Quanterra

REC'D
JUL 06 1999
RESP

CASE NARRATIVE

North American Galvanizing
1461 Kinard Ct.
St. Louis, MO 63132
Attn.: Eddie Sloan

April 30, 1999

Quanterra Project Number	: 858.01
SDG/ Login Number	: 21118
Date Received by Lab	: April 15, 1999
Number of Samples	: Three
Sample Matrix	: Solid

I. Introduction

On April 15, 1999 samples were received at the Quanterra St. Louis laboratory from North American Galvanizing. A listing of the samples and the Quanterra identification numbers is attached. A listing of the abbreviations and data qualifiers used with the laboratory data is also attached.

II. Analytical Results/Methodology

The analytical results for this report are presented by analytical tests. Each set of data will include sample identification information, the analytical results, and the appropriate detection limits.

III. Quality Control

The QA/QC information can be found immediately following the analytical data. This QA/QC data are used to assess the laboratory's accuracy and precision during the analytical procedure.

IV. Comments/Nonconformances

There were no nonconformances experienced with these samples.

Respectfully submitted,

John Powell
Project Manager

R00141792
RCRA RECORDS CENTER

Quanterra ID	Client ID	Matrix	Date Collected	Date Received
21118-001	CAUSTIC SLUDGE	Solid	14-Apr-99	15-Apr-99
21118-002	CAUSTIC RINSE SLUDGE	Solid	14-Apr-99	15-Apr-99
21118-003	REFRACTORY BRICK	Solid	14-Apr-99	15-Apr-99

Abbreviations and Data Qualifiers

NC	No criteria at this time
NA	Not applicable
ND	Non - detect
PCI/L	Picocuries per liter
PCI/G	Picocuries per gram
MG/L	Milligrams per liter
UG/L	Micrograms per liter
MG/KG	Milligrams per kilogram
UG/G	Micrograms per gram
%REC	Percent Recovery
QCBLK	Method Blank
QCLCS	Laboratory Control Sample
CRDL	Customer Required Detection Limit
RPD	Relative Percent Difference
DL	PQL
J	Estimated Value (Organics only)
D	Diluted
U	Non - Detect
B	Value greater than IDL but less than CRDL (Metals only)
B	Analyte found in the blank (Organics only)
E	Exceeds calibration
E	FOUND IN FULL CLP TYPE DATA PACKAGE METALS ONLY: Serial diution result for samples with concentrations greater than 50 times the IDL are not within 10% of the original sample result.
N	FOUND IN FULL CLP TYPE DATA PACKAGE METALS ONLY: Matrix Spike or matrix spike duplicate is outside expected recovery limits.
IDL	Instrument detection limit
MDL	Method detection limit
MDA	Minimal detectable activity

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North American Galvanizing
1461 Kinard Ct.
St. Louis, MO 63132

Project: 858.01

Sample Date : 04/14/99
Receipt Date : 04/15/99
Report Date : 04/29/99

Quanterra ID : 21118-001

Category : TCLP Metals
Matrix : Solid

Client ID: CAUSTIC SLUDGE

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Mercury	EPA 7470	04/21/99	04/26/99	04/26/99	ND	MG/L		0.00080	0.20	4
Arsenic	EPA 6010	04/21/99	04/26/99	04/26/99	ND	MG/L		1.2	5.0	4
Barium	EPA 6010	04/21/99	04/26/99	04/26/99	0.098	MG/L	B	0.80	100	4
Cadmium	EPA 6010	04/21/99	04/26/99	04/26/99	0.041	MG/L		0.020	1.0	4
Chromium	EPA 6010	04/21/99	04/26/99	04/26/99	ND	MG/L		0.040	5.0	4
Lead	EPA 6010	04/21/99	04/26/99	04/26/99	ND	MG/L		0.40	5.0	4
Selenium	EPA 6010	04/21/99	04/26/99	04/26/99	0.010	MG/L	B	1.0	1.0	4
Silver	EPA 6010	04/21/99	04/26/99	04/26/99	ND	MG/L		0.040	5.0	4

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Project: 858.01

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Sample Date : 04/14/99
Receipt Date : 04/15/99
Report Date : 04/29/99

Category : TCLP Metals
Matrix : Solid

Client ID: CAUSTIC RINSE SLUDGE

Quanterra ID : 21118-002

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Mercury	EPA 7470	04/21/99	04/26/99	04/26/99	ND	MG/L		0.00080	0.20	4
Arsenic	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		1.2	5.0	4
Barium	EPA 6010	04/21/99	04/27/99	04/27/99	0.45	MG/L	B	0.80	100	4
Cadmium	EPA 6010	04/21/99	04/27/99	04/27/99	0.12	MG/L		0.020	1.0	4
Chromium	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		0.040	5.0	4
Lead	EPA 6010	04/21/99	04/27/99	04/27/99	0.19	MG/L	B	0.40	5.0	4
Selenium	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		1.0	1.0	4
Silver	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		0.040	5.0	4

