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Client Sample ID: 5.3.A.R.1.2
Sample ID: 392062019

Project: MJWC00115
Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

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Report Date: January 19, 2016

Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes

Client Sample ID: 5.3.A.R.1.4
 Sample ID: 387899021
 Matrix: Soil
 Collect Date: 15-DEC-15
 Receive Date: 21-DEC-15
 Collector: Client
 Moisture: 10.1%

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date Time	Batch	Mtd.
Gravimetric Solids													
<i>ASTM D 2216 % Moisture "As Received"</i>													
Moisture		10.1						percent		LYTI	12/22/15 1007	1532997	1
Rad Alpha Spec Analysis													
<i>ASP Plutonium Isotopic, Solid "Dry Weight Corrected"</i>													
Plutonium-238		0.0223	+/-0.0628	0.067	0.00	+/-0.0629	1.00	pCi/g		HAKB	01/11/16 0941	1533905	2
Plutonium-239/240	U	0.0232	+/-0.0794	0.147	0.0401	+/-0.0795	1.00	pCi/g					
<i>ASP Uranium Isotopic, Solid "Dry Weight Corrected"</i>													
Uranium-232	U	0.0247	+/-0.065	0.117	0.0348	+/-0.0652	1.00	pCi/g		HAKB	01/11/16 1029	1533902	3
Uranium-233/234		0.664	+/-0.217	0.0981	0.0225	+/-0.246	1.00	pCi/g					
Uranium-235/236	U	0.0135	+/-0.0506	0.0852	0.0159	+/-0.0507	1.00	pCi/g					
Uranium-238		0.673	+/-0.217	0.0531	0.00	+/-0.246	1.00	pCi/g					
<i>Alphaspec Np237, Solid "Dry Weight Corrected"</i>													
Neptunium-237	U	-0.0333	+/-0.147	0.384	0.0879	+/-0.147	1.00	pCi/g		HAKB	01/08/16 0854	1533904	4
<i>Alphaspec Th229 + 228,230,232 Solid "Dry Weight Corrected"</i>													
Thorium-228		1.15	+/-0.500	0.409	0.131	+/-0.528	1.00	pCi/g		HAKB	01/11/16 1350	1533901	5
Thorium-229		0.0726	+/-0.167	0.264	0.0606	+/-0.167	1.00	pCi/g					
Thorium-230		0.835	+/-0.409	0.264	0.0605	+/-0.425	1.00	pCi/g					
Thorium-232		0.690	+/-0.374	0.263	0.0603	+/-0.386	1.00	pCi/g					
<i>Am241, Cm Solid "Dry Weight Corrected"</i>													
Americium-241	U	0.0128	+/-0.0479	0.0805	0.0151	+/-0.0479	1.00	pCi/g		HAKB	01/11/16 1545	1533903	6
Curium-242		0.00	+/-0.0375	0.0559	0.00	+/-0.0376	1.00	pCi/g					
Curium-243/244	U	0.0126	+/-0.0473	0.0796	0.0149	+/-0.0474	1.00	pCi/g					
Curium-245/246		0.0192	+/-0.054	0.0577	0.00	+/-0.0541	1.00	pCi/g					
<i>Liquid Scint Pu241, Solid "Dry Weight Corrected"</i>													
Plutonium-241	U	1.03	+/-5.58	9.69	4.64	+/-5.58	15.0	pCi/g		HAKB	01/13/16 1320	1533906	7
Rad Gamma Spec Analysis													
<i>Gamma I129, Solid "Dry Weight Corrected"</i>													
Iodine-129	U	0.0183	+/-0.329	0.583	0.267	+/-0.329	1.00	pCi/g		MJH1	01/12/16 1812	1533089	8
<i>Gammasespec, Gamma, Solid "Dry Weight Corrected"</i>													
Actinium-227	U	-0.0503	+/-0.211	0.405	0.189	+/-0.212		pCi/g		RXF2	01/14/16 1048	1533152	9
Antimony-125	U	-0.0136	+/-0.0759	0.143	0.0649	+/-0.0761		pCi/g					
Bismuth-212		1.65	+/-0.715	0.684	0.300	+/-0.734		pCi/g					
Bismuth-214		0.827	+/-0.135	0.125	0.057	+/-0.151		pCi/g					
Cesium-137	U	-0.0157	+/-0.0325	0.0602	0.0271	+/-0.0333	0.100	pCi/g					
Cobalt-60	U	0.0034	+/-0.0381	0.076	0.0332	+/-0.0381		pCi/g					
Europium-154	U	-0.0158	+/-0.0881	0.173	0.0735	+/-0.0884		pCi/g					
Lead-212		1.14	+/-0.122	0.0966	0.0455	+/-0.158		pCi/g					
Lead-214		1.18	+/-0.149	0.304	0.147	+/-0.180		pCi/g					

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Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gamma Spec Analysis														
<i>GammaSpec, Gamma, Solid "Dry Weight Corrected"</i>														
Potassium-40		13.3	+/-1.33	0.575	0.240	+/-1.77		pCi/g						
Protactinium-231	UI	0.00	+/-0.573	0.745	0.346	+/-0.601		pCi/g						
Radium-226		0.827	+/-0.135	0.125	0.057	+/-0.151		pCi/g						
Radium-228	UI	0.00	+/-0.230	0.487	0.231	+/-0.473		pCi/g						
Thallium-208		0.314	+/-0.0794	0.0612	0.0278	+/-0.0837		pCi/g						
Tin-126	UI	0.00	+/-0.125	0.113	0.0538	+/-0.127		pCi/g						
Rad Gas Flow Proportional Counting														
<i>GFPC, Gross A-B, solid "Dry Weight Corrected"</i>														
Alpha		9.99	+/-1.98	2.24	1.02	+/-2.78	4.00	pCi/g		KXB2	01/11/16	1957	1534757	10
Beta		18.5	+/-1.86	2.39	1.16	+/-3.19	10.0	pCi/g						
<i>GFPC, Sr90, solid "Dry Weight Corrected"</i>														
Strontium-90	U	-0.249	+/-0.512	1.05	0.462	+/-0.512	2.00	pCi/g		KSD1	01/11/16	0857	1534758	11
Rad Liquid Scintillation Analysis														
<i>LSC, Tritium Dist, Solid "Dry Weight Corrected"</i>														
Tritium	U	-1.59	+/-2.42	4.35	2.09	+/-2.42	6.00	pCi/g		TXJ1	01/08/16	1257	1534917	12
<i>Liquid Scint C14, Solid "Dry Weight Corrected"</i>														
Carbon-14	U	0.468	+/-0.695	1.17	0.573	+/-0.696	2.00	pCi/g		TXJ1	01/15/16	0205	1534934	13
<i>Liquid Scint Tc99, Solid "Dry Weight Corrected"</i>														
Technetium-99	U	-1.36	+/-1.41	2.57	1.24	+/-1.41	5.00	pCi/g		MYM	01/12/16	0853	1534637	14

