



Pace Analytical Services, Inc.
723 Kasota Ave. SE
Minneapolis, MN 55414

Phone: 612.656.1100
Fax: 612.656.1181

www.pacelabs.com

LABORATORY ANALYSIS REPORT

DATE: 2010/05/11
CLIENT: Pionetics Corporation
151H Old County Road
San Carlos, CA 94070

PAGE: 1 of 7
PROJECT: 543
COLLECTED BY: AB
PROJECT REC'D: 2010-03-04
PROJECT DESC: Linx 140-120V

CONTACT: Eric Nyberg

Pace Analyticals Product Testing Division received 2 Linx 140-120V (s) for the analysis presented in the following report.

All data reported is associated with quality control that met method, EPA, NSF/ANSI or internal laboratory specification. Any exceptions are noted in a footnote or narrative format.

Pace Analytical Services, Inc. appreciates the opportunity to provide you with this product testing service. We value your feedback, would you please take a few minutes to access our customer satisfaction survey at: <http://www.pacelabs.com/my-account/customer-survey.html> . If you have any questions or comments regarding this report, please feel free to contact us.

Sincerely,

A handwritten signature in black ink that reads "Ashley Batten". The signature is written in a cursive, flowing style.

Enclosure



ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005962		Description: Influent			Volume: 10 Unit Volume	
<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	56.40 ²³	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Calcium (wc)	38.4	mg/L	0.10	EPA 200.8	2010-04-27	2010-04-28
Chlorine (wc)	0.36	mg/L	0.01	SM4500	2010-04-27	2010-04-27
Conductivity	699	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Fluoride	0.86	mg/L	0.10	SM 4500-F	2010-04-27	2010-04-28
Magnesium (wc)	12.1	mg/L	0.01	EPA 200.8	2010-04-27	2010-04-28
Nitrate as Nitrogen (wc)	1.4 ²²	mg/L	0.10	SM 4500-NO3-H	2010-04-27	2010-05-05
pH (wc)	6.61	(None)	NA	EPA 150.1	2010-04-27	2010-04-27
Phosphorus (wc)	0.07 ²²	mg/L	0.05	SM 4500-P	2010-04-27	2010-04-30
Pressure (psi)	60	psi	NA	(None)	2010-04-27	2010-04-27
Silicon (wc)	9.3	mg/L	0.13	EPA 200.8	2010-04-27	2010-04-28
Temperature (wc)	22.3	°C	NA	EPA 150.1	2010-04-27	2010-04-27
Turbidity (wc)	<1.0	NTU	1.0	EPA 180.1	2010-04-27	2010-04-27

ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005968		Description: Linx 140-120V #3			Volume: 10 Unit Volume	
<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	<0.50	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Arsenic (V) % Red	>99	%	NA	EPA 200.8	2010-04-27	2010-04-30
Conductivity	9	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Conductivity % Red	99	%	NA	EPA 120.1	2010-04-27	2010-04-30
Flow Rate	0.451	GPM	NA	(None)	2010-04-27	2010-04-27



ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005969	Description: Linx 140-120V #4	Volume: 10 Unit Volume
-----------------------	--------------------------------------	-------------------------------

<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	<0.50	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Arsenic (V) % Red	>99	%	NA	EPA 200.8	2010-04-27	2010-04-30
Conductivity	6	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Conductivity % Red	>99	%	NA	EPA 120.1	2010-04-27	2010-04-30
Flow Rate	0.445	GPM	NA	(None)	2010-04-27	2010-04-27

ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005970	Description: Linx 140-120V #3	Volume: 2.8 Liters
-----------------------	--------------------------------------	---------------------------

<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	2.00	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Arsenic (V) % Red	96.50	%	NA	EPA 200.8	2010-04-27	2010-04-30
Conductivity	34	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Conductivity % Red	95	%	NA	EPA 120.1	2010-04-27	2010-04-30
Flow Rate	0.451	GPM	NA	(None)	2010-04-27	2010-04-27

ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005971	Description: Linx 140-120V #4	Volume: 2.8 Liters
-----------------------	--------------------------------------	---------------------------

<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	2.70	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Arsenic (V) % Red	95.20	%	NA	EPA 200.8	2010-04-27	2010-04-30
Conductivity	26	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Conductivity % Red	96	%	NA	EPA 120.1	2010-04-27	2010-04-30
Flow Rate	0.445	GPM	NA	(None)	2010-04-27	2010-04-27



ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005972	Description: Linx 140-120V #3	Volume: 5.7 Liters
-----------------------	--------------------------------------	---------------------------

<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	3.10	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Arsenic (V) % Red	94.50	%	NA	EPA 200.8	2010-04-27	2010-04-30
Conductivity	40	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Conductivity % Red	94	%	NA	EPA 120.1	2010-04-27	2010-04-30
Flow Rate	0.451	GPM	NA	(None)	2010-04-27	2010-04-27

ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005973	Description: Linx 140-120V #4	Volume: 5.7 Liters
-----------------------	--------------------------------------	---------------------------

<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	3.80	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Arsenic (V) % Red	93.30	%	NA	EPA 200.8	2010-04-27	2010-04-30
Conductivity	37	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Conductivity % Red	95	%	NA	EPA 120.1	2010-04-27	2010-04-30
Flow Rate	0.445	GPM	NA	(None)	2010-04-27	2010-04-27

ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005974	Description: Linx 140-120V #3	Volume: 8.5 Liters
-----------------------	--------------------------------------	---------------------------

<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	3.40	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Arsenic (V) % Red	94.00	%	NA	EPA 200.8	2010-04-27	2010-04-30
Conductivity	41	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Conductivity % Red	94	%	NA	EPA 120.1	2010-04-27	2010-04-30
Flow Rate	0.451	GPM	NA	(None)	2010-04-27	2010-04-27



ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005975	Description: Linx 140-120V #4	Volume: 8.5 Liters
-----------------------	--------------------------------------	---------------------------

<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	4.10	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Arsenic (V) % Red	92.70	%	NA	EPA 200.8	2010-04-27	2010-04-30
Conductivity	39	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Conductivity % Red	94	%	NA	EPA 120.1	2010-04-27	2010-04-30
Flow Rate	0.445	GPM	NA	(None)	2010-04-27	2010-04-27

ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005976	Description: Linx 140-120V #3	Volume: 11.4 Liters
-----------------------	--------------------------------------	----------------------------

<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	3.40	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Arsenic (V) % Red	94.00	%	NA	EPA 200.8	2010-04-27	2010-04-30
Conductivity	43	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Conductivity % Red	94	%	NA	EPA 120.1	2010-04-27	2010-04-30
Flow Rate	0.451	GPM	NA	(None)	2010-04-27	2010-04-27

ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005977	Description: Linx 140-120V #4	Volume: 11.4 Liters
-----------------------	--------------------------------------	----------------------------

<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	4.10	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Arsenic (V) % Red	92.70	%	NA	EPA 200.8	2010-04-27	2010-04-30
Conductivity	39	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Conductivity % Red	94	%	NA	EPA 120.1	2010-04-27	2010-04-30
Flow Rate	0.445	GPM	NA	(None)	2010-04-27	2010-04-27



Pace Analytical Services, Inc.
723 Kasota Ave. SE
Minneapolis, MN 55414

Phone: 612.656.1100
Fax: 612.656.1181

www.pacelabs.com

LABORATORY ANALYSIS REPORT

PROJECT: 543

PAGE: 6 of 7

ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005978	Description: Linx 140-120V #3	Volume: 13.6 Liters
-----------------------	--------------------------------------	----------------------------

<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	3.70	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Arsenic (V) % Red	93.40	%	NA	EPA 200.8	2010-04-27	2010-04-30
Conductivity	44	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Conductivity % Red	94	%	NA	EPA 120.1	2010-04-27	2010-04-30
Flow Rate	0.451	GPM	NA	(None)	2010-04-27	2010-04-27

ANSI/NSF 53-2009 Low pH Arsenic V Reduction

Sample: 005979	Description: Linx 140-120V #4	Volume: 13.6 Liters
-----------------------	--------------------------------------	----------------------------

<u>Compound</u>	<u>Results</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Method</u>	<u>Date Collected</u>	<u>Date Analyzed</u>
Arsenic (V)	4.10	ug/L	0.50	EPA 200.8	2010-04-27	2010-04-28
Arsenic (V) % Red	92.70	%	NA	EPA 200.8	2010-04-27	2010-04-30
Conductivity	40	uS/cm	1	EPA 120.1	2010-04-27	2010-04-27
Conductivity % Red	94	%	NA	EPA 120.1	2010-04-27	2010-04-30
Flow Rate	0.445	GPM	NA	(None)	2010-04-27	2010-04-27



PERFORMANCE SUMMARY

<i>Contaminant</i>	<i>As (V)</i>	
<i>Number of Systems Tested</i>	2	
<i>Rated Claim</i>	11.40	<i>Liters</i>
<i>Performance Indicating Device (PID)</i>	Yes	
<i>Total Test Volume</i>	14	<i>Liters</i>
<i>Percentage of Rated Claim</i>	123	<i>PERCENT</i>
<i>Manufacturers Rated Flow Rate</i>	0.50	<i>GPM</i>
<i>Average Flow Rate (all devices)</i>	0.448	<i>GPM</i>
<i>Average Test Influent</i>	56.4	<i>ug/L</i>
<i>Average Effluent (all devices)</i>	2.87	<i>ug/L</i>
<i>Maximum Allowable Effluent Level</i>	1000	<i>ug/L</i>
<i>Failure Point - Linx 140-120V #3</i>	<i>Didn't Fail</i>	<i>Liters</i>
<i>Failure Point - Linx 140-120V #4</i>	<i>Didn't Fail</i>	<i>Liters</i>

This report has been reviewed for technical accuracy and completeness. The analyses were performed using EPA or other approved methodologies and the results were reported on an "as received" basis unless otherwise noted. These results relate only to the items tested.

NA = Not Applicable

su - Standard Units

UV - Unit Volume

mg/L = milligrams per Liter

ug/L = micrograms per Liter

GPM = Gallons Per Minute

NTU = Nephelometric Turbidity Unit

(wc) = Water Characteristics are for monitoring purposes only, quality control samples may or may not have been performed.

22 - Water characteristic value is outside the specified protocol limits.

23 - Influent spike level is outside average allowable protocol limits.

END OF DOCUMENT