

TOWN OF GLASTONBURY
GL-2017-21
SEWAGE SLUDGE DISPOSAL SERVICES
ADDENDUM NO. 1
February 16, 2017

Bid Due Date: 02-23-17 @ 11:00 A.M.

The attention of bidders submitting proposals for the above-referenced project is called to the following Addendum to the specifications. The items set forth herein, whether of omission, addition, substitution or other change, are all to be included in and form a part of the proposed Contract Documents for the work. Bidders shall acknowledge this Addendum on the Bid Proposal Page (BP-1).

Please replace footnote 2 on Bid Proposal Page 3 (BP-3) with the following:

Sludge Calculation: The unit costs for items C,D,E shall then be averaged by year to determine the average unit cost by year. The average unit cost by year shall then be totaled to determine the 5 year average unit cost to be used for the sludge calculation. The 5 year average unit cost shall be multiplied by 2,400,000 gallons to determine the total 5 year sludge cost (based upon line items C,D,E).

Note: Calculations within the spreadsheet are correct as originally posted.

Question 1: Please provide solids and metals percent data for the gallons provided in the table on page DS-3 of the bid document?

Answer: See attached documents

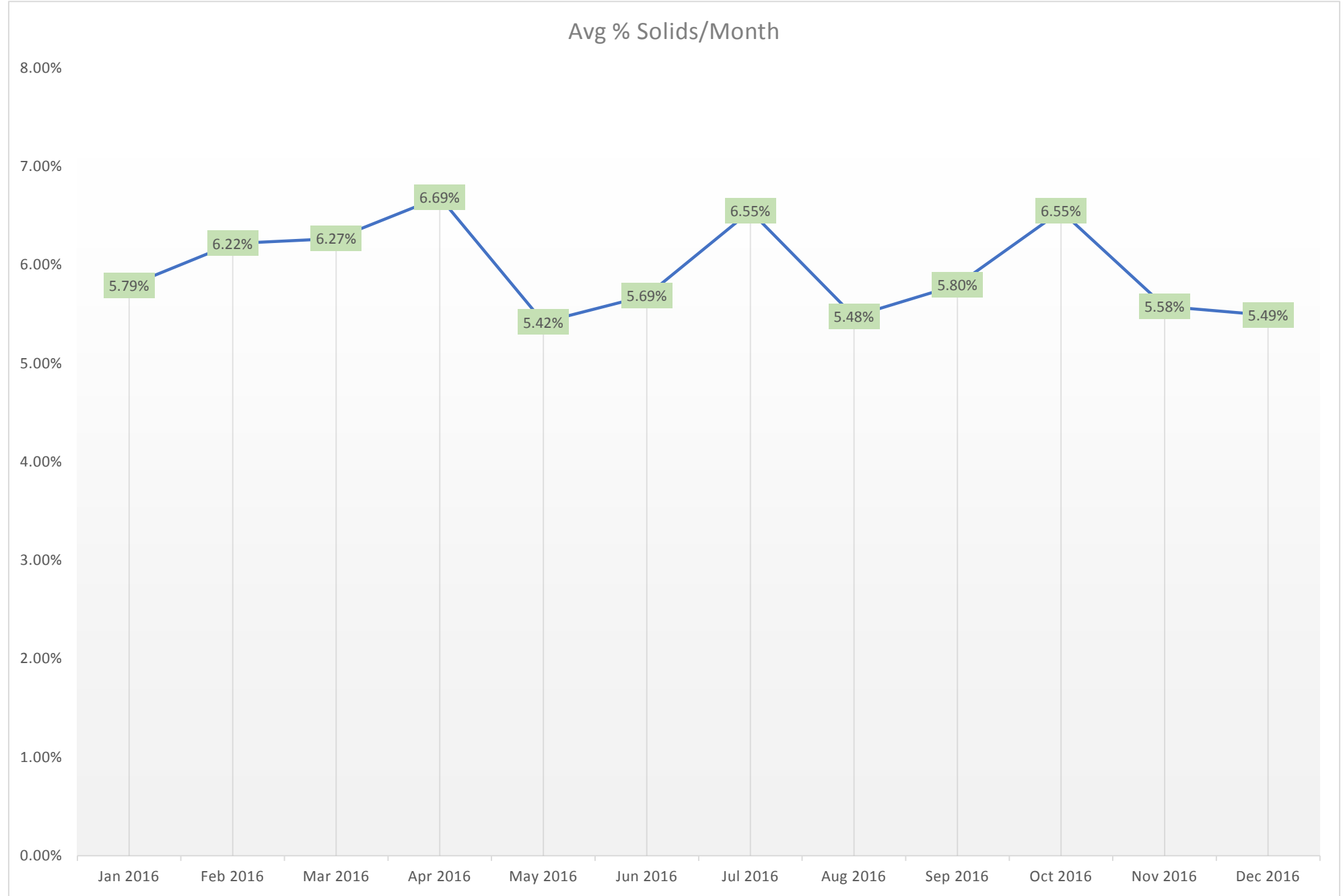
Note: This addendum consists of 11 pages including the above text.