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	LYT1	12/22/15	1007	1532997

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified
4	ASTM C 1476-00 Modified
5	DOE EML HASL-300, Th-01-RC Modified
6	DOE EML HASL-300, Am-05-RC Modified
7	DOE EML HASL-300, Pu-11-RC Modified
8	DOE EML HASL-300J-01 Modified
9	DOE HASL 300, 4.5.2.3/Ga-01-R
10	EPA 900.0/SW846 9310/SM 7110B Modified
11	EPA 905.0 Modified/DOE RP501 Rev 1 Modified
12	EPA 906.0 Modified
13	EPA EERF C-01 Modified

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Project: MJWC00115
Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
14	DOE EML HASL-300, Te-02-RC Modified													
Surrogate/Tracer	Recovery	Test												
Plutonium-242 Tracer		ASP Plutonium Isotopic, Solid "Dry Weight Corrected"						1533905	63.4					(15%-125%)
Uranium-232 Tracer		ASP Uranium Isotopic, Solid "Dry Weight Corrected"						1533902	78.7					(15%-125%)
Uranium-235/236 Tracer		ASP Uranium Isotopic, Solid "Dry Weight Corrected"						1533902	90.7					(15%-125%)
Americium-243 Tracer		Alphaspec Np237, Solid "Dry Weight Corrected"						1533904	93.8					(15%-125%)
Actinium-227 Tracer		Alphaspec Th229 + 228,230,232 Solid "Dry Weight Corrected"						1533901	97.2					(15%-125%)
Americium-243 Tracer		Am241, Cm Solid "Dry Weight Corrected"						1533903	86.1					(15%-125%)
Plutonium-242 Tracer		Liquid Scint Pu241, Solid "Dry Weight Corrected"						1533906	63.4					(15%-125%)
Strontium Carrier		GFPC, Sr90, solid "Dry Weight Corrected"						1534758	71.7					(25%-125%)
Technetium-99m Tracer		Liquid Scint Te99, Solid "Dry Weight Corrected"						1534637	96.2					(15%-125%)

Notes:

TPU and Counting Uncertainty are 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

Company : MJW Corporation
 Address : 15 Hazelwood Drive
 Suite 112
 Buffalo, New York 14228

Report Date: January 19, 2016

Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes

Client Sample ID: 5.3.A.R.1.5
 Sample ID: 387899022
 Matrix: Soil
 Collect Date: 15-DEC-15
 Receive Date: 21-DEC-15
 Collector: Client
 Moisture: 26.7%

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids														
<i>ASTM D 2216 % Moisture "As Received"</i>														
Moisture		26.7						percent		LYT1	12/22/15	1007	1532997	1
Rad Alpha Spec Analysis														
<i>ASP Plutonium Isotopic, Solid "Dry Weight Corrected"</i>														
Plutonium-238	U	-0.0298	+/-0.048	0.153	0.0455	+/-0.0481	1.00	pCi/g		HAKB	01/11/16	0941	1533905	2
Plutonium-239/240	U	0.0389	+/-0.106	0.196	0.0669	+/-0.106	1.00	pCi/g						
<i>ASP Uranium Isotopic, Solid "Dry Weight Corrected"</i>														
Uranium-232	U	-0.036	+/-0.0817	0.223	0.0729	+/-0.0819	1.00	pCi/g		HAKB	01/11/16	1029	1533902	3
Uranium-233/234		0.937	+/-0.333	0.142	0.0265	+/-0.388	1.00	pCi/g						
Uranium-235/236		0.118	+/-0.130	0.0888	0.00	+/-0.133	1.00	pCi/g						
Uranium-238		0.606	+/-0.272	0.163	0.0375	+/-0.301	1.00	pCi/g						
<i>Alphaspec Np237, Solid "Dry Weight Corrected"</i>														
Neptunium-237	U	-0.0801	+/-0.242	0.679	0.173	+/-0.242	1.00	pCi/g		HAKB	01/08/16	0854	1533904	4
<i>Alphaspec Th229 + 228,230,232 Solid "Dry Weight Corrected"</i>														
Thorium-228		0.947	+/-0.536	0.485	0.143	+/-0.559	1.00	pCi/g		HAKB	01/11/16	1350	1533901	5
Thorium-229		0.228	+/-0.288	0.358	0.082	+/-0.290	1.00	pCi/g						
Thorium-230		0.856	+/-0.493	0.394	0.100	+/-0.510	1.00	pCi/g						
Thorium-232		0.321	+/-0.310	0.193	0.00	+/-0.314	1.00	pCi/g						
<i>Am241, Cm Solid "Dry Weight Corrected"</i>														
Americium-241	U	0.00807	+/-0.0448	0.0859	0.0197	+/-0.0449	1.00	pCi/g		HAKB	01/11/16	1545	1533903	6
Curium-242		0.00	+/-0.0347	0.0516	0.00	+/-0.0347	1.00	pCi/g						
Curium-243/244	U	0.0116	+/-0.0437	0.0735	0.0138	+/-0.0437	1.00	pCi/g						
Curium-245/246		0.0178	+/-0.0499	0.0533	0.00	+/-0.050	1.00	pCi/g						
<i>Liquid Scint Pu241, Solid "Dry Weight Corrected"</i>														
Plutonium-241	U	1.67	+/-5.13	8.86	4.24	+/-5.15	15.0	pCi/g		HAKB	01/13/16	1406	1533906	7
Rad Gamma Spec Analysis														
<i>Gamma I129, Solid "Dry Weight Corrected"</i>														
Iodine-129	U	0.0576	+/-0.320	0.605	0.271	+/-0.321	1.00	pCi/g		MJH1	01/12/16	1812	1533089	8
<i>Gamma spec, Gamma, Solid "Dry Weight Corrected"</i>														
Actinium-227	U	0.146	+/-0.275	0.539	0.252	+/-0.284		pCi/g		RXF2	01/14/16	1049	1533152	9
Antimony-125	U	0.0531	+/-0.110	0.199	0.0913	+/-0.112		pCi/g						
Bismuth-212	UL	0.00	+/-0.823	1.36	0.626	+/-1.09		pCi/g						
Bismuth-214		1.02	+/-0.177	0.137	0.0616	+/-0.197		pCi/g						
Cesium-137		0.656	+/-0.0902	0.0613	0.0268	+/-0.105	0.100	pCi/g						
Cobalt-60	U	0.00633	+/-0.0404	0.082	0.035	+/-0.0405		pCi/g						
Europium-154	U	0.125	+/-0.134	0.293	0.130	+/-0.146		pCi/g						
Lead-212		0.737	+/-0.108	0.105	0.0489	+/-0.124		pCi/g						
Lead-214		1.12	+/-0.195	0.128	0.058	+/-0.217		pCi/g						

