TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
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University Park, IL 60484
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TestAmerica Job ID: 500-104979-1
Client Project/Site: Ponds and Process Tanks

For:
Central Wire (Techalloy)
6509 Olson Road
Union, Illinois 60180

Attn: Robert Johnson

Sandie Fredrick

Authorized for release by:
12/18/2015 4:10:26 PM

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LINKS

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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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Definitions/Glossary

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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
CFL	Contains Free Liquid
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)

Case Narrative

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Job ID: 500-104979-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-104979-1

Comments
No additional comments.

Receipt
The samples were received on 12/9/2015 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0º C.

Receipt Exceptions
Samples: 1, 4, and 5 had one vial from the set of three broken on arrival.

Sample 5 received with significant headspace in the sample vial(s).

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Client Sample ID: P&T Effluent

Lab Sample ID: 500-104979-1
Date Collected: 12/08/15 13:20
Matrix: Ground Water
Date Received: 12/09/15 09:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			12/12/15 04:01	1
Tetrachloroethene	<1.0		1.0	0.37	ug/L			12/12/15 04:01	1
Trichloroethene	<0.50		0.50	0.16	ug/L			12/12/15 04:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 125*		*12/12/15 04:01*	*1*
4-Bromofluorobenzene (Surr)	*83*		*75 - 120*		*12/12/15 04:01*	*1*
Dibromofluoromethane	*103*		*75 - 120*		*12/12/15 04:01*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*12/12/15 04:01*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.09**	**HF**	0.200	0.200	SU			12/09/15 17:08	1

Client Sample ID: North Pond

Lab Sample ID: 500-104979-2
Date Collected: 12/08/15 13:10
Matrix: Ground Water
Date Received: 12/09/15 09:20

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.50		0.50	0.19	ug/L		12/10/15 15:30	12/11/15 11:28	1
Copper	**3.7**		2.0	0.96	ug/L		12/10/15 15:30	12/11/15 11:28	1
Iron	**50**	**J B**	100	26	ug/L		12/10/15 15:30	12/11/15 11:28	1
Lead	**0.20**	**J**	0.50	0.14	ug/L		12/10/15 15:30	12/11/15 11:28	1
Manganese	<2.5		2.5	0.99	ug/L		12/10/15 15:30	12/11/15 11:28	1
Nickel	**5.6**		2.0	0.53	ug/L		12/10/15 15:30	12/11/15 11:28	1
Selenium	<2.5		2.5	0.83	ug/L		12/10/15 15:30	12/11/15 11:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			12/17/15 14:44	1
pH	**7.60**	**HF**	0.200	0.200	SU			12/09/15 17:08	1

Client Sample ID: South Pond

Lab Sample ID: 500-104979-3
Date Collected: 12/08/15 13:15
Matrix: Ground Water
Date Received: 12/09/15 09:20

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.50		0.50	0.19	ug/L		12/10/15 15:30	12/11/15 11:32	1
Copper	**3.8**		2.0	0.96	ug/L		12/10/15 15:30	12/11/15 11:32	1
Iron	**79**	**J B**	100	26	ug/L		12/10/15 15:30	12/11/15 11:32	1
Lead	**0.14**	**J**	0.50	0.14	ug/L		12/10/15 15:30	12/11/15 11:32	1
Manganese	**11**		2.5	0.99	ug/L		12/10/15 15:30	12/11/15 11:32	1
Nickel	**5.4**		2.0	0.53	ug/L		12/10/15 15:30	12/11/15 11:32	1
Selenium	<2.5		2.5	0.83	ug/L		12/10/15 15:30	12/11/15 11:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			12/17/15 14:46	1
pH	**6.71**	**HF**	0.200	0.200	SU			12/09/15 17:08	1

Client Sample Results

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Client Sample ID: Well No. 1

