Seneca Companies

The Complete Solution

HEADQUARTERS
Des Moines, Iowa

P.O. Box 3360
Des Moines, Iowa
50316

4140 E. 14th Street
Des Moines, Iowa 50313
Phone: 515-262-5000
Toll-Free: 800-369-5500
Fax: 515-262-4951

CON 12-15
Doc #28910

February 7, 2014

Mr. Matt Culp
Contaminated Sites Section
Iowa Department of Natural Resources
Wallace State Office Building
Des Moines, IA 50319

Subject: Submittal of the Soil Disposal and Lead Recycling Report for City of Clarinda Firing Range Located in Clarinda, Iowa.

Dear Mr. Culp:

Seneca Environmental Services is submitting the enclosed Soil Disposal and Lead Recycling Report on behalf of our client, City of Clarinda.

If you have any questions regarding the accompanying Report, I can be reached at 515-261-7723 or by emailing me at bkussatz@senecaco.com.

Sincerely,
Seneca Companies

Blaine Kussatz, CHMM
Project Manager

cc: Gary McClarnon – City of Clarinda

File: Seneca Companies, Des Moines, IA

69481 FEB10'14 PM 3:09

SOIL DISPOSAL AND LEAD RECYCLING REPORT

FOR CITY OF CLARINDA FIRING RANGE

LOCATED AT THE CITY OF CLARINDA AIRPORT

CLARINDA, IOWA

Prepared for:

Mr. Gary McClarnon
City of Clarinda
200 South 15th Street
Clarinda, Iowa 51632

Seneca Project No. : 6360021

by
Seneca Environmental Services

Blaine Kussatz, CHMM
Project Manager

February 6, 2014

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SOIL DISPOSAL AND LEAD RECYCLING REPORT
FOR THE CITY OF CLARINDA FIRING RANGE
LOCATED AT THE CITY OF CLARINDA AIRPORT
IN CLARINDA, IOWA

Introduction:

This report summarizes the recycling of the lead bullets and fragments recovered and disposal of lead contaminated soils from the Firing Range Reclamation Project conducted on the City of Clarinda Firing Range located at the City of Clarinda Airport in Clarinda, Iowa. The reclamation project involved removing the lead bullets/fragments from the soil within the firing range berm and portions of the range floor. Soil removal was based on the results from the Limited Surface/Subsurface Investigation completed in August of 2012. The project consisted of physical removal of lead bullets/fragments to be recycled, stockpiling the screened soils into separate piles, collecting and analyzing the soil samples from the piles to determine the final destination of the screened soils. The three options for the final disposal were: leave onsite, dispose of at local landfill, or dispose of as hazardous waste within a permitted landfill.

Module I. Site History:

The Property is currently owned by the City of Clarinda. The site has been utilized as a firing range for over thirty (30) years. The owner of the property is conducting the remediation because they are closing the firing range.

Module II. Recycling of Lead Bullets:

The lead, along with some soil, was captured in super saks to be recycled. The super saks were transported to The Doe Run Company located in Boss, Missouri. The Settlement Report shows that 8,001 lbs of lead was recycled. On the settlement sheet, you will see the Bullet Lead material with a gross weight of 8,001 lbs. This is the material from Clarinda Firing Range. The lead shot you see on the Report was from a different project. The Settlement Report is included in **Appendix B**.

Module III. Disposal of Contaminated Soils:

Screened soil was stockpiled in separate piles. **Appendix A – Sheet 1** depicts the pile locations. Composite samples were collected from each pile and submitted to the laboratory to be analyzed for Total Lead and Antimony by utilizing the EPA Method SW 6010C – Total Metals by SW 846 Series Method.

