



Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010
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October 22, 2008

Ms. Tami Rice
Contaminated Sites Section
Iowa Department of Natural Resources
502 E. 9th
Des Moines, Iowa 50319

Subject: Former American Recycling Site

Dear Ms. Rice:

As you are aware, the Iowa Department of Transportation accessed the property known as the Former American Recycling Site to perform load tests for future reconstruction of the Broadway Viaduct.

The work consisted of boring out 3 shafts, each 5' in diameter to a depth of from 54' to 64'. The shafts, seen in the first attached photo, were grouped in a triangular pattern separated by 40 feet. A polymer slurry was used during drilling to stabilize the shafts. When the excavation was complete, a cage of reinforcing steel was set inside the shafts and they were filled with concrete. The slurry displaced by the concrete was collected and removed from the site.

When the concrete was set, two of the shafts were injected with high pressure grout which formed a bulb of grout in the soil beneath the shafts. After sufficient cure time, the top of the shafts were loaded with 2,000 tons of weight which was then accelerated vertically to measure the bearing or load capacity of the shafts. After testing, the shafts were removed to at least three feet below existing ground surface and the site cap and topsoil material was replaced in each hole. The area was re-seeded in an attempt to restore it to the original condition. The second attached picture shoes the current condition of the site.


All soil generated during drilling of the shafts was stockpiled on site. On August 26, 2008 IDOT personnel were at the site to sample stockpiled soil. Six composite soil samples were collected from different areas of the pile. Four discreet areas were sampled and composited together to form each sample. Attached, please find the analytical results of the stockpile sampling. The samples were run for TCLP metals. You will notice none of the samples

exceeded TCLP levels for lead or any other of the eight metals sampled. As such, the stockpiled material was re-used as topdressing at the site.

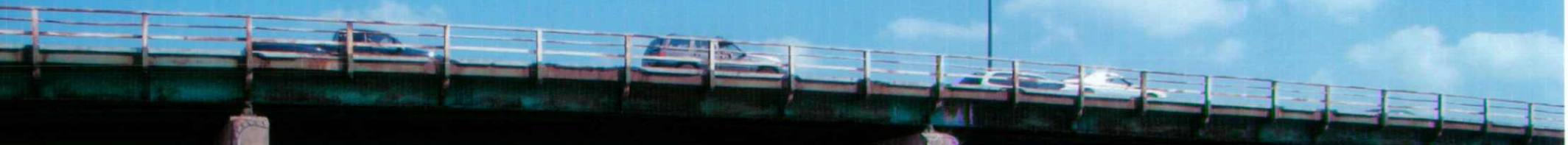
We have restored the site to its original condition and feel no additional work is required.

If you have any questions, concerns or need further information on this project, please feel free to contact me at 515-239-1741.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mary Kay Solberg', written in a cursive style.

Mary Kay Solberg
Office of Location and Environment





ANALYTICAL REPORT

August 29, 2008

Work Order: 18H1185

Page 1 of 12

Report To
Mary Kay Solberg IDOT-Environmental Services 800 Lincoln Way Ames, IA 50010

Work Order Information
Date Received: 08/26/2008 2:45PM Collector: Solberg, Mary Kay Phone: (515) 239-1741 PO Number:

