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October 2, 2012

Mrs. Carla M. Jordan Casella Waste Services of Ontario, LLC Ontario County Landfill 1879 State Routes 5 & 20 Stanley, New York 14561

Re: Chemung County Landfill January 2012 Radionuclide Monitoring Event File: 574.129.001

Dear Mrs. Jordan:

This letter report summarizes our January 2012 Radionuclide Monitoring event, which was conducted in accordance with the Site EMP Appendix F – Additional Considerations for Radionuclide Sampling. This event is the initial monitoring event to be completed under this new monitoring requirement. Barton & Loguidice, P.C. (B&L) conducted the sampling on January 31, 2012. Samples of both filtered and non-filtered media were collected from three (3) locations, including two primary leachate collection systems identified as Cells I/II/III, Cell IV, as well as the Leachate Lagoon. Included as attachments to this letter are the following supporting documents:

- Attachment A TestAmerica Laboratories, Inc. Analytical Report \
- Attachment B Pace Analytical Services, Inc. Analytical Report
- Table 1 Chemung County Landfill Radionuclide Data Results

The samples were initially submitted for analysis to TestAmerica Laboratories, Inc.(TestAmerica) located in St. Louis for the following analysis in accordance with the EMP:

- Radium-226 per EPA 903.1
- Radium-228 per EPA 904.0
- Total Uranium per EPA 908.0
- Gamma Spectrum per EPA 901.1

Included in Attachment A is the TestAmerica analytical report. TestAmerica utilized a different analytical method for Total Uranium than B&L requested on the chain of custody document. TestAmerica utilized method 200.8, which was a deviation from the required EPA method 908.0. B&L discussed this deviation from the EMP with DEC to determine if it was acceptable. The Department did not approve the use of Method 200.8 and required analysis via EPA Method 908.0. TestAmerica did not have the appropriate certification and was unable to complete EPA Method 908.0.

Z:081-Vankv{D0/\176000-176999\176924\LM:\574.129.001 June 2012 Radionuclide Monitoring - 100212 (ID 176924).doex

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Mrs. Carla M. Jordan Casella Waste Services of Ontario, LLC October 2, 2012 Page 2

B&L determined that Pace Analytical Services, Inc. (Pace) was certified for and could successfully complete each method as identified in the EMP. B&L had the remaining sample media sent from TestAmerica to Pace for EPA method 908.0 analysis. The samples were received by Pace on May 23, 2012. The Pace analytical report is included as Attachment B of this letter summary report.

Included in the attached Table 1 are the results for each monitoring location compared to relevant Nuclear Regulatory Commission (NRC) and DEC standards. Also included in Table 1 for both the Cell I/II/III and Cell IV locations are historical data from the May 2010 sampling event. Although some of the methods utilized in the May 2010 event do not directly compare with the current requirement set forth by the EMP, this data is included as a historical reference for comparison purposes.

The results indicate that radionuclide concentrations remain generally consistent with the results of samples collected in May 2010. The reported result for Radium-228 during this event (1.76 ± 0.99) , however, was substantially less than reported for the May 2010 event (12.3 ± 7.2) . More importantly, the results remain far below applicable effluent and sewer discharge criteria established by the federal Nuclear Regulatory Commission (NRC) and/or NYSDEC. Duplicate analyses for Cesium-137 in the Cells I, II, and III sample and Radium-226 and Radium-228 in the Leachate Lagoon sample were also completed and indicated acceptable reproducibility. As we conduct further radionuclide monitoring and gain more analytical data from the required monitoring network, we will be better able to assess the data for potential changes/trends over time.

Please contact me if you have any questions regarding this letter summary report.

Very truly yours,

BARTON & LOGUIDICE, P.C.

Michael R. Brother Senior Managing Hydrogeologist

MRB/akg Attachments cc: Mark Domagala, NYSDEC

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Attachment A

TestAmerica Laboratories, Inc. Analytical Report

<u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

Radiological Analysis

Lot #: F2B030485

Darik Jordan

Barton & Loguidice, PC 290 Elwood Davis Road PO Box 3107 Syracuse, NY 13220

TESTAMERICA LABORATORIES, INC.

Lynn Fussner

Project Manager

March 2, 2012

F2B030485

1 of 30

13715 Rider Trail North Earth City, MO 63045 tel 314.298.8566 fax 314.298.8757 www.testamericainc.com

Case Narrative LOT NUMBER: F2B030485

This report contains the analytical results for the six samples received under chain of custody by TestAmerica St. Louis on February 3, 2012. These samples are associated with your Radiological Analysis project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. **TestAmerica St. Louis' Florida certification number is E87689**. The case narrative is an integral part of this report.

This report shall not be reproduced, except in full, without the written approval of the laboratory.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

ICP-Mass Spectrometry (MCAWW 200.8)

The samples were analyzed at a dilution due to the presence of matrix interferences. The samples were high in salts. The reporting limit has been adjusted for the dilution.

Affected Samples:

F2B030485 (1): CELLS I/II/III F2B030485 (2): CELLS I/II/III DISSOLVED F2B030485 (3): CELLS IV F2B030485 (4): CELLS IV DISSOLVED F2B030485 (5): LEACHATE LAGOON F2B030485 (6): LEACHATE LAGOON DISSOLVED

Radium-226 by GFPC (EPA 903.0 MOD)

The samples were run at reduced aliquot due to color and odor noted by the analyst.