Pile F1

Soil sample laboratory results from Pile F1 had Total Lead concentrations of 682 mg/kg which is greater than the Statewide Standards. A TCLP lead test was run on the soil sample resulting in a concentration of 1.77 mg/L which allows the soil to be classified as non-hazardous waste and able to be disposed of at the local landfill. On January 22, 2014 Pile F1 was transported to the Page County Landfill and 33.32 tons of soil was disposed of. Scale tickets are included in **Appendix C.**

Pile F2

Soil sample laboratory result from Pile F2 had Total Lead concentration of 272 mg/kg which is less than the Statewide Standard, therefore this pile was left on the site.

Piles B1 – B5

Soil sample laboratory results from Piles B-1, B-2, B-3, B-4, and B-5 had Total Lead concentrations of 4,080 mg/kg, 3,240 mg/kg, 3,370 mg/kg, 8,000 mg/kg, and 3,040 mg/kg, respectively. Since these concentrations were greater than the Statewide Standards, the samples were analyzed by TCLP. Piles B-1, B-2, B-3, B-4, and B-5 had concentrations of leachable lead at 37.0 mg/L, 13.8 mg/L, 9.68 mg/L 11.4 mg/L, and 5.29 mg/L, respectively, which are greater than the waste determination for hazardous waste. Based on the results it was deemed the soil had to be disposed of in a permitted landfill. Since the State of Iowa does not have a landfill permitted to accept soil that fails TCLP, the The Environmental Quality Company (EQ) was contacted and a Waste Profile Form was submitted for approval. Acceptance, by The Environmental Quality Company (EQ), of the soil was approved on January 10, 2014. On January 21, 2014, 57.72 tons of lead contaminated soil was loaded onto semi-tractor trailers to be transported for disposal. The soil was transported to the EQ Oklahoma

facility located at 2700 South 25th West Avenue, Tulsa, Oklahoma. Waste manifests are included in **Appendix D**.

Module IV. Soil Sampling:

Upon removal of Piles B1 – B5, composite soil samples were collected from the former location of each pile. The soil samples were analyzed for Total Lead to verify that soils exceeding TCLP levels have been removed and properly disposed of. Soil sample laboratory results from the former locations; Piles B-1(PF1), B-2 (PF2), B-3 (PF3), B-4 (PF4), and B-5 (PF5) had Total Lead concentrations of 22.7 mg/kg, 62.9 mg/kg, 37.7 mg/kg, 70.1 mg/kg, and 12.9 mg/kg, respectively, which are less than the IDNR Statewide Standards for Soil. Laboratory analyses are included in **Appendix F**.

Table 1
Soil Sample Results

Sample ID	Total Lead Concentration (mg/kg)	Statewide Standard for Lead (mg/kg)
PF1	22.7	400
PF2	62.9	400
PF3	37.7	400
PF4	70.1	400
PF5	12.9	400

The IDNR Statewide Standards for Soil were obtained from Chapter 137 IAC: Iowa Land Recycling Program and Response Action Standards (1998).

MODULE V. Summary and Recommendations:

Pile F1 soil sample results showed that the soil was greater than the IDNR Statewide Standards for Lead but less than the TCLP standards therefore, 33.32 tons of soil was transported and disposed of at the Page County Landfill. Pile F2 soil sample results showed that the soil was less than the IDNR Statewide Standards for Lead, therefore the soil was left onsite. Piles B1 – B5 soil sample results showed that the soil failed TCLP for lead,

therefore 57.72 tons of lead contaminated soil was transported to and disposed of at The Environmental Quality Company – EQ Oklahoma facility located in Tulsa, Oklahoma.

Subsequent to the removal of the contaminated soils, composite soil samples were collected from the former location of Piles B1 – B5. The analytical results were less than the IDNR Statewide Standards for Lead, indicating that the soils exceeding TCLP was removed.