Project : Solid Waste Testing

Project Number: Broadway

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
18H1185-01	Composite-Pile - Sample 1			Matrix:Soil		Collected: 08/26/08 09:50	
Silver (TCLP)	<0.100 mg/l	0.100	1H82904	EPA 6010B	RVV	08/29/08 14:07	
Arsenic (TCLP)	<0.200 mg/l	0.200	1H82904	EPA 6010B	RVV	08/29/08 14:07	
Barium (TCLP)	1.75 mg/l	0.100	1H82904	EPA 6010B	RVV	08/29/08 14:07	
Cadmium (TCLP)	<0.050 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:07	
Chromium (TCLP)	<0.050 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:07	
Mercury (TCLP)	<0.00500 mg/l	0.00500	1H82902	EPA 7470A	SAA	08/29/08 14:58	
Lead (TCLP)	1.13 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:07	
Selenium (TCLP)	<0.200 mg/l	0.200	1H82904	EPA 6010B	RVV	08/29/08 14:07	
TCLP pH, Final	5.2 pH	0.1	1H82726	EPA 1311	TMR	08/28/08 8:15	
TCLP pH, Initial	4.9 pH	0.1	1H82726	EPA 1311	TMR	08/27/08 14:55	
18H1185-02	Composite-Pile - Sample 2			Matrix:Soil		Collected: 08/26/08 09:55	
Silver (TCLP)	<0.100 mg/l	0.100	1H82904	EPA 6010B	RVV	08/29/08 14:33	
Arsenic (TCLP)	<0.200 mg/l	0.200	1H82904	EPA 6010B	RVV	08/29/08 14:33	
Barium (TCLP)	1.76 mg/l	0.100	1H82904	EPA 6010B	RVV	08/29/08 14:33	
Cadmium (TCLP)	<0.050 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:33	
Chromium (TCLP)	<0.050 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:33	
Mercury (TCLP)	<0.00500 mg/l	0.00500	1H82902	EPA 7470A	SAA	08/29/08 15:06	
Lead (TCLP)	2.82 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:33	
Selenium (TCLP)	<0.200 mg/l	0.200	1H82904	EPA 6010B	RVV	08/29/08 14:33	
TCLP pH, Final	5.2 pH	0.1	1H82726	EPA 1311	TMR	08/28/08 8:15	
TCLP pH, Initial	4.9 pH	0.1	1H82726	EPA 1311	TMR	08/27/08 14:55	
18H1185-03	Composite-Pile - Sample 3			Matrix:Soil		Collected: 08/26/08 10:00	
Silver (TCLP)	<0.100 mg/l	0.100	1H82904	EPA 6010B	RVV	08/29/08 14:37	
Arsenic (TCLP)	<0.200 mg/l	0.200	1H82904	EPA 6010B	RVV	08/29/08 14:37	
Barium (TCLP)	1.72 mg/l	0.100	1H82904	EPA 6010B	RVV	08/29/08 14:37	
Cadmium (TCLP)	<0.050 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:37	
Chromium (TCLP)	<0.050 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:37	

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IDOT-Environmental Services
 800 Lincoln Way
 Ames, IA 50010