Date Collected: 12/08/15 13:40
Date Received: 12/09/15 09:20

Lab Sample ID: 500-104979-4
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.46	ug/L			12/12/15 04:29	1
1,1,1-Trichloroethane	**3.8**		1.0	0.38	ug/L			12/12/15 04:29	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			12/12/15 04:29	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			12/12/15 04:29	1
1,1-Dichloroethane	**25**		1.0	0.41	ug/L			12/12/15 04:29	1
1,1-Dichloroethene	**8.4**		1.0	0.39	ug/L			12/12/15 04:29	1
1,1-Dichloropropene	<1.0		1.0	0.30	ug/L			12/12/15 04:29	1
1,2,3-Trichlorobenzene	<1.0		1.0	0.46	ug/L			12/12/15 04:29	1
1,2,3-Trichloropropane	<1.0		1.0	0.41	ug/L			12/12/15 04:29	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			12/12/15 04:29	1
1,2,4-Trimethylbenzene	<1.0		1.0	0.36	ug/L			12/12/15 04:29	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0	2.0	ug/L			12/12/15 04:29	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			12/12/15 04:29	1
1,2-Dichlorobenzene	<1.0		1.0	0.33	ug/L			12/12/15 04:29	1
1,2-Dichloroethane	<1.0		1.0	0.39	ug/L			12/12/15 04:29	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			12/12/15 04:29	1
1,3,5-Trimethylbenzene	<1.0		1.0	0.25	ug/L			12/12/15 04:29	1
1,3-Dichlorobenzene	<1.0		1.0	0.40	ug/L			12/12/15 04:29	1
1,3-Dichloropropane	<1.0		1.0	0.36	ug/L			12/12/15 04:29	1
1,4-Dichlorobenzene	<1.0		1.0	0.36	ug/L			12/12/15 04:29	1
2,2-Dichloropropane	<1.0		1.0	0.44	ug/L			12/12/15 04:29	1
2-Chlorotoluene	<1.0		1.0	0.31	ug/L			12/12/15 04:29	1
2-Hexanone	<5.0		5.0	1.6	ug/L			12/12/15 04:29	1
4-Chlorotoluene	<1.0		1.0	0.35	ug/L			12/12/15 04:29	1
Acetone	<5.0		5.0	1.7	ug/L			12/12/15 04:29	1
Benzene	<0.50		0.50	0.15	ug/L			12/12/15 04:29	1
Bromobenzene	<1.0		1.0	0.36	ug/L			12/12/15 04:29	1
Bromochloromethane	<1.0		1.0	0.43	ug/L			12/12/15 04:29	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			12/12/15 04:29	1
Bromoform	<1.0		1.0	0.48	ug/L			12/12/15 04:29	1
Bromomethane	<2.0		2.0	0.80	ug/L			12/12/15 04:29	1
Carbon disulfide	<2.0		2.0	0.45	ug/L			12/12/15 04:29	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			12/12/15 04:29	1
Chlorobenzene	<1.0		1.0	0.39	ug/L			12/12/15 04:29	1
Chloroethane	<1.0		1.0	0.51	ug/L			12/12/15 04:29	1
Chloroform	<1.0		1.0	0.37	ug/L			12/12/15 04:29	1
Chloromethane	<1.0		1.0	0.32	ug/L			12/12/15 04:29	1
cis-1,2-Dichloroethene	**84**		1.0	0.41	ug/L			12/12/15 04:29	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			12/12/15 04:29	1
Dibromochloromethane	<1.0		1.0	0.49	ug/L			12/12/15 04:29	1
Dibromomethane	<1.0		1.0	0.27	ug/L			12/12/15 04:29	1
Dichlorodifluoromethane	<2.0		2.0	0.67	ug/L			12/12/15 04:29	1
Ethylbenzene	<0.50		0.50	0.18	ug/L			12/12/15 04:29	1
Hexachlorobutadiene	<1.0		1.0	0.45	ug/L			12/12/15 04:29	1
Isopropylbenzene	<1.0		1.0	0.39	ug/L			12/12/15 04:29	1
m&p-Xylene	<1.0		1.0	0.18	ug/L			12/12/15 04:29	1
Methyl Ethyl Ketone	<5.0		5.0	2.1	ug/L			12/12/15 04:29	1
methyl isobutyl ketone	<5.0		5.0	2.2	ug/L			12/12/15 04:29	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			12/12/15 04:29	1

Client Sample Results

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Client Sample ID: Well No. 1