Month % Solids

Jan 2016	5.79%
Feb 2016	6.22%
Mar 2016	6.27%
Apr 2016	6.69%
May 2016	5.42%
Jun 2016	5.69%
Jul 2016	6.55%
Aug 2016	5.48%
Sep 2016	5.80%
Oct 2016	6.55%
Nov 2016	5.58%
Dec 2016	5.49%

Total % 71.53%

Avg % 5.96%

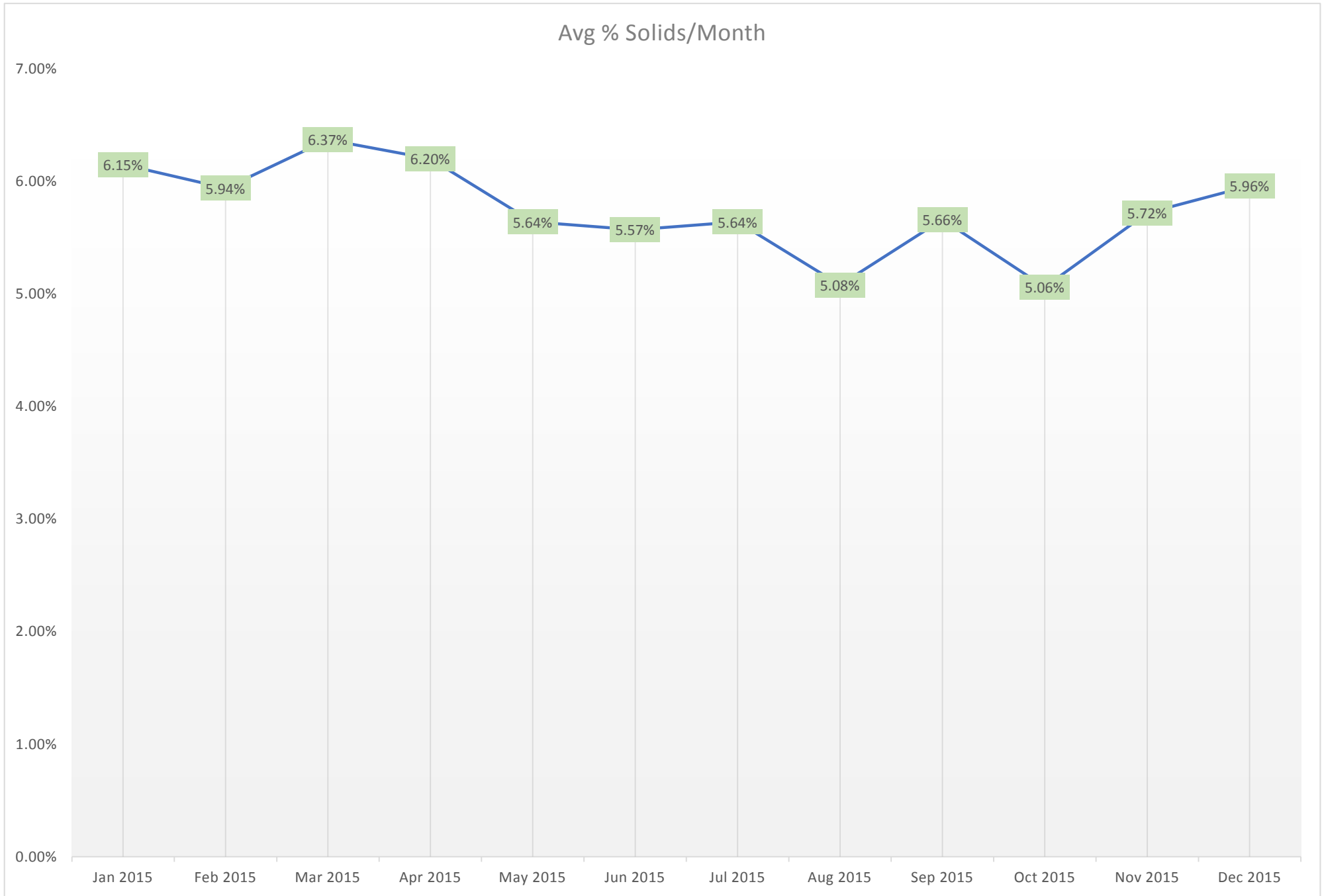


Month % Solids

Jan 2015	6.15%
Feb 2015	5.94%
Mar 2015	6.37%
Apr 2015	6.20%
May 2015	5.64%
Jun 2015	5.57%
Jul 2015	5.64%
Aug 2015	5.08%
Sep 2015	5.66%
Oct 2015	5.06%
Nov 2015	5.72%
Dec 2015	5.96%

Total % 68.99%

Avg % 5.75%





Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
 February 20, 2015

FOR: Town of Glastonbury
 Glastonbury WPCF
 P O Box 6523
 Glastonbury, CT 06033
 Attn: Mr Greg Doyle

Sample Information

Matrix: SLUDGE
 Location Code: GLASTONB
 Rush Request: Standard
 P.O.#:

Custody Information

Collected by:
 Received by: -LB
 Analyzed by: see "By" below

Date Time
 02/05/15 8:00
 02/05/15 14:49

Laboratory Data

SDG ID: GBH70857
 Phoenix ID: BH70858

Project ID:
 Client ID: SLUDGE

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Arsenic	< 3.2	3.2	mg/Kg	02/06/15	LK	SW6010C
Beryllium	< 1.6	1.6	mg/Kg	02/06/15	LK	SW6010C
Cadmium	< 1.6	1.6	mg/Kg	02/06/15	LK	SW6010C
Chromium	13.6	1.6	mg/Kg	02/06/15	LK	SW6010C
Copper	471	1.6	mg/Kg	02/06/15	LK	SW6010C