August 29, 2008

Page 2 of 12

Work Order: 18H1185

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
18H1185-03	Composite-Pile - Sample 3			Matrix:Soil	Collected: 08/26/08 10:00		
Mercury (TCLP)	<0.00500 mg/l	0.00500	1H82902	EPA 7470A	SAA	08/29/08 15:08	
Lead (TCLP)	0.180 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:37	
Selenium (TCLP)	<0.200 mg/l	0.200	1H82904	EPA 6010B	RVV	08/29/08 14:37	
TCLP pH, Final	5.2 pH	0.1	1H82726	EPA 1311	TMR	08/28/08 8:15	
TCLP pH, Initial	4.9 pH	0.1	1H82726	EPA 1311	TMR	08/27/08 14:55	
18H1185-04	Composite-Pile - Sample 4			Matrix:Soil	Collected: 08/26/08 10:05		
Silver (TCLP)	<0.100 mg/l	0.100	1H82904	EPA 6010B	RVV	08/29/08 14:41	
Arsenic (TCLP)	<0.200 mg/l	0.200	1H82904	EPA 6010B	RVV	08/29/08 14:41	
Barium (TCLP)	1.64 mg/l	0.100	1H82904	EPA 6010B	RVV	08/29/08 14:41	
Cadmium (TCLP)	<0.050 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:41	
Chromium (TCLP)	<0.050 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:41	
Mercury (TCLP)	<0.00500 mg/l	0.00500	1H82902	EPA 7470A	SAA	08/29/08 15:10	
Lead (TCLP)	0.635 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:41	
Selenium (TCLP)	<0.200 mg/l	0.200	1H82904	EPA 6010B	RVV	08/29/08 14:41	
TCLP pH, Initial	4.9 pH	0.1	1H82726	EPA 1311	TMR	08/27/08 14:55	
TCLP pH, Final	5.9 pH	0.1	1H82726	EPA 1311	TMR	08/28/08 8:15	
18H1185-05	Composite-Pile - Sample 5			Matrix:Soil	Collected: 08/26/08 10:10		
Silver (TCLP)	<0.100 mg/l	0.100	1H82904	EPA 6010B	RVV	08/29/08 14:45	
Arsenic (TCLP)	<0.200 mg/l	0.200	1H82904	EPA 6010B	RVV	08/29/08 14:45	
Barium (TCLP)	1.81 mg/l	0.100	1H82904	EPA 6010B	RVV	08/29/08 14:45	
Cadmium (TCLP)	<0.050 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:45	
Chromium (TCLP)	<0.050 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:45	
Mercury (TCLP)	<0.00500 mg/l	0.00500	1H82902	EPA 7470A	SAA	08/29/08 15:12	
Lead (TCLP)	0.296 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:45	
Selenium (TCLP)	<0.200 mg/l	0.200	1H82904	EPA 6010B	RVV	08/29/08 14:45	
TCLP pH, Final	5.2 pH	0.1	1H82726	EPA 1311	TMR	08/28/08 8:15	
TCLP pH, Initial	4.9 pH	0.1	1H82726	EPA 1311	TMR	08/27/08 14:55	
18H1185-06	Composite-Pile - Sample 6			Matrix:Soil	Collected: 08/26/08 10:15		
Silver (TCLP)	<0.100 mg/l	0.100	1H82904	EPA 6010B	RVV	08/29/08 14:49	
Arsenic (TCLP)	<0.200 mg/l	0.200	1H82904	EPA 6010B	RVV	08/29/08 14:49	
Barium (TCLP)	1.45 mg/l	0.100	1H82904	EPA 6010B	RVV	08/29/08 14:49	
Cadmium (TCLP)	<0.050 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:49	
Chromium (TCLP)	<0.050 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:49	
Mercury (TCLP)	<0.00500 mg/l	0.00500	1H82902	EPA 7470A	SAA	08/29/08 15:14	
Lead (TCLP)	2.46 mg/l	0.050	1H82904	EPA 6010B	RVV	08/29/08 14:49	
Selenium (TCLP)	<0.200 mg/l	0.200	1H82904	EPA 6010B	RVV	08/29/08 14:49	
TCLP pH, Final	5.5 pH	0.1	1H82726	EPA 1311	TMR	08/28/08 8:15	

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IDOT-Environmental Services
800 Lincoln Way
Ames, IA 50010

August 29, 2008
Page 3 of 12

Work Order: 18H1185

18H1185-06	Composite-Pile - Sample 6			Matrix:Soil	Collected: 08/26/08 10:15
TCLP pH, Initial	4.9 pH	0.1	1H82726	EPA 1311	TMR 08/27/08 14:55

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IDOT-Environmental Services
 800 Lincoln Way
 Ames, IA 50010