Affected Samples:

F2B030485 (1): CELLS I/II/III F2B030485 (2): CELLS I/II/III DISSOLVED F2B030485 (3): CELLS IV F2B030485 (4): CELLS IV DISSOLVED

Radium-228 by GFPC (EPA 904 MOD)

The samples were run at reduced aliquot due to color and odor noted by the analyst. The reporting limit was not met due to a reduction of sample size which can be attributed to possible matrix interference noted by the analyst during the initial preparation. The analytical results are reported.

Affected Samples:

F2B030485 (1): CELLS I/II/III F2B030485 (2): CELLS I/II/III DISSOLVED F2B030485 (3): CELLS IV F2B030485 (4): CELLS IV DISSOLVED

There were no other nonconformances or observations noted with any analysis on this lot.

METHODS SUMMARY

F2B030485

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Gamma Spectroscopy - Cesium-137 & Hits ICP-Mass Spectrometry ICP-Mass Spectrometry Radium-226 by GFPC Radium-228 by GFPC	EPA 901.1 MOD MCAWW 200.8 EPA 903.0 MOD EPA 904 MOD	EPA 903.0 EPA 904

References:

 EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SAMPLE SUMMARY

F2B030485

<u>wo #</u>	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MQLTN	001	CELLS I/II/III	01/31/12	12:45
MQLTQ	002	CELLS I/II/III DISSOLVED	01/31/12	12:49
MQLTR	003	CELLS IV	01/31/12	12:06
MQLTT	004	CELLS IV DISSOLVED	01/31/12	12:13
MQLTV	005	LEACHATE LAGOON	01/31/12	13:13
MQLTW	006	LEACHATE LAGOON DISSOLVED	01/31/12	12:20
		1		

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.

- All calculations are performed before rounding to avoid round-off errors in calculated results.

- Results noted as "ND" were not detected at or above the stated limit.

- This report must not be reproduced, except in full, without the written approval of the laboratory.

- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor,

paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

F2B030485

Barton & Loguidice, PC

Client Sample ID: CELLS I/II/III

TOTAL Metals

Lot-Sample #...: F2B030485-001. Matrix.....: WATER Date Sampled...: 01/31/12 12:45 Date Received..: 02/03/12

		REPORTII	4G		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	: 2051103					
Uranium	0.56 B	2.0	ug/L	MCAWW 200.8	02/20-02/22/12	MQLTN1AA
	-	Dilution Fac	Stor: 2	Analysis Time: 17:54		

NOTE (S):

B Estimated result, Result is less than RL

F2B030485

Client Sample ID: CELLS I/II/III DISSOLVED

TOTAL Metals .

Lot-Sample #...: F2B030485-002

Matrix....: WATER

Date	Sampled:	01/31/12	12:49	Date	Received:	02/03/12
------	----------	----------	-------	------	-----------	----------

PARAMETER	RESULT	REPORTING	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	: 2051103					
Uranium	0.88 B	2.0	ug/L	MCAWW 200.8	02/20-02/22/12	MQLTQ1AA
		Dilution Facto	»r: 2	Analysis Time: 18:06		

NOTE(S):

B Estimated result. Result is less than RL.

F2B030485

Barton & Loguidice, PC

Client Sample ID: CELLS IV

TOTAL Metals

Lot-Sample #...: F2B030485-003 Date Sampled...: 01/31/12 12:06 Date Received..: 02/03/12 Matrix..... WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #: Uranium I	2051103 ND D1:	2.0 Lution Factor	ug/L :: 2 A:	MCAWW 200.8 nalysis Time: 18:09	02/20-02/22/12	MQLTR1AA

F2B030485

Barton & Loguidice, PC

Client Sample ID: CELLS IV DISSOLVED

TOTAL Metals

Lot-Sample #...: F2B030485-004 Date Sampled...: 01/31/12 12:13 Date Received..: 02/03/12 Matrix.....: WATER

		REPORTING	3		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER´#
Prep Batch #	: 2051103					
Uranium	ND	2.0	ug/L	MCAWW 200.8	02/20-02/22/12	MQLTT1AA
		Dilution Fact	or: 2	Analysis Time: 18:12		

F2B030485

Barton & Loguidice, PC 🐇

Client Sample ID: LEACHATE LAGOON

TOTAL Metals

Lot-Sample #...: F2B030485-005 Matrix.. Date Sampled...: 01/31/12 13:13 Date Received..: 02/03/12

Matrix.....: WATER

						,
	•	REPORTING			PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #.	: 2051103					
Uranium	0.84 B	2.0	ug/L	MCAWW 200.8	02/20-02/22/12	MQLTV1AA
		Dilution Facto	or: 2	Analysis Time: 18:15		

NOTE(S):

B Estimated result. Result is less than RL,

Client Sample ID: LEACHATE LAGOON DISSOLVED

TOTAL Metals

Lot-Sample #...: F2B030485-006 Matrix..... WATER Date Sampled...: 01/31/12 12:20 Date Received..: 02/03/12 REPORTING PREPARATION-WORK PARAMETER RESULT LIMIT UNITS METHOD ANALYSIS DATE ORDER # Prep Batch #...: 2051103 Uranium 0.79 B 2.0 ug/Ն MCAWW 200.8 02/20-02/22/12 MQLTW1AA Dilution Factor: 2 Analysis Time..: 18:18

NOTE(S):

B Estimated result. Result is less than RL.

