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ANALYTICAL REPORT

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Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-186068-1
Client Project/Site: ITC WW20190525-002-Day23
Revision: 1

For:
Cardno, Inc
970 Wedgewood Drive
Crystal Lake, Illinois 60014

Attn: Ms. Cheryl Hennessy

Authorized for release by:
6/11/2019 7:28:26 PM

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Job ID: 600-186068-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-186068-1

Comments
This report was revised 6-11-19 updating the reporting limits for the 608 analysis performed in TA Houston in regard to dicofol .

Receipt
The sample was received on 5/28/2019 12:23 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

Receipt Exceptions
Method(s) 531.1: One or more containers for the following sample was received broken or leaking: WW20190525-002-Day23 (600-186068-1).

One voa vial 60ml amber received broken: 600-186068-P-1

GC/MS Semi VOA
Method(s) 625: Surrogate recovery for the following sample was outside the upper control limit: WW20190525-002-Day23 (600-186068-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 625: The continuing calibration verification (CCV) associated with batch 180-280766 recovered above the upper control limit for 4-Nitrophenol and N-Nitrosodimethylamine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-598726 and analytical batch 490-599172.

Method(s) 625: Requested RL for Hexachlorophene is at 0.0101 mg/L, the lowest point on the initial calibration is 0.025 mg/L: WW20190525-002-Day23 (600-186068-1)

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

HPLC/IC
Method(s) 531.1: The continuing calibration verification (CCV) associated with batch 680-572768 recovered above the upper control limit for Carbaryl. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 531.1: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 680-572768 recovered outside control limits for the following analytes: Carbaryl. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 531.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 680-572768 were outside control limits for Carbaryl. Sample was a non detect and was reported.

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

GC Semi VOA
Method(s) 608: The continuing calibration verification (CCV) associated with batch 280313 recovered above the upper control limit for PCB-1232. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 608: The continuing calibration verification (CCV) associated with batch 280281 recovered outside acceptance criteria, low biased, for 4,4'-DDT and Methoxychlor. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. Note: All recoveries are within 608.3 limits.

Method(s) 608: Surrogate recovery for the following samples were outside the upper control limit: (LCS 600-266120/2-A) and (LCSD

Job ID: 600-186068-1 (Continued)

Laboratory: Eurofins TestAmerica, Houston (Continued)

600-266120/3-A). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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

Organic Prep
Method(s) 608: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 180-280089.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with method Nonylphenols aqueous in preparation batch 320-299523.

Method(s) 608: Elevated reporting limits are provided for the following sample due to insufficient sample provided for preparation: WW20190525-002-Day23 (600-186068-1).

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

Method Summary

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Method	Method Description	Protocol	Laboratory
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL NSH
EPA 625	Semivolatile Organic Compounds (GC/MS) - Low Levels	EPA	TAL PIT
Organotins/GCMS	Organotins (GC/MS)	TAL SOP	TAL BUR
WS-MS-0010	Nonylphenols	TAL SOP	TAL SAC
608	Organochlorine Pesticides in Water	40CFR136A	TAL HOU
EPA 608	Organochlorine Pesticides/PCBs in Water	40CFR136A	TAL PIT
EPA 608	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL PIT
PCB	Total PCB Calculation	TAL SOP	TAL PIT
531.1	Carbamate Pesticides (HPLC)	EPA	TAL SAV
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUR
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL SAC
608	Liquid-Liquid Extraction (Separatory Funnel)	40CFR136A	TAL HOU
608	Liquid-Liquid Extraction (Separatory Funnel)	40CFR136A	TAL PIT
625	Liquid-Liquid Extraction	40CFR136A	TAL NSH
625	Liquid-Liquid Extraction	40CFR136A	TAL PIT

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

TAL BUR = Eurofins TestAmerica, Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-186068-1	WW20190525-002-Day23	Water	05/25/19 14:00	05/28/19 12:23	

Client Sample Results

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Client Sample ID: WW20190525-002-Day23

Lab Sample ID: 600-186068-1

Date Collected: 05/25/19 14:00
Date Received: 05/28/19 12:23

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorophene	0.00691	U	0.0102	0.00691	mg/L		05/30/19 15:01	06/01/19 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*110*		*10 - 120*	*05/30/19 15:01*	*06/01/19 21:16*	*1*
2-Fluorophenol	*40*		*29 - 120*	*05/30/19 15:01*	*06/01/19 21:16*	*1*
Nitrobenzene-d5	*78*		*27 - 120*	*05/30/19 15:01*	*06/01/19 21:16*	*1*
Phenol-d5	*28*		*10 - 120*	*05/30/19 15:01*	*06/01/19 21:16*	*1*
Terphenyl-d14	*107*		*13 - 120*	*05/30/19 15:01*	*06/01/19 21:16*	*1*
2-Fluorobiphenyl (Surr)	*70*		*10 - 120*	*05/30/19 15:01*	*06/01/19 21:16*	*1*

Method: EPA 625 - Semivolatile Organic Compounds (GC/MS) - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.0000590	U	0.00100	0.0000590	mg/L		05/30/19 10:54	06/06/19 04:07	1
1,2,4,5-Tetrachlorobenzene	0.0000520	U	0.00100	0.0000520	mg/L		05/30/19 10:54	06/06/19 04:07	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0000490	U	0.00100	0.0000490	mg/L		05/30/19 10:54	06/06/19 04:07	1
Methylnaphthalene	0.0000560	U	0.000190	0.0000560	mg/L		05/30/19 10:54	06/06/19 04:07	1
2,2'-oxybis[1-chloropropane]	0.0000580	U	0.000190	0.0000580	mg/L		05/30/19 10:54	06/06/19 04:07	1
2,4,5-Trichlorophenol	0.0000610	U	0.00100	0.0000610	mg/L		05/30/19 10:54	06/06/19 04:07	1
2,4,6-Trichlorophenol	0.0000680	U	0.00100	0.0000680	mg/L		05/30/19 10:54	06/06/19 04:07	1
2,4-Dichlorophenol	0.0000510	U	0.000190	0.0000510	mg/L		05/30/19 10:54	06/06/19 04:07	1
2,4-Dimethylphenol	0.0000410	U	0.00100	0.0000410	mg/L		05/30/19 10:54	06/06/19 04:07	1
2,4-Dinitrophenol	0.00153	U	0.0100	0.00153	mg/L		05/30/19 10:54	06/06/19 04:07	1
2,4-Dinitrotoluene	0.0000510	U	0.00100	0.0000510	mg/L		05/30/19 10:54	06/06/19 04:07	1
2,6-Dinitrotoluene	0.0000600	U	0.00100	0.0000600	mg/L		05/30/19 10:54	06/06/19 04:07	1
2-Chloronaphthalene	0.0000590	U	0.000190	0.0000590	mg/L		05/30/19 10:54	06/06/19 04:07	1
2-Chlorophenol	0.0000640	U	0.00100	0.0000640	mg/L		05/30/19 10:54	06/06/19 04:07	1
2-Methylnaphthalene	0.0000620	U	0.000190	0.0000620	mg/L		05/30/19 10:54	06/06/19 04:07	1
2-Methylphenol	0.000300	U	0.00100	0.000300	mg/L		05/30/19 10:54	06/06/19 04:07	1
2-Nitroaniline	0.000548	U	0.00500	0.000548	mg/L		05/30/19 10:54	06/06/19 04:07	1
2-Nitrophenol	0.0000610	U	0.00100	0.0000610	mg/L		05/30/19 10:54	06/06/19 04:07	1
3,3'-Dichlorobenzidine	0.000583	U	0.00100	0.000583	mg/L		05/30/19 10:54	06/06/19 04:07	1
3-Nitroaniline	0.0000670	U	0.00500	0.0000670	mg/L		05/30/19 10:54	06/06/19 04:07	1
4-Chloro-3-methylphenol	0.0000610	U	0.00100	0.0000610	mg/L		05/30/19 10:54	06/06/19 04:07	1
4-Chloroaniline	0.0000440	U	0.00100	0.0000440	mg/L		05/30/19 10:54	06/06/19 04:07	1
3-Methylphenol + 4-Methylphenol	0.000372	U	0.00100	0.000372	mg/L		05/30/19 10:54	06/06/19 04:07	1
4-Nitroaniline	0.0000580	U	0.00500	0.0000580	mg/L		05/30/19 10:54	06/06/19 04:07	1
4-Nitrophenol	0.000142	U	0.00500	0.000142	mg/L		05/30/19 10:54	06/06/19 04:07	1
Acenaphthene	0.0000650	U	0.000190	0.0000650	mg/L		05/30/19 10:54	06/06/19 04:07	1
Acenaphthylene	0.0000650	U	0.000190	0.0000650	mg/L		05/30/19 10:54	06/06/19 04:07	1
Acetophenone	0.0000620	U	0.00100	0.0000620	mg/L		05/30/19 10:54	06/06/19 04:07	1
Aniline	0.000371	U	0.00100	0.000371	mg/L		05/30/19 10:54	06/06/19 04:07	1
Anthracene	0.0000490	U	0.000190	0.0000490	mg/L		05/30/19 10:54	06/06/19 04:07	1
Atrazine	0.000633	U	0.00100	0.000633	mg/L		05/30/19 10:54	06/06/19 04:07	1
Benzaldehyde	0.000111	U	0.00100	0.000111	mg/L		05/30/19 10:54	06/06/19 04:07	1
Benzidine	0.00913	U	0.0200	0.00913	mg/L		05/30/19 10:54	06/06/19 04:07	1
Benzo[a]anthracene	0.0000750	U	0.000190	0.0000750	mg/L		05/30/19 10:54	06/06/19 04:07	1
Benzo[a]pyrene	0.0000530	U	0.000190	0.0000530	mg/L		05/30/19 10:54	06/06/19 04:07	1
3,4-Benzofluoranthene	0.0000970	U	0.000190	0.0000970	mg/L		05/30/19 10:54	06/06/19 04:07	1
Benzo[k]fluoranthene	0.0000880	U	0.000190	0.0000880	mg/L		05/30/19 10:54	06/06/19 04:07	1