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Certificate of Analysis

Company : MJW Corporation
 Address : 15 Hazelwood Drive
 Suite 112
 Buffalo, New York 14228
 Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes
 Client Sample ID: 5.3.A.R.1.5
 Sample ID: 387899022

Report Date: January 19, 2016

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gamma Spec Analysis														
<i>Gammascpec, Gamma, Solid "Dry Weight Corrected"</i>														
Potassium-40		10.5	+/-1.32	0.740	0.309	+/-1.61		pCi/g						
Protactinium-231	UI	0.00	+/-0.503	0.833	0.382	+/-0.515		pCi/g						
Radium-226		1.02	+/-0.177	0.137	0.0616	+/-0.197		pCi/g						
Radium-228		0.698	+/-0.245	0.227	0.097	+/-0.266		pCi/g						
Thallium-208		0.247	+/-0.106	0.0659	0.0295	+/-0.108		pCi/g						
Tin-126	UI	0.00	+/-0.109	0.141	0.0669	+/-0.111		pCi/g						
Rad Gas Flow Proportional Counting														
<i>GFPC, Gross A/B, solid "Dry Weight Corrected"</i>														
Alpha		7.90	+/-1.68	2.01	0.923	+/-2.29	4.00	pCi/g		KXB2	01/11/16	1957	1534757	10
Beta		20.5	+/-1.84	2.28	1.11	+/-3.38	10.0	pCi/g						
<i>GFPC, Sr90, solid "Dry Weight Corrected"</i>														
Strontium-90		0.601	+/-0.639	1.06	0.467	+/-0.648	2.00	pCi/g		KSD1	01/11/16	0855	1534758	11
Rad Liquid Scintillation Analysis														
<i>LSC, Tritium Dist. Solid "Dry Weight Corrected"</i>														
Tritium	U	-2.91	+/-3.13	5.69	2.74	+/-3.13	6.00	pCi/g		TXJ1	01/08/16	1409	1534917	12
<i>Liquid Scint C14, Solid "Dry Weight Corrected"</i>														
Carbon-14	U	0.377	+/-0.843	1.43	0.699	+/-0.843	2.00	pCi/g		TXJ1	01/15/16	0307	1534934	13
<i>Liquid Scint Tc99, Solid "Dry Weight Corrected"</i>														
Technetium-99	U	-1.52	+/-2.22	3.99	1.92	+/-2.22	5.00	pCi/g		MYM	01/12/16	0910	1534637	14

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	LYT1	12/22/15	1007	1532997

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified
4	ASTM C 1476-00 Modified
5	DOE EML HASL-300, Th-01-RC Modified
6	DOE EML HASL-300, Am-05-RC Modified
7	DOE EML HASL-300, Pu-11-RC Modified
8	DOE EML HASL-300, J-01 Modified
9	DOE HASL 300, 4.5.2.3/Ga-01-R
10	EPA 900.0/SW846 9310/SM 7110B Modified
11	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
12	EPA 906.0 Modified
13	EPA EI-RF C-01 Modified

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Certificate of Analysis

Company : MJW Corporation
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Buffalo, New York 14228

Report Date: January 19, 2016

Contact: Ms. Laurie Losey
Project: Soil Radioisotopes

Client Sample ID: 5.3.A.R.1.5
Sample ID: 387899022

Project: MJWC00115
Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Le	TPU	RL	Units	DF	Analyst	Date Time	Batch	Mtd.
14	DOE EML HASL-300, Te-02-RC Modified												
Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits									
Plutonium-242 Tracer	ASP Plutonium Isotopic, Solid "Dry Weight Corrected"	1533905	69.2	(15%-125%)									
Uranium-232 Tracer	ASP Uranium Isotopic, Solid "Dry Weight Corrected"	1533902	50.9	(15%-125%)									
Uranium-235/236 Tracer	ASP Uranium Isotopic, Solid "Dry Weight Corrected"	1533902	54.5	(15%-125%)									
Americium-243 Tracer	Alphaspec Np237, Solid "Dry Weight Corrected"	1533904	61.7	(15%-125%)									
Actinium-227 Tracer	Alphaspec Th229 + 228,230,232 Solid "Dry Weight Corrected"	1533901	86.1	(15%-125%)									
Americium-243 Tracer	Am241, Cm Solid "Dry Weight Corrected"	1533903	93.1	(15%-125%)									
Plutonium-242 Tracer	Liquid Scint Pu241, Solid "Dry Weight Corrected"	1533906	69.2	(15%-125%)									
Strontium Carrier	GFPC, Sr90, solid "Dry Weight Corrected"	1534758	80.3	(25%-125%)									
Technetium-99m Tracer	Liquid Scint Tc99, Solid "Dry Weight Corrected"	1534637	94.3	(15%-125%)									

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

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Certificate of Analysis

Company : MJW Corporation
 Address : 15 Hazelwood Drive
 Suite 112
 Buffalo, New York 14228

Report Date: January 19, 2016

Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes

Client Sample ID: 5.3.A.R.1.6
 Sample ID: 387899023
 Matrix: Soil
 Collect Date: 15-DEC-15
 Receive Date: 21-DEC-15
 Collector: Client
 Moisture: 9.77%