Mercury	< 0.39	0.39	mg/kg	02/06/15	RS	SW7471B
Nickel	40.8	1.6	mg/Kg	02/06/15	LK	SW6010C
Lead	15.2	1.6	mg/Kg	02/06/15	LK	SW6010C
Zinc	327	1.6	mg/Kg	02/06/15	LK	SW6010C
Percent Solid	6.67	1	%			SW846
Total Solids @ 104C	6.67	0.1	%	02/10/15	KH	SM2540B
Fixed Solids @ 500C	14.3	0.1	%	02/10/15	KH	E160.4
Ammonia as Nitrogen	5300	1900	mg/Kg	02/09/15	WHM	E350.1
Nitrite as N	68.3	1.5	mg/kg	02/05/15	BS/EG	SW9056A
Nitrate as N	122	7.5	mg/kg	02/05/15	BS/EG	SW9056A
pH - Sludge	6.88	0.10	pH Units	02/05/15 22:00	DH/KDB	SM4500-H B/SW
Nitrogen Tot Kjeldahl	86300	3800	mg/Kg	02/09/15	WHM	E351.1
Total Nitrogen	86500	0.05	mg/Kg	02/09/15	WHM	SM4500NH3/E30
Volatile Solids @ 500C	85.7	0.1	%	02/10/15	KH	SM2540E/E160.4
Mercury Digestion	Completed			02/06/15	I/I	SW7471B
Sludge Ext. for PCB	Completed			02/09/15	M/M	SW3550C
Extraction for TPH	Completed			02/06/15	M/M	SW3550C
Total Metals Digest	Completed			02/05/15	CB/AG	SW3050B

TPH by GC (Extractable Products)

Ext. Petroleum HC	18000	11000	mg/Kg	02/06/15	JRB	CT ETPH/SW80
Identification	**		mg/Kg	02/06/15	JRB	CT ETPH/SW80

QA/QC Surrogates



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
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Analysis Report
 May 21, 2015