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Project: 858.01

Sample Date : 04/14/99
Receipt Date : 04/15/99
Report Date : 04/29/99

Category : TCLP Metals
Matrix : Solid

Client ID: REFRACTORY BRICK

Quanterra ID : 21118-003

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Mercury	EPA 7470	04/21/99	04/26/99	04/26/99	ND	MG/L		0.00080	0.20	4
Arsenic	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		1.2	5.0	4
Barium	EPA 6010	04/21/99	04/27/99	04/27/99	0.22	MG/L	B	0.80	100	4
Cadmium	EPA 6010	04/21/99	04/27/99	04/27/99	0.0085	MG/L	B	0.020	1.0	4
Chromium	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		0.040	5.0	4
Lead	EPA 6010	04/21/99	04/27/99	04/27/99	0.48	MG/L		0.40	5.0	4
Selenium	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		1.0	1.0	4
Silver	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		0.040	5.0	4

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Project: 858.01

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Sample Date : NA
Receipt Date : NA
Report Date : 04/29/99

Category : TCLP Metals
Matrix : Solid

Client ID: NA

Quanterra ID : EXTBLK197947-1

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Mercury	EPA 7470	04/21/99	04/26/99	04/26/99	ND	MG/L		0.00080	0.20	4
Arsenic	EPA 6010	04/21/99	04/26/99	04/26/99	ND	MG/L		1.2	5.0	4
Barium	EPA 6010	04/21/99	04/26/99	04/26/99	0.26	MG/L	B	0.80	100	4
Cadmium	EPA 6010	04/21/99	04/26/99	04/26/99	0.43	MG/L		0.020	1.0	4
Chromium	EPA 6010	04/21/99	04/26/99	04/26/99	ND	MG/L		0.040	5.0	4
Lead	EPA 6010	04/21/99	04/26/99	04/26/99	0.014	MG/L	B	0.40	5.0	4
Selenium	EPA 6010	04/21/99	04/26/99	04/26/99	0.012	MG/L	B	1.0	1.0	4
Silver	EPA 6010	04/21/99	04/26/99	04/26/99	ND	MG/L		0.040	5.0	4

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Category : TCLP Metals
Matrix : Solid

Client ID: NA

Sample Date : NA
Receipt Date : NA
Report Date : 04/29/99

Quanterra ID : EXTBLK197948-1

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Mercury	EPA 7470	04/21/99	04/26/99	04/26/99	ND	MG/L		0.00080	0.20	4
Arsenic	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		1.2	5.0	4
Barium	EPA 6010	04/21/99	04/27/99	04/27/99	0.23	MG/L	B	0.80	100	4
Cadmium	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		0.020	1.0	4
Chromium	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		0.040	5.0	4
Lead	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		0.40	5.0	4
Selenium	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		1.0	1.0	4
Silver	EPA 6010	04/21/99	04/27/99	04/27/99	ND	MG/L		0.040	5.0	4

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1461 Kinard Ct.
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Project: 858.01

Sample Date : NA
Receipt Date : NA
Report Date : 04/29/99

Category : TCLP Metals
Matrix : Solid

Client ID: NA

Quanterra ID : QCBLK198213-1

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Arsenic	EPA 6010	NA	04/27/99	04/27/99	ND	MG/L		0.30	5.0	1
Barium	EPA 6010	NA	04/27/99	04/27/99	ND	MG/L		0.20	100	1
Cadmium	EPA 6010	NA	04/27/99	04/27/99	ND	MG/L		0.0050	1.0	1
Chromium	EPA 6010	NA	04/27/99	04/27/99	0.0064	MG/L	B	0.010	5.0	1
Lead	EPA 6010	NA	04/27/99	04/27/99	0.0012	MG/L	B	0.10	5.0	1
Selenium	EPA 6010	NA	04/27/99	04/27/99	ND	MG/L		0.25	1.0	1
Silver	EPA 6010	NA	04/27/99	04/27/99	ND	MG/L		0.010	5.0	1

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Project: 858.01

Category : TCLP Metals
Matrix : Solid

Client ID: NA

Sample Date : NA
Receipt Date : NA
Report Date : 04/29/99

Quanterra ID : QCLCS198147-1

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Arsenic	EPA 6010	NA	04/26/99	04/26/99	108	%REC				1
Barium	EPA 6010	NA	04/26/99	04/26/99	108	%REC				1
Cadmium	EPA 6010	NA	04/26/99	04/26/99	105	%REC				1
Chromium	EPA 6010	NA	04/26/99	04/26/99	100	%REC				1
Lead	EPA 6010	NA	04/26/99	04/26/99	100	%REC				1
Selenium	EPA 6010	NA	04/26/99	04/26/99	104	%REC				1
Silver	EPA 6010	NA	04/26/99	04/26/99	104	%REC				1