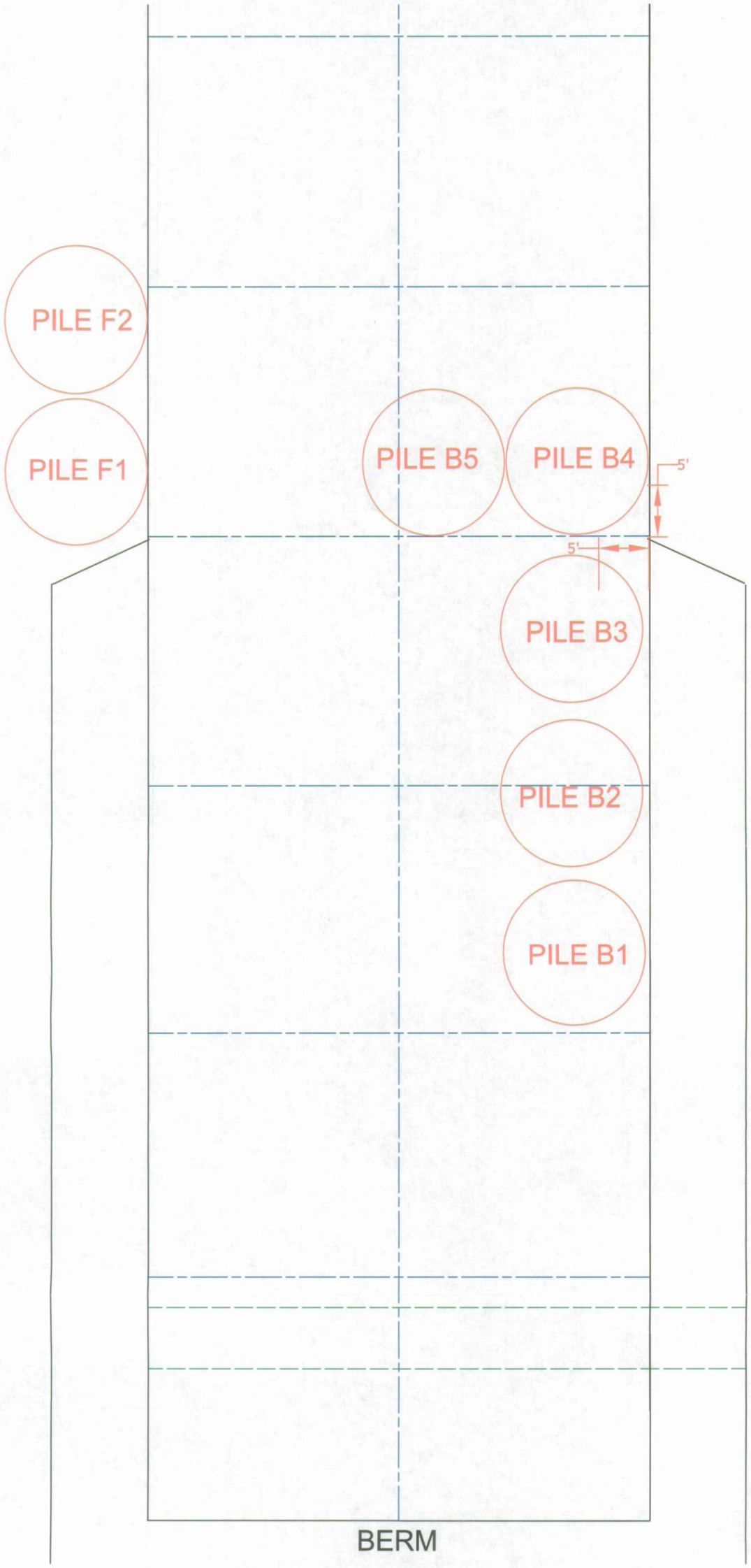
Based on the disposal of contaminated soils at applicable disposal facilities and the analytical results less than the IDNR Statewide Standards for Lead, further investigation and/or remediation does not appear warranted at this time.

The information contained in this report is based on a limited number of soil sample locations and a limited analytical suite. Soil samples that were collected are assumed to be representative of the small area surrounding the sample location. Failure to discover all hazardous substances or conditions at the time of this report through appropriate techniques does not guarantee that hazardous materials or substances do not exist at the site. We make no warranty, expressed or implied, for this property nor make certification of the suitability of future use of the property based on the results of this assessment, except that our services were performed in accordance with the level of care and skill ordinarily practiced by members of the profession in this area at this time under similar budget and time constraints.