F2B030485

METHOD BLANK REPORT

TOTAL Metals

Client Lot i	ŧz	F2B030485	
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Matrix....: WATER

PARAMETER	RESULT	REPORTI	NG UNITS	METHOD	PREPARATION - ANALYSIS DATE	WORK ORDER #
MB Lot-Sample Uranium	#: F2B20000 ND	0-103 Prep 1.0 Dilution Fa	Batch # ug/L letor: 1	: 2051103 MCAWW 200.8	02/20-02/22/12	MQODTIAA
			MCITY INIT	•		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

F2B030485

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #:	F2B030485			Matrix	: WATER
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#:	F2B200000-1	103 Prep Bat	ch #: 2051103		
Uranium	105	(85 - 115) Dilution Facto:	MCAWW 200.8 r: 1 Analysis '	02/20-02/22/12 Time: 17:17	MQ0DT1AC

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #: F2B030485 Date Sampled: 01/31/12 12:45 Date Received: 02/03/12				.: 02/03/12	Matrix WA		
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK <u>ORDER #</u>	
MS Lot-Sample	e #: F2B03(0485-001 Prep Ba	atch #	.: 2051103			
Uranium	94	(70 - 130)		MCAWW 200.8	02/20-02/22/12	MQL/TN1AG	
	94	(70 - 130) 0.32	(0-20)	MCAWW 200.8	02/20-02/22/12	MQLTN1AH	
		Dilution Fact	or: 2				
		Analysis Time	18:00	•		ì	
NOTE (S) :							

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Calculations are performed before rounding to avoid round-off errors in calculated results.

F2B030485

Client Sample ID: CELLS I/II/III

Radiochemistry

Lab Sample ID: Work Order; Matrix:	F2B030485-0 MQLTN WATER	01		Date Collec Date Receiv	ctéd: ved:	01/31/12 02/03/12	1245 0920	
Parameter	Result	Qual	Total Uncert, (2 c+/-)	RL	mde	Pro Dat	ap te	Analysis Date
Gamma Cs-137 & H	lits by EPA 901	.1 MOD		pCi/L	Ba	tch # 20531	16	Yld %
Cesium 137	0.0	U	4.9	20.0	16	02	/22/12	02/22/12
Radium 226 by E	PA 903.0 MOD			pCi/L	Ba	tch # 20341	46	Yld % 58
Radium (226)	1.72		0.55	1.00	0.44	02	/03/12	02/29/12
Radium 228 by GE	PC EPA 904 MOD	3		pCi/L	Ba	tch # 20341	45	¥ld % 51
Radium 228	1.4	U	1.3	1.0	2.0	02	/04/12	02/29/12

NOTE (S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only. Bold results are greater than the MDC. F2B030485 U Result is less than the sample detection limit.

Client Sample ID: CELLS I/II/III DUP

Radiochemistry

Lab Sample ID: Work Order: Matrix:	F2B030485-0 MQLTN WATER	01X		Date Collec Date Receiv	ted: ed:	01/31/12 12 02/03/12 09	15 20
Parameter	Result	Qual	Total Uncert. (2 c+/~)	ri,	mdc	Prop Date	Analysis Date
Gamma Cs-137 & Hi Cesium 137	ts by EPA 901. 0.07	.1 MOD U	¥ 7.9	Ci/L 20.0	Ba 15	toh # 2053116 02/22/	Yld % 12 02/23/12

NOTE (S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only. Bold results are greater than the MDC. F2B030485 U Result is less than the sample detection limit.

Client Sample ID: CELLS I/II/III DISSOLVED

Radiochemistry

Lab Sample II Work Order: Matrix:	le ID: F2B030485-002 Date Colle er: MQLTQ Date Recei WATER		sted: 01/31/12 1249 red: 02/03/12 0920				
Parameter	Result	Qual	Total Uncert. (2 g+/-)	RL	Rdc	Prop Date	Analysis Date
Gamma Cs-137 & Cesium 137	Hits by EPA 901. 0.0	.1 MOD U	2.4	pCi/L 20.0	Bato 16	h # 2053116 02/22/12	Yld % 02/23/12
Radium 226 by Radium (226)	EPA 903.0 MOD 1.59		0.46	pCi/L 1.00	Batc 0.39	n # 2034146 02/03/12	¥ld % 90 02/29/12
Radium 228 by G Radium 228	FPC EPA 904 MOD 1.76		0.99	pCi/L 1.00	Bato 1.4	nh # 203414 5 02/04/12	Xld % 77 02/29/12

NOTE (S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only. Bold results are greater than the MDC. F2B030485 U Result is less than the sample detection limit.

Client Sample ID: CELLS IV

Radiochemistry

Lab Sample II Work Order; Matrix;	F2B030485-0 MQLTR WATER	03		Date Colleg Date Receiv	cted: 0 ved: 0	1/31/12 1206 2/03/12 0920	-
Parameter	Result	Qual	Total Uncert. (2 g+/-)	RL	mdc	Frep Date	Analysis Date
Gamma Cs-137 & Cesium 137	Hits by EPA 901 1.1	.1 MOD U	7.2	pCi/L 20.0	Bato 13	h # 2053116 02/22/12	Yld % 02/23/12
Radium 226 by Radium (226)	EPA 903.0 MOD 2.43		0.68	pCi/L 1.00	Batci 0.58	h # 2034146 02/03/12	Yld % 61 02/29/12
Radium 228 by G Radium 228	FPC EPA 904 MOD 1.8	υ	1.5	pCi/L 1.0	Bate 2.3	h # 2034145 02/04/12	¥1d % 52 02/29/12

NOTE (S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only. Bold results are greater than the MDC.

U Result is less than the sample detection limit.