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids														
<i>ASTM D 2216 % Moisture "As Received"</i>														
Moisture		9.77						percent		LYT1	12/22/15	1007	1532997	1
Rad Alpha Spec Analysis														
<i>ASP Plutonium Isotopic, Solid "Dry Weight Corrected"</i>														
Plutonium-238	U	0.0013	+/-0.096	0.213	0.0581	+/-0.0962	1.00	pCi/g		HAKB	01/11/16	0941	1533905	2
Plutonium-239/240	U	0.0181	+/-0.117	0.239	0.0712	+/-0.117	1.00	pCi/g						
<i>ASP Uranium Isotopic, Solid "Dry Weight Corrected"</i>														
Uranium-232	U	0.013	+/-0.0489	0.0822	0.0154	+/-0.049	1.00	pCi/g		HAKB	01/11/16	1029	1533902	3
Uranium-233/234		0.757	+/-0.233	0.0869	0.0163	+/-0.269	1.00	pCi/g						
Uranium-235/236		0.032	+/-0.0629	0.0872	0.0163	+/-0.0632	1.00	pCi/g						
Uranium-238		0.685	+/-0.222	0.0869	0.0163	+/-0.253	1.00	pCi/g						
<i>Alphaspec Np237, Solid "Dry Weight Corrected"</i>														
Neptunium-237	U	-0.0831	+/-0.225	0.601	0.193	+/-0.226	1.00	pCi/g		HAKB	01/08/16	0854	1533904	4
<i>Alphaspec Th229, 228,230,232 Solid "Dry Weight Corrected"</i>														
Thorium-228		1.06	+/-0.517	0.487	0.163	+/-0.543	1.00	pCi/g		HAKB	01/11/16	1350	1533901	5
Thorium-229	U	0.0396	+/-0.149	0.250	0.0468	+/-0.149	1.00	pCi/g						
Thorium-230		0.718	+/-0.412	0.365	0.104	+/-0.425	1.00	pCi/g						
Thorium-232		0.274	+/-0.273	0.317	0.0806	+/-0.276	1.00	pCi/g						
<i>Am241, Cm Solid "Dry Weight Corrected"</i>														
Americium-241	U	0.0118	+/-0.0528	0.103	0.0295	+/-0.0528	1.00	pCi/g		HAKB	01/11/16	1545	1533903	6
Curium-242	U	-0.00392	+/-0.0338	0.0783	0.0146	+/-0.0338	1.00	pCi/g						
Curium-243/244	U	-0.00698	+/-0.0309	0.0806	0.0185	+/-0.0309	1.00	pCi/g						
Curium-245/246		0.00	+/-0.034	0.0505	0.00	+/-0.034	1.00	pCi/g						
<i>Liquid Scint Pu241, Solid "Dry Weight Corrected"</i>														
Plutonium-241	U	2.14	+/-6.57	11.2	5.46	+/-6.59	15.0	pCi/g		HAKB	01/14/16	0141	1533906	7
Rad Gamma Spec Analysis														
<i>Gamma 1129, Solid "Dry Weight Corrected"</i>														
Iodine-129	U	0.192	+/-0.286	0.981	0.340	+/-0.300	1.00	pCi/g		MJH1	01/15/16	0601	1535059	8
<i>Gammasp. Gamma, Solid "Dry Weight Corrected"</i>														
Actinium-227	U	-0.155	+/-0.270	0.487	0.229	+/-0.280		pCi/g		RXF2	01/14/16	1049	1533152	9
Antimony-125	U	0.039	+/-0.0946	0.190	0.0883	+/-0.0962		pCi/g						
Bismuth-212	UI	0.00	+/-1.10	1.24	0.579	+/-1.33		pCi/g						
Bismuth-214		1.16	+/-0.180	0.139	0.0643	+/-0.203		pCi/g						
Cesium-137	UI	0.00	+/-0.0469	0.0705	0.0322	+/-0.0513	0.100	pCi/g						
Cobalt-60	U	-0.00459	+/-0.0464	0.0746	0.0326	+/-0.0464		pCi/g						
Europium-154	U	0.0204	+/-0.0951	0.193	0.084	+/-0.0955		pCi/g						
Lead-212		1.16	+/-0.130	0.107	0.0504	+/-0.161		pCi/g						
Lead-214		1.23	+/-0.216	0.156	0.0734	+/-0.238		pCi/g						

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Certificate of Analysis

Company : MJW Corporation
 Address : 15 Hazelwood Drive
 Suite 112
 Buffalo, New York 14228
 Contact: Ms. Laurie Loscy
 Project: Soil Radioisotopes
 Client Sample ID: 5.3.A.R.1.6
 Sample ID: 387899023

Report Date: January 19, 2016

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gamma Spec Analysis														
<i>GammaSpec, Gamma, Solid "Dry Weight Corrected"</i>														
Potassium-40		13.0	+/-1.33	0.618	0.263	+/-1.73		pCi/g						
Protactinium-231	U	0.00	+/-0.809	0.920	0.432	+/-0.862		pCi/g						
Radium-226		1.16	+/-0.180	0.139	0.0643	+/-0.203		pCi/g						
Radium-228		0.930	+/-0.322	0.236	0.105	+/-0.346		pCi/g						
Thallium-208		0.298	+/-0.0706	0.0682	0.0313	+/-0.0747		pCi/g						
Tin-126	U	0.0128	+/-0.166	0.145	0.0695	+/-0.168		pCi/g						
Rad Gas Flow Proportional Counting														
<i>GFPC, Gross A.B, solid "Dry Weight Corrected"</i>														
Alpha		9.66	+/-2.23	2.89	1.35	+/-2.91	4.00	pCi/g		KXB2	01/11/16	1939	1534757	10
Beta		18.5	+/-1.64	2.01	0.977	+/-3.02	10.0	pCi/g						
<i>GFPC, Sr90, solid "Dry Weight Corrected"</i>														
Strontium-90	U	-0.381	+/-0.408	0.942	0.404	+/-0.408	2.00	pCi/g		KSD1	01/11/16	0855	1534758	11
Rad Liquid Scintillation Analysis														
<i>LSC, Tritium Dist, Solid "Dry Weight Corrected"</i>														
Tritium	U	-1.1	+/-2.48	4.42	2.13	+/-2.48	6.00	pCi/g		TXJ1	01/08/16	1522	1534917	12
<i>Liquid Scint C14, Solid "Dry Weight Corrected"</i>														
Carbon-14	U	-0.0854	+/-0.694	1.20	0.584	+/-0.694	2.00	pCi/g		TXJ1	01/15/16	0408	1534934	13
<i>Liquid Scint Tc99, Solid "Dry Weight Corrected"</i>														
Technetium-99	U	-2.04	+/-1.77	3.27	1.57	+/-1.77	5.00	pCi/g		MYM	01/13/16	0504	1534637	14

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	LYTT	12/22/15	1007	1532997

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, U-02-RC Modified
4	ASTM C 1476-00 Modified
5	DOE EML HASL-300, Th-01-RC Modified
6	DOE EML HASL-300, Am-05-RC Modified
7	DOE EML HASL-300, Pu-11-RC Modified
8	DOE EML HASL-300, I-01 Modified
9	DOE HASL 300, 4 5 2.3/Ga-01-R
10	EPA 900.0/SW846 9310/SM 7110B Modified
11	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
12	EPA 906.0 Modified
13	EPA EERF C-01 Modified