Lab Sample ID: 500-104979-4
Date Collected: 12/08/15 13:40
Matrix: Ground Water
Date Received: 12/09/15 09:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<5.0		5.0	1.6	ug/L			12/12/15 04:29	1
Naphthalene	<1.0		1.0	0.34	ug/L			12/12/15 04:29	1
n-Butylbenzene	<1.0		1.0	0.39	ug/L			12/12/15 04:29	1
N-Propylbenzene	<1.0		1.0	0.41	ug/L			12/12/15 04:29	1
o-Xylene	<0.50		0.50	0.22	ug/L			12/12/15 04:29	1
p-Isopropyltoluene	<1.0		1.0	0.36	ug/L			12/12/15 04:29	1
sec-Butylbenzene	<1.0		1.0	0.40	ug/L			12/12/15 04:29	1
Styrene	<1.0		1.0	0.39	ug/L			12/12/15 04:29	1
tert-Butylbenzene	<1.0		1.0	0.40	ug/L			12/12/15 04:29	1
Tetrachloroethene	**0.69**	**J**	1.0	0.37	ug/L			12/12/15 04:29	1
Toluene	<0.50		0.50	0.15	ug/L			12/12/15 04:29	1
trans-1,2-Dichloroethene	**0.96**	**J**	1.0	0.35	ug/L			12/12/15 04:29	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			12/12/15 04:29	1
Trichloroethene	**7.5**		0.50	0.16	ug/L			12/12/15 04:29	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			12/12/15 04:29	1
Vinyl chloride	<0.50		0.50	0.20	ug/L			12/12/15 04:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 125*		*12/12/15 04:29*	*1*
4-Bromofluorobenzene (Surr)	*82*		*75 - 120*		*12/12/15 04:29*	*1*
Dibromofluoromethane	*105*		*75 - 120*		*12/12/15 04:29*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*12/12/15 04:29*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.26**	**HF**	0.200	0.200	SU			12/09/15 17:08	1

Client Sample ID: Well No. 2

Lab Sample ID: 500-104979-5
Date Collected: 12/08/15 14:00
Matrix: Ground Water
Date Received: 12/09/15 09:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.46	ug/L			12/12/15 04:57	1
1,1,1-Trichloroethane	**28**		1.0	0.38	ug/L			12/12/15 04:57	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			12/12/15 04:57	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			12/12/15 04:57	1
1,1-Dichloroethane	**5.1**		1.0	0.41	ug/L			12/12/15 04:57	1
1,1-Dichloroethene	**2.1**		1.0	0.39	ug/L			12/12/15 04:57	1
1,1-Dichloropropene	<1.0		1.0	0.30	ug/L			12/12/15 04:57	1
1,2,3-Trichlorobenzene	<1.0		1.0	0.46	ug/L			12/12/15 04:57	1
1,2,3-Trichloropropane	<1.0		1.0	0.41	ug/L			12/12/15 04:57	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			12/12/15 04:57	1
1,2,4-Trimethylbenzene	<1.0		1.0	0.36	ug/L			12/12/15 04:57	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0	2.0	ug/L			12/12/15 04:57	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			12/12/15 04:57	1
1,2-Dichlorobenzene	<1.0		1.0	0.33	ug/L			12/12/15 04:57	1
1,2-Dichloroethane	<1.0		1.0	0.39	ug/L			12/12/15 04:57	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			12/12/15 04:57	1
1,3,5-Trimethylbenzene	<1.0		1.0	0.25	ug/L			12/12/15 04:57	1

Client Sample Results

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Client Sample ID: Well No. 2