Client Sample ID: CELLS IV DISSOLVED

Radiochemistry

Lab Sample II Work Order: Matrix:): F2B030485-0 MQLTT WATER	04		Date Colle Date Receiv	red: (01/31/12 1213 02/03/12 0920	
Parameter	Result	Qual	Total Uncert. (2 c+/-)	RL	mde	Prep Date	Analysis Date
Gamma Cs-137 & Cesium 137	Hits by EPA 901 2.8	.1 мор U	8.0	pCi/L 20.0	Bato 14	ch # 2053116 02/22/12	Yld % 02/23/12
Radium 226 by Radium (226)	EPA 903.0 MOD 1.80		0,48	pCi/L 1.00	Bat. 0.39	ch # 2034146 02/03/12	Yld % 102 02/29/12
Radium 228 by G Radium 228	FPC EPA 904 MOD 1.91		0.94	pCi/L 1.00	Bat.	ch # 2034145 . 02/04/12	¥ld % 90 02/29/12

NOTE (S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only. Bold results are greater than the MDC. F2B030485 U Result is less than the sample detection limit.

Client Sample ID: LEACHATE LAGOON

Radiochemistry

Lab Sample ID: Work Order: Matrix:	F2B030485-00 MQLTV WATER)5		Date Colled Date Receiv	oted: 01 Wed: 02	/31/12 1313 /03/12 0920		
Parameter	Result	Qual	Total Uncert. (2 g+/-)	RL	ndc	Prep Date	Analysis Date	÷
Gamma Cs-137 & H Cesium 137	its by EPA 901. 1	1 MOD U	6.0	pCi/L 20.0	Batch 11	# 2053116 02/22/12	Yld % 02/23/12	
Radium 226 by E) Radium (226)	PA 903.0 MOD 0.74		0.21	pCi/L 1.00	Batch 0.17	# 2034146 02/03/12	Yld % 101 02/29/12	
Radium 228 by GF1 Radium 228	PC EPA 904 MOD 0.39	U	0.46	pCi/L 1.00	Batch 0.75	# 2034145 02/04/12	Yld % 84 02/29/12	

NOTE (S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only. Bold results are greater than the MDC.

F2B030485 U Result is less than the sample detection limit.



Client Sample ID: LEACHATE LAGOON DUP

Radiochemistry

Lab Sample : Work Order: Matrix:	ID: F2B030485-005x MQLTV WATER	Σ.		Date Collecte Date Received	ed: 01/ l: 02/	31/12 1313 03/12 0920	
Parameter	Result	Qual	Total Uncert. (2 c+/-)	RL	nde	Prep Date	Analysis Date
Radium 228 by	GFPC EPA 904 MOD			pCi/L	Batch (\$ 2034145	Yld % 72
Radium 228	0.73	υ	0.57	1.00	0.88	02/04/12	02/29/12
Radium 226 by	EPA 903.0 MOD			pCi/L	Batch	2034146	Yld % 82
Radium (226)	0.59	``	0.20	1.00	0.19	02/03/12	02/29/12

NOTE (S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only. Bold results are greater than the MDC.

F2B030485 U Result is less than the sample detection limit.

Client Sample ID: LEACHATE LAGOON DISSOLVED

Radiochemistry

Lab Sample ID: Work Order: Matrix:	F2B030485-0) MQLTW WATER	06		Date Collec Date Receiv	ted: ed:	01/31/12 1220 02/03/12 0920))
Parameter	Result	Qual	Total Uncert. (2 g+/-)	RL	mdo	Prep Date	Analysis Date
Gamma Cs-137 & H Cesium 137	its by EPA 901. -1.6	.1 MOD U	7.0	pCi/L 20.0	Bat 13	ch # 2053116 02/22/12	Yld % 02/23/12
Radium 226 by E Radium (226)	PA 903.0 MOD 0.39		0.16	pCi/L 1.00	Bat 0.17	coh # 2034146 02/03/12	¥ld % 94 02/29/12
Radium 228 by GF Radium 229	PC EPA 904 MOD 0,77		0.50	pCi/L 1.00	Bat 0.76	coh # 2034145 02/04/12	¥ld % 81 02/29/12

NOTE (S)

Data are incomplete without the case narrative,

MDC is determined by instrument performance only. Bold results are greater than the MDC. F2B030485 U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: Matrix:	F2B030485 WATER							
Parameter	Result	Qual	Total Uncert. (2 g+/~)	RL	MDC		Prep Date	Lab Sample ID Analysis Date
Gamma Cs-137 & Cesium 137	Hits by EPA 901 1.2	U U	pCi/L 7.8	Batch # 20.0	2053116 15	Yld %	F 02/22/12	2B220000-116B 02/23/12
Radium 228 by 6 Radium 228	0.27	יי. ע	pCi/L 0.35	Batch # 1.00	2034145 0.57	Yld %	90 F 02/04/12	2 B030000-145 B 02/29/12
Radium 226 by Radium (226)	EPA 903.0 MOD 0.05	U	pCi/L 0.12	Batch #	2034146 0.21	Yld %	106 F 02/03/12	2B030000-146B 02/29/12

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NOTE (S)

Data are incomplete without the case narrative.

U Result is less than the sample detection limit....