This report has been prepared on behalf of and exclusively for the use of the City of Clarinda. This report and the findings contained herein shall not, in whole or part, be disseminated or conveyed to any other party or be used or relied upon by any other party, in whole or in part, without the consultant's prior written consent.

APPENDIX A

PILE LOCATION MAP



SHEET NO.: 3

PROJECT NO.: 6360021

FILENAME: 6360021 REM

SCALE: 1"=10'

DESIGNED BY: CLARINDA, IA

DRAWN BY: JENNIFER BAKER

DATE: 7/20/2012

JOB DESCRIPTION: CITY OF CLARINDA - FIRING RANGE
CLARINDA, IA

SHEET TITLE: SCALED SITE MAP -
FIRING RANGE SCREENED PILE LOCATIONS

Seneca Companies
The Complete Solution

N E S W

REV. NO.

DATE:

APPENDIX B

LEAD RECYCLING SETTLEMENT REPORT

Vendor: 0504716 GIPSON-RICKETTS LLC

Shipped From: SAME

Location Name: SAME

City/State: VALLEY CENTER KS

Vendor's Document Number: 484

Order#: 0125346

Received: 10/17/13

Receipt#: 239703

Weight Ticket:

Gross . :	76,480
Tare . . :	32,760
Dunnage . :	1,140
Net Weight:	42,580

Freight Charge Type: Delivered

Material Received:	CC	ACCT#	Net Wgt	Price		Amount
Lead Shot	448	13200	34,579	.7400	$	25,588.46
Bullet Lead	444	13200	8,001	.2000	$	1,600.20
Total:			42,580		$	27,188.66

Approved: _____

Date: _____

APPENDIX C

WASTE MANIFESTS

15664

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
IAR 000 518 803	1	(712) 542-2194	012811862 JJK

GENERATOR

5. Generator's Name and Mailing Address: CITY OF CLARINDA
200 SOUTH 15TH STREET
CLARINDA, IA 51632
Generator's Phone: (712) 542-2136

Generator's Site Address (if different than mailing address)
1420 E. Laporte Dr.
Clarinda, IA 51632

6. Transporter 1 Company Name: U.S. Bulk Transport Inc — U.S. EPA ID Number: PA 9837475 15

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: EQ OKLAHOMA, INC.
2700 South 25th West Avenue
TULSA, OK 74107
Facility's Phone: (918) 582-9595

U.S. EPA ID Number: OKD 000 402 386

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ, NA3077, Hazardous waste, solid, n.o.s. (lead soil), 9, PGIII, D008, ERG #171	001	DT	EX 25.12	T	D008
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. A146021EOK / Lead Contaminated Soil

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Stephonie Huseman — Signature: Stephonie Huseman — Month: 1 — Day: 21 — Year: 14

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Arthur Carter — Signature: [signature] — Month: 01 — Day: 21 — Year: 14

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month — Day — Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H140			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Rominick — Signature: [signature] — Month: 1 — Day: 22 — Year: 14

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

15663

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number IAR 000 518 803	2. Page 1 of 1	3. Emergency Response Phone (712) 542-2194	4. Manifest Tracking Number 012811863 JJK

GENERATOR

5. Generator's Name and Mailing Address CITY OF CLARINDA
200 SOUTH 15TH STREET
CLARINDA, IA 51632
Generator's Phone: (712) 542-2136

Generator's Site Address (if different than mailing address)
1428 E. Lincoln Dr.
Clarinda, IA 51632

6. Transporter 1 Company Name US BUIK TRANSPORT. INC — U.S. EPA ID Number PAD 987347515

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address EQ OKLAHOMA, INC.
2700 South 25th West Avenue
TULSA, OK 74107
Facility's Phone: (918) 582-9595