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Project: 858.01

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Category : TCLP Metals
Matrix : Solid

Client ID: NA

Sample Date : NA
Receipt Date : NA
Report Date : 04/29/99

Quanterra ID : QCLCS198203-1

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Mercury	EPA 7470	NA	04/26/99	04/26/99	100	%REC				1

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Project: 858.01

Category : TCLP Metals
Matrix : Solid

Client ID: NA

Sample Date : NA
Receipt Date : NA
Report Date : 04/29/99

Quanterra ID : QCLCS198204-1

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Mercury	EPA 7470	NA	04/26/99	04/26/99	100	%REC				1

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Project: 858.01

Sample Date : NA
Receipt Date : NA
Report Date : 04/29/99

Category : TCLP Metals
Matrix : Solid

Client ID: NA

Quanterra ID : QCLCS198213-1

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Arsenic	EPA 6010	NA	04/27/99	04/27/99	105	%REC				1
Barium	EPA 6010	NA	04/27/99	04/27/99	105	%REC				1
Cadmium	EPA 6010	NA	04/27/99	04/27/99	102	%REC				1
Chromium	EPA 6010	NA	04/27/99	04/27/99	99	%REC				1
Lead	EPA 6010	NA	04/27/99	04/27/99	98	%REC				1
Selenium	EPA 6010	NA	04/27/99	04/27/99	101	%REC				1
Silver	EPA 6010	NA	04/27/99	04/27/99	102	%REC				1

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North American Galvanizing
1461 Kinard Ct.
St. Louis, MO 63132

Project: 858.01

Category : TCLP Metals
Matrix : Solid

Client ID: NA

Sample Date : NA
Receipt Date : NA
Report Date : 04/29/99

Quanterra ID : QCBLK198147-1

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Arsenic	EPA 6010	NA	04/26/99	04/26/99	ND	MG/L		0.30	5.0	1
Barium	EPA 6010	NA	04/26/99	04/26/99	ND	MG/L		0.20	100	1
Cadmium	EPA 6010	NA	04/26/99	04/26/99	ND	MG/L		0.0050	1.0	1
Chromium	EPA 6010	NA	04/26/99	04/26/99	ND	MG/L		0.010	5.0	1
Lead	EPA 6010	NA	04/26/99	04/26/99	ND	MG/L		0.10	5.0	1
Selenium	EPA 6010	NA	04/26/99	04/26/99	ND	MG/L		0.25	1.0	1
Silver	EPA 6010	NA	04/26/99	04/26/99	ND	MG/L		0.010	5.0	1

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North American Galvanizing
1461 Kinard Ct.
St. Louis, MO 63132

Project: 858.01

Category : TCLP Metals
Matrix : Solid

Client ID: NA

Sample Date : NA
Receipt Date : NA
Report Date : 04/29/99

Quanterra ID : QCBLK198203-1

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Mercury	EPA 7470	NA	04/26/99	04/26/99	ND	MG/L		0.00020	0.20	1

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St. Louis, MO 63132

Project: 858.01

Category : TCLP Metals
Matrix : Solid

Client ID: NA

Sample Date : NA
Receipt Date : NA
Report Date : 04/29/99

Quanterra ID : QCBLK198204-1

Analyte	Method	Extract Date	Prep Date	Analyses Date	Result	Units	Qual.	Detection Limit	Regulatory Level	Dilution
Mercury	EPA 7470	NA	04/26/99	04/26/99	ND	MG/L		0.00020	0.20	1

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North American Galvanizing
1461 Kinard Ct.
St. Louis, MO 63132

Project: 858.01

Category: pH
Method: EPA 9045
Matrix: Solid

Sample Date : 04/14/99
Receipt Date : 04/15/99
Report Date : 04/29/99

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
CAUSTIC SLUDGE	21118-001	pH	C-006	QCBLK198192-1	04/26/99	04/26/99	11.5	PH UNITS			1
CAUSTIC RINSE SLUD	21118-002	pH	C-006	QCBLK198192-1	04/26/99	04/26/99	5.37	PH UNITS			1
REFRACTORY BRICK	21118-003	pH	C-006	QCBLK198192-1	04/26/99	04/26/99	7.40	PH UNITS			1
NA	QCBLK198192-1	pH	C-006	QCBLK198192-1	04/26/99	04/26/99	8.46	PH UNITS			1

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