Laboratory Control Sample Report

Radiochemistry

Client Lot	ID:	F2B03
Matrix:	•	WATER

F2B030485
WATER

			Total	× .	I	ab Sample ID
Parameter	Spike Amount	Result	Uncert. (2 σ+/-)	. MDC	% Yld % Rec	QC Control Limits
Radium 228 by GFPC	EPA 904 MOD	-	pCi/L	904 MOD	F	2B030000-145C
Radium 228	5,04	3.71	0.74	0.65	82 74	(63 - 130)
	Batch #:	2034145		Analysis Date:	02/29/12	
Radium 226 by EPA	903.0 MOD		pCi/L	903.0 MOD	F	2B030000-146C
Radium (226)	11.3	10.8	1.2	0.2	94 96	(59 - 128)
	Batch #:	2034146		Analysis Date:	02/29/12	
Gamma Cs-137 & Hit:	s by EPA 901.1	MOD	pCi/L	901.1 MOD	F.	2B220000-116C
Americium 241	141000	138000	16000	400	98	(90 - 111)
Cesium 137	53100	52900	5300	100	99	(90 - 111)
Cobalt 60	87900	85200	8400	200 .	97	(89 - 110)
	Batch #:	2053116		Analysis Date:	02/23/12	

NOTE (\$12B030485

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: Matrix;	F2B030485 WATER			Date Date	e Sampled: e Received:	01/31/12 02/03/12	
Parameter	SAMPLE Result	Total Uncert. (2 σ +/-)	% Yld	To DUFLICATE Un Result (2	tal cart. 2 σ+/-) * ¥	QC Sample ID	
Gamma Cs-137 & Hi	ts by EPA 901.1	MOD	pCi/L	901.1 MOD		F2B030485-001	
Cesium 137	0.0 U Batch #:	4.9 2053116	(Sample)	0.07 U 7	.9	200	₹R₽D
Radium 228 by GFP	C EPA 904 MOD		pCi/L	904 MOD	·····	F2B030485-005	
Radium 228	0,39 U Batch #:	0.46 2034145	84 (Sample)	0.73 U 0 2034145 (Duplic	.57 72	62	%RPD
Radium 226 by EP	A 903.0 MOD		pCi/L	903.0 MOD.		F2B030485-005	
Radium (226)	0.74 Batch #:	0.21 2034146	101 (Sample)	0.59 0 2034146 (Duplic	.20 82	23	%RPD

NOTE (S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off error in calculated results F2B030485

Result is less than the sample detection limit. υ

F2B030485

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CLIENT ANALYSIS SUMMARY

Storage Loc: METS,R31/32 Date Received: 2012-02-03 Project Manager: LMF Quote #: 90085 SDG: Analytical Due Date: 2012-03-01 Project: Radiological Analysis Report Due Date: 2012-03-02 PO#: Report to: Darik Jordan Report Type: B Standard Report Client: 108020 Barton & Loguidice, PC EDD Code: 00 #SMPS in LOT: 8