August 29, 2008

Page 4 of 12

Work Order: 18H1185

Determination of TCLP Metals - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 18H2901 - 1H82904										
Calibration Blank (18H2901-CCB1)										
Prepared & Analyzed: 08/29/08										
Arsenic (TCLP)	ND		mg/l	0.00000						
Barium (TCLP)	ND		"	0.00000						
Cadmium (TCLP)	ND		"	0.00000						
Chromium (TCLP)	ND		"	0.00000						
Lead (TCLP)	ND		"	0.00000						
Selenium (TCLP)	0.00500		"	0.00000						
Silver (TCLP)	ND		"	0.00000						
Calibration Blank (18H2901-CCB2)										
Prepared & Analyzed: 08/29/08										
Arsenic (TCLP)	ND		mg/l	0.00000						
Barium (TCLP)	ND		"	0.00000						
Cadmium (TCLP)	ND		"	0.00000						
Chromium (TCLP)	ND		"	0.00000						
Lead (TCLP)	ND		"	0.00000						
Selenium (TCLP)	ND		"	0.00000						
Silver (TCLP)	ND		"	0.00000						
Calibration Blank (18H2901-CCB3)										
Prepared & Analyzed: 08/29/08										
Arsenic (TCLP)	ND		mg/l	0.00000						
Barium (TCLP)	ND		"	0.00000						
Cadmium (TCLP)	ND		"	0.00000						
Chromium (TCLP)	ND		"	0.00000						
Lead (TCLP)	0.004		"	0.00000						
Selenium (TCLP)	ND		"	0.00000						
Silver (TCLP)	ND		"	0.00000						
Calibration Blank (18H2901-CCB4)										
Prepared & Analyzed: 08/29/08										
Arsenic (TCLP)	ND		mg/l	0.00000						
Barium (TCLP)	ND		"	0.00000						
Cadmium (TCLP)	ND		"	0.00000						
Chromium (TCLP)	ND		"	0.00000						
Lead (TCLP)	0.005		"	0.00000						
Selenium (TCLP)	0.00730		"	0.00000						
Silver (TCLP)	ND		"	0.00000						

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IDOT-Environmental Services
800 Lincoln Way
Ames, IA 50010

August 29, 2008

Page 5 of 12

Work Order: 18H1185

Determination of TCLP Metals - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 18H2901 - 1H82904										
Calibration Check (18H2901-CCV1)				Prepared & Analyzed: 08/29/08						
Arsenic (TCLP)	1.03		mg/l	1.00000		103	90-110			
Barium (TCLP)	0.993		"	1.00000		99.3	90-110			
Cadmium (TCLP)	1.02		"	1.00000		102	90-110			
Chromium (TCLP)	0.974		"	1.00000		97.4	90-110			
Lead (TCLP)	1.04		"	1.00000		104	90-110			
Selenium (TCLP)	1.03		"	1.00000		103	90-110			
Silver (TCLP)	0.997		"	1.00000		99.7	90-110			
Calibration Check (18H2901-CCV2)				Prepared & Analyzed: 08/29/08						
Arsenic (TCLP)	1.02		mg/l	1.00000		102	90-110			
Barium (TCLP)	0.972		"	1.00000		97.2	90-110			
Cadmium (TCLP)	0.997		"	1.00000		99.7	90-110			
Chromium (TCLP)	0.963		"	1.00000		96.3	90-110			
Lead (TCLP)	1.03		"	1.00000		103	90-110			
Selenium (TCLP)	1.02		"	1.00000		102	90-110			
Silver (TCLP)	0.982		"	1.00000		98.2	90-110			
Calibration Check (18H2901-CCV3)				Prepared & Analyzed: 08/29/08						
Arsenic (TCLP)	1.00		mg/l	1.00000		100	90-110			
Barium (TCLP)	0.970		"	1.00000		97.0	90-110			
Cadmium (TCLP)	0.992		"	1.00000		99.2	90-110			
Chromium (TCLP)	0.956		"	1.00000		95.6	90-110			
Lead (TCLP)	1.02		"	1.00000		102	90-110			
Selenium (TCLP)	1.01		"	1.00000		101	90-110			
Silver (TCLP)	0.986		"	1.00000		98.6	90-110			
Calibration Check (18H2901-CCV4)				Prepared & Analyzed: 08/29/08						
Arsenic (TCLP)	1.02		mg/l	1.00000		102	90-110			
Barium (TCLP)	0.993		"	1.00000		99.3	90-110			
Cadmium (TCLP)	1.01		"	1.00000		101	90-110			
Chromium (TCLP)	0.974		"	1.00000		97.4	90-110			
Lead (TCLP)	1.03		"	1.00000		103	90-110			
Selenium (TCLP)	1.02		"	1.00000		102	90-110			
Silver (TCLP)	1.01		"	1.00000		101	90-110			