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Company : MJW Corporation
Address : 15 Hazelwood Drive
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Buffalo, New York 14228

Report Date: January 19, 2016

Contact: Ms. Laurie Losey
Project: Soil Radioisotopes

Client Sample ID: 5.3.A.R.1.6
Sample ID: 387899023

Project: MIWC00115
Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
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14 DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Plutonium-242 Tracer	ASP Plutonium Isotopic, Solid "Dry Weight Corrected"	1533905	43.7	(15%-125%)
Uranium-232 Tracer	ASP Uranium Isotopic, Solid "Dry Weight Corrected"	1533902	80.9	(15%-125%)
Uranium-235/236 Tracer	ASP Uranium Isotopic, Solid "Dry Weight Corrected"	1533902	86.3	(15%-125%)
Americium-243 Tracer	Alphaspec Np237, Solid "Dry Weight Corrected"	1533904	94.7	(15%-125%)
Actinium-227 Tracer	Alphaspec Th229 + 228,230,232 Solid "Dry Weight Corrected"	1533901	96.6	(15%-125%)
Americium-243 Tracer	Am241, Cm Solid "Dry Weight Corrected"	1533903	99.8	(15%-125%)
Plutonium-242 Tracer	Liquid Scint Pu241, Solid "Dry Weight Corrected"	1533906	43.7	(15%-125%)
Strontium Carrier	GFPC, Sr90, solid "Dry Weight Corrected"	1534758	79.2	(25%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Solid "Dry Weight Corrected"	1534637	92.7	(15%-125%)

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

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Certificate of Analysis

Company : MJW Corporation
 Address : 15 Hazelwood Drive
 Suite 112
 Buffalo, New York 14228

Report Date: January 19, 2016

Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes

Client Sample ID: 5.3.A.R.1.7
 Sample ID: 387899004
 Matrix: Water
 Collect Date: 15-DEC-15
 Receive Date: 21-DEC-15
 Collector: Client

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
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Rad Gamma Spec Analysis

Gamma spec, Gamma, Liquid (Standard List) "As Received"

Actinium-227	U	-8.13	+/-24.5	43.3	20.5	+/-24.8		pCi/L		MJH1	01/08/16	1549	1532831	1
Antimony-125	U	-2.6	+/-9.12	15.8	7.36	+/-9.20		pCi/L						
Bismuth-212	U	11.9	+/-43.4	82.6	37.7	+/-43.7		pCi/L						
Bismuth-214	U	-1.23	+/-9.88	14.2	6.66	+/-9.90		pCi/L						
Cesium-137	U	-1.55	+/-5.08	8.29	3.89	+/-5.13	10.0	pCi/L						
Cobalt-60	U	-0.407	+/-2.97	5.66	2.44	+/-2.97		pCi/L						
Europtium-154	U	-5.97	+/-9.99	17.5	7.68	+/-10.4		pCi/L						
Lead-212	U	-6.48	+/-8.40	11.9	5.71	+/-8.91		pCi/L						
Lead-214	U	5.75	+/-14.5	14.2	6.74	+/-14.8		pCi/L						
Potassium-40	U	-32.8	+/-52.4	85.8	39.0	+/-54.5		pCi/L						
Protactinium-231	U	-15.6	+/-49.0	85.8	40.6	+/-49.6		pCi/L						
Radium-228	U	-11.5	+/-13.4	22.9	10.4	+/-14.5		pCi/L						
Thallium-208	U	1.25	+/-5.27	6.51	3.02	+/-5.27		pCi/L						
Tin-126	U	2.52	+/-7.23	12.8	6.16	+/-7.32		pCi/L						

Rad Gas Flow Proportional Counting

GFPC, Gross A/B, liquid "As Received"

Alpha		1.32	+/-1.63	2.69	0.911	+/-1.65	5.00	pCi/L		JXB7	01/05/16	1216	1533798	2
Beta		3.03	+/-2.58	4.08	1.78	+/-2.63	5.00	pCi/L						

The following Analytical Methods were performed

Method	Description
1	EPA 901.1
2	EPA 900.0/SW846 9310

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
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Notes:

TPU and Counting Uncertainty are 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

Company : MJW Corporation
 Address : 15 Hazelwood Drive
 Suite 112
 Buffalo, New York 14228

Report Date: January 18, 2016

Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes

Client Sample ID: 5.3A.R.2.1
 Sample ID: 387853008
 Matrix: Soil
 Collect Date: 11-DEC-15
 Receive Date: 18-DEC-15
 Collector: Client
 Moisture: 25.9%

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids														
<i>ASTM D 2216 % Moisture "As Received"</i>														
Moisture		25.9						percent		CXC1	12/21/15	1516	1532672	1
Rad Gamma Spec Analysis														
<i>Gammascpec. Gamma, Solid "Dry Weight Corrected"</i>														
Actinium-227	U	-0.00564	+/-0.261	0.488	0.227	+/-0.261		pCi/g		RXF2	01/13/16	0654	1532995	2
Antimony-125	U	-0.0131	+/-0.102	0.184	0.0841	+/-0.102		pCi/g						
Bismuth-212	UI	0.00	+/-0.724	1.36	0.628	+/-0.843		pCi/g						
Bismuth-214		0.797	+/-0.183	0.127	0.057	+/-0.194		pCi/g						
Cesium-137		0.609	+/-0.120	0.0656	0.0291	+/-0.129	0.100	pCi/g						
Cobalt-60	U	0.0197	+/-0.035	0.0771	0.033	+/-0.0362		pCi/g						
Europium-154	U	-0.134	+/-0.124	0.196	0.0828	+/-0.139		pCi/g						
Lead-212		0.764	+/-0.117	0.103	0.0482	+/-0.131		pCi/g						
Lead-214		0.964	+/-0.199	0.335	0.162	+/-0.213		pCi/g						
Potassium-40		10.5	+/-1.47	0.729	0.309	+/-1.75		pCi/g						
Protactinium-231	U	0.243	+/-0.679	0.922	0.428	+/-0.682		pCi/g						
Radium-226		0.797	+/-0.183	0.127	0.057	+/-0.194		pCi/g						
Radium-228		0.656	+/-0.235	0.268	0.119	+/-0.252		pCi/g						
Thallium-208		0.175	+/-0.0541	0.0689	0.0311	+/-0.056		pCi/g						
Tin-126	U	0.0368	+/-0.103	0.157	0.0745	+/-0.104		pCi/g						
Rad Gas Flow Proportional Counting														
<i>GFPC, Gross A-B, solid "Dry Weight Corrected"</i>														
Alpha		6.00	+/-2.85	3.11	1.15	+/-3.08	4.00	pCi/g		JXB7	01/11/16	1334	1534754	3
Beta		23.4	+/-3.94	4.50	2.09	+/-5.20	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	CXC1	12/21/15	1516	1532672