U.S. EPA ID Number OKD 000 402 386

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ, NA3077, Hazardous waste, solid, n.o.s. (lead soil), 9, PGIII, D008, ERG 9171	001	DT	EST. 33.16	T	D008
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. A146021EOK / Lead Contaminated Soil

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Stephonie Huseman — Signature: Stephonie Huseman — Month: 1 — Day: 21 — Year: 14

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JACK ORNDORFF — Signature — Month: 1 — Day: 21 — Year: 14

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month — Day — Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H110			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Pomrick — Signature — Month: 1 — Day: 22 — Year: 14

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

APPENDIX D

LABORATORY ANALYSIS OF SOIL AND GROUNDWATER SAMPLES
CHAIN OF CUSTODY FORM

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Cedar Falls
704 Enterprise Drive
Cedar Falls, IA 50613
Tel: (319)277-2401

TestAmerica Job ID: 310-23585-1
TestAmerica Sample Delivery Group: 6360021
Client Project/Site: Clarinda Firing Range

For:
Seneca Companies
PO BOX 3360
Des Moines, Iowa 50316

Attn: Blaine Kussatz

Authorized for release by:
1/28/2014 3:34:23 PM
Brian Graettinger, Manager of Project Management
brian.graettinger@testamericainc.com

Designee for

Angela Muehling, Project Manager I
(319)277-2401
angela.muehling@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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QC Sample Results 12
QC Association 13
Chronicle 14
Certification Summary 15
Method Summary 16
Chain of Custody 17
Receipt Checklists 19

Job ID: 310-23585-1

Laboratory: TestAmerica Cedar Falls

Narrative

Job Narrative
310-23585-1

Comments
No additional comments.

Receipt
The samples were received on 1/22/2014 6:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

Metals
Method(s) 6010C: The following sample(s) was diluted due to the presence of an interferent. PF1 (310-23585-1), PF2 (310-23585-2), PF3 (310-23585-3), PF4 (310-23585-4), PF5 (310-23585-5). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Sample Summary

Client: Seneca Companies
Project/Site: Clarinda Firing Range

TestAmerica Job ID: 310-23585-1
SDG: 6360021

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-23585-1	PF1	Soil	01/21/14 11:25	01/22/14 18:00
310-23585-2	PF2	Soil	01/21/14 11:45	01/22/14 18:00
310-23585-3	PF3	Soil	01/21/14 12:15	01/22/14 18:00
310-23585-4	PF4	Soil	01/21/14 12:35	01/22/14 18:00
310-23585-5	PF5	Soil	01/21/14 13:00	01/22/14 18:00

Detection Summary

Client: Seneca Companies
Project/Site: Clarinda Firing Range

TestAmerica Job ID: 310-23585-1
SDG: 6360021

Client Sample ID: PF1 — Lab Sample ID: 310-23585-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	22.7		16.8		mg/Kg	3	☼	6010C	Total/NA

Client Sample ID: PF2 — Lab Sample ID: 310-23585-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	62.9		17.4		mg/Kg	3	☼	6010C	Total/NA

Client Sample ID: PF3 — Lab Sample ID: 310-23585-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	37.7		16.7		mg/Kg	3	☼	6010C	Total/NA

Client Sample ID: PF4 — Lab Sample ID: 310-23585-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	70.1		17.2		mg/Kg	3	☼	6010C	Total/NA

Client Sample ID: PF5 — Lab Sample ID: 310-23585-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	12.9		10.1		mg/Kg	3	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Seneca Companies
Project/Site: Clarinda Firing Range

TestAmerica Job ID: 310-23585-1
SDG: 6360021

Client Sample ID: PF1
Date Collected: 01/21/14 11:25
Date Received: 01/22/14 18:00
Sampler Name: Blaine Kussatz

Lab Sample ID: 310-23585-1
Matrix: Soil
Percent Solids: 81.5
Sampler Phone Number: 800-369-3500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	22.7		16.8		mg/Kg	☼	01/27/14 08:13	01/27/14 15:20	3