<u>SAMP</u>	<u>LE #</u>	CLIE	NT SAMPL	<u>E ID</u> <u>Site</u>	<u>D</u>	Client Matrix	DATE/TI	ME SAMPLED	WORKORDE	R.	[
1		CELLS	S 1/11/11			2	2012-01-3	31 / 1245	MQLTN	WA	TER
<u>SAMP</u>	LE Ç	OMME	NTS:								
UX	QV	MCAW W	200.8	WATER, 200:6 Total	GJ	METALS, TOTAL - 2%	01	STANDARD TEST SET	PROT: A W	RK ()6
XX	Z۷		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Soecial L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A W	RK ()6
XX	Z4	EPA	904 MOD	WATER, 904 MOD, Radium	G2	Precipitate, Separation - 21 day	01	STANDARD TEST SET	PROT: A	RK ()6
ХХ	Z 7	EPA	901.1	WATER, 901.1 MOD, Gamma	.G7	Direct Addition of Sample to	01	STANDARD TEST SET	PROT: A	RK ()6
XX	ΖY	EPA	903.0 MOD	WATER, 903.0 MOD, Radium 228	G2	Precipitale, Separation - 21 day Ingrowth	01	STANDARD TEST SET		RK (06
SAMP	LE <u>#</u>	CLIE	NT SAMPL	E ID Site	<u>ID</u>	Cllent Matrix	DATE/T	ME SAMPLED	WORKORDE	R	
2		CELLS		SOLVED			2012-01-3	31/ 124 9	MQLTQ	WA	TER
<u>SAMP</u>		OMME	NTS:								
• UX	QV	MCAW W	200,8	WATER, 200.8 Total	GJ	METALS, TOTAL - 2%	01	STANDARD TEST SET	PROT: A W	RK	06
XX	z٧	.,	RAD	WATER, RAD SCREEN, RAD	RA	IN-HOUSE RAD	01	STANDARD TEST SET	PROT: A	RK	06
ХХ	Z4	ÉPA	904	WATER, 904 MOD, Radium	G2	Precipitale, Separation - 21 day	01	STANDARD TEST SET	PROT: A W	RK 1	06
. xx	Z 7	EPA	901.1	WATER, 901.1 MOD, Gamma	G7	Direct Addition of Sample to	01	STANDARD TEST SET	PROT: A	RX I	06
хх	ΖY	EPA	903.0 MOD	CS-137 & Hits by WATER, 903.0 MOD, Radium 226	G2	Geometry Precipitate, Separation - 21 day Ingrowth	01	STANDARD TEST SET	PROT: A W	DG RK DG	06
SAMP	<u>LE #</u>	CLIE	NT SAMPL	E ID Site	ID	Cllent Matrix	DATE/T	IME SAMPLED	WORKORDE	R	<u>t</u>
3		CELLS	S IV			:	2012-01-	31/1206	MOLTR	W	\TER
SAMP	1E <u>C</u> (OMME	VTS:								
UX	QV	MCAW W	200.8	WATER, 200,8 Total Uranium	GJ	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A W	/RK OC	06
XX	z٧		RAD SCREEN	WATER, RAD SCREEN, RAD	RA	IN-HOUSE RAD	01	STANDARD TEST SET	PROT: A W	/RK OC	06
ХХ	Z4	EPA	904 MOD	WATER, 904 MOD, Radium	G2	Precipitete, Separation - 21 day	01	STANDARD TEST SET	PROT: A	RK	06
ХХ	Z 7	EPA	901.1	WATER, 901.1 MOD, Gamma	G7	Direct Addition of Sample to	01	STANDARD TEST SET	PROT: A	/RK	06
xx	ΖY	epa	903.0 MOD	WATER, 903.9 MOD, Radium 226	_ G2	Precipitate, Separation - 21 day Ingrowth	01	STANDARD TEST SET	PROT: A	VRK OC	06
<u>SAMP</u>	<u>LE #</u>	CLIE	NT SAMPL	<u>EID Site</u>	ID	Client Matrix	DATE/I	IME SAMPLED	WORKORD	ER	<u>l</u>
4		CELLS		LVED			2012-01-	31 / 1213	MQLTT	W.	ATER
SAMP	LE O	OMME	NTS:								
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XX	z٧	47	RAD	WATER, RAD SCREEN, RAD	RA	IN-HOUSE RAD	01	STANDARD TEST SET	PROT: A	VRK	06
XX	Z4	EPA	904	WATER, 904 MOD, Redum	G2	Precipitate, Separation - 21 day	01	STANDARD TEST SET	PROT: A	WRK	06
хх	Z 7	EPA	901.1	WATER, 901,1 MOD, Gamma	G7	Direct Addition of Sample to	.01	STANDARD TEST SET	PROT: A	NRK	06
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SAMP	<u>LE #</u>	CLIE	NT SAMPL	.E ID Site	ID	Client Matrix	DATE/	IME SAMPLED	WORKORD	<u>ER</u>	ļ
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Project	t Man	ager:	LMF	Quote #: 900	85 -	SDG:				Received.		2012-02-03
Projec	t:			Radiological	Analys	s			Analytical	Due Date;		2012-03-01
PO#:				Report to:)arik d	ordan			Report	Due Date:		2012-03-02
Client:		1	08020	Barton & Loguidice, PC		#SN	APS In LO	DT: 6	Report Type: EDD Code:	в 00	Standa	ard Report
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XX	Z 4	EPA	904 MOD	WATER, 904 MOD, Redium	G2	Precipitale, Separation - 21 day	D1	STANDARD TE	ST SET	PROT: A	WRK	06
ХХ	Z 7	EPA	901.1	WATER, 901.1 MOD, Gamma	G7	Direct Addition of Sample to	01	STANDARD TE	ST SET	PROT: A	WRK	06
XX	ΖY	EPA	903.0 MOD	WATER, 903.0 MDD, Rødlum 226	G2	Geometry Precipitate, Separation - 21 day Ingrowth	01	STANDARD TE	ST SET	PROT: A	WRK	06
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<u>SAMF</u>	LE C	OMME	<u>NTS:</u>									
UX	QV	MCAW W	200.8	WATER, 200.6 Total Uranium	GJ	METALS, TOTAL - 2% HCI	01	STANDARD TE	ST SET	PROT: A	WRK	06
XX	z٧		RAD SCREEN	WATER, RAD SCREEN, RAD	RA	IN-HOUSE RAD	01	STANDARD TE	ST SET	PROT: A	WRK	06
XX	Z4	EPA	904 MOD	WATER, 904 MOD, Radium	G2	Precipitale, Separation - 21 day	01	STANDARD TE	ST SET	PROT: A	WRK	06
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xx	ΖY	EPA	903.0 MOD	WATER, 903.0 MOD, Radium 226	G2	Geometry Precipitate, Separation - 21 day Ingrowth	01	STANDARD TE	ST SET	PROT: A	WRK	06

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TestAmerica - St. Louis

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TRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

<u>TestAmerica</u>	Lot #(s): _	F2	50304	485 Test	
THE LEADER IN ENVIRONMENTAL TESTING CUR Form #:	2 5 8		<u> </u>		
CONDITION UPON RECEIPT FORM	-				
Client: DATTON & CGUI	VICE E				···
Quote No: 90085		-			
COC/RFA No: 1916-78 /191	1.79				
Initiated By: NUO	<i>א י</i> שי ת	ate:	13/12	Ti	me: 0920
	Shipping In	format	ion		
Shipper: (FedEx) UPS DHL C	ourier Client O)ther:		Multip	ble Packages: (Y)
Shipping # (s):*			S	ample Temper	ature (s):**
1. 8643 4944 8115 6.			<u></u>	1. AUB1	En 16.
2. 8693 4944 2104 7.		·		2 ANBIE	NT 7.
3 8.				3	8
4 9.	<u></u>		· · · · · · · · · · · · · · · · · · ·	4	9
5 10.	**0-		the received at A	5. $\frac{1}{2^{\circ}C}$ If not m	10.
*Numbered shipping lines correspond to Numbered Sample T	emp lines varia	ampie mu ance does blorate	NOT affect the fo	llowing: Metals-L	iquid; Rad tests- Liquid or S
Condition (Circle "Y" for yes, "N" for no and "N/A" for n	ot applicable):				
1. Y N Are there custody seals pre-	sent on the	8.	YN	Are there cus	tody seals present on b
2. Y N/A Do custody seals on cooler tampered with?	appear to be	9,	Y N N/A	Do custody set tampered wit	eals on bottles appear t h?
THE LEADER IN ENVIRONMENTAL TESTING CUR Form #: 2 5 8 CONDITION UPON RECEIPT FORM Client: DAI/IOU & COUDER Quote No: 90085 COCREFA No: 1916 70 /1916 79 Initiated By: DVO Shipping Information Sample Temperature (s):** 1. Colspan="2">Multiple Packages: (Y) N A 2. Applet All SIG Apple All SIG All SIG Simple must be received at 4*C ± 2*C. Front, note contents below. Temperature variance does NOT affect the following: Metals-Liquid: Rad tests-Liquid or Solids; Perceivards Condition (Circle*** for or and *N/A* for not applicable): 1. Octocor?					
4. YN Sample received with Chai	n of Custody?	11.	Y N NA	Containers for marked with	"Do Not Preserve" lab
5. YN N/A Does the Chain of Custody ID's on the container(s)?	match sample	12.	N	Sample recei	ved in proper container
6. YN . Was sample received broke	en?	13.	Y N/A	Headspace in (If Yes, note sa	n VOA or TOX liquid s mple ID's below)
7. YN Is sample volume sufficien	t for analysis?	14.	Y N N/A	Was Internal	COC/Workshare recei
For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL con	tainers received must be	c verified,	EXCEPT VOA,	rox, Oil & Grease	e and soils.
Notes:		0.1	1.1.1.1	1.10	Rent 26/10
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Corrective Action:	u. neguest	<u>eri ()</u>	100.0	Mr Mr	67 W 2/4/1
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 Sample(s) processed "as is" Sample(s) on hold until: 	If re	eleased,	notify:	.l.	
Project Management Review: AUT	ARE DEDIO OF TOWN	nt 15 15	Date: Z	THE BY BOLLEON	NE OTHER THANDING
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Attachment B