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE HASL 300.4 5.2.3/Ga-01-R
3	EPA 900.0/SW846 9310/SM 7110B Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits

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Certificate of Analysis

Company : MJW Corporation
Address : 15 Hazelwood Drive
Suite 112
Buffalo, New York 14228

Report Date: January 18, 2016

Contact: Ms. Laurie Losey
Project: Soil Radioisotopes

Client Sample ID: 5.3A.R.2.1
Sample ID: 387853008

Project: MJWC00115
Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.	
Surrogate/Tracer Recovery	Test												Batch ID	Recovery%	Acceptable Limits

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

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Certificate of Analysis

Company : MJW Technical Services
 Address : 15 Hazelwood Drive
 Suite 112
 Buffalo, New York 14228

Report Date: March 8, 2016

Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes

Client Sample ID: 5.3.A.R.2.2
 Sample ID: 392043006
 Matrix: Soil
 Collect Date: 11-DEC-15
 Receive Date: 25-FEB-16
 Collector: Client
 Moisture: 18.3%

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gamma Spec Analysis														
<i>Gamma with Ingrowth "Dry Weight Corrected"</i>														
Actinium-227	U	0.0201	+/-0.262	0.492	0.233	+/-0.262		pCi/g		MXR1	03/07/16	0850	1547791	1
Antimony-125	U	-0.0198	+/-0.0838	0.159	0.0726	+/-0.0842		pCi/g						
Bismuth-212		1.24	+/-0.663	0.978	0.444	+/-0.674		pCi/g						
Bismuth-214		0.748	+/-0.154	0.122	0.0552	+/-0.166		pCi/g						
Cesium-137		0.0604	+/-0.0457	0.071	0.0322	+/-0.046	0.100	pCi/g						
Cobalt-60	U	-0.00476	+/-0.0369	0.0718	0.0307	+/-0.0369		pCi/g						
Europium-154	U	0.0523	+/-0.107	0.208	0.090	+/-0.110		pCi/g						
Lead-212		0.765	+/-0.121	0.119	0.0567	+/-0.153		pCi/g						
Lead-214		0.976	+/-0.185	0.128	0.0594	+/-0.203		pCi/g						
Potassium-40		11.5	+/-1.29	0.341	0.119	+/-1.71		pCi/g						
Protactinium-231	U	0.166	+/-0.547	0.914	0.430	+/-0.553		pCi/g						
Radium-226		0.748	+/-0.154	0.122	0.0552	+/-0.166		pCi/g						
Radium-228		0.860	+/-0.243	0.230	0.101	+/-0.268		pCi/g						
Thallium-208		0.219	+/-0.0724	0.0634	0.0288	+/-0.0747		pCi/g						
Tin-126	UI	0.00	+/-0.0762	0.082	0.0391	+/-0.0785		pCi/g						

Rad Gas Flow Proportional Counting

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

Alpha		12.5	+/-3.02	3.30	1.46	+/-3.90	4.00	pCi/g		BXF1	03/04/16	0755	1547857	2
Beta		14.8	+/-2.30	2.73	1.29	+/-3.27	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	CXC1	02/25/16	1523	1547783

The following Analytical Methods were performed

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 900.0/SW846.9310/SM 7110B Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits

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Certificate of Analysis

Company : MJW Technical Services
Address : 15 Hazelwood Drive
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Buffalo, New York 14228

Report Date: March 8, 2016

Contact: Ms. Laurie Losey
Project: Soil Radioisotopes

Client Sample ID: 5.3.A.R.2.2
Sample ID: 392043006

Project: MJWC00115
Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.	
Surrogate/Tracer Recovery	Test												Batch ID	Recovery%	Acceptable Limits

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

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Certificate of Analysis

Company : MJW Corporation
 Address : 15 Hazelwood Drive
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Report Date: January 18, 2016

Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes

Client Sample ID: 5.3A.R.3.1
 Sample ID: 387853009
 Matrix: Soil
 Collect Date: 11-DEC-15
 Receive Date: 18-DEC-15
 Collector: Client
 Moisture: 24.5%

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids														
<i>ASTM D 2216 % Moisture "As Received"</i>														
Moisture		24.5						percent		CXC1	12/21/15	1516	1532672	1
Rad Gamma Spec Analysis														
<i>Gammascpec, Gamma, Solid "Dry Weight Corrected"</i>														
Actinium-227	U	-0.0716	+/-0.334	0.621	0.290	+/-0.336		pCi/g		RXF2	01/13/16	0723	1532995	2
Antimony-125	U	0.0942	+/-0.119	0.238	0.110	+/-0.126		pCi/g						
Bismuth-212	UI	0.00	+/-1.01	1.43	0.655	+/-1.13		pCi/g						
Bismuth-214		0.825	+/-0.200	0.180	0.0823	+/-0.213		pCi/g						
Cesium-137		0.559	+/-0.102	0.0751	0.0331	+/-0.114	0.100	pCi/g						
Cobalt-60	U	-0.0333	+/-0.043	0.0734	0.0297	+/-0.0456		pCi/g						
Europium-154	U	-0.116	+/-0.138	0.235	0.098	+/-0.148		pCi/g						
Lead-212		0.782	+/-0.132	0.131	0.0611	+/-0.149		pCi/g						
Lead-214		0.992	+/-0.245	0.400	0.194	+/-0.260		pCi/g						
Potassium-40		10.0	+/-1.45	1.03	0.446	+/-1.68		pCi/g						
Protactinium-231	U	0.205	+/-0.667	1.27	0.597	+/-0.675		pCi/g						
Radium-226		0.825	+/-0.200	0.180	0.0823	+/-0.213		pCi/g						
Radium-228		0.986	+/-0.307	0.312	0.137	+/-0.337		pCi/g						
Thallium-208		0.267	+/-0.0789	0.0845	0.0382	+/-0.0824		pCi/g						
Tin-126	U	0.0323	+/-0.114	0.214	0.102	+/-0.115		pCi/g						
Rad Gas Flow Proportional Counting														
<i>GFPC, Gross A/B, solid "Dry Weight Corrected"</i>														
Alpha		10.5	+/-3.33	3.37	1.37	+/-3.90	4.00	pCi/g		JXB7	01/11/16	1338	1534754	3
Beta		21.5	+/-3.24	3.62	1.69	+/-4.40	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	CXC1	12/21/15	1516	1532672