6

Client: Seneca Companies
Project/Site: Clarinda Firing Range

TestAmerica Job ID: 310-23585-1
SDG: 6360021

Client Sample ID: PF2
Date Collected: 01/21/14 11:45
Date Received: 01/22/14 18:00
Sampler Name: Blaine Kussatz

Lab Sample ID: 310-23585-2
Matrix: Soil
Percent Solids: 84.1
Sampler Phone Number: 800-369-3500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	62.9		17.4		mg/Kg	☼	01/27/14 08:13	01/27/14 15:33	3

6

Client: Seneca Companies
Project/Site: Clarinda Firing Range

TestAmerica Job ID: 310-23585-1
SDG: 6360021

Client Sample ID: PF3
Date Collected: 01/21/14 12:15
Date Received: 01/22/14 18:00
Sampler Name: Blaine Kussatz

Lab Sample ID: 310-23585-3
Matrix: Soil
Percent Solids: 79.0
Sampler Phone Number: 800-369-3500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	37.7		16.7		mg/Kg	☼	01/27/14 08:13	01/27/14 15:35	3

Client: Seneca Companies
Project/Site: Clarinda Firing Range

TestAmerica Job ID: 310-23585-1
SDG: 6360021

Client Sample ID: PF4
Date Collected: 01/21/14 12:35
Date Received: 01/22/14 18:00
Sampler Name: Blaine Kussatz

Lab Sample ID: 310-23585-4
Matrix: Soil
Percent Solids: 85.1
Sampler Phone Number: 800-369-3500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	70.1		17.2		mg/Kg	☼	01/27/14 08:13	01/27/14 15:40	3

Client: Seneca Companies
Project/Site: Clarinda Firing Range

TestAmerica Job ID: 310-23585-1
SDG: 6360021

Client Sample ID: PF5
Date Collected: 01/21/14 13:00
Date Received: 01/22/14 18:00
Sampler Name: Blaine Kussatz

Lab Sample ID: 310-23585-5
Matrix: Soil
Percent Solids: 71.5
Sampler Phone Number: 800-369-3500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12.9		10.1		mg/Kg	☼	01/27/14 08:13	01/27/14 15:42	3

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 310-37643/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 37743 — **Prep Batch: 37643**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<4.72		4.72		mg/Kg		01/27/14 08:13	01/27/14 15:16	1

Lab Sample ID: LCS 310-37643/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 37743 — **Prep Batch: 37643**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	91.4	93.56		mg/Kg		102	80 - 115

Lab Sample ID: 310-23585-1 MS — **Client Sample ID: PF1**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 37743 — **Prep Batch: 37643**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	22.7		239	259.1		mg/Kg	☼	99	75 - 125

Lab Sample ID: 310-23585-1 MSD — **Client Sample ID: PF1**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 37743 — **Prep Batch: 37643**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	22.7		242	254.0		mg/Kg	☼	96	75 - 125	2	20

Metals

Prep Batch: 37643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-23585-1	PF1	Total/NA	Soil	3050B	
310-23585-1 MS	PF1	Total/NA	Soil	3050B	
310-23585-1 MSD	PF1	Total/NA	Soil	3050B	
310-23585-2	PF2	Total/NA	Soil	3050B	
310-23585-3	PF3	Total/NA	Soil	3050B	
310-23585-4	PF4	Total/NA	Soil	3050B	
310-23585-5	PF5	Total/NA	Soil	3050B	
LCS 310-37643/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 310-37643/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 37743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-23585-1	PF1	Total/NA	Soil	6010C	37643
310-23585-1 MS	PF1	Total/NA	Soil	6010C	37643
310-23585-1 MSD	PF1	Total/NA	Soil	6010C	37643
310-23585-2	PF2	Total/NA	Soil	6010C	37643
310-23585-3	PF3	Total/NA	Soil	6010C	37643
310-23585-4	PF4	Total/NA	Soil	6010C	37643
310-23585-5	PF5	Total/NA	Soil	6010C	37643
LCS 310-37643/2-A	Lab Control Sample	Total/NA	Solid	6010C	37643
MB 310-37643/1-A	Method Blank	Total/NA	Solid	6010C	37643