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Client Sample ID: WW20190525-002-Day23

Lab Sample ID: 600-186068-1

Date Collected: 05/25/19 14:00

Matrix: Water

Date Received: 05/28/19 12:23

Method: EPA 625 - Semivolatile Organic Compounds (GC/MS) - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzoic acid	0.000923	U	0.00500	0.000923	mg/L		05/30/19 10:54	06/06/19 04:07	1
Benzyl alcohol	0.000163	U	0.00100	0.000163	mg/L		05/30/19 10:54	06/06/19 04:07	1
Bis(2-chloroethoxy)methane	0.0000670	U	0.00100	0.0000670	mg/L		05/30/19 10:54	06/06/19 04:07	1
Bis(2-chloroethyl)ether	0.0000400	U	0.000190	0.0000400	mg/L		05/30/19 10:54	06/06/19 04:07	1
Bis(2-ethylhexyl) phthalate	0.00623	U	0.0100	0.00623	mg/L		05/30/19 10:54	06/06/19 04:07	1
Butyl benzyl phthalate	0.000462	U	0.00100	0.000462	mg/L		05/30/19 10:54	06/06/19 04:07	1
Caprolactam	0.000470	U	0.00500	0.000470	mg/L		05/30/19 10:54	06/06/19 04:07	1
Carbazole	0.0000510	U	0.000190	0.0000510	mg/L		05/30/19 10:54	06/06/19 04:07	1
Chrysene	0.0000810	U	0.000190	0.0000810	mg/L		05/30/19 10:54	06/06/19 04:07	1
Dibenz(a,h)anthracene	0.0000720	U	0.000190	0.0000720	mg/L		05/30/19 10:54	06/06/19 04:07	1
Dibenzofuran	0.0000730	U	0.00100	0.0000730	mg/L		05/30/19 10:54	06/06/19 04:07	1
Diethyl phthalate	0.000567	U	0.00100	0.000567	mg/L		05/30/19 10:54	06/06/19 04:07	1
Dimethyl phthalate	0.0000560	U	0.00100	0.0000560	mg/L		05/30/19 10:54	06/06/19 04:07	1
4,6-Dinitro-2-methylphenol	0.00147	U	0.00500	0.00147	mg/L		05/30/19 10:54	06/06/19 04:07	1
Di-n-butyl phthalate	0.000743	U	0.00100	0.000743	mg/L		05/30/19 10:54	06/06/19 04:07	1
Fluoranthene	0.0000600	U	0.000190	0.0000600	mg/L		05/30/19 10:54	06/06/19 04:07	1
Fluorene	0.0000690	U	0.000190	0.0000690	mg/L		05/30/19 10:54	06/06/19 04:07	1
Hexachlorobenzene	0.0000560	U	0.000190	0.0000560	mg/L		05/30/19 10:54	06/06/19 04:07	1
Hexachlorobutadiene	0.0000690	U	0.000190	0.0000690	mg/L		05/30/19 10:54	06/06/19 04:07	1
Hexachlorocyclopentadiene	0.000497	U	0.00100	0.000497	mg/L		05/30/19 10:54	06/06/19 04:07	1
Hexachloroethane	0.0000620	U	0.00100	0.0000620	mg/L		05/30/19 10:54	06/06/19 04:07	1
Indeno[1,2,3-cd]pyrene	0.0000850	U	0.000190	0.0000850	mg/L		05/30/19 10:54	06/06/19 04:07	1
Isophorone	0.0000540	U	0.00100	0.0000540	mg/L		05/30/19 10:54	06/06/19 04:07	1
Cresols, Total	0.000774	U	0.00200	0.000774	mg/L		05/30/19 10:54	06/06/19 04:07	1
Naphthalene	0.0000590	U	0.000190	0.0000590	mg/L		05/30/19 10:54	06/06/19 04:07	1
Nitrobenzene	0.000500	U	0.00200	0.000500	mg/L		05/30/19 10:54	06/06/19 04:07	1
N-Nitrosodi-n-butylamine	0.000429	U	0.00100	0.000429	mg/L		05/30/19 10:54	06/06/19 04:07	1
N-Nitrosodiethylamine	0.000291	U	0.00100	0.000291	mg/L		05/30/19 10:54	06/06/19 04:07	1
N-Nitrosodimethylamine	0.0000670	U	0.00100	0.0000670	mg/L		05/30/19 10:54	06/06/19 04:07	1
N-Nitrosodiphenylamine	0.000119	U	0.00100	0.000119	mg/L		05/30/19 10:54	06/06/19 04:07	1
N-Nitrosodi-n-propylamine	0.0000710	U	0.000190	0.0000710	mg/L		05/30/19 10:54	06/06/19 04:07	1
Pentachlorobenzene	0.000356	U	0.00100	0.000356	mg/L		05/30/19 10:54	06/06/19 04:07	1
Pentachlorophenol	0.000847	U	0.00500	0.000847	mg/L		05/30/19 10:54	06/06/19 04:07	1
Phenanthrene	0.0000550	U	0.000190	0.0000550	mg/L		05/30/19 10:54	06/06/19 04:07	1
Phenol	0.000487	U	0.00100	0.000487	mg/L		05/30/19 10:54	06/06/19 04:07	1
Pyrene	0.0000540	U	0.000190	0.0000540	mg/L		05/30/19 10:54	06/06/19 04:07	1
Pyridine	0.000542	U	0.00200	0.000542	mg/L		05/30/19 10:54	06/06/19 04:07	1
n-Decane	0.000277	U	0.00100	0.000277	mg/L		05/30/19 10:54	06/06/19 04:07	1
n-Octadecane	0.000465	U	0.00100	0.000465	mg/L		05/30/19 10:54	06/06/19 04:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*109*	*X*	*45 - 106*	*05/30/19 10:54*	*06/06/19 04:07*	*1*
2-Fluorophenol (Surr)	*76*		*39 - 105*	*05/30/19 10:54*	*06/06/19 04:07*	*1*
2,4,6-Tribromophenol (Surr)	*71*		*39 - 125*	*05/30/19 10:54*	*06/06/19 04:07*	*1*
Nitrobenzene-d5 (Surr)	*80*		*43 - 110*	*05/30/19 10:54*	*06/06/19 04:07*	*1*
Phenol-d5 (Surr)	*71*		*40 - 108*	*05/30/19 10:54*	*06/06/19 04:07*	*1*
Terphenyl-d14 (Surr)	*80*		*45 - 120*	*05/30/19 10:54*	*06/06/19 04:07*	*1*

Client Sample Results

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Client Sample ID: WW20190525-002-Day23

Lab Sample ID: 600-186068-1

Date Collected: 05/25/19 14:00
Date Received: 05/28/19 12:23

Matrix: Water

Method: Organotins/GCMS - Organotins (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tributyltin	0.0459	U	0.0459	0.0459	ug/L		05/30/19 13:45	06/03/19 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tripentyltin	*75*		*15 - 150*	*05/30/19 13:45*	*06/03/19 13:40*	*1*

Method: WS-MS-0010 - Nonylphenols

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nonylphenol	1.62	U	5.06	1.62	ug/L		06/06/19 08:47	06/10/19 14:33	1
Bisphenol-A	0.324	U	1.01	0.324	ug/L		06/06/19 08:47	06/10/19 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-nonylphenol monoethoxylate (Surr)	*67*		*47 - 138*	*06/06/19 08:47*	*06/10/19 14:33*	*1*

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dicofol	0.104	U	0.104	0.104	ug/L		05/30/19 05:35	05/30/19 10:28	1
Mirex	0.0104	U	0.104	0.0104	ug/L		05/30/19 05:35	05/30/19 10:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*32 - 143*	*05/30/19 05:35*	*05/30/19 10:28*	*1*
DCB Decachlorobiphenyl	*143*		*36 - 144*	*05/30/19 05:35*	*05/30/19 10:28*	*1*

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.000000205	U	0.00000129	0.000000205	mg/L		05/29/19 11:17	05/31/19 15:02	1
4,4'-DDE	0.000000107	U	0.00000129	0.000000107	mg/L		05/29/19 11:17	05/31/19 15:02	1
4,4'-DDT	0.000000294	U	0.00000129	0.000000294	mg/L		05/29/19 11:17	05/31/19 15:02	1
Aldrin	0.000000121	U	0.00000129	0.000000121	mg/L		05/29/19 11:17	05/31/19 15:02	1
Hexachlorocyclohexane, alpha-	0.000000119	U	0.00000129	0.000000119	mg/L		05/29/19 11:17	05/31/19 15:02	1
Hexachlorocyclohexane, beta-	0.000000150	U	0.00000129	0.000000150	mg/L		05/29/19 11:17	05/31/19 15:02	1
Dieldrin	0.000000128	U	0.00000129	0.000000128	mg/L		05/29/19 11:17	05/31/19 15:02	1
Endosulfan I	0.000000149	U	0.00000129	0.000000149	mg/L		05/29/19 11:17	05/31/19 15:02	1
Endosulfan II	0.000000116	U	0.00000129	0.000000116	mg/L		05/29/19 11:17	05/31/19 15:02	1
Endosulfan sulfate	0.000000287	U	0.00000129	0.000000287	mg/L		05/29/19 11:17	05/31/19 15:02	1
Endrin	0.000000226	U	0.00000129	0.000000226	mg/L		05/29/19 11:17	05/31/19 15:02	1
Hexachlorocyclohexane, gamma-	0.000000118	U	0.00000129	0.000000118	mg/L		05/29/19 11:17	05/31/19 15:02	1
Heptachlor	0.000000448	U	0.00000129	0.000000448	mg/L		05/29/19 11:17	05/31/19 15:02	1
Heptachlor epoxide	0.000000138	U	0.00000129	0.000000138	mg/L		05/29/19 11:17	05/31/19 15:02	1
Methoxychlor	0.000000341	U	0.00000129	0.000000341	mg/L		05/29/19 11:17	05/31/19 15:02	1