Pace Analytical Services, Inc. Analytical Report

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June 06, 2012

Mr. Darik Jordan Barton & Loguidice 11 Centre Park, Suite 203 Rochester, NY 14614

RE: Project: Chemeny County Landfill Pace Project No.: 3070245

Dear Mr. Jordan:

Enclosed are the analytical results for sample(s) received by the laboratory on May 23, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Largen tylellin.

Jacquelyn Collins

jacquelyn.collins@pacelabs.com Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Chemeny County Landfill Pace Project No.: 3070245

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601 ACLASS DOD-ELAP Accreditation #: ADE-1544 Alabama Certification #: 41590 Arizona Certification #: AZ0734 Arkansas Certification California/TNI Certification #: 04222CA Colorado Certification Connecticut Certification #: PH 0694 **Delaware Certification** Florida/TNI Certification #: E87683 Guam/PADEP Certification Hawaii/PADEP Certification Idaho Certification Illinois/PADEP Certification Indiana/PADEP Certification Iowa Certification #: 391 Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133 Louisiana/TNI Certification #: LA080002 Louisiana/TNI Certification #: 4086 Maine Certification #: PA0091 Marvland Certification #: 308 Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082 Nevada Certification New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification New York/TNI Certification #: 10888 North Carolina Certification #: 42706 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 South Dakota Certification Tennessee Certification #: TN2867 Texas/TNI Certification #: TN2867 Utah/TNI Certification #: ANTE Virgin Island/PADEP Certification Virginia Certification #: 00112 Virginia VELAP (Cert # 460198) Washington Certification #: C868 West Virginia Certification #: 143 Wisconsin/PADEP Certification Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

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Page 2 of 8



SAMPLE SUMMARY

Project: Chemeny County Landfill Pace Project No.: 3070245

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3070245001	Cells I/II/III	Water	01/31/12 12:45	05/23/12 09:15
3070245002	Cells I/II/III Dissolved	Water	01/31/12 12:49	05/23/12 09:15
3070245003	Cell IV	Water	01/31/12 12:06	05/23/12 09:15
3070245004	Cell IV Dissoved	Water	01/31/12 12:13	05/23/12 09:15
3070245005	Leachate Lagoon	Water	01/31/12 13:13	05/23/12 09:15
3070245006	Leachate Lagoon Dissolved	Water	01/31/12 12:20	05/23/12 09:15

REPORT OF LABORATORY ANALYSIS

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Page 3 of 8



7

SAMPLE ANALYTE COUNT

 Project:
 Chemeny County Landfill

 Pace Project No.:
 3070245

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3070245001	Cells I/II/III	EPA 908.0	АМК	1
3070245002	Cells I/II/III Dissolved	EPA 908.0	AMK	1
3070245003	Cell IV	EPA 908.0	AMK	· 1
3070245004	Cell IV Dissoved	EPA 908.0	АМК	1
3070245005	Leachate Lagoon	EPA 908.0	АМК	1
3070245006	Leachate Lagoon Dissolved	EPA 908.0	АМК	1

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Chemeny County Landfill

Pace Project No.: 3070245

Method:EPA 908.0Description:908.0 Total UraniumClient:Barton & LoguidiceDate:June 06, 2012

General Information:

6 samples were analyzed for EPA 908.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