FOR: Town of Glastonbury
 Glastonbury WPCF
 P O Box 6523
 Glastonbury, CT 06033
 Attn: Mr Greg Doyle

Sample Information

Matrix: SLUDGE
 Location Code: GLASTONB
 Rush Request: Standard
 P.O.#: 44303-00

Custody Information

Collected by:
 Received by: LB
 Analyzed by: see "By" below

Date Time

05/07/15 8:00
 05/07/15 9:55

Laboratory Data

SDG ID: GBJ13164
 Phoenix ID: BJ13165

Project ID:
 Client ID: SLUDGE

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Arsenic	< 2.9	2.9	mg/Kg	1	05/11/15	EK	SW6010C
Beryllium	< 1.5	1.5	mg/Kg	1	05/11/15	EK	SW6010C
Cadmium	< 1.5	1.5	mg/Kg	1	05/11/15	EK	SW6010C
Chromium	13.8	1.5	mg/Kg	1	05/11/15	EK	SW6010C
Copper	487	15	mg/Kg	10	05/11/15	EK	SW6010C
Mercury	0.35	0.11	mg/kg	1	05/08/15	RS	SW7471B
Nickel	10.5	1.5	mg/Kg	1	05/11/15	EK	SW6010C
Lead	18.8	1.5	mg/Kg	1	05/11/15	EK	SW6010C
Zinc	395	1.5	mg/Kg	1	05/11/15	EK	SW6010C
Percent Solid	6.20	1	%				SW846-%Solid
Total Solids @ 104C	6.20	0.1	%	1	05/11/15	KH/CL	SM2540B-97
Fixed Solids @ 500C	21.9	0.1	%	1	05/11/15	KH/CL	E160.4
Ammonia as Nitrogen	7150	3500	mg/Kg	1	05/11/15	WHM	E350.1
Nitrite as N	168	1.6	mg/kg	10	05/07/15	BS/EG	SW9056A
Nitrate as N	184	8.1	mg/kg	10	05/07/15	BS/EG	SW9056A
pH - Sludge	6.15	0.10	pH Units	1	05/07/15 21:00	DH/KDB	SW9045
Nitrogen Tot Kjeldahl	107000	7000	mg/Kg	1	05/11/15	WHM	E351.1
Total Nitrogen	107000	0.05	mg/Kg	1	05/11/15	WHM	SM4500NH3/E300.0
Volatile Solids @ 500C	78.1	0.1	%	1	05/11/15	KH/CL	SM2540E/E160.4-9
Mercury Digestion	Completed				05/08/15	I/I	SW7471B
Sludge Ext. for PCB	Completed				05/08/15	M/M	SW3550C
Extraction for TPH	Completed				05/07/15	M/M	SW3550C
Total Metals Digest	Completed				05/08/15	CB/AG	SW3050B

TPH by GC (Extractable Products)

Ext. Petroleum HC	21000	2200	mg/Kg	1	05/11/15	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	05/11/15	JRB	CTETPH 8015D

QA/QC Surrogates



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
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Analysis Report

August 28, 2015

FOR: Town of Glastonbury
 Glastonbury WPCF
 P O Box 6523
 Glastonbury, CT 06033
 Attn: Mr Greg Doyle

Sample Information

Matrix: WASTE WATER
 Location Code: GLASTONB
 Rush Request: Standard
 P.O.#: 51476-00