Client Sample Results

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Client Sample ID: WW20190525-002-Day23

Lab Sample ID: 600-186068-1

Date Collected: 05/25/19 14:00
Matrix: Water
Date Received: 05/28/19 12:23

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	0.00000149	U	0.0000129	0.00000149	mg/L		05/29/19 11:17	05/31/19 15:02	1
Toxaphene	0.0000112	U	0.0000990	0.0000112	mg/L		05/29/19 11:17	05/31/19 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*64*		*38 - 146*	*05/29/19 11:17*	*05/31/19 15:02*	*1*
DCB Decachlorobiphenyl (Surr)	*82*		*42 - 150*	*05/29/19 11:17*	*05/31/19 15:02*	*1*

Method: EPA 608 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.00000471	U	0.00000990	0.00000471	mg/L		05/29/19 11:17	05/31/19 16:20	1
PCB-1221	0.00000566	U	0.00000990	0.00000566	mg/L		05/29/19 11:17	05/31/19 16:20	1
PCB-1232	0.00000516	U	0.00000990	0.00000516	mg/L		05/29/19 11:17	05/31/19 16:20	1
PCB-1242	0.00000904	U	0.00000990	0.00000904	mg/L		05/29/19 11:17	05/31/19 16:20	1
PCB-1248	0.00000296	U	0.00000990	0.00000296	mg/L		05/29/19 11:17	05/31/19 16:20	1
PCB-1254	0.00000943	U	0.00000990	0.00000943	mg/L		05/29/19 11:17	05/31/19 16:20	1
PCB-1260	0.00000388	U	0.00000990	0.00000388	mg/L		05/29/19 11:17	05/31/19 16:20	1
PCB-1262	0.00000703	U	0.00000990	0.00000703	mg/L		05/29/19 11:17	05/31/19 16:20	1
PCB-1268	0.00000450	U	0.00000990	0.00000450	mg/L		05/29/19 11:17	05/31/19 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*129*		*38 - 146*	*05/29/19 11:17*	*05/31/19 16:20*	*1*
DCB Decachlorobiphenyl (Surr)	*94*		*42 - 150*	*05/29/19 11:17*	*05/31/19 16:20*	*1*

Method: PCB - Total PCB Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.00000943	U	0.00000990	0.00000943	mg/L			06/03/19 06:23	1

Method: 531.1 - Carbamate Pesticides (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbaryl	0.250	U *	2.50	0.250	ug/L			06/03/19 17:33	1

Definitions/Glossary

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Qualifiers

GC/MS Semi 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.
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

HPLC/IC

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Surrogate Summary

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	TBP (10-120)	2FP (29-120)	NBZ (27-120)	PHL (10-120)	TPHL (13-120)	FBP (10-120)
600-186068-1	WW20190525-002-Day23	110	40	78	28	107	70
LCS 490-598726/4-A	Lab Control Sample	112	52	74	39	108	83
MB 490-598726/1-A	Method Blank	107	52	89	34	110	74

Surrogate Legend

TBP = 2,4,6-Tribromophenol
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl (Surr)

Method: EPA 625 - Semivolatile Organic Compounds (GC/MS) - Low Levels

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	FBP (45-106)	2FP (39-105)	TBP (39-125)	NBZ (43-110)	PHL (40-108)	TPHL (45-120)
600-186068-1	WW20190525-002-Day23	109 X	76	71	80	71	80
LCS 180-280168/2-A	Lab Control Sample	67	77	69	80	75	73
MB 180-280168/1-A	Method Blank	77	89	69	88	82	73

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: Organotins/GCMS - Organotins (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TPTT (15-150)
600-186068-1	WW20190525-002-Day23	75
LCS 200-143572/2-A	Lab Control Sample	69
LCSD 200-143572/3-A	Lab Control Sample Dup	74
MB 200-143572/1-A	Method Blank	77

Surrogate Legend

TPTT = Tripentyltin

Method: WS-MS-0010 - Nonylphenols

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	4NPME (47-138)
600-186068-1	WW20190525-002-Day23	67
LCS 320-299523/2-A	Lab Control Sample	92

Surrogate Summary

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Method: WS-MS-0010 - Nonylphenols (Continued)

Matrix: Water **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	4NPME (47-138)
LCSD 320-299523/3-A	Lab Control Sample Dup	95
MB 320-299523/1-A	Method Blank	57

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

4NPME = 4-nonylphenol monoethoxylate (Surr)

Method: 608 - Organochlorine Pesticides in Water

Matrix: Water **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	TCX1 (32-143)	DCBP1 (36-144)
600-186068-1	WW20190525-002-Day23	94	143
LCS 600-266120/2-A	Lab Control Sample	141	250 X
LCS 600-266120/6-A	Lab Control Sample	143	139
LCSD 600-266120/3-A	Lab Control Sample Dup	81	234 X
LCSD 600-266120/7-A	Lab Control Sample Dup	123	127
MB 600-266120/1-A	Method Blank	88	58

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water

Matrix: Water **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	TCX1 (38-146)	TCX2 (38-146)	DCB1 (42-150)	DCB2 (42-150)
600-186068-1	WW20190525-002-Day23	61	64	75	82
LCS 180-280089/2-A	Lab Control Sample	62	62	76	84
LCSD 180-280089/3-A	Lab Control Sample Dup	63	62	80	85
MB 180-280089/1-A	Method Blank	62	63	75	87

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: EPA 608 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	TCX1 (38-146)	TCX2 (38-146)	DCB1 (42-150)	DCB2 (42-150)
600-186068-1	WW20190525-002-Day23	119	129	85	94
LCS 180-280089/4-A	Lab Control Sample	133	128	94	92
LCSD 180-280089/5-A	Lab Control Sample Dup	119	114	84	86
MB 180-280089/1-A	Method Blank	119	112	82	81

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

TCX = Tetrachloro-m-xylene (Surr)
DCB = DCB Decachlorobiphenyl (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-598726/1-A
Matrix: Water
Analysis Batch: 599172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 598726

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorophene	0.00676	U	0.0100	0.00676	mg/L		05/30/19 15:01	06/01/19 19:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*107*		*10 - 120*	*05/30/19 15:01*	*06/01/19 19:26*	*1*
2-Fluorophenol	*52*		*29 - 120*	*05/30/19 15:01*	*06/01/19 19:26*	*1*
Nitrobenzene-d5	*89*		*27 - 120*	*05/30/19 15:01*	*06/01/19 19:26*	*1*
Phenol-d5	*34*		*10 - 120*	*05/30/19 15:01*	*06/01/19 19:26*	*1*
Terphenyl-d14	*110*		*13 - 120*	*05/30/19 15:01*	*06/01/19 19:26*	*1*
2-Fluorobiphenyl (Surr)	*74*		*10 - 120*	*05/30/19 15:01*	*06/01/19 19:26*	*1*

Lab Sample ID: LCS 490-598726/4-A
Matrix: Water
Analysis Batch: 599172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 598726

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorophene	0.250	0.1811		mg/L		72	27 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*112*		*10 - 120*
2-Fluorophenol	*52*		*29 - 120*
Nitrobenzene-d5	*74*		*27 - 120*
Phenol-d5	*39*		*10 - 120*
Terphenyl-d14	*108*		*13 - 120*
2-Fluorobiphenyl (Surr)	*83*		*10 - 120*

Method: EPA 625 - Semivolatile Organic Compounds (GC/MS) - Low Levels

Lab Sample ID: MB 180-280168/1-A
Matrix: Water
Analysis Batch: 280766

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.0000590	U	0.00100	0.0000590	mg/L		05/30/19 10:54	06/06/19 02:43	1
1,2,4,5-Tetrachlorobenzene	0.0000520	U	0.00100	0.0000520	mg/L		05/30/19 10:54	06/06/19 02:43	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0000490	U	0.00100	0.0000490	mg/L		05/30/19 10:54	06/06/19 02:43	1
Methylnaphthalene	0.0000560	U	0.000190	0.0000560	mg/L		05/30/19 10:54	06/06/19 02:43	1
2,2'-oxybis[1-chloropropane]	0.0000580	U	0.000190	0.0000580	mg/L		05/30/19 10:54	06/06/19 02:43	1
2,4,5-Trichlorophenol	0.0000610	U	0.00100	0.0000610	mg/L		05/30/19 10:54	06/06/19 02:43	1
2,4,6-Trichlorophenol	0.0000680	U	0.00100	0.0000680	mg/L		05/30/19 10:54	06/06/19 02:43	1
2,4-Dichlorophenol	0.0000510	U	0.000190	0.0000510	mg/L		05/30/19 10:54	06/06/19 02:43	1
2,4-Dimethylphenol	0.0000410	U	0.00100	0.0000410	mg/L		05/30/19 10:54	06/06/19 02:43	1
2,4-Dinitrophenol	0.00153	U	0.0100	0.00153	mg/L		05/30/19 10:54	06/06/19 02:43	1
2,4-Dinitrotoluene	0.0000510	U	0.00100	0.0000510	mg/L		05/30/19 10:54	06/06/19 02:43	1
2,6-Dinitrotoluene	0.0000600	U	0.00100	0.0000600	mg/L		05/30/19 10:54	06/06/19 02:43	1
2-Chloronaphthalene	0.0000590	U	0.000190	0.0000590	mg/L		05/30/19 10:54	06/06/19 02:43	1
2-Chlorophenol	0.0000640	U	0.00100	0.0000640	mg/L		05/30/19 10:54	06/06/19 02:43	1
2-Methylnaphthalene	0.0000620	U	0.000190	0.0000620	mg/L		05/30/19 10:54	06/06/19 02:43	1

Method: EPA 625 - Semivolatile Organic Compounds (GC/MS) - Low Levels (Continued)