Date Collected: 12/08/15 14:00
Date Received: 12/09/15 09:20

Lab Sample ID: 500-104979-5
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	<1.0		1.0	0.40	ug/L			12/12/15 04:57	1
1,3-Dichloropropane	<1.0		1.0	0.36	ug/L			12/12/15 04:57	1
1,4-Dichlorobenzene	<1.0		1.0	0.36	ug/L			12/12/15 04:57	1
2,2-Dichloropropane	<1.0		1.0	0.44	ug/L			12/12/15 04:57	1
2-Chlorotoluene	<1.0		1.0	0.31	ug/L			12/12/15 04:57	1
2-Hexanone	<5.0		5.0	1.6	ug/L			12/12/15 04:57	1
4-Chlorotoluene	<1.0		1.0	0.35	ug/L			12/12/15 04:57	1
Acetone	<5.0		5.0	1.7	ug/L			12/12/15 04:57	1
Benzene	<0.50		0.50	0.15	ug/L			12/12/15 04:57	1
Bromobenzene	<1.0		1.0	0.36	ug/L			12/12/15 04:57	1
Bromochloromethane	<1.0		1.0	0.43	ug/L			12/12/15 04:57	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			12/12/15 04:57	1
Bromoform	<1.0		1.0	0.48	ug/L			12/12/15 04:57	1
Bromomethane	<2.0		2.0	0.80	ug/L			12/12/15 04:57	1
Carbon disulfide	<2.0		2.0	0.45	ug/L			12/12/15 04:57	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			12/12/15 04:57	1
Chlorobenzene	<1.0		1.0	0.39	ug/L			12/12/15 04:57	1
Chloroethane	<1.0		1.0	0.51	ug/L			12/12/15 04:57	1
Chloroform	<1.0		1.0	0.37	ug/L			12/12/15 04:57	1
Chloromethane	<1.0		1.0	0.32	ug/L			12/12/15 04:57	1
cis-1,2-Dichloroethene	**11**		1.0	0.41	ug/L			12/12/15 04:57	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			12/12/15 04:57	1
Dibromochloromethane	<1.0		1.0	0.49	ug/L			12/12/15 04:57	1
Dibromomethane	<1.0		1.0	0.27	ug/L			12/12/15 04:57	1
Dichlorodifluoromethane	<2.0		2.0	0.67	ug/L			12/12/15 04:57	1
Ethylbenzene	<0.50		0.50	0.18	ug/L			12/12/15 04:57	1
Hexachlorobutadiene	<1.0		1.0	0.45	ug/L			12/12/15 04:57	1
Isopropylbenzene	<1.0		1.0	0.39	ug/L			12/12/15 04:57	1
m&p-Xylene	<1.0		1.0	0.18	ug/L			12/12/15 04:57	1
Methyl Ethyl Ketone	<5.0		5.0	2.1	ug/L			12/12/15 04:57	1
methyl isobutyl ketone	<5.0		5.0	2.2	ug/L			12/12/15 04:57	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			12/12/15 04:57	1
Methylene Chloride	<5.0		5.0	1.6	ug/L			12/12/15 04:57	1
Naphthalene	<1.0		1.0	0.34	ug/L			12/12/15 04:57	1
n-Butylbenzene	<1.0		1.0	0.39	ug/L			12/12/15 04:57	1
N-Propylbenzene	<1.0		1.0	0.41	ug/L			12/12/15 04:57	1
o-Xylene	<0.50		0.50	0.22	ug/L			12/12/15 04:57	1
p-Isopropyltoluene	<1.0		1.0	0.36	ug/L			12/12/15 04:57	1
sec-Butylbenzene	<1.0		1.0	0.40	ug/L			12/12/15 04:57	1
Styrene	<1.0		1.0	0.39	ug/L			12/12/15 04:57	1
tert-Butylbenzene	<1.0		1.0	0.40	ug/L			12/12/15 04:57	1
Tetrachloroethene	**31**		1.0	0.37	ug/L			12/12/15 04:57	1
Toluene	<0.50		0.50	0.15	ug/L			12/12/15 04:57	1
trans-1,2-Dichloroethene	<1.0		1.0	0.35	ug/L			12/12/15 04:57	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			12/12/15 04:57	1
Trichloroethene	**14**		0.50	0.16	ug/L			12/12/15 04:57	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			12/12/15 04:57	1
Vinyl chloride	<0.50		0.50	0.20	ug/L			12/12/15 04:57	1

Client Sample Results

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Client Sample ID: Well No. 2

Lab Sample ID: 500-104979-5
Matrix: Ground Water

Date Collected: 12/08/15 14:00
Date Received: 12/09/15 09:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		75 - 125		12/12/15 04:57	1
4-Bromofluorobenzene (Surr)	81		75 - 120		12/12/15 04:57	1
Dibromofluoromethane	102		75 - 120		12/12/15 04:57	1
Toluene-d8 (Surr)	99		75 - 120		12/12/15 04:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.29	HF	0.200	0.200	SU			12/09/15 17:08	1