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE HASL 300, 4.5.2.3/Ga-01-R
3	EPA 900.0/SW846.9310/SM 7110B Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits

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Certificate of Analysis

Company : MJW Corporation
Address : 15 Hazelwood Drive
Suite 112
Buffalo, New York 14228

Report Date: January 18, 2016

Contact: Ms. Laurie Losey
Project: Soil Radioisotopes

Client Sample ID: 5.3A.R.3.1
Sample ID: 387853009

Project: MJWC00115
Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.	
Surrogate/Tracer Recovery	Test												Batch ID	Recovery%	Acceptable Limits

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

GEL LABORATORIES LLC

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Certificate of Analysis

Company : MJW Technical Services
 Address : 15 Hazelwood Drive
 Suite 112
 Buffalo, New York 14228
 Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes
 Client Sample ID: 5.3.A.R.3.2
 Sample ID: 392043007
 Matrix: Soil
 Collect Date: 11-DEC-15
 Receive Date: 25-FEB-16
 Collector: Client
 Moisture: 19.4%

Report Date: March 8, 2016

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
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Rad Gamma Spec Analysis

Gamma with Ingrowth "Dry Weight Corrected"

Actinium-227	U	0.0355	+/-0.222	0.428	0.201	+/-0.222		pCi/g		MXR1	03/07/16	0850	1547791	1
Antimony-125	U	-0.0396	+/-0.0798	0.141	0.0642	+/-0.0818		pCi/g						
Bismuth-212	UI	0.00	+/-0.583	0.755	0.339	+/-0.595		pCi/g						
Bismuth-214		0.807	+/-0.145	0.104	0.0472	+/-0.159		pCi/g						
Cesium-137		0.177	+/-0.0598	0.0677	0.031	+/-0.0614	0.100	pCi/g						
Cobalt-60	U	-0.00104	+/-0.0313	0.0629	0.027	+/-0.0313		pCi/g						
Europium-154	U	0.0321	+/-0.121	0.212	0.0939	+/-0.122		pCi/g						
Lead-212		0.873	+/-0.110	0.0905	0.0425	+/-0.137		pCi/g						
Lead-214		0.918	+/-0.187	0.128	0.0597	+/-0.202		pCi/g						
Potassium-40		10.9	+/-1.20	0.653	0.284	+/-1.53		pCi/g						
Protactinium-231	UI	0.00	+/-0.604	0.815	0.381	+/-0.613		pCi/g						
Radium-226		0.807	+/-0.145	0.104	0.0472	+/-0.159		pCi/g						
Radium-228	UI	0.00	+/-0.268	0.436	0.206	+/-0.388		pCi/g						
Thallium-208		0.222	+/-0.0771	0.0604	0.0276	+/-0.0793		pCi/g						
Tin-126	UI	0.00	+/-0.108	0.132	0.0633	+/-0.109		pCi/g						

Rad Gas Flow Proportional Counting

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

Alpha		8.90	+/-2.87	3.46	1.51	+/-3.40	4.00	pCi/g		BXF1	03/04/16	0755	1547857	2
Beta		18.2	+/-2.39	2.74	1.30	+/-3.60	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	CXC1	02/25/16	1523	1547783

The following Analytical Methods were performed

Method	Description
1	DOE HASL 300, 4 5 2.3/Ga-01-R
2	EPA 900.0/SW846 9310/SM 7110B Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
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Certificate of Analysis

Company : MJW Technical Services
Address : 15 Hazelwood Drive
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Buffalo, New York 14228

Report Date: March 8, 2016

Contact: Ms. Laurie Losey
Project: Soil Radioisotopes

Client Sample ID: 5.3.A.R.3.2
Sample ID: 392043007

Project: MJWC00115
Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.	
Surrogate/Tracer Recovery	Test												Batch ID	Recovery%	Acceptable Limits

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

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Certificate of Analysis

Company : MJW Corporation
 Address : 15 Hazelwood Drive
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Report Date: January 18, 2016

Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes

Client Sample ID: 5.3A.R.4.1
 Sample ID: 387853010
 Matrix: Soil
 Collect Date: 11-DEC-15
 Receive Date: 18-DEC-15
 Collector: Client
 Moisture: 28.8%

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids														
<i>ASTM D 2216 % Moisture "As Received"</i>														
Moisture		28.8						percent		CXC1	12/21/15	1516	1532672	1
Rad Gamma Spec Analysis														
<i>Gammascpec. Gamma, Solid "Dry Weight Corrected"</i>														
Actinium-227	U	-0.0569	+/-0.253	0.453	0.214	+/-0.255		pCi/g		RXF2	01/13/16	0744	1532995	2
Antimony-125	U	0.0434	+/-0.0849	0.164	0.0762	+/-0.0872		pCi/g						
Bismuth-212	UI	0.00	+/-0.467	0.973	0.451	+/-0.560		pCi/g						
Bismuth-214		0.915	+/-0.145	0.0933	0.0421	+/-0.164		pCi/g						
Cesium-137		0.635	+/-0.086	0.0619	0.0284	+/-0.100	0.100	pCi/g						
Cobalt-60	U	-0.0108	+/-0.036	0.0656	0.029	+/-0.0364		pCi/g						
Europium-154	U	-0.00411	+/-0.113	0.212	0.0955	+/-0.113		pCi/g						
Lead-212		0.755	+/-0.107	0.0984	0.0465	+/-0.123		pCi/g						
Lead-214		1.02	+/-0.165	0.121	0.0562	+/-0.185		pCi/g						
Potassium-40		9.32	+/-1.15	0.682	0.303	+/-1.40		pCi/g						
Protactinium-231	UI	0.00	+/-0.486	0.848	0.399	+/-0.530		pCi/g						
Radium-226		0.915	+/-0.145	0.0933	0.0421	+/-0.164		pCi/g						
Radium-228		0.491	+/-0.233	0.219	0.0988	+/-0.246		pCi/g						
Thallium-208		0.191	+/-0.0675	0.0608	0.028	+/-0.0694		pCi/g						
Tin-126	U	0.0699	+/-0.123	0.149	0.071	+/-0.125		pCi/g						
Rad Gas Flow Proportional Counting														
<i>GFPC, Gross A/B, solid "Dry Weight Corrected"</i>														
Alpha		10.2	+/-3.40	3.86	1.63	+/-3.92	4.00	pCi/g		JXB7	01/11/16	1332	1534754	3
Beta		19.5	+/-2.78	2.94	1.37	+/-3.82	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	CXC1	12/21/15	1516	1532672