Lab Sample ID: MB 180-280168/1-A
Matrix: Water
Analysis Batch: 280766

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	0.000300	U	0.00100	0.000300	mg/L		05/30/19 10:54	06/06/19 02:43	1
2-Nitroaniline	0.000548	U	0.00500	0.000548	mg/L		05/30/19 10:54	06/06/19 02:43	1
2-Nitrophenol	0.0000610	U	0.00100	0.0000610	mg/L		05/30/19 10:54	06/06/19 02:43	1
3,3'-Dichlorobenzidine	0.000583	U	0.00100	0.000583	mg/L		05/30/19 10:54	06/06/19 02:43	1
3-Nitroaniline	0.0000670	U	0.00500	0.0000670	mg/L		05/30/19 10:54	06/06/19 02:43	1
4-Chloro-3-methylphenol	0.0000610	U	0.00100	0.0000610	mg/L		05/30/19 10:54	06/06/19 02:43	1
4-Chloroaniline	0.0000440	U	0.00100	0.0000440	mg/L		05/30/19 10:54	06/06/19 02:43	1
3-Methylphenol + 4-Methylphenol	0.000372	U	0.00100	0.000372	mg/L		05/30/19 10:54	06/06/19 02:43	1
4-Nitroaniline	0.0000580	U	0.00500	0.0000580	mg/L		05/30/19 10:54	06/06/19 02:43	1
4-Nitrophenol	0.000142	U	0.00500	0.000142	mg/L		05/30/19 10:54	06/06/19 02:43	1
Acenaphthene	0.0000650	U	0.000190	0.0000650	mg/L		05/30/19 10:54	06/06/19 02:43	1
Acenaphthylene	0.0000650	U	0.000190	0.0000650	mg/L		05/30/19 10:54	06/06/19 02:43	1
Acetophenone	0.0000620	U	0.00100	0.0000620	mg/L		05/30/19 10:54	06/06/19 02:43	1
Aniline	0.000371	U	0.00100	0.000371	mg/L		05/30/19 10:54	06/06/19 02:43	1
Anthracene	0.0000490	U	0.000190	0.0000490	mg/L		05/30/19 10:54	06/06/19 02:43	1
Atrazine	0.000633	U	0.00100	0.000633	mg/L		05/30/19 10:54	06/06/19 02:43	1
Benzaldehyde	0.000111	U	0.00100	0.000111	mg/L		05/30/19 10:54	06/06/19 02:43	1
Benzidine	0.00913	U	0.0200	0.00913	mg/L		05/30/19 10:54	06/06/19 02:43	1
Benzo[a]anthracene	0.0000750	U	0.000190	0.0000750	mg/L		05/30/19 10:54	06/06/19 02:43	1
Benzo[a]pyrene	0.0000530	U	0.000190	0.0000530	mg/L		05/30/19 10:54	06/06/19 02:43	1
3,4-Benzofluoranthene	0.0000970	U	0.000190	0.0000970	mg/L		05/30/19 10:54	06/06/19 02:43	1
Benzo[k]fluoranthene	0.0000880	U	0.000190	0.0000880	mg/L		05/30/19 10:54	06/06/19 02:43	1
Benzoic acid	0.000923	U	0.00500	0.000923	mg/L		05/30/19 10:54	06/06/19 02:43	1
Benzyl alcohol	0.000163	U	0.00100	0.000163	mg/L		05/30/19 10:54	06/06/19 02:43	1
Bis(2-chloroethoxy)methane	0.0000670	U	0.00100	0.0000670	mg/L		05/30/19 10:54	06/06/19 02:43	1
Bis(2-chloroethyl)ether	0.0000400	U	0.000190	0.0000400	mg/L		05/30/19 10:54	06/06/19 02:43	1
Bis(2-ethylhexyl) phthalate	0.00623	U	0.0100	0.00623	mg/L		05/30/19 10:54	06/06/19 02:43	1
Butyl benzyl phthalate	0.000462	U	0.00100	0.000462	mg/L		05/30/19 10:54	06/06/19 02:43	1
Caprolactam	0.000470	U	0.00500	0.000470	mg/L		05/30/19 10:54	06/06/19 02:43	1
Carbazole	0.0000510	U	0.000190	0.0000510	mg/L		05/30/19 10:54	06/06/19 02:43	1
Chrysene	0.0000810	U	0.000190	0.0000810	mg/L		05/30/19 10:54	06/06/19 02:43	1
Dibenz(a,h)anthracene	0.0000720	U	0.000190	0.0000720	mg/L		05/30/19 10:54	06/06/19 02:43	1
Dibenzofuran	0.0000730	U	0.00100	0.0000730	mg/L		05/30/19 10:54	06/06/19 02:43	1
Diethyl phthalate	0.000567	U	0.00100	0.000567	mg/L		05/30/19 10:54	06/06/19 02:43	1
Dimethyl phthalate	0.0000560	U	0.00100	0.0000560	mg/L		05/30/19 10:54	06/06/19 02:43	1
4,6-Dinitro-2-methylphenol	0.00147	U	0.00500	0.00147	mg/L		05/30/19 10:54	06/06/19 02:43	1
Di-n-butyl phthalate	0.000743	U	0.00100	0.000743	mg/L		05/30/19 10:54	06/06/19 02:43	1
Fluoranthene	0.0000600	U	0.000190	0.0000600	mg/L		05/30/19 10:54	06/06/19 02:43	1
Fluorene	0.0000690	U	0.000190	0.0000690	mg/L		05/30/19 10:54	06/06/19 02:43	1
Hexachlorobenzene	0.0000560	U	0.000190	0.0000560	mg/L		05/30/19 10:54	06/06/19 02:43	1
Hexachlorobutadiene	0.0000690	U	0.000190	0.0000690	mg/L		05/30/19 10:54	06/06/19 02:43	1
Hexachlorocyclopentadiene	0.000497	U	0.00100	0.000497	mg/L		05/30/19 10:54	06/06/19 02:43	1
Hexachloroethane	0.0000620	U	0.00100	0.0000620	mg/L		05/30/19 10:54	06/06/19 02:43	1
Indeno[1,2,3-cd]pyrene	0.0000850	U	0.000190	0.0000850	mg/L		05/30/19 10:54	06/06/19 02:43	1
Isophorone	0.0000540	U	0.00100	0.0000540	mg/L		05/30/19 10:54	06/06/19 02:43	1
Cresols, Total	0.000774	U	0.00200	0.000774	mg/L		05/30/19 10:54	06/06/19 02:43	1
Naphthalene	0.0000590	U	0.000190	0.0000590	mg/L		05/30/19 10:54	06/06/19 02:43	1
Nitrobenzene	0.000500	U	0.00200	0.000500	mg/L		05/30/19 10:54	06/06/19 02:43	1
N-Nitrosodi-n-butylamine	0.000429	U	0.00100	0.000429	mg/L		05/30/19 10:54	06/06/19 02:43	1

Method: EPA 625 - Semivolatile Organic Compounds (GC/MS) - Low Levels (Continued)

Lab Sample ID: MB 180-280168/1-A
Matrix: Water
Analysis Batch: 280766

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiethylamine	0.000291	U	0.00100	0.000291	mg/L		05/30/19 10:54	06/06/19 02:43	1
N-Nitrosodimethylamine	0.0000670	U	0.00100	0.0000670	mg/L		05/30/19 10:54	06/06/19 02:43	1
N-Nitrosodiphenylamine	0.000119	U	0.00100	0.000119	mg/L		05/30/19 10:54	06/06/19 02:43	1
N-Nitrosodi-n-propylamine	0.0000710	U	0.000190	0.0000710	mg/L		05/30/19 10:54	06/06/19 02:43	1
Pentachlorobenzene	0.000356	U	0.00100	0.000356	mg/L		05/30/19 10:54	06/06/19 02:43	1
Pentachlorophenol	0.000847	U	0.00500	0.000847	mg/L		05/30/19 10:54	06/06/19 02:43	1
Phenanthrene	0.0000550	U	0.000190	0.0000550	mg/L		05/30/19 10:54	06/06/19 02:43	1
Phenol	0.000487	U	0.00100	0.000487	mg/L		05/30/19 10:54	06/06/19 02:43	1
Pyrene	0.0000540	U	0.000190	0.0000540	mg/L		05/30/19 10:54	06/06/19 02:43	1
Pyridine	0.000542	U	0.00200	0.000542	mg/L		05/30/19 10:54	06/06/19 02:43	1
n-Decane	0.000277	U	0.00100	0.000277	mg/L		05/30/19 10:54	06/06/19 02:43	1
n-Octadecane	0.000465	U	0.00100	0.000465	mg/L		05/30/19 10:54	06/06/19 02:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*45 - 106*	*05/30/19 10:54*	*06/06/19 02:43*	*1*
2-Fluorophenol (Surr)	*89*		*39 - 105*	*05/30/19 10:54*	*06/06/19 02:43*	*1*
2,4,6-Tribromophenol (Surr)	*69*		*39 - 125*	*05/30/19 10:54*	*06/06/19 02:43*	*1*
Nitrobenzene-d5 (Surr)	*88*		*43 - 110*	*05/30/19 10:54*	*06/06/19 02:43*	*1*
Phenol-d5 (Surr)	*82*		*40 - 108*	*05/30/19 10:54*	*06/06/19 02:43*	*1*
Terphenyl-d14 (Surr)	*73*		*45 - 120*	*05/30/19 10:54*	*06/06/19 02:43*	*1*