Client Sample ID: Trip Blank

Lab Sample ID: 500-104979-6
Matrix: Water

Date Collected: 12/08/15 00:00
Date Received: 12/09/15 09:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.46	ug/L			12/12/15 05:25	1
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			12/12/15 05:25	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			12/12/15 05:25	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			12/12/15 05:25	1
1,1-Dichloroethane	<1.0		1.0	0.41	ug/L			12/12/15 05:25	1
1,1-Dichloroethene	<1.0		1.0	0.39	ug/L			12/12/15 05:25	1
1,1-Dichloropropene	<1.0		1.0	0.30	ug/L			12/12/15 05:25	1
1,2,3-Trichlorobenzene	<1.0		1.0	0.46	ug/L			12/12/15 05:25	1
1,2,3-Trichloropropane	<1.0		1.0	0.41	ug/L			12/12/15 05:25	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			12/12/15 05:25	1
1,2,4-Trimethylbenzene	<1.0		1.0	0.36	ug/L			12/12/15 05:25	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0	2.0	ug/L			12/12/15 05:25	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			12/12/15 05:25	1
1,2-Dichlorobenzene	<1.0		1.0	0.33	ug/L			12/12/15 05:25	1
1,2-Dichloroethane	<1.0		1.0	0.39	ug/L			12/12/15 05:25	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			12/12/15 05:25	1
1,3,5-Trimethylbenzene	<1.0		1.0	0.25	ug/L			12/12/15 05:25	1
1,3-Dichlorobenzene	<1.0		1.0	0.40	ug/L			12/12/15 05:25	1
1,3-Dichloropropane	<1.0		1.0	0.36	ug/L			12/12/15 05:25	1
1,4-Dichlorobenzene	<1.0		1.0	0.36	ug/L			12/12/15 05:25	1
2,2-Dichloropropane	<1.0		1.0	0.44	ug/L			12/12/15 05:25	1
2-Chlorotoluene	<1.0		1.0	0.31	ug/L			12/12/15 05:25	1
2-Hexanone	<5.0		5.0	1.6	ug/L			12/12/15 05:25	1
4-Chlorotoluene	<1.0		1.0	0.35	ug/L			12/12/15 05:25	1
Acetone	<5.0		5.0	1.7	ug/L			12/12/15 05:25	1
Benzene	<0.50		0.50	0.15	ug/L			12/12/15 05:25	1
Bromobenzene	<1.0		1.0	0.36	ug/L			12/12/15 05:25	1
Bromochloromethane	<1.0		1.0	0.43	ug/L			12/12/15 05:25	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			12/12/15 05:25	1
Bromoform	<1.0		1.0	0.48	ug/L			12/12/15 05:25	1
Bromomethane	<2.0		2.0	0.80	ug/L			12/12/15 05:25	1
Carbon disulfide	<2.0		2.0	0.45	ug/L			12/12/15 05:25	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			12/12/15 05:25	1
Chlorobenzene	<1.0		1.0	0.39	ug/L			12/12/15 05:25	1
Chloroethane	<1.0		1.0	0.51	ug/L			12/12/15 05:25	1