Custody Information

Collected by: BA
 Received by: LB
 Analyzed by: see "By" below

Date Time

08/06/15 8:00
 08/06/15 12:10

Laboratory Data

SDG ID: GBJ69548
 Phoenix ID: BJ69549

Project ID:
 Client ID: SLUDGE

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Arsenic	2.8	2.4	mg/Kg	1	08/07/15	EK	E200.7
Beryllium	< 1.2	1.2	mg/Kg	1	08/07/15	EK	E200.7
Cadmium	< 1.2	1.2	mg/Kg	1	08/07/15	EK	E200.7
Chromium	10.2	1.2	mg/Kg	1	08/07/15	EK	E200.7
Copper	518	12	mg/Kg	10	08/08/15	EK	E200.7
Mercury	< 0.45	0.45	mg/kg	1	08/07/15	M/R	SW7471B
Nickel	11.1	1.2	mg/Kg	1	08/07/15	EK	E200.7
Lead	19.6	1.2	mg/Kg	1	08/07/15	EK	E200.7
Zinc	352	1.2	mg/Kg	1	08/07/15	EK	E200.7
Percent Solid	5.77	1	%				SW846-%Solid
Total Solids @ 104C	5.77	0.1	%	1	08/10/15	TM/KH	SM2540B-97
Fixed Solids @ 500C	19.6	0.1	%	1	08/10/15	TM/KH	E160.4
Ammonia as Nitrogen	5570	3900	mg/Kg	1	08/11/15	WHM	E350.1
Nitrite as N	2.17	1.7	mg/kg	10	08/06/15	B/E/G	SW9056A
Nitrate as N	330	8.7	mg/kg	10	08/06/15	B/E/G	SW9056A
pH - Sludge	6.33	0.10	pH Units	1	08/06/15 21:45	DH/KDB	SW9045
Nitrogen Tot Kjeldahl	111000	7900	mg/Kg	1	08/11/15	WHM	E351.1
Total Nitrogen	111000	0.05	mg/Kg	1	08/11/15	WHM	SM4500NH3/E300.0
Volatile Solids @ 500C	80.4	0.1	%	1	08/10/15	TM/KH	SM2540E/E160.4-9
Mercury Digestion	Completed				08/07/15	U/I	SW7471B
Sludge Ext. for PCB	Completed				08/07/15	M/M	SW3550C
Extraction for TPH	Completed				08/10/15	M/M	SW3550C
Total Metals Digest	Completed				08/06/15	G/AG/I	SW3050B

TPH by GC (Extractable Products)

Ext. Petroleum HC	8400	2600	mg/Kg	1	08/11/15	JRB	CTETPH 8015D	B
Identification	**		mg/Kg	1	08/11/15	JRB	CTETPH 8015D	

QA/QC Surrogates



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
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Analysis Report
 November 25, 2015

FOR: Town of Glastonbury
 Glastonbury WPCF
 P O Box 6523
 Glastonbury, CT 06033
 Attn: Mr Greg Doyle

Sample Information

Matrix: WASTE WATER
 Location Code: GLASTONB
 Rush Request: Standard
 P.O.#: 51476-00

Custody Information

Collected by:
 Received by: LK
 Analyzed by: see "By" below

Date Time
 11/05/15 8:00
 11/05/15 14:49

Laboratory Data

SDG ID: GBK18771
 Phoenix ID: BK18772

Project ID:
 Client ID: SLUDGE

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Arsenic	< 3.7	3.7	mg/Kg	1	11/06/15	LK	E200.7
Beryllium	< 1.8	1.8	mg/Kg	1	11/06/15	LK	E200.7
Cadmium	< 1.8	1.8	mg/Kg	1	11/06/15	LK	E200.7
Chromium	11.2	1.8	mg/Kg	1	11/06/15	LK	E200.7
Copper	573	1.8	mg/Kg	1	11/06/15	LK	E200.7
Mercury	0.32	0.13	mg/kg	1	11/10/15	RS	SW7471B
Nickel	12.7	1.8	mg/Kg	1	11/06/15	LK	E200.7
Lead	20.2	1.8	mg/Kg	1	11/06/15	LK	E200.7
Zinc	497	1.8	mg/Kg	1	11/06/15	LK	E200.7
Percent Solid	4.49	1	%				SW846-%Solid
Total Solids @ 104C	4.49	0.1	%	1	11/06/15	KH/KDB	SM2540B-97
Fixed Solids @ 500C	23.1	0.1	%	1	11/06/15	KH/KDB	E160.4
Ammonia as Nitrogen	3710	1900	mg/Kg	1	11/11/15	WHM	E350.1
Nitrite as N	12.5	2.2	mg/kg	10	11/05/15	BS/EG	SW9056A
Nitrate as N	880	11	mg/kg	10	11/05/15	BS/EG	SW9056A
pH - Sludge	6.25	0.10	pH Units	1	11/05/15 23:30	DH/KOB	SW9045
Nitrogen Tot Kjeldahl	35700	3700	mg/Kg	1	11/11/15	WHM	E351.1
Total Nitrogen	36600	0.05	mg/Kg	1	11/11/15	WHM	SM4500NH3/E300.0-97
Volatile Solids @ 500C	76.9	0.1	%	1	11/06/15	KH/KDB	SM2540E/E160.4-97
Mercury Digestion	Completed				11/09/15	I/I	SW7471B
Sludge Ext. for PCB	Completed				11/06/15	B/T	SW3550C
Extraction for TPH	Completed				11/06/15	B/T	SW3550C
Total Metals Digest	Completed				11/05/15	G/AG/I	SW3050B