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IDOT-Environmental Services
 800 Lincoln Way
 Ames, IA 50010

August 29, 2008
 Page 6 of 12

Work Order: 18H1185

Determination of TCLP Metals - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 18H2901 - 1H82904										
High Cal Check (18H2901-HCV2) Prepared & Analyzed: 08/29/08										
Arsenic (TCLP)	18.2		mg/l	20.0000		91.1	90-110			
Lead (TCLP)	18.7		"	20.0000		93.3	90-110			
Selenium (TCLP)	18.1		"	20.0000		90.7	90-110			
Silver (TCLP)	18.3		"	20.0000		91.7	90-110			
High Cal Check (18H2901-HCV3) Prepared & Analyzed: 08/29/08										
Chromium (TCLP)	94.5		mg/l	100.000		94.5	90-110			
Lead (TCLP)	106		"	100.000		106	90-110			
Initial Cal Blank (18H2901-ICB1) Prepared & Analyzed: 08/29/08										
Arsenic (TCLP)	ND		mg/l	0.00000						
Barium (TCLP)	ND		"	0.00000						
Cadmium (TCLP)	ND		"	0.00000						
Chromium (TCLP)	ND		"	0.00000						
Lead (TCLP)	ND		"	0.00000						
Selenium (TCLP)	0.00540		"	0.00000						
Silver (TCLP)	ND		"	0.00000						
Initial Cal Check (18H2901-ICV1) Prepared & Analyzed: 08/29/08										
Arsenic (TCLP)	1.02		mg/l	1.00000		102	90-110			
Barium (TCLP)	1.01		"	1.00000		101	90-110			
Cadmium (TCLP)	1.02		"	1.00000		102	90-110			
Chromium (TCLP)	0.983		"	1.00000		98.3	90-110			
Lead (TCLP)	1.04		"	1.00000		104	90-110			
Selenium (TCLP)	1.02		"	1.00000		102	90-110			
Silver (TCLP)	1.01		"	1.00000		101	90-110			
Secondary Cal Check (18H2901-SCV1) Prepared & Analyzed: 08/29/08										
Arsenic (TCLP)	0.550		mg/l	0.500000		110	90-110			
Barium (TCLP)	0.516		"	0.500000		103	90-110			
Cadmium (TCLP)	0.520		"	0.500000		104	90-110			
Chromium (TCLP)	0.506		"	0.500000		101	90-110			
Lead (TCLP)	0.538		"	0.500000		108	90-110			
Selenium (TCLP)	0.529		"	0.500000		106	90-110			
Silver (TCLP)	0.504		"	0.500000		101	90-110			

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IDOT-Environmental Services
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Ames, IA 50010