Client Sample Results

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-104979-6

Date Collected: 12/08/15 00:00
Date Received: 12/09/15 09:20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<1.0		1.0	0.37	ug/L			12/12/15 05:25	1
Chloromethane	<1.0		1.0	0.32	ug/L			12/12/15 05:25	1
cis-1,2-Dichloroethene	<1.0		1.0	0.41	ug/L			12/12/15 05:25	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			12/12/15 05:25	1
Dibromochloromethane	<1.0		1.0	0.49	ug/L			12/12/15 05:25	1
Dibromomethane	<1.0		1.0	0.27	ug/L			12/12/15 05:25	1
Dichlorodifluoromethane	<2.0		2.0	0.67	ug/L			12/12/15 05:25	1
Ethylbenzene	<0.50		0.50	0.18	ug/L			12/12/15 05:25	1
Hexachlorobutadiene	<1.0		1.0	0.45	ug/L			12/12/15 05:25	1
Isopropylbenzene	<1.0		1.0	0.39	ug/L			12/12/15 05:25	1
m&p-Xylene	<1.0		1.0	0.18	ug/L			12/12/15 05:25	1
Methyl Ethyl Ketone	<5.0		5.0	2.1	ug/L			12/12/15 05:25	1
methyl isobutyl ketone	<5.0		5.0	2.2	ug/L			12/12/15 05:25	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			12/12/15 05:25	1
Methylene Chloride	<5.0		5.0	1.6	ug/L			12/12/15 05:25	1
Naphthalene	<1.0		1.0	0.34	ug/L			12/12/15 05:25	1
n-Butylbenzene	<1.0		1.0	0.39	ug/L			12/12/15 05:25	1
N-Propylbenzene	<1.0		1.0	0.41	ug/L			12/12/15 05:25	1
o-Xylene	<0.50		0.50	0.22	ug/L			12/12/15 05:25	1
p-Isopropyltoluene	<1.0		1.0	0.36	ug/L			12/12/15 05:25	1
sec-Butylbenzene	<1.0		1.0	0.40	ug/L			12/12/15 05:25	1
Styrene	<1.0		1.0	0.39	ug/L			12/12/15 05:25	1
tert-Butylbenzene	<1.0		1.0	0.40	ug/L			12/12/15 05:25	1
Tetrachloroethene	<1.0		1.0	0.37	ug/L			12/12/15 05:25	1
Toluene	<0.50		0.50	0.15	ug/L			12/12/15 05:25	1
trans-1,2-Dichloroethene	<1.0		1.0	0.35	ug/L			12/12/15 05:25	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			12/12/15 05:25	1
Trichloroethene	<0.50		0.50	0.16	ug/L			12/12/15 05:25	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			12/12/15 05:25	1
Vinyl chloride	<0.50		0.50	0.20	ug/L			12/12/15 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*75 - 125*		*12/12/15 05:25*	*1*
4-Bromofluorobenzene (Surr)	*81*		*75 - 120*		*12/12/15 05:25*	*1*
Dibromofluoromethane	*100*		*75 - 120*		*12/12/15 05:25*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*12/12/15 05:25*	*1*

Lab Chronicle

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Client Sample ID: P&T Effluent — Lab Sample ID: 500-104979-1

Date Collected: 12/08/15 13:20
Date Received: 12/09/15 09:20
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	316105	12/12/15 04:01	EMA	TAL CHI
Total/NA	Analysis	SM 4500 H+ B		1	315782	12/09/15 17:08	SMO	TAL CHI

Client Sample ID: North Pond — Lab Sample ID: 500-104979-2

Date Collected: 12/08/15 13:10
Date Received: 12/09/15 09:20
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			315967	12/10/15 15:30	PJH	TAL CHI
Total Recoverable	Analysis	6020A		1	316086	12/11/15 11:28	FXG	TAL CHI
Total/NA	Analysis	353.2		1	317070	12/17/15 14:44	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 H+ B		1	315782	12/09/15 17:08	SMO	TAL CHI

Client Sample ID: South Pond — Lab Sample ID: 500-104979-3

Date Collected: 12/08/15 13:15
Date Received: 12/09/15 09:20
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			315967	12/10/15 15:30	PJH	TAL CHI
Total Recoverable	Analysis	6020A		1	316086	12/11/15 11:32	FXG	TAL CHI
Total/NA	Analysis	353.2		1	317070	12/17/15 14:46	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 H+ B		1	315782	12/09/15 17:08	SMO	TAL CHI

Client Sample ID: Well No. 1 — Lab Sample ID: 500-104979-4

Date Collected: 12/08/15 13:40
Date Received: 12/09/15 09:20
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	316105	12/12/15 04:29	EMA	TAL CHI
Total/NA	Analysis	SM 4500 H+ B		1	315782	12/09/15 17:08	SMO	TAL CHI