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	DOE HASL 300, 4.5.2.3/Ga-01-R
3	EPA 900 0/SW846 9310/SM 7110B Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
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Certificate of Analysis

Company : MJW Corporation
Address : 15 Hazelwood Drive
Suite 112
Buffalo, New York 14228

Report Date: January 18, 2016

Contact: Ms. Laurie Losey
Project: Soil Radioisotopes

Client Sample ID: 5.3A.R.4.1
Sample ID: 387853010

Project: MJWC00115
Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date Time	Batch	Mtd.	
Surrogate/Tracer Recovery	Test											Batch ID	Recovery%	Acceptable Limits

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

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Certificate of Analysis

Company : MJW Technical Services
 Address : 15 Hazelwood Drive
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Report Date: March 8, 2016

Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes

Project: MJWC00115
 Client ID: MJWC001

Client Sample ID: 5.3.A.R.4.2
 Sample ID: 392043008
 Matrix: Soil
 Collect Date: 11-DEC-15
 Receive Date: 25-FEB-16
 Collector: Client
 Moisture: 18.8%

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
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Rad Gamma Spec Analysis

Gamma with Ingrowth "Dry Weight Corrected"

Actinium-227	U	0.152	+/-0.271	0.534	0.251	+/-0.281		pCi/g		MXR1	03/07/16	0851	1547791	1
Antimony-125	U	-0.0559	+/-0.115	0.184	0.0842	+/-0.118		pCi/g						
Bismuth-212	UI	0.00	+/-0.741	1.03	0.466	+/-0.849		pCi/g						
Bismuth-214		0.889	+/-0.172	0.113	0.0503	+/-0.190		pCi/g						
Cesium-137		0.0692	+/-0.0428	0.0715	0.0323	+/-0.0433	0.100	pCi/g						
Cobalt-60	U	-0.00424	+/-0.038	0.0747	0.0319	+/-0.0381		pCi/g						
Europium-154	U	-0.0086	+/-0.138	0.231	0.101	+/-0.138		pCi/g						
Lead-212		0.850	+/-0.118	0.108	0.0505	+/-0.142		pCi/g						
Lead-214		0.886	+/-0.189	0.142	0.0658	+/-0.205		pCi/g						
Potassium-40		9.51	+/-1.40	0.659	0.276	+/-1.62		pCi/g						
Protactinium-231	UI	0.00	+/-0.929	0.919	0.428	+/-0.965		pCi/g						
Radium-226		0.889	+/-0.172	0.113	0.0503	+/-0.190		pCi/g						
Radium-228		0.814	+/-0.277	0.235	0.103	+/-0.305		pCi/g						
Thallium-208		0.232	+/-0.0623	0.0598	0.0268	+/-0.0657		pCi/g						
Tin-126	UI	0.00	+/-0.133	0.172	0.0821	+/-0.135		pCi/g						

Rad Gas Flow Proportional Counting

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

Alpha		10.3	+/-3.24	3.23	1.31	+/-3.80	4.00	pCi/g		BXF1	03/04/16	0744	1547857	2
Beta		17.7	+/-3.32	4.22	1.99	+/-4.20	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	CXC1	02/25/16	1523	1547783

The following Analytical Methods were performed

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 900 0/SW846 9310/SM 7110B Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
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GEL LABORATORIES LLC

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

Certificate of Analysis

Company : MJW Technical Services
Address : 15 Hazelwood Drive
Suite 112
Buffalo, New York 14228

Report Date: March 8, 2016

Contact: Ms. Laurie Losey
Project: Soil Radioisotopes

Client Sample ID: 5.3.A.R.4.2
Sample ID: 392043008

Project: MJWC00115
Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.	
Surrogate/Tracer	Recovery	Test											Batch ID	Recovery%	Acceptable Limits

Notes:

TPU and Counting Uncertainty are 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

Company : MJW Corporation
 Address : 15 Hazelwood Drive
 Suite 112
 Buffalo, New York 14228

Report Date: January 14, 2016

Contact: Ms. Laurie Losey
 Project: Soil Radioisotopes

Client Sample ID: 5.3.A.R.4.5
 Sample ID: 387686007
 Matrix: Water
 Collect Date: 11-DEC-15
 Receive Date: 17-DEC-15
 Collector: Client

Project: MJWC00115
 Client ID: MJWC001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
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Rad Gamma Spec Analysis

GammaSpec, Gamma, Liquid (Standard List) "As Received"

Actinium-227	U	-3.02	+/-26.8	48.2	22.7	+/-26.8		pCi/L		MJH1	01/08/16	1531	1532831	1
Antimony-125	U	-4.6	+/-8.94	15.3	7.02	+/-9.18		pCi/L						
Bismuth-212	U	10.6	+/-45.9	88.7	40.1	+/-46.1		pCi/L						
Bismuth-214	U	-2.09	+/-10.5	15.6	7.25	+/-10.5		pCi/L						
Cesium-137	U	-3.12	+/-3.70	6.32	2.86	+/-3.96	10.0	pCi/L						
Cobalt-60	U	2.18	+/-3.67	7.82	3.43	+/-3.80		pCi/L						
Europium-154	U	-2.93	+/-9.24	17.4	7.41	+/-9.34		pCi/L						
Lead-212	U	-7.92	+/-8.71	12.5	5.97	+/-9.44		pCi/L						
Lead-214	U	-7.05	+/-9.95	14.6	6.83	+/-10.5		pCi/L						
Potassium-40	U	-62.1	+/-54.5	94.2	42.3	+/-61.6		pCi/L						
Protactinium-231	U	24.5	+/-48.5	90.8	42.7	+/-50.0		pCi/L						
Radium-228	U	-10.9	+/-20.4	29.5	13.5	+/-21.1		pCi/L						
Thallium-208	U	-3.37	+/-4.97	6.89	3.16	+/-5.21		pCi/L						
Tin-126	UI	0.00	+/-11.8	15.5	7.38	+/-12.9		pCi/L						

Rad Gas Flow Proportional Counting

GFPC, Gross A-B, liquid "As Received"

Alpha	U	0.149	+/-1.40	3.11	1.13	+/-1.40	5.00	pCi/L		JXB7	01/05/16	1143	1533798	2
Beta	U	-1.35	+/-2.26	4.63	2.05	+/-2.26	5.00	pCi/L						

The following Analytical Methods were performed

Method	Description
1	EPA 901 F
2	EPA 900.0/SW846 9310

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
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Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).