August 29, 2008

Page 7 of 12

Work Order: 18H1185

Determination of TCLP Metals - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 18H2910 - 1H82902										
Calibration Blank (18H2910-CCB1)				Prepared & Analyzed: 08/29/08						
Mercury (TCLP)	ND		mg/l	0.00000						
Calibration Blank (18H2910-CCB2)				Prepared & Analyzed: 08/29/08						
Mercury (TCLP)	ND		mg/l	0.00000						
Calibration Blank (18H2910-CCB3)				Prepared & Analyzed: 08/29/08						
Mercury (TCLP)	ND		mg/l	0.00000						
Calibration Check (18H2910-CCV1)				Prepared & Analyzed: 08/29/08						
Mercury (TCLP)	ND		mg/l	0.00200000		88.5	80-120			
Calibration Check (18H2910-CCV2)				Prepared & Analyzed: 08/29/08						
Mercury (TCLP)	ND		mg/l	0.00200000		91.0	80-120			
Calibration Check (18H2910-CCV3)				Prepared & Analyzed: 08/29/08						
Mercury (TCLP)	ND		mg/l	0.00200000		88.0	80-120			
Initial Cal Blank (18H2910-ICB1)				Prepared & Analyzed: 08/29/08						
Mercury (TCLP)	ND		mg/l	0.00000						
Initial Cal Check (18H2910-ICV1)				Prepared & Analyzed: 08/29/08						
Mercury (TCLP)	ND		mg/l	0.00200000		86.5	80-120			
Secondary Cal Check (18H2910-SCV1)				Prepared & Analyzed: 08/29/08						
Mercury (TCLP)	ND		mg/l	0.00200000		102	80-120			
Batch 1H82902 - EPA 7470A Hg Water										
Blank (1H82902-BLK1)				Prepared & Analyzed: 08/29/08						
Mercury (TCLP)	ND	0.00050	mg/l							

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IDOT-Environmental Services
 800 Lincoln Way
 Ames, IA 50010

August 29, 2008

Page 8 of 12

Work Order: 18H1185

Determination of TCLP Metals - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1H82902 - EPA 7470A Hg Water										
Blank (1H82902-BLK2) Prepared & Analyzed: 08/29/08										
Mercury (TCLP)	ND	0.00500	mg/l							
Blank (1H82902-BLK3) Prepared & Analyzed: 08/29/08										
Mercury (TCLP)	ND	0.00500	mg/l							
LCS (1H82902-BS1) Prepared & Analyzed: 08/29/08										
Mercury (TCLP)	0.00231	0.00050	mg/l	0.00250000		92.4	60-112			
Matrix Spike (1H82902-MS1) Source: 18H1185-01 Prepared & Analyzed: 08/29/08										
Mercury (TCLP)	0.0244	0.00500	mg/l	0.0250000	0.000660	95.0	60-113			
Matrix Spike Dup (1H82902-MSD1) Source: 18H1185-01 Prepared & Analyzed: 08/29/08										
Mercury (TCLP)	0.0236	0.00500	mg/l	0.0250000	0.000660	91.8	60-113	3.33	20	
Batch 1H82904 - EPA 3010A TCLP ICP										
Blank (1H82904-BLK1) Prepared & Analyzed: 08/29/08										
Arsenic (TCLP)	ND	0.020	mg/l							
Barium (TCLP)	ND	0.010	"							
Cadmium (TCLP)	ND	0.005	"							
Chromium (TCLP)	ND	0.005	"							
Lead (TCLP)	0.00500	0.005	"							QB-03
Selenium (TCLP)	ND	0.020	"							
Silver (TCLP)	ND	0.010	"							
Blank (1H82904-BLK2) Prepared & Analyzed: 08/29/08										
Arsenic (TCLP)	ND	0.020	mg/l							
Barium (TCLP)	ND	0.010	"							
Cadmium (TCLP)	ND	0.005	"							
Chromium (TCLP)	ND	0.005	"							
Lead (TCLP)	ND	0.005	"							
Selenium (TCLP)	ND	0.020	"							
Silver (TCLP)	ND	0.010	"							

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IDOT-Environmental Services
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August 29, 2008