Client Sample ID: Well No. 2 — Lab Sample ID: 500-104979-5

Date Collected: 12/08/15 14:00
Date Received: 12/09/15 09:20
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	316105	12/12/15 04:57	EMA	TAL CHI
Total/NA	Analysis	SM 4500 H+ B		1	315782	12/09/15 17:08	SMO	TAL CHI

Lab Chronicle

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-104979-6

Date Collected: 12/08/15 00:00
Date Received: 12/09/15 09:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	316105	12/12/15 05:25	EMA	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Certification Summary

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-16

Method Summary

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
6020A	Metals (ICP/MS)	SW846	TAL CHI
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL CHI
SM 4500 H+ B	pH	SM	TAL CHI

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Central Wire (Techalloy)
Project/Site: Ponds and Process Tanks

TestAmerica Job ID: 500-104979-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-104979-1	P&T Effluent	Ground Water	12/08/15 13:20	12/09/15 09:20
500-104979-2	North Pond	Ground Water	12/08/15 13:10	12/09/15 09:20
500-104979-3	South Pond	Ground Water	12/08/15 13:15	12/09/15 09:20
500-104979-4	Well No. 1	Ground Water	12/08/15 13:40	12/09/15 09:20
500-104979-5	Well No. 2	Ground Water	12/08/15 14:00	12/09/15 09:20
500-104979-6	Trip Blank	Water	12/08/15 00:00	12/09/15 09:20

Chicago
2417 Bond Street

University Park, IL 60466
phone 708.534.5200 fax 708.534.5363

Chain of Custody Record, 3rd Month of Quarter

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Robert Johnson	Site Contact: Robert Johnson	Date: 12/8/15	COC No: 508133
Central Wire Union Plant	Tel/Fax: 815.923.4919; 815.923.2126	Lab Contact:	Carrier: UPS	1 of 1 COCs
6509 Olson Rd.	Analysis Turnaround Time			Job No. 500-104979
Union, IL 60180	Calendar (C) or Work Days (W)			
(815) 923-2131 Phone	TAT if different from Below			SDG No.
(815) 923-2126 Fax	[X] 2 weeks			
3rd mo. of qtr	[ ] 1 week			
Union Plant	[ ] 2 days			
P O #	[ ] 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs (vials) 1, 2	Metals* (250 ml jars) 1, 4	N + N (500 ml vials) 1, 3	pH 1, 6	Sample Specific Notes:
1	P&T Effluent	12/8	1320	G	GW	3	N	X				
	P&T pH		1320	G	GW	1	N				X	
2	North Pond		1310	G	GW	1	N		X			
	North Pond		1310	G	GW	1	N			X		
	North Pond		1310	G	GW	1	N				X	
3	South Pond		1315	G	GW	1	N		X			
	South Pond		1315	G	GW	1	N			X		
	South Pond		1315	G	GW	1	N				X	
4	Well No. 1		1340	G	GW	3	N	X				
	Well No. 1		1340	G	GW	1	N				X	
5	Well No. 2		1400	G	GW	3	N	X				
	Well No. 2		1400	G	GW	1	N				X	
6	Trip Blank					1						

500-104979 COC

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
[ ] *Non-Hazard* [ ] *Flammable* [ ] *Skin Irritant* *Poison B* [ ] *Unknown* [ ]

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
[ ] *Return To Client* [X] *Disposal By Lab* [ ] *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:
North Pond Metals: Iron (Fe), Lead (Pb), Manganese (Mn), Nickel (Ni), Cadmium (Cd), Nitrates (N), Selenium (Se) & Copper (Cu)
South Pond Metals: Iron (Fe), Lead (Pb), Manganese (Mn), Nickel (Ni), Cadmium (Cd), Nitrates (N), Selenium (Se) & Copper (Cu)

1.0

UPS Ground

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Robert Johnson	CWI	12/8 1415		CWI	12/8/15
	CWI	12/8/15		UPS	12-8-15
				TA-CHI	12/9/15 09:20

Login Sample Receipt Checklist

Client: Central Wire (Techalloy)

Job Number: 500-104979-1

Login Number: 104979
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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	1.0
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.	False	Containers recd broken. Sufficient sample in remaining containers for analysis.
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").	False	Headspace larger than 1/4" in one or more vials, one vial with accpt. headspace
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	