Lab Sample ID: LCS 180-280168/2-A
Matrix: Water
Analysis Batch: 280766

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	0.0100	0.006454		mg/L		65	49 - 100
1,2,4,5-Tetrachlorobenzene	0.0100	0.006842		mg/L		68	45 - 100
1,2-Diphenylhydrazine(as Azobenzene)	0.0100	0.007459		mg/L		75	46 - 112
Methylnaphthalene	0.0100	0.007048		mg/L		70	47 - 100
2,2'-oxybis[1-chloropropane]	0.0100	0.006487		mg/L		65	36 - 150
2,4,5-Trichlorophenol	0.0100	0.006753		mg/L		68	44 - 101
2,4,6-Trichlorophenol	0.0100	0.007253		mg/L		73	37 - 144
2,4-Dichlorophenol	0.0100	0.007233		mg/L		72	39 - 135
2,4-Dimethylphenol	0.0100	0.007184		mg/L		72	32 - 119
2,4-Dinitrophenol	0.0200	0.01216		mg/L		61	10 - 150
2,4-Dinitrotoluene	0.0100	0.007257		mg/L		73	39 - 139
2,6-Dinitrotoluene	0.0100	0.006859		mg/L		69	50 - 150
2-Chloronaphthalene	0.0100	0.006509		mg/L		65	60 - 118
2-Chlorophenol	0.0100	0.007173		mg/L		72	23 - 134
2-Methylnaphthalene	0.0100	0.006934		mg/L		69	48 - 100
2-Methylphenol	0.0100	0.007323		mg/L		73	49 - 100
2-Nitroaniline	0.0100	0.008184		mg/L		82	44 - 119
2-Nitrophenol	0.0100	0.007435		mg/L		74	29 - 150
3,3'-Dichlorobenzidine	0.0100	0.007009		mg/L		70	10 - 150
3-Nitroaniline	0.0100	0.006973		mg/L		70	52 - 101
4-Chloro-3-methylphenol	0.0100	0.007769		mg/L		78	22 - 147
4-Chloroaniline	0.0100	0.006639		mg/L		66	47 - 100

Method: EPA 625 - Semivolatile Organic Compounds (GC/MS) - Low Levels (Continued)

Lab Sample ID: LCS 180-280168/2-A
Matrix: Water
Analysis Batch: 280766

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3-Methylphenol + 4-Methylphenol	0.0100	0.007367		mg/L		74	48 - 100
4-Nitroaniline	0.0100	0.007147		mg/L		71	49 - 106
4-Nitrophenol	0.0200	0.01871		mg/L		94	10 - 132
Acenaphthene	0.0100	0.006722		mg/L		67	47 - 145
Acenaphthylene	0.0100	0.006813		mg/L		68	33 - 145
Acetophenone	0.0100	0.007048		mg/L		70	40 - 100
Aniline	0.0100	0.006768		mg/L		68	37 - 100
Anthracene	0.0100	0.006888		mg/L		69	27 - 133
Atrazine	0.0100	0.007476		mg/L		75	10 - 102
Benzaldehyde	0.0100	0.001618		mg/L		16	10 - 100
Benzidine	0.0100	0.00913	U	mg/L		24	5 - 100
Benzo[a]anthracene	0.0100	0.007236		mg/L		72	33 - 143
Benzo[a]pyrene	0.0100	0.007289		mg/L		73	17 - 150
3,4-Benzofluoranthene	0.0100	0.006576		mg/L		66	24 - 150
Benzo[k]fluoranthene	0.0100	0.006379		mg/L		64	11 - 150
Benzoic acid	0.0100	0.01062		mg/L		106	10 - 111
Benzyl alcohol	0.0100	0.005525		mg/L		55	39 - 102
Bis(2-chloroethoxy)methane	0.0100	0.007020		mg/L		70	33 - 150
Bis(2-chloroethyl)ether	0.0100	0.006867		mg/L		69	12 - 150
Bis(2-ethylhexyl) phthalate	0.0100	0.007595	J	mg/L		76	10 - 150
Butyl benzyl phthalate	0.0100	0.008194		mg/L		82	10 - 150
Caprolactam	0.0100	0.008248		mg/L		82	42 - 119
Carbazole	0.0100	0.007136		mg/L		71	55 - 101
Chrysene	0.0100	0.006714		mg/L		67	17 - 150
Dibenz(a,h)anthracene	0.0100	0.007524		mg/L		75	10 - 150
Dibenzofuran	0.0100	0.006553		mg/L		66	52 - 100
Diethyl phthalate	0.0100	0.007537		mg/L		75	10 - 114
Dimethyl phthalate	0.0100	0.007194		mg/L		72	10 - 112
4,6-Dinitro-2-methylphenol	0.0200	0.01139		mg/L		57	10 - 150
Di-n-butyl phthalate	0.0100	0.007620		mg/L		76	10 - 118
Fluoranthene	0.0100	0.007625		mg/L		76	26 - 137
Fluorene	0.0100	0.006799		mg/L		68	59 - 121
Hexachlorobenzene	0.0100	0.006754		mg/L		68	10 - 150
Hexachlorobutadiene	0.0100	0.007483		mg/L		75	24 - 116
Hexachlorocyclopentadiene	0.0100	0.006283		mg/L		63	12 - 115
Hexachloroethane	0.0100	0.007260		mg/L		73	40 - 113
Indeno[1,2,3-cd]pyrene	0.0100	0.007633		mg/L		76	10 - 150
Isophorone	0.0100	0.007996		mg/L		80	21 - 150
Cresols, Total	0.0200	0.01469		mg/L		73	49 - 100
Naphthalene	0.0100	0.006789		mg/L		68	21 - 133
Nitrobenzene	0.0100	0.008015		mg/L		80	35 - 150
N-Nitrosodimethylamine	0.0100	0.009459		mg/L		95	38 - 105
N-Nitrosodiphenylamine	0.0100	0.006606		mg/L		66	52 - 103
N-Nitrosodi-n-propylamine	0.0100	0.007739		mg/L		77	10 - 150
Pentachlorophenol	0.0200	0.01251		mg/L		63	14 - 150
Phenanthrene	0.0100	0.006692		mg/L		67	54 - 120
Phenol	0.0100	0.007245		mg/L		72	10 - 112
Pyrene	0.0100	0.006790		mg/L		68	52 - 115
Pyridine	0.0200	0.01711		mg/L		86	19 - 117

Method: EPA 625 - Semivolatile Organic Compounds (GC/MS) - Low Levels (Continued)

Lab Sample ID: LCS 180-280168/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280766 — **Prep Batch: 280168**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
n-Decane			0.0100	0.007031		mg/L		70	24 - 107		
n-Octadecane			0.0100	0.007097		mg/L		71	35 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*45 - 106*
2-Fluorophenol (Surr)	*77*		*39 - 105*
2,4,6-Tribromophenol (Surr)	*69*		*39 - 125*
Nitrobenzene-d5 (Surr)	*80*		*43 - 110*
Phenol-d5 (Surr)	*75*		*40 - 108*
Terphenyl-d14 (Surr)	*73*		*45 - 120*

Method: Organotins/GCMS - Organotins (GC/MS)

Lab Sample ID: MB 200-143572/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 143681 — **Prep Batch: 143572**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tributyltin	0.0450	U	0.0450	0.0450	ug/L		05/30/19 13:45	06/03/19 12:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tripentyltin	*77*		*15 - 150*	*05/30/19 13:45*	*06/03/19 12:57*	*1*

Lab Sample ID: LCS 200-143572/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 143681 — **Prep Batch: 143572**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Tributyltin			0.445	0.4742		ug/L		107	30 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tripentyltin	*69*		*15 - 150*

Lab Sample ID: LCSD 200-143572/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 143681 — **Prep Batch: 143572**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tributyltin			0.445	0.4544		ug/L		102	30 - 150	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tripentyltin	*74*		*15 - 150*

QC Sample Results

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Method: WS-MS-0010 - Nonylphenols

Lab Sample ID: MB 320-299523/1-A
Matrix: Water
Analysis Batch: 300285

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 299523

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nonylphenol	1.60	U	5.00	1.60	ug/L		06/06/19 08:47	06/10/19 11:38	1
Bisphenol-A	0.320	U	1.00	0.320	ug/L		06/06/19 08:47	06/10/19 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-nonylphenol monoethoxylate (Surr)	*57*		*47 - 138*	*06/06/19 08:47*	*06/10/19 11:38*	*1*

Lab Sample ID: LCS 320-299523/2-A
Matrix: Water
Analysis Batch: 300285

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 299523

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nonylphenol	24.0	20.26		ug/L		84	35 - 133
Bisphenol-A	4.80	3.462		ug/L		72	42 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-nonylphenol monoethoxylate (Surr)	*92*		*47 - 138*

Lab Sample ID: LCSD 320-299523/3-A
Matrix: Water
Analysis Batch: 300285

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 299523

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nonylphenol	24.0	20.29		ug/L		85	35 - 133	0	35
Bisphenol-A	4.80	3.498		ug/L		73	42 - 120	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-nonylphenol monoethoxylate (Surr)	*95*		*47 - 138*

Method: 608 - Organochlorine Pesticides in Water

Lab Sample ID: MB 600-266120/1-A
Matrix: Water
Analysis Batch: 266117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 266120

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dicofol	0.100	U	0.100	0.100	ug/L		05/30/19 05:35	05/30/19 08:25	1
Mirex	0.0100	U	0.100	0.0100	ug/L		05/30/19 05:35	05/30/19 08:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*88*		*32 - 143*	*05/30/19 05:35*	*05/30/19 08:25*	*1*
DCB Decachlorobiphenyl	*58*		*36 - 144*	*05/30/19 05:35*	*05/30/19 08:25*	*1*

Method: 608 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCS 600-266120/2-A
Matrix: Water
Analysis Batch: 266117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 266120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	141		32 - 143
DCB Decachlorobiphenyl	250	X	36 - 144

Lab Sample ID: LCS 600-266120/6-A
Matrix: Water
Analysis Batch: 266117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 266120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dicofol	2.00	1.968		ug/L		98	70 - 130
Mirex	2.00	1.715		ug/L		86	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	143		32 - 143
DCB Decachlorobiphenyl	139		36 - 144

Lab Sample ID: LCSD 600-266120/3-A
Matrix: Water
Analysis Batch: 266117

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 266120

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	81		32 - 143
DCB Decachlorobiphenyl	234	X	36 - 144