TPH by GC (Extractable Products)

Ext. Petroleum HC	3200	1600	mg/Kg	1	11/10/15	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	11/10/15	JRB	CTETPH 8015D

QA/QC Surrogates



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
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Analysis Report

February 24, 2016

FOR: Town of Glastonbury
 Glastonbury WPCF
 P O Box 6523
 Glastonbury, CT 06033
 Attn: Mr Greg Doyle

Sample Information

Matrix: WASTE WATER
 Location Code: GLASTONB
 Rush Request: Standard
 P.O.#: 51476-00

Custody Information

Collected by:
 Received by: LK
 Analyzed by: see "By" below

Date Time

02/04/16 8:00
 02/04/16 15:30

Laboratory Data

SDG ID: GBK61733
 Phoenix ID: BK61734

Project ID:
 Client ID: SLUDGE

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Arsenic	< 4.2	4.2	mg/Kg	1	02/05/16	LK	E200.7
Beryllium	< 2.1	2.1	mg/Kg	1	02/05/16	LK	E200.7
Cadmium	< 2.1	2.1	mg/Kg	1	02/05/16	LK	E200.7
Chromium	13.0	2.1	mg/Kg	1	02/05/16	LK	E200.7
Copper	513	2.1	mg/Kg	1	02/05/16	LK	E200.7
Mercury	< 0.64	0.64	mg/kg	1	02/05/16	RS	SW7471B
Nickel	11.7	2.1	mg/Kg	1	02/05/16	LK	E200.7
Lead	29.4	2.1	mg/Kg	1	02/05/16	LK	E200.7
Zinc	306	2.1	mg/Kg	1	02/05/16	LK	E200.7
Percent Solid	3.95	1	%				SW846-%Solid
Total Solids @ 104C	3.95	0.1	%	1	02/05/16	KH	SM2540B-97
Fixed Solids @ 500C	22.0	0.1	%	1	02/05/16	KH	E160.4
Ammonia as Nitrogen	7270	1500	mg/Kg	1	02/09/16	WHM	E350.1
Nitrite as N	23.9	2.5	mg/kg	10	02/05/16	BS/EG	SW9056A
Nitrate as N	533	13	mg/kg	10	02/05/16	BS/EG	SW9056A
pH - Sludge	6.60	0.10	pH Units	1	02/04/16 20:30	DH/KOB	SW9045
Nitrogen Tot Kjeldahl	85400	3000	mg/Kg	1	02/09/16	WHM	E351.1
Total Nitrogen	86000	0.05	mg/Kg	1	02/09/16	WHM	SM4500NH3/E300.0
Volatile Solids @ 500C	78.0	0.1	%	1	02/05/16	KH	SM2540E/E160.4-97
Mercury Digestion	Completed				02/05/16	W/W	SW7471B
Sludge Ext. for PCB	Completed				02/04/16	B/T	SW3550C
Extraction for TPH	Completed				02/08/16	B/V	SW3550C
Total Metals Digest	Completed				02/04/16	G/G	SW3050B

TPH by GC (Extractable Products)

Ext. Petroleum HC	11000	3500	mg/Kg	1	02/09/16	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	02/09/16	JRB	CTETPH 8015D

QA/QC Surrogates



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
 May 26, 2016

FOR: Town of Glastonbury
 Glastonbury WPCF
 P O Box 6523
 Glastonbury, CT 06033
 Attn: Mr Greg Doyle