Page 9 of 12

Work Order: 18H1185

Determination of TCLP Metals - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1H82904 - EPA 3010A TCLP ICP										
LCS (1H82904-BS1)				Prepared & Analyzed: 08/29/08						
Arsenic (TCLP)	0.526	0.020	mg/l	0.500000		105	84-111			
Barium (TCLP)	5.14	0.010	"	5.000000		103	89-111			
Cadmium (TCLP)	0.106	0.005	"	0.100000		106	90-118			
Chromium (TCLP)	0.511	0.005	"	0.500000		102	85-124			
Lead (TCLP)	0.542	0.005	"	0.500000		108	74-129			
Selenium (TCLP)	0.0978	0.020	"	0.100000		97.8	76-110			
Silver (TCLP)	0.547	0.010	"	0.500000		109	74-140			
Matrix Spike (1H82904-MS1)				Source: 18H1185-01			Prepared & Analyzed: 08/29/08			
Arsenic (TCLP)	4.94	0.200	mg/l	5.000000	ND	98.8	70-130			
Barium (TCLP)	49.0	0.100	"	50.000000	1.75	94.6	70-130			
Cadmium (TCLP)	0.976	0.050	"	1.000000	0.023	95.3	70-130			
Chromium (TCLP)	4.54	0.050	"	5.000000	ND	90.8	70-130			
Lead (TCLP)	6.01	0.050	"	5.000000	1.13	97.6	70-130			
Selenium (TCLP)	0.901	0.200	"	1.000000	ND	90.1	70-130			
Silver (TCLP)	5.58	0.100	"	5.000000	ND	112	70-130			
Matrix Spike Dup (1H82904-MSD1)				Source: 18H1185-01			Prepared & Analyzed: 08/29/08			
Arsenic (TCLP)	4.76	0.200	mg/l	5.000000	ND	95.2	70-130	3.77	20	
Barium (TCLP)	48.4	0.100	"	50.000000	1.75	93.4	70-130	1.21	20	
Cadmium (TCLP)	0.968	0.050	"	1.000000	0.023	94.5	70-130	0.823	20	
Chromium (TCLP)	4.50	0.050	"	5.000000	ND	89.9	70-130	1.02	20	
Lead (TCLP)	6.03	0.050	"	5.000000	1.13	98.0	70-130	0.299	20	
Selenium (TCLP)	0.925	0.200	"	1.000000	ND	92.5	70-130	2.63	20	
Silver (TCLP)	4.90	0.100	"	5.000000	ND	98.0	70-130	13.1	20	
Post Spike (1H82904-PS1)				Source: 18H1185-01			Prepared & Analyzed: 08/29/08			
Arsenic (TCLP)	1.98		mg/l	2.000000	-0.00550	99.5	70-130			
Barium (TCLP)	2.11		"	2.000000	0.175	96.9	75-125			
Cadmium (TCLP)	1.88		"	2.000000	0.002	94.0	75-125			
Chromium (TCLP)	1.88		"	2.000000	-0.000200	93.8	75-125			
Lead (TCLP)	2.07		"	2.000000	0.113	97.7	75-125			
Selenium (TCLP)	1.83		"	2.000000	-0.000200	91.5	75-125			
Silver (TCLP)	1.98		"	2.000000	ND	98.8	75-125			

ND = Non Detect; REC= Recovery; RPD= Relative Percent Difference

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IDOT-Environmental Services
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August 29, 2008

Page 10 of 12

Work Order: 18H1185

Certified Analyses included in this Report

Method/Matrix	Analyte	Certifications
<i>EPA 6010B in Solid</i>		
	Arsenic (TCLP)	IA-NT
	Barium (TCLP)	IA-NT,KS-NT,NELAC
	Cadmium (TCLP)	IA-NT,KS-NT,NELAC
	Chromium (TCLP)	IA-NT,KS-NT,NELAC
	Lead (TCLP)	IA-NT,KS-NT,NELAC
	Selenium (TCLP)	IA-NT
	Silver (TCLP)	IA-NT,KS-NT,NELAC
<i>EPA 6010B in Water</i>		
	Arsenic (TCLP)	IA-NT
	Barium (TCLP)	IA-NT,KS-NT,NELAC
	Cadmium (TCLP)	IA-NT,KS-NT,NELAC
	Chromium (TCLP)	IA-NT,KS-NT,NELAC
	Lead (TCLP)	IA-NT,KS-NT,NELAC
	Selenium (TCLP)	IA-NT
	Silver (TCLP)	IA-NT,KS-NT,NELAC
<i>EPA 7470A in Water</i>		
	Mercury (TCLP)	IA-NT,NELAC,KS-NT