Lab Sample ID: LCSD 600-266120/7-A
Matrix: Water
Analysis Batch: 266117

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 266120

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dicofol	2.00	1.986		ug/L		99	70 - 130	1	20
Mirex	2.00	1.647		ug/L		82		4	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	123		32 - 143
DCB Decachlorobiphenyl	127		36 - 144

Method: EPA 608 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 180-280089/1-A
Matrix: Water
Analysis Batch: 280313

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280089

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.00000476	U	0.0000100	0.00000476	mg/L		05/29/19 09:40	05/31/19 15:04	1
PCB-1221	0.00000572	U	0.0000100	0.00000572	mg/L		05/29/19 09:40	05/31/19 15:04	1
PCB-1232	0.00000521	U	0.0000100	0.00000521	mg/L		05/29/19 09:40	05/31/19 15:04	1

Method: EPA 608 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: MB 180-280089/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280313 — **Prep Batch: 280089**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	0.00000913	U	0.0000100	0.00000913	mg/L		05/29/19 09:40	05/31/19 15:04	1
PCB-1248	0.00000299	U	0.0000100	0.00000299	mg/L		05/29/19 09:40	05/31/19 15:04	1
PCB-1254	0.00000952	U	0.0000100	0.00000952	mg/L		05/29/19 09:40	05/31/19 15:04	1
PCB-1260	0.00000392	U	0.0000100	0.00000392	mg/L		05/29/19 09:40	05/31/19 15:04	1
PCB-1262	0.00000710	U	0.0000100	0.00000710	mg/L		05/29/19 09:40	05/31/19 15:04	1
PCB-1268	0.00000455	U	0.0000100	0.00000455	mg/L		05/29/19 09:40	05/31/19 15:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*112*		*38 - 146*	*05/29/19 09:40*	*05/31/19 15:04*	*1*
DCB Decachlorobiphenyl (Surr)	*81*		*42 - 150*	*05/29/19 09:40*	*05/31/19 15:04*	*1*

Lab Sample ID: LCS 180-280089/4-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280313 — **Prep Batch: 280089**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.00100	0.001093		mg/L		109	50 - 140
PCB-1260	0.00100	0.0008700		mg/L		87	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*128*		*38 - 146*
DCB Decachlorobiphenyl (Surr)	*92*		*42 - 150*

Lab Sample ID: LCSD 180-280089/5-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280313 — **Prep Batch: 280089**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.00100	0.0009328		mg/L		93	50 - 140	16	35
PCB-1260	0.00100	0.0007565		mg/L		76	10 - 140	14	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*114*		*38 - 146*
DCB Decachlorobiphenyl (Surr)	*86*		*42 - 150*

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water

Lab Sample ID: MB 180-280089/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280281 — **Prep Batch: 280089**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.000000207	U	0.00000130	0.000000207	mg/L		05/29/19 09:40	05/31/19 13:41	1

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water (Continued)

Lab Sample ID: MB 180-280089/1-A
Matrix: Water
Analysis Batch: 280281

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280089

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDE	0.000000108	U	0.00000130	0.000000108	mg/L		05/29/19 09:40	05/31/19 13:41	1
4,4'-DDT	0.000000297	U	0.00000130	0.000000297	mg/L		05/29/19 09:40	05/31/19 13:41	1
Aldrin	0.000000122	U	0.00000130	0.000000122	mg/L		05/29/19 09:40	05/31/19 13:41	1
Hexachlorocyclohexane, alpha-	0.000000120	U	0.00000130	0.000000120	mg/L		05/29/19 09:40	05/31/19 13:41	1
Hexachlorocyclohexane, beta-	0.000000152	U	0.00000130	0.000000152	mg/L		05/29/19 09:40	05/31/19 13:41	1
Dieldrin	0.000000129	U	0.00000130	0.000000129	mg/L		05/29/19 09:40	05/31/19 13:41	1
Endosulfan I	0.000000150	U	0.00000130	0.000000150	mg/L		05/29/19 09:40	05/31/19 13:41	1
Endosulfan II	0.000000117	U	0.00000130	0.000000117	mg/L		05/29/19 09:40	05/31/19 13:41	1
Endosulfan sulfate	0.000000290	U	0.00000130	0.000000290	mg/L		05/29/19 09:40	05/31/19 13:41	1
Endrin	0.000000228	U	0.00000130	0.000000228	mg/L		05/29/19 09:40	05/31/19 13:41	1
Hexachlorocyclohexane, gamma-	0.000000119	U	0.00000130	0.000000119	mg/L		05/29/19 09:40	05/31/19 13:41	1
Heptachlor	0.000000452	U	0.00000130	0.000000452	mg/L		05/29/19 09:40	05/31/19 13:41	1
Heptachlor epoxide	0.000000139	U	0.00000130	0.000000139	mg/L		05/29/19 09:40	05/31/19 13:41	1
Methoxychlor	0.000000344	U	0.00000130	0.000000344	mg/L		05/29/19 09:40	05/31/19 13:41	1
Chlordane (technical)	0.00000150	U	0.0000130	0.00000150	mg/L		05/29/19 09:40	05/31/19 13:41	1
Toxaphene	0.0000113	U	0.000100	0.0000113	mg/L		05/29/19 09:40	05/31/19 13:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*63*		*38 - 146*	*05/29/19 09:40*	*05/31/19 13:41*	*1*
DCB Decachlorobiphenyl (Surr)	*87*		*42 - 150*	*05/29/19 09:40*	*05/31/19 13:41*	*1*

Lab Sample ID: LCS 180-280089/2-A
Matrix: Water
Analysis Batch: 280281

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280089

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.0000250	0.00001503		mg/L		60	31 - 141
4,4'-DDE	0.0000250	0.00001589		mg/L		64	30 - 145
4,4'-DDT	0.0000250	0.00001531		mg/L		61	25 - 150
Aldrin	0.0000250	0.00002108		mg/L		84	42 - 140
Hexachlorocyclohexane, alpha-	0.0000250	0.00001697		mg/L		68	37 - 140
Hexachlorocyclohexane, beta-	0.0000250	0.00001656		mg/L		66	17 - 147
Dieldrin	0.0000250	0.00001779		mg/L		71	36 - 146
Endosulfan I	0.0000250	0.00002099		mg/L		84	45 - 150
Endosulfan II	0.0000250	0.00001948		mg/L		78	10 - 150
Endosulfan sulfate	0.0000250	0.00001476		mg/L		59	26 - 144
Endrin	0.0000250	0.00001824		mg/L		73	30 - 147

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water (Continued)

Lab Sample ID: LCS 180-280089/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280281 — **Prep Batch: 280089**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclohexane, gamma-	0.0000250	0.00001804		mg/L		72	32 - 140
Heptachlor	0.0000250	0.00002096		mg/L		84	34 - 140
Heptachlor epoxide	0.0000250	0.00002103		mg/L		84	37 - 142
Methoxychlor	0.0000250	0.00001582		mg/L		63	42 - 119

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*62*		*38 - 146*
DCB Decachlorobiphenyl (Surr)	*84*		*42 - 150*

Lab Sample ID: LCSD 180-280089/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280281 — **Prep Batch: 280089**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.0000250	0.00001747		mg/L		70	31 - 141	15	35
4,4'-DDE	0.0000250	0.00001781		mg/L		71	30 - 145	11	35
4,4'-DDT	0.0000250	0.00001772		mg/L		71	25 - 150	15	35
Aldrin	0.0000250	0.00002337		mg/L		93	42 - 140	10	35
Hexachlorocyclohexane, alpha-	0.0000250	0.00001884		mg/L		75	37 - 140	10	35
Hexachlorocyclohexane, beta-	0.0000250	0.00001813		mg/L		73	17 - 147	9	35
Dieldrin	0.0000250	0.00001975		mg/L		79	36 - 146	10	35
Endosulfan I	0.0000250	0.00002353		mg/L		94	45 - 150	11	28
Endosulfan II	0.0000250	0.00002121		mg/L		85	10 - 150	9	35
Endosulfan sulfate	0.0000250	0.00001743		mg/L		70	26 - 144	17	35
Endrin	0.0000250	0.00002044		mg/L		82	30 - 147	11	35
Hexachlorocyclohexane, gamma-	0.0000250	0.00001956		mg/L		78	32 - 140	8	35
Heptachlor	0.0000250	0.00002222		mg/L		89	34 - 140	6	35
Heptachlor epoxide	0.0000250	0.00002264		mg/L		91	37 - 142	7	26
Methoxychlor	0.0000250	0.00001793		mg/L		72	42 - 119	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*63*		*38 - 146*
DCB Decachlorobiphenyl (Surr)	*85*		*42 - 150*

Method: 531.1 - Carbamate Pesticides (HPLC)

Lab Sample ID: MB 680-572768/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 572768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbaryl	0.250	U	2.50	0.250	ug/L			06/03/19 14:03	1

Method: 531.1 - Carbamate Pesticides (HPLC) (Continued)

Lab Sample ID: LCS 680-572768/5
Matrix: Water
Analysis Batch: 572768

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Carbaryl			10.0	13.67	*	ug/L		137	80 - 120		

Lab Sample ID: LCSD 680-572768/6
Matrix: Water
Analysis Batch: 572768

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbaryl			10.0	16.70	*	ug/L		167	80 - 120	20	20

QC Association Summary

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

GC/MS Semi VOA

Prep Batch: 143572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	3510C	
MB 200-143572/1-A	Method Blank	Total/NA	Water	3510C	
LCS 200-143572/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 200-143572/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 143681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	Organotins/GCMS	143572
MB 200-143572/1-A	Method Blank	Total/NA	Water	Organotins/GCMS	143572
LCS 200-143572/2-A	Lab Control Sample	Total/NA	Water	Organotins/GCMS	143572
LCSD 200-143572/3-A	Lab Control Sample Dup	Total/NA	Water	Organotins/GCMS	143572

Prep Batch: 280168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	625	
MB 180-280168/1-A	Method Blank	Total/NA	Water	625	
LCS 180-280168/2-A	Lab Control Sample	Total/NA	Water	625	