Sample Information

Matrix: SLUDGE
 Location Code: GLASTONB
 Rush Request: Standard
 P.O.#: 51476-00

Custody Information

Collected by:
 Received by: LK
 Analyzed by: see "By" below

Date Time
 05/05/16 8:00
 05/05/16 15:08

Laboratory Data

SDG ID: GBN26067
 Phoenix ID: BN26068

Project ID:
 Client ID: SLUDGE

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Arsenic	3.3	3.2	mg/Kg	1	05/11/16	EK	SW6010C
Beryllium	< 1.6	1.6	mg/Kg	1	05/11/16	EK	SW6010C
Cadmium	< 1.6	1.6	mg/Kg	1	05/11/16	EK	SW6010C
Chromium	12.8	1.6	mg/Kg	1	05/11/16	EK	SW6010C
Copper	582	1.6	mg/Kg	1	05/11/16	EK	SW6010C
Mercury	0.54	0.20	mg/kg	1	05/06/16	RS	SW7471B
Nickel	12.5	1.6	mg/Kg	1	05/11/16	EK	SW6010C
Lead	18.1	1.6	mg/Kg	1	05/11/16	EK	SW6010C
Zinc	365	1.6	mg/Kg	1	05/11/16	EK	SW6010C
Percent Solid	3.78	1	%				SW846-%Solid
Total Solids @ 104C	3.78	0.1	%	1	05/06/16	KH	SM2540B-97
Fixed Solids @ 500C	14.8	0.1	%	1	05/06/16	KH	E160.4
Ammonia as Nitrogen	< 5600	5600	mg/Kg	1	05/12/16	WHM	E350.1
Nitrite as N	18.6	2.6	mg/kg	10	05/06/16	BS/EG	SW9056A
Nitrate as N	976	13	mg/kg	10	05/06/16	BS/EG	SW9056A
pH - Sludge	6.44	0.10	pH Units	1	05/05/16 19:30	DH/EG	SW9045
Nitrogen Tot Kjeldahl	97100	11000	mg/Kg	1	05/12/16	WHM	E351.1
Total Nitrogen	98100	0.05	mg/Kg	1	05/12/16	WHM	SM4500NH3/E300.0
Volatile Solids @ 500C	85.2	0.1	%	1	05/06/16	KH	SM2540E/E160.4-97
Extraction of CT ETPH	Completed				05/10/16	NJ/CK	SW3545A
Mercury Digestion	Completed				05/06/16	W/W	SW7471B
Sludge Ext. for PCB	Completed				05/05/16	P/V	SW3550C
Total Metals Digest	Completed				05/10/16	G/AG	SW3050B

TPH by GC (Extractable Products)

Ext. Petroleum HC	4500	3900	mg/Kg	1	05/12/16	KCA	CTETPH 8015D
Identification	**		mg/Kg	1	05/12/16	KCA	CTETPH 8015D

QA/QC Surrogates



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
 September 06, 2016

FOR: Town of Glastonbury
 Glastonbury WPCF
 P O Box 6523
 Glastonbury, CT 06033
 Attn: Mr Greg Doyle

Sample Information

Custody Information

Date Time

Matrix: SLUDGE
 Location Code: GLASTONB
 Rush Request: Standard
 P.O.#: 51476-00

Collected by:
 Received by: SW
 Analyzed by: see "By" below

08/04/16 8:00
 08/04/16 12:10

Laboratory Data

SDG ID: GBN86041
 Phoenix ID: BN86042

Project ID:
 Client ID: SLUDGE

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Arsenic	3.1	2.6	mg/Kg	1	08/08/16	LK	SW6010C
Beryllium	< 1.3	1.3	mg/Kg	1	08/08/16	LK	SW6010C
Cadmium	< 1.3	1.3	mg/Kg	1	08/08/16	LK	SW6010C
Chromium	10.9	1.3	mg/Kg	1	08/08/16	LK	SW6010C
Copper	541	13	mg/Kg	10	08/08/16	LK	SW6010C
Mercury	< 0.36	0.36	mg/kg	1	08/08/16	RS	SW7471B
Nickel	9.8	1.3	mg/Kg	1	08/08/16	LK	SW6010C
Lead	19.6	1.3	mg/Kg	1	08/08/16	LK	SW6010C
Zinc	353	1.3	mg/Kg	1	08/08/16	LK	SW6010C
Percent Solid	6.88	1	%				SW846-%Solid
Total Solids @ 104C	6.88	0.1	%	1	08/08/16	AS/KH	SM2540B-97
Fixed Solids @ 500C	19.4	0.1	%	1	08/08/16	AS/KH	SM2540E
Ammonia as Nitrogen	8610	910	mg/Kg	1	09/02/16	WHM	E350.1
Nitrite as N	36.0	1.5	mg/kg	10	08/31/16	B/E/G	SW9056A
Nitrate as N	< 7.3	7.3	mg/kg	10	08/31/16	B/E/G	SW9056A
Nitrogen Tot Kjeldahl	81300	1800	mg/Kg	1	09/02/16	WHM	E351.1
Total Nitrogen	81300	0.05	mg/Kg	1	09/02/16	WHM	SM4500NH3/E300.0-97
Volatile Solids @ 500C	80.6	0.1	%	1	08/08/16	AS/KH	SM2540E/E160.4-97
Extraction of CT ETPH	Completed				08/04/16	NJ/CKV	SW3545A
Mercury Digestion	Completed				08/08/16	WW	SW7471B
Sludge Ext. for PCB	Completed				08/05/16	PV	SW3550C
Total Metals Digest	Completed				08/04/16	AG	SW3050B