Client Sample ID: PF1 — **Lab Sample ID: 310-23585-1**
Date Collected: 01/21/14 11:25 — **Matrix: Soil**
Date Received: 01/22/14 18:00 — **Percent Solids: 81.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			37643	01/27/14 08:13	CJT	TAL CF
Total/NA	Analysis	6010C		3	37743	01/27/14 15:20	MRH	TAL CF

Client Sample ID: PF2 — **Lab Sample ID: 310-23585-2**
Date Collected: 01/21/14 11:45 — **Matrix: Soil**
Date Received: 01/22/14 18:00 — **Percent Solids: 84.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			37643	01/27/14 08:13	CJT	TAL CF
Total/NA	Analysis	6010C		3	37743	01/27/14 15:33	MRH	TAL CF

Client Sample ID: PF3 — **Lab Sample ID: 310-23585-3**
Date Collected: 01/21/14 12:15 — **Matrix: Soil**
Date Received: 01/22/14 18:00 — **Percent Solids: 79.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			37643	01/27/14 08:13	CJT	TAL CF
Total/NA	Analysis	6010C		3	37743	01/27/14 15:35	MRH	TAL CF

Client Sample ID: PF4 — **Lab Sample ID: 310-23585-4**
Date Collected: 01/21/14 12:35 — **Matrix: Soil**
Date Received: 01/22/14 18:00 — **Percent Solids: 85.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			37643	01/27/14 08:13	CJT	TAL CF
Total/NA	Analysis	6010C		3	37743	01/27/14 15:40	MRH	TAL CF

Client Sample ID: PF5 — **Lab Sample ID: 310-23585-5**
Date Collected: 01/21/14 13:00 — **Matrix: Soil**
Date Received: 01/22/14 18:00 — **Percent Solids: 71.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			37643	01/27/14 08:13	CJT	TAL CF
Total/NA	Analysis	6010C		3	37743	01/27/14 15:42	MRH	TAL CF

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

Certification Summary

Client: Seneca Companies
Project/Site: Clarinda Firing Range

TestAmerica Job ID: 310-23585-1
SDG: 6360021

Laboratory: TestAmerica Cedar Falls

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA	IHLAP		101044	11-01-14
Illinois	NELAP	5	200024	11-29-14
Iowa	State Program	7	7	12-01-13 *
Kansas	NELAP	7	E-10341	01-31-14
Minnesota	NELAP	5	019-999-319	12-31-14
North Dakota	State Program	8	R-186	09-29-13 *
Oregon	NELAP	10	IA100001	09-29-14
Wisconsin	State Program	5	999917270	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Seneca Companies
Project/Site: Clarinda Firing Range

TestAmerica Job ID: 310-23585-1
SDG: 6360021

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CF

Protocol References:

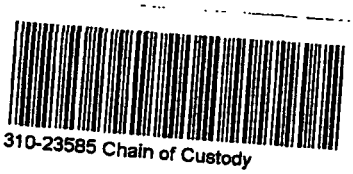
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
704 Enterprise Drive • Cedar Falls, IA 50613
Tel 319-277-2401 • Fax 319-277-2425

TestAmerica Sample Receipt an Cedar Falls Facility



Client: Seneca Project: _____

City: Des Moines State: IA

Date: 1/22/14 Receiver's Initials: JMP Time (Delivered): 1800

Temperature Record:

Cooler ID# (If Applicable)
B Seneca

Uncorrected Temp:
2.5 °C

Corrected Temp:
2.4 °C

Thermometer:

- [X] IR "E" - 111531506
- [ ] IR "Front" - 61854108
- [ ] IR "G" - 130195822
- [ ] IR "H" - 130195853
- [ ] Other:

Courier:

- [ ] UPS
- [X] TA Courier
- [ ] FedEx
- [ ] TA Field Services
- [ ] FedEx Ground
- [ ] Client
- [ ] US Postal Service
- [ ] Other:
- [ ] Spee-Dee

Exceptions Noted:

- [X] Temperature blank
- [ ] Temperature out-of compliance
- [ ] Sample(s) not received in cooler
- [ ] Sample(s) received same day of sampling
- [ ] Evidence of chilling process
- [ ] Temp blank <0°C, samples NOT FROZEN
- [ ] Temp blank <0°C, samples FROZEN
- [ ] Temperature not taken: *(indicate reason)*

Coolant Record:

- [X] Received on ice
  - [X] Wet ice
  - [ ] Blue ice
  - [ ] Dry ice
  - [ ] Other:
- [ ] NONE

- [ ] Non-Conformance Report Started

Custody Seals:

Cooler Custody Seals Present? [ ] Yes [X] No

Cooler Custody Seals Intact? [ ] Yes [ ] No [X] N/A

Sample Custody Seals Present? [ ] Yes [ ] No

Sample Custody Seals Intact? [ ] Yes [ ] No [ ] N/A

Document No.: CF-LG-WI-002
Revision: 20
Date: 7/31/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Cedar Falls Division
704 Enterprise Drive
Cedar Falls, IA 50613

Phone: 319 - 277 - 2401 or 1 - 800 - 750 - 2401
Fax: 319 - 277 - 2425

Company: Seneca Environmental
Send Report To: Blaine Kussatz
Address: 4140 N.E. 14th Street
City/State/Zip Code: Des Moines, IA 50313
Telephone Number: 800-369-3500 Fax: 515-262-2469
Sampled by: (Print Name) Blaine Kussatz
(Signature)

Your PO #: 292293 CL
Invoice To: Blaine Kussatz
TA Quote #:
Project Name: Charisha Firing Range
Project Number: 6360001
Project Manager: Blaine Kussatz
Proj. Mgr. Telephone: 515-201-7728
Proj. Mgr. E-mail: bkussatz@senecaco.com

Sample ID	Date Sampled	Time Sampled	# of containers shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red & White Label)	HCl (Blue & White Label)	NaOH (Orange & White Label)	H_2SO_4 Plastic (Yellow & White Label)	H_2SO_4 Glass(Yellow & White Label)	None (Black & White Label)	Other (Specify)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other Specify:	Analyze For: OA1 BTEX (GC)	OA1 w/ MTBE (GCMS)	OA2	Total Lead							RUSH TAT (Must call ahead)	Standard TAT	E-mail results	Fax Results	Send QC with report
PF1	1/21/14	1125	1		C								✓						✓					✓								✓		
PF2		1145	1		C								✓						✓					✓								✓		
PF3		1215	1		C								✓						✓					✓								✓		
PF4		1235	1		C								✓						✓					✓								✓		
PF5	↓	1300	1		C								✓						✓					✓								✓		

NOTE: All turn around times are calculated from the time of receipt at TestAmerica.
NOTICE: Pre-Arrangements must be made AT LEAST 48 Hours In ADVANCE to receive results with RUSH turn around time commitments; additional charges may be assessed.
NOTE: There may be a charge assessed for TestAmerica disposing of sample remainders.

NOTES:

Relinquished by:	Date	Time	Received by:	Date	Time	Relinquished by:	Date	Time
	1/22/14	0735						
Shipped Via:			Comments:			Shipped Via:		
Received for TestAmerica by:	Date	Time	Temperature Upon Receipt:			Laboratory Comments:		
	1/22/14	18:00						

Login Sample Receipt Checklist

Client: Seneca Companies

Job Number: 310-23585-1
SDG Number: 6360021

Login Number: 23585
List Number: 1
Creator: Facciani, Melene K

List Source: TestAmerica Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	