Analysis Batch: 280766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	EPA 625	280168
MB 180-280168/1-A	Method Blank	Total/NA	Water	EPA 625	280168
LCS 180-280168/2-A	Lab Control Sample	Total/NA	Water	EPA 625	280168

Prep Batch: 299523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	3510C	
MB 320-299523/1-A	Method Blank	Total/NA	Water	3510C	
LCS 320-299523/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 320-299523/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 300285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	WS-MS-0010	299523
MB 320-299523/1-A	Method Blank	Total/NA	Water	WS-MS-0010	299523
LCS 320-299523/2-A	Lab Control Sample	Total/NA	Water	WS-MS-0010	299523
LCSD 320-299523/3-A	Lab Control Sample Dup	Total/NA	Water	WS-MS-0010	299523

Prep Batch: 598726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	625	
MB 490-598726/1-A	Method Blank	Total/NA	Water	625	
LCS 490-598726/4-A	Lab Control Sample	Total/NA	Water	625	

Analysis Batch: 599172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	625	598726
MB 490-598726/1-A	Method Blank	Total/NA	Water	625	598726

GC/MS Semi VOA (Continued)

Analysis Batch: 599172 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-598726/4-A	Lab Control Sample	Total/NA	Water	625	598726

GC Semi VOA

Analysis Batch: 266117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	608	266120
MB 600-266120/1-A	Method Blank	Total/NA	Water	608	266120
LCS 600-266120/2-A	Lab Control Sample	Total/NA	Water	608	266120
LCS 600-266120/6-A	Lab Control Sample	Total/NA	Water	608	266120
LCSD 600-266120/3-A	Lab Control Sample Dup	Total/NA	Water	608	266120
LCSD 600-266120/7-A	Lab Control Sample Dup	Total/NA	Water	608	266120

Prep Batch: 266120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	608	
MB 600-266120/1-A	Method Blank	Total/NA	Water	3510C	
LCS 600-266120/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 600-266120/6-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 600-266120/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 600-266120/7-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 280089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	608	
MB 180-280089/1-A	Method Blank	Total/NA	Water	608	
LCS 180-280089/2-A	Lab Control Sample	Total/NA	Water	608	
LCS 180-280089/4-A	Lab Control Sample	Total/NA	Water	608	
LCSD 180-280089/3-A	Lab Control Sample Dup	Total/NA	Water	608	
LCSD 180-280089/5-A	Lab Control Sample Dup	Total/NA	Water	608	

Analysis Batch: 280281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	EPA 608	280089
MB 180-280089/1-A	Method Blank	Total/NA	Water	EPA 608	280089
LCS 180-280089/2-A	Lab Control Sample	Total/NA	Water	EPA 608	280089
LCSD 180-280089/3-A	Lab Control Sample Dup	Total/NA	Water	EPA 608	280089

Analysis Batch: 280313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	EPA 608	280089
MB 180-280089/1-A	Method Blank	Total/NA	Water	EPA 608	280089
LCS 180-280089/4-A	Lab Control Sample	Total/NA	Water	EPA 608	280089
LCSD 180-280089/5-A	Lab Control Sample Dup	Total/NA	Water	EPA 608	280089

Analysis Batch: 280456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	PCB	

QC Association Summary

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

HPLC/IC

Analysis Batch: 572768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-186068-1	WW20190525-002-Day23	Total/NA	Water	531.1	
MB 680-572768/4	Method Blank	Total/NA	Water	531.1	
LCS 680-572768/5	Lab Control Sample	Total/NA	Water	531.1	
LCSD 680-572768/6	Lab Control Sample Dup	Total/NA	Water	531.1	

Lab Chronicle

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Client Sample ID: WW20190525-002-Day23

Date Collected: 05/25/19 14:00
Date Received: 05/28/19 12:23

Lab Sample ID: 600-186068-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	625			978.9 mL	1 mL	598726	05/30/19 15:01	KWS	TAL NSH
Total/NA	Analysis	625		1			599172	06/01/19 21:16	T1C	TAL NSH
Total/NA	Prep	625			1000 mL	1.0 mL	280168	05/30/19 10:54	BJT	TAL PIT
Total/NA	Analysis	EPA 625		1	1 mL	1 mL	280766	06/06/19 04:07	VVP	TAL PIT
Total/NA	Prep	3510C			980 mL	5 mL	143572	05/30/19 13:45	CSB	TAL BUR
Total/NA	Analysis	Organotins/GCMS		1			143681	06/03/19 13:40	DJB	TAL BUR
Total/NA	Prep	3510C			988 mL	.5 mL	299523	06/06/19 08:47	SJC	TAL SAC
Total/NA	Analysis	WS-MS-0010		1			300285	06/10/19 14:33	M1A	TAL SAC
Total/NA	Prep	608			960 mL	10.0 mL	266120	05/30/19 05:35	LER	TAL HOU
Total/NA	Analysis	608		1			266117	05/30/19 10:28	MJT	TAL HOU
Total/NA	Prep	608			1010 mL	1.0 mL	280089	05/29/19 11:17	CBY	TAL PIT
Total/NA	Analysis	EPA 608		1			280313	05/31/19 16:20	DFE	TAL PIT
Total/NA	Prep	608			1010 mL	1.0 mL	280089	05/29/19 11:17	CBY	TAL PIT
Total/NA	Analysis	EPA 608		1			280281	05/31/19 15:02	DFE	TAL PIT
Total/NA	Analysis	PCB		1			280456	06/03/19 06:23	JMO	TAL PIT
Total/NA	Analysis	531.1		1	1 mL	1 mL	572768	06/03/19 17:33	CJM	TAL SAV

Laboratory References:

TAL BUR = Eurofins TestAmerica, Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990
TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444
TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177
TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600
TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Texas	NELAP	6	T104704223-18-23	10-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
608	608	Water	Dicofol
608	608	Water	Mirex

Laboratory: Eurofins TestAmerica, Burlington

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

Authority	Program	EPA Region	Identification Number	Expiration Date
ANAB	DoD		L2336	02-25-20
Connecticut	State Program	1	PH-0751	09-30-19
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-01-20
Florida	NELAP	4	E87467	06-30-19 *
Minnesota	NELAP	5	050-999-436	12-31-19
New Hampshire	NELAP	1	2006	12-18-19
New Jersey	NELAP	2	VT972	06-30-19 *
New York	NELAP	2	10391	04-01-20
Pennsylvania	NELAP	3	68-00489	04-30-20
Rhode Island	State Program	1	LAO00298	12-30-19
US Fish & Wildlife	Federal		LE-058448-0	07-31-19
USDA	Federal		P330-11-00093	07-24-20
Vermont	State Program	1	VT-4000	12-31-19
Virginia	NELAP	3	460209	12-14-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Laboratory: Eurofins TestAmerica, Nashville

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-20
Arkansas DEQ	State Program	6	88-0737	04-25-20
California	State Program	9	2938	06-30-19
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-19
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-19
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-20
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-19
Mississippi	State Program	4	N/A	06-30-19
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-19
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-20
North Carolina (WW/SW)	State Program	4	387	12-31-19
North Dakota	State Program	8	R-146	06-30-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19 *
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-19
South Carolina	State Program	4	84009 (001)	02-28-19 *
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	04-10-20
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-20
Wisconsin	State Program	5	998020430	08-31-19
Wyoming (UST)	A2LA	8	453.07	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Cardno, Inc
Project/Site: ITC WW20190525-002-Day23

Job ID: 600-186068-1

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State Program	9	2891	04-30-20
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Kentucky (DW)	Kentucky UST	4	162013	04-30-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-20
New Jersey	NELAP	2	PA005	06-30-19
New York	NELAP	2	11182	03-31-20
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	02-06-20
Pennsylvania	NELAP	3	02-00416	04-30-20
South Carolina	State Program	4	89014	04-30-19 *
Texas	NELAP	6	T104704528-15-2	03-31-20
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19 *
Virginia	NELAP	3	460189	09-14-19
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State Program	5	998027800	08-31-19

Laboratory: Eurofins TestAmerica, Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Texas	NELAP	6	T104704399	05-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
WS-MS-0010	3510C	Water	Bisphenol-A
WS-MS-0010	3510C	Water	Nonylphenol

Laboratory: Eurofins TestAmerica, Savannah

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Texas	NELAP	6	T104704185-19-12	11-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
531.1		Water	Carbaryl

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: C. Pilla	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-68698-18746.1
Client Contact: Ms. Cheryl Hennessy	Phone:	E-Mail: dean.joiner@testamericainc.com		Page: Page 1 of 1
Company: Cardno, Inc				Job #:
Address: 970 Wedgewood Drive	Due Date Requested:			
City: Crystal Lake	TAT Requested (days): ~~5~~ WD TAT Level 3e 2			
State, Zip: IL, 60014				
Phone:	PO #: Purchase Order Requested			
Email: cheryl.randle@cardno.com	WO #:			
Project Name: ITC Deer Park Water Samples - Full List	Project #: 60010840 Analytical Grp: Active List 2019			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	531.1 - Carbaryl	608_Pest - Mirex/Dicofol (Houston)	Nonylphenols - (MOD) Project List	608, 608_PCB, - Pesticides/PCBs - (Pittsburgh)	625 - Hexachlorphene (Nashville)	Organotins_GCMS - (MOD) TBT Only	625_LL - Custom 625 Semivolatile List (Pittsburgh)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				VR	N	S	N	N	N	N		
WW-20190525-002- Day23	5/25/19	1400	C	Water	N	N	X	X	X	X	X	X	X	~~15~~ 16	

600-186068 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify) III

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/28/19 1130	Cardno			
	5/28/19 1130	SHO			
	5/28/19 ~~1214~~ 1223			5/28/19 1223	TA

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

TestAmerica Houston

Loc: 600
186058

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Date/Time Received: '19 MAY 28 12:23

JOB NUMBER: _____

CLIENT: Carano

UNPACKED BY: YR

CARRIER/DRIVER: PC

Custody Seal Present: ☐ YES ☑ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	Y / N	Y / N	3.8	0706	-0.2	3.6
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