Code	Description	Number	Expires
IA-NT	Iowa Department of Natural Resources	095	02/01/2010
KS-NT	Kansas Department of Health and Environment	E-10287	07/31/2009
NELAC	New Jersey Department of Environmental Protection	IA001	06/30/2009

Notes and Definitions

QB-03 The method blank contains analyte at a concentration above the MRL; however concentration is less than 10% of the action level, which is negligible according to method criteria.

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IDOT-Environmental Services
800 Lincoln Way
Ames, IA 50010

August 29, 2008
Page 11 of 12

Work Order: 18H1185

End of Report

Sue Thompson

Keystone Laboratories, Inc.

Sue Thompson
Project Manager I

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Keystone LABORATORIES, INC.



IDOT-Environmental Services
800 Lincoln Way
Ames, IA 50010

Work Order: 18H1185

August 29, 2008
Page 12 of 12

CHAIN OF CUSTODY RECORD

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PAGE _____ OF _____

PRINT OR TYPE INFORMATION BELOW SAMPLER: <u>M. K. SOLBERG</u> SITE NAME: <u>BROADWAY</u> ADDRESS: <u>1207 W BROADWAY</u> CITY/ST/ZIP: <u>COUNCIL BLUFFS, IOWA</u> PHONE: <u>515-239-1741</u>	REPORT TO: NAME: <u>M. K. SOLBERG</u> COMPANY NAME: <u>IOWA DOT</u> ADDRESS: <u>800 LINCOLN WAY</u> CITY/ST/ZIP: <u>AMES, IOWA 50010</u> PHONE: <u>515-239-1741</u> FAX: <u>515-239-1720</u>	BILL TO: NAME: <u>MARY KAY SOLBERG</u> COMPANY NAME: <u>IOWA DOT</u> ADDRESS: <u>800 LINCOLN WAY</u> CITY/ST/ZIP: <u>AMES, IOWA 50010</u> PHONE: <u>515-239-1741</u> Keystone Quote No.: _____
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CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	TCLP	MISTALS	ANALYSES REQUIRED										LAB USE ONLY					
									1	2	3	4	5	6	7	8	9	10	11	12	LABORATORY WORK ORDER NO.	LABORATOR SAMPLE NUMBER		
SAMPLE 1	8/26/08	9:50	COMPOSITE PILE	1	SOIL	C	X																01	
SAMPLE 2	8/26/08	9:55	COMPOSITE PILE	1	SOIL	C	X																	02
SAMPLE 3	8/26/08	10:00	COMPOSITE PILE	1	SOIL	C	X																	03
SAMPLE 4	8/26/08	10:05	COMPOSITE PILE	1	SOIL	C	X																	04
SAMPLE 5	8/26/08	10:10	COMPOSITE PILE	1	SOIL	C	X																	05
SAMPLE 6	8/26/08	10:15	COMPOSITE PILE	1	SOIL	C	X																	06

Relinquished by: (Signature) <u>M. K. Solberg</u>	Date <u>8/26/08</u> Time <u>10:18A</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>8/26/08</u> Time <u>10:18</u>	Turn-Around: <input type="checkbox"/> Standard <input type="checkbox"/> Rush Contact Lab Prior to Submission.
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>8/26/08</u> Time <u>1:45</u>	Received for Lab by: (Signature) <u>[Signature]</u>	Date <u>8/26/08</u> Time <u>1:45</u>	Remarks: <u>PLEASE RUSH!!!</u> <u>NEED ANALYSIS ASAP!</u>

Original - Return with Report • Yellow - Lab Copy • Pink - Sampler Copy

FORM CCR 7-97

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