- ,

Project:	Chemeny Co	unty Landfill					
Pace Projec	t No.: 3070245						
Sample: Ce PWS:	ells I/II/III	Lab ID: 3070245 Site ID:	001 Collected: 01/31/12 12:45 Sample Type:	Received:	05/23/12 09:15 N	Aatrix: Water	
i	Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Total Uraniur	n	EPA 908.0	-1.34 ± 3.73 (9.37)	pCi/L	06/05/12 07:31	7440-61-1	·
Sample: Ce PWS:	Is I/I/II Dissolved	Lab ID: 3070245 Site ID:	Collected: 01/31/12 12:49 Sample Type:	Received:	05/23/12 09:15 M	Aatrix: Water	
· I	Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Total Uraniur	n	EPA 908.0	3.65 ± 3.52 (6.62)	pCi/L	06/05/12 07:31	7440-61-1	·
Sample: Ce PWS:	ell IV	Lab ID: 3070245 Site ID:	003 Collected: 01/31/12 12:06 Sample Type:	Received:	05/23/12 09:15 N	Matrix: Water	
· •	Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Total Uraniun	n	EPA 908.0	1.65 ± 3.03 (6.54)	pCi/L	06/05/12 07:31	7440-61-1	
Sample: Ce PWS:	II IV Dissoved	Lab ID: 3070245 Site ID:	004 Collected: 01/31/12 12:13 Sample Type:	Received:	05/23/12 09:15	Matrix: Water	
F	Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Total Uraniun	n	EPA 908.0	-1.44 ± 3.43 (8.84)	pCi/L	06/05/12 07:31	7440-61-1	
Sample: Le PWS:	achate Lagoon	Lab ID: 3070245 Site ID:	005 Collected: 01/31/12 13:13 Sample Type:	Received;	05/23/12 09:15	Matrix: Water	
F	Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Total Uraniun	n	EPA 908.0	1.34 ± 3.08 (6.82)	pCi/L	06/05/12 07:31	7440-61-1	
Sample: Le	achate Lagoon ssolved	Lab ID: 3070245	006 Collected: 01/31/12 12:20	Received:	05/23/12 09:15	Matrix: Water	
FVVO	_	Sile iD.	Sample Type:				
F	Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Total Uraniun	n	EPA 908.0	2.75 ± 3.47 (7.01)	pCi/L	06/05/12 07:31	7440-61-1	

Date: 06/06/2012 02:40 PM

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QUALITY CONTROL DATA

Project:	Chemeny County Landfill			
Pace Project No.:	3070245			
QC Batch:	RADC/12225	Analysis Method:	EPA 908.0	
QC Batch Method:	EPA 908.0	Analysis Description:	908.0 Total Uranium	
Associated Lab Sar	nples: 3070245001, 3070245002	, 3070245003, 3070245004, 30	070245005, 3070245006	
METHOD BLANK:	446676	Matrix: Water		
Associated Lab Sar	mples: 3070245001, 3070245002	2, 3070245003, 3070245004, 30	70245005, 3070245006	

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Total Uranium	0.0585 ± 0.311 (0.729)	pCi/L	06/05/12 07:31	
		•		

Date: 06/06/2012 02:40 PM

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QUALIFIERS

Project: Chemeny County Landfill Pace Project No.: 3070245

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected,

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Date: 06/06/2012 02:40 PM

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Table 1

Chemung County Landfill Radionuclide Data Results

· .										· · ·	Table	1 - Ch	emun	g County	Landfill	Radi	ionuciide	Data Re	sults											
-	NRC/DEC	effluent limit, sewer limit	Cesium 137 (pCi/L) 1008 10000	Guði	Total uncert	Radium 226 (pCi/L) 60 600	Total Qual. uncert.	Radium 228 (pCi/L) 60 _600	Quel a	Total uncert	Uranium 234 (pCi/L) 300 3000	Dual.	Total ancert.	Uranium 235/236 (pCI/L) 300 3000	Qual. a	Total moert.	Uranium 238 (pCi/L) 300 3000	Cual o	Totol ncert	Total Uranium o pCI/L	Totai Dusi. uncert	Thoriun 228 (pCi/L) 200 2000	1 Cust	Total uncen.	Thoriun 230 (pCi/L) 100 1000	Cual.	Totei uncert.	Thorium 232 (pCi/L) 30 300) Qual	Total uncert.
	RL		20.0			1.00		1.0	-		1.00			1.00			1.00					1.00			1.00			1.00		
[Leachate Monitoring Location	Total Vs. Filtered																												
	Cell MI/MF 13-May-10 31-Jan-12 31-Jan-12 31-Jan-12	Total Total Total - Dupe Filtered	<20 0.07 <20	U U U	49 7.9 2.4	3.3 1.72 1.59	1.8 0.65 - 0.45	12.3 1.4 1.75	: - -	7.2 1.3 0.99	1.6 - -	υ	1,3 - -	-0.22 - - -	u a	.22	0,33 - -	U 0. - - -	67	-1.34 3.65	3.73 3.52	0,18 - -	υ	0.41 - -	0.68 - - -	U	0.7 - -	0.0	ν υ	0.12 - -
	Ceil IV 13-May-10 31-Jan-12 31-Jan-12	Total Total Filtered	- 1,1 2.8	U U	7.2 8.0	0.7 2.43 1.80	J 0.22 0.58 0.48	0.74 1.8 1.91	រ រ រ	0.42 1.5 0.94	0.73 - -	J	0.28 •	0.042	U 0 - -	.09	0.46	.0 E	22	- 1,65 -1.44	3.03 3.43	-0.008	U	0.01 - -	D.081	ſ	0.09 -	C.O - -	ບ	0.02 -
	Leachate Lagoon 31-Jan-12 31-Jan-12 31-Jan-12 31-Jan-12	Total Total - Oupe Filtered	1 - -1.6	ບ ບ	6.0 7.0	0.74 0.59 0.39	0.21 0.2 0.16	0.39 0.73 0.77	ບ ແ ບ ແ ແ	0.46 0.57 0.5			•	-	-					1.34 - 2,75	3.08 3.47	-		- - -	-			- -		
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х	Notes:	Qual. U J B Total Uncert.	3 = = = =	Qualifer Result is Lab esti Lab esti Total un	s less th mated r mated r certaint	an detecti esult esult; resu y (2 o +/-)	ion limit At is less than	reporting I	imit																					

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