5/28/19

Samples received on ice? ☑ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☑ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓	

COMMENTS:

5/28/19

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: C. Pilla	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-68698-18746.1
Client Contact: Ms. Cheryl Hennessy	Phone:	E-Mail: dean.joiner@testamericainc.com		Page: Page 1 of 1
Company: Cardno, Inc				Job #:
Address: 970 Wedgewood Drive	Due Date Requested:			
City: Crystal Lake	TAT Requested (days): ~~8~~ WD TAT Level 3e 2			
State, Zip: IL, 60014				
Phone:	PO #: Purchase Order Requested			
Email: cheryl.randle@cardno.com	WO #:			
Project Name: ITC Deer Park Water Samples - Full List	Project #: 60010840 Analytical Grp: Active List 2019			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	531.1 - Carbaryl	608_Pest - Mirex/Dicofol (Houston)	Nonylphenols - (MOD) Project List	608, 608_PCB, - Pesticides/PCBs - (Pittsburgh)	625 - Hexachlorphene (Nashville)	Organotins_GCMS - (MOD) TBT Only	625_LL - Custom 625 Semivolatile List (Pittsburgh)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	VR	N	S	N	N	N	N	X	
WW-20190525-002-Day23	5/25/19	1400	C	Water	N	N	X	X	X	X	X	X	X	16	

600-186068 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify) III

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/28/19 1130	Cardno			
	5/28/19 1130	S/L2			
	5/28/19 RTY 1223			5/28/19 1223	TA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

TestAmerica Houston

Loc: 600
186058

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Date/Time Received: 19 MAY 28 12:23

JOB NUMBER: _____ CLIENT: Cardno

UNPACKED BY: YR CARRIER/DRIVER: PC

Custody Seal Present: ☐ YES ☑ NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	Y / N	Y / N	3.8	0706	-0.2	3.6
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

YR 5/28/19

Samples received on ice? ☑ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☑ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓	

COMMENTS:

YR 5/28/19

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone: 713-690-4444 Fax: 713-690-5646

Chain of Custody Record

600-186068 Chain of Custody

Environment Testing TestAmerica

83.1

Page 1 of 1

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Joiner, Dean A	
Client Contact: Shipping/Receiving	Phone:	E-Mail: dean.joiner@testamericainc.com	State of Origin: Texas
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas	Job #: 600-186068-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 5/30/2019		
City: Pittsburgh	TAT Requested (days):		
State, Zip: PA, 15238			
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:		
Email:	WO #:		
Project Name: ITC Deer Park Water Samples	Project #: 60010840		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	608/608_Prep (MOD) Copy Analytes	625_LL/625_LL_Prep (MOD) Special List	608_PCB/608_Prep_PCB (MOD) Priority Pollutant PCB's	Total_PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
WW20190525-002-Day23 (600-186068-1)	5/25/19	14:00 Central		Water			X	X	X	X	4	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:		Time:	Method of Shipment:	
Relinquished by:	Date/Time: 5/28 1600	Company: TA	Received by:	Date/Time: 5/29/19 930	Company: TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 01/16/2019

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone: 713-690-4444 Fax: 713-690-5646

Chain of Custody Record

600-186068 Chain of Custody

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Joiner, Dean A	COC No: 600-39781.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: dean.joiner@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas	Job #: 600-186068-1
Address: 30 Community Drive, Suite 11,	Due Date Requested: 5/30/2019		
City: South Burlington	TAT Requested (days):		
State, Zip: VT, 05403			
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:		
Email:	WO #:		
Project Name: ITC Deer Park Water Samples	Project #: 60010840		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Organotins_GCMS/3510C (MOD) TBT Only	Special Instructions/Note:
			Preservation Code:			
WW20190525-002-Day23 (600-186068-1)	5/25/19	14:00 Central		Water	X	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:	Method of Shipment:	
Relinquished by:	Date/Time: 0128 1600	Company: TA	Received by:	Date/Time: 5/29/19 10:35	Company: TA Bu 1	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 1.9			

Ver: 01/16/2019

ORIGIN ID:LKSA (713) 358-2413
SAMPLE RECEIVING
TESTAMERICA INC
6310 ROTHWAY ST

HOUSTON, TX 77040
UNITED STATES US

SHIP DATE: 28MAY19
ACTWGT: 10.00 LB MAN
CAD: 0758523/CAFE3211

BILL RECIPIENT

TO SHIPPING/RECEIVING
TESTAMERICA LABORATORIES, INC.
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990 REF: 8600-68821
PO: YES

FedEx Express

TRK# 0201 4840 2906 3166

WED - 29 MAY 3:00P
STANDARD OVERNIGHT

NC BTVA

05403
VT-US BTV

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone: 713-690-4444 Fax: 713-690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-39784.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: dean.joiner@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 600-186068-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 5/30/2019			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: ITC Deer Park Water Samples	Project #: 60010840			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Nonylphenols/3510C_28Day (MOD) Project List	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
WW20190525-002-Day23 (600-186068-1)	5/25/19	14:00 Central		Water			X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by: [signature]	Date/Time: 5/28 1600	Company: TTI	Received by: [signature]	Date/Time: 5/29/19 940	Company: EA-SAC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 3.2		

Ver: 01/16/2019

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-186068 Chain of Custody

Cooler Received/Opened On 5/29/2019 @ 9:45

Time Samples Removed From Cooler 11:46 Time Samples Placed In Storage 11:49 (2 Hour Window)

1. Tracking # 3177 (last 4 digits, FedEx) Courier: Fedex

   IR Gun ID 31470366 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 3.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) ACE

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (intial) ACE

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) ACE

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) ACE

I certify that I attached a label with the unique LIMS number to each container (intial) ACE

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone: 713-690-4444 Fax: 713-690-5646

Chain of Custody Record

600-186068

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Joiner, Dean A	COC No: 600-39782.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: dean.joiner@testamericainc.com Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Texas	Job #: 600-186068-1
Address: 2960 Foster Creighton Drive,	Due Date Requested: 5/30/2019		
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: ITC Deer Park Water Samples	Project #: 60010840		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	625/625_Prep (MOD) Custom 625 Semivolatile List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
WW20190525-002-Day23 (600-186068-1)	5/25/19	14:00 Central		Water			X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 5/28 1100	Company TA	Received by:	Date/Time: 5/29/19 9:45	Company TA-MAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 3.5		

Ver: 01/16/2019

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone: 713-690-4444 Fax: 713-690-5646

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-39785.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: dean.joiner@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 600-186068-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 5/30/2019			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: ITC Deer Park Water Samples	Project #: 60010840			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	531.1/ Carbaryl												Total Number of containers	Special Instructions/Note:
			Preservation Code:																	
WW20190525-002-Day23 (600-186068-1)	5/25/19	14:00 Central		Water			X												2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: [signature]	Date/Time: 5/28 1100	Company: TA	Received by: [signature]	Date/Time: 5-29-19 0925	Company: TASAV
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.2/2.3

Ver: 01/16/2019

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600-186068 Field Sheet

Job:__

Tracking # 4840 2906 3096

SO / PO / FO / 2-Day / Ground / UPS / Courier / GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Notes:

Therm. ID: HACCP Corr. Factor: –

Ice ✓ Wet ✓ Gel ____ Other ____

Cooler Custody Seal: –

Sample Custody Seal: –

Cooler ID: –

Temp Observed: 3.2°C Corrected: 3.2°C

From: Temp Blank ☐ Sample ☑

NCM Filed: Yes ☐ No ☐

	Yes	No	NA
Perchlorate has headspace?	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
CoC is complete w/o discrepancies?	☑	☐	☐
Samples received within holding time?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Cooler compromised/tampered with?	☐	☑	☐
Samples compromised/tampered with?	☐	☑	☐
Samples w/o discrepancies?	☑	☐	☐
Sample containers have legible labels?	☑	☐	☐
Containers are not broken or leaking?	☑	☐	☐
Sample date/times are provided.	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐
Sample temp OK?	☑	☐	☐
Sample out of temp?	☐	☑	☐

Initials: MAN Date: 5/29/19

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

W19C

Q:\DOCUMENT-MANAGEMENT\FORMS\QA-812 SAMPLE RECEIVING NOTES.DOC QA-812 BWD 05/02/2019

Login Sample Receipt Checklist

Client: Cardno, Inc

Job Number: 600-186068-1

Login Number: 186068
List Number: 1
Creator: Taylor, Jacquelyn R

List Source: Eurofins TestAmerica, Houston

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	3.6
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 (excluding tests with immediate HTs)	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	Check done at department level as required.

Login Sample Receipt Checklist

Client: Cardno, Inc

Job Number: 600-186068-1

Login Number: 186068
List Number: 4
Creator: McNabb, Robert W

List Source: Eurofins TestAmerica, Burlington
List Creation: 05/29/19 11:04 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
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	1.9ºC
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?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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.	N/A	
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	

Login Sample Receipt Checklist

Client: Cardno, Inc

Job Number: 600-186068-1

Login Number: 186068
List Number: 2
Creator: Say, Thomas C

List Source: Eurofins TestAmerica, Pittsburgh
List Creation: 05/29/19 10:26 AM

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	
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 (excluding tests with immediate HTs)	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	

Login Sample Receipt Checklist

Client: Cardno, Inc

Job Number: 600-186068-1

Login Number: 186068
List Number: 6
Creator: Her, David A

List Source: Eurofins TestAmerica, Sacramento
List Creation: 05/29/19 02:26 PM

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.	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	3.2c
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?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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.	N/A	
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	

Login Sample Receipt Checklist

Client: Cardno, Inc

Job Number: 600-186068-1

Login Number: 186068
List Number: 3
Creator: Nobles, Terry G

List Source: Eurofins TestAmerica, Savannah
List Creation: 05/29/19 10:35 AM

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.	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	
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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Container received broken. No volume could be salvaged for analysis.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
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	