TPH by GC (Extractable Products)

Ext. Petroleum HC	770	720	mg/Kg	1	08/05/16	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	08/05/16	JRB	CTETPH 8015D

QA/QC Surrogates

% n-Pentacosane	66		%	1	08/05/16	JRB	50 - 150 %
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Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
 November 23, 2016

FOR: Town of Glastonbury
 Glastonbury WPCF
 P O Box 6523
 Glastonbury, CT 06033
 Attn: Mr Greg Doyle

Sample Information

Matrix: WASTE WATER
 Location Code: GLASTONB
 Rush Request: Standard
 P.O.#: 51476-00

Custody Information

Collected by:
 Received by: B
 Analyzed by: see "By" below

Date Time

11/03/16 8:00
 11/03/16 16:14

Laboratory Data

SDG ID: GBV75432
 Phoenix ID: BV75433

Project ID:
 Client ID: SLUDGE

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Arsenic	< 3.6	3.6	mg/Kg	1	11/06/16	TH	E200.7
Beryllium	< 1.8	1.8	mg/Kg	1	11/06/16	TH	E200.7
Cadmium	< 1.8	1.8	mg/Kg	1	11/06/16	TH	E200.7
Chromium	9.2	1.8	mg/Kg	1	11/06/16	TH	E200.7
Copper	454	1.8	mg/Kg	1	11/06/16	TH	E200.7
Mercury	0.47	0.38	mg/kg	1	11/08/16	RS	SW7471B
Nickel	9.7	1.8	mg/Kg	1	11/06/16	TH	E200.7
Lead	18.4	1.8	mg/Kg	1	11/06/16	TH	E200.7
Zinc	264	1.8	mg/Kg	1	11/13/16	LK	E200.7
Percent Solid	6.36	1	%				SW846-%Solid
Total Solids @ 104C	6.36	0.1	%	1	11/07/16	KH	SM2540B-97
Fixed Solids @ 500C	17.8	0.1	%	1	11/07/16	KH	SM2540E
Ammonia as Nitrogen	4850	2790	mg/Kg	1	11/09/16	WHM	E350.1
Nitrite as N	18.8	1.57	mg/kg	10	11/04/16	BS/EG	SW9056A
Nitrate as N	325	7.86	mg/kg	10	11/04/16	BS/EG	SW9056A
Organic Nitrogen	103000	1120	mg/Kg	1	11/09/16	WHM	E350.1/E350.2
pH - Sludge	6.51	0.10	pH Units	1	11/03/16 21:01	O	SW9045
Total Nitrogen	108000	0.05	mg/Kg	1	11/09/16	WHM	SM4500NH3/E300.0-97
Volatile Solids @ 500C	82.2	"BALANC	%	1	11/07/16	KH	SM2540E/E160.4-97
Extraction of CT ETPH	Completed				11/03/16	CC/CKV	SW3545A
Mercury Digestion	Completed				11/08/16	W/W	SW7471B
Sludge Ext. for PCB	Completed				11/07/16	P/V	SW3550C
Total Metals Digest	Completed				11/04/16	X/AG	SW3050B

TPH by GC (Extractable Products)

Ext. Petroleum HC	1000	760	mg/Kg	1	11/08/16	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	11/08/16	JRB	CTETPH 8015D

QA/QC Surrogates