

Chemtech Consulting Group

Analytical Review Report

Date Printed : 9/21/15

Analyst : HM

Data File : LB77923.csv

Approved By : 

Approved Date : 9/21/15

Worksheet # :

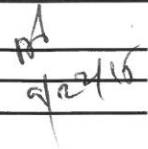
M9012 A-B - Total, Amenable & Reactive cyanide-15

Lab Sample ID	Client ID		Raw Amt PPB	Dil	Matrix	A. Date	Prep Method	Analysis Method				Line 1
Parameter						%Rec	LCL	UCL	RPD	Max RPD	Units	Line 2
Cyanide												
0.0PPBCN	0.0PPBCN				W	9/21/15						
Cyanide		PASS	-0.032		-0.000						mg/L	
5.0PPBCN	5.0PPBCN				W	9/21/15						
Cyanide		PASS	5.590		0.006						mg/L	
10PPBCN	10PPBCN				W	9/21/15						
Cyanide		PASS	10.501		0.011						mg/L	
50PPBCN	50PPBCN				W	9/21/15						
Cyanide		PASS	48.572		0.049						mg/L	
100PPBCN	100PPBCN				W	9/21/15						
Cyanide		PASS	100.754		0.101						mg/L	
250PPBCN	250PPBCN				W	9/21/15						
Cyanide		PASS	249.280		0.249						mg/L	
500PPBCN	500PPBCN				W	9/21/15						
Cyanide		PASS	500.336		0.500						mg/L	
LOW	LOW				W	9/21/15						
Cyanide		PASS	10.230		0.010						mg/L	
HIGH	HIGH				W	9/21/15						
Cyanide		PASS	517.217		0.517						mg/L	
ICV1	ICV1				W	9/21/15						
Cyanide		PASS	104.806		0.11	110.0	85	115			mg/L	
ICB1	ICB1				W	9/21/15						
Cyanide		PASS	1.715		0.002			+/-0.0025			mg/L	
CCV1	CCV1				W	9/21/15						
Cyanide		PASS	238.508		0.24	96.0	90	110			mg/L	
CCB1	CCB1				W	9/21/15						
Cyanide		PASS	1.206		0.001			+/-0.0025			mg/L	
PB85665BLS	PB85665BLS				S	9/21/15						
Cyanide		PASS	1.127		0.056			+/-0.0330			mg/Kg	
PB85665BSS	PB85665BSS				S	9/21/15						
Cyanide		PASS	95.403		4.54	91.0	80.00	110.00			mg/Kg	
G3748-01	MGP-202-30-32			1	S	9/21/15						
Cyanide		PASS	1.474		0.102						mg/Kg	
G3748-02	MGP-202-38-40			1	S	9/21/15						
Cyanide		PASS	1.309		0.062						mg/Kg	
G3748-04	MGP-205-10-12			1	S	9/21/15						
Cyanide		OR	886.611		42.3						mg/Kg	
G3748-06	MGP-205-24-25			1	S	9/21/15						
Cyanide		PASS	2.858		0.094						mg/Kg	
G3753-02	SP-1			1	S	9/21/15						
Cyanide		PASS	1.191		0.062						mg/Kg	

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Lab Sample ID	Client ID		Raw Amt	Dil	Matrix	A. Date	Prep	Analysis			Line 1
Parameter			PPB		Final Conc	%Rec	Method	Method	RPD	Max RPD	Units
							LCL	UCL			Line 2
Cyanide											
G3753-02D	SP-1D			1	S	9/21/15					
Cyanide		PASS	1.265		0.066				6.3	20	mg/Kg
CCV2	CCV2				W	9/21/15					
Cyanide		PASS	241.964		0.24	96.0	90	110			mg/L
CCB2	CCB2				W	9/21/15					
Cyanide		PASS	1.263		0.001			+/-0.0025			mg/L
G3753-02S	SP-1S			1	S	9/21/15					
Cyanide		FAIL	14.986		0.543	33.0	48	158			mg/Kg
G3753-02SD	SP-1SD			1	S	9/21/15					
Cyanide		FAIL	15.104		0.547	33.0	48	158	0.7	20	mg/Kg
G3753-04	SP-2			1	S	9/21/15					
Cyanide		PASS	1.502		0.053						mg/Kg
CCV3	CCV3				W	9/21/15					
Cyanide		PASS	244.466		0.24	96.0	90	110			mg/L
CCB3	CCB3				W	9/21/15					
Cyanide		PASS	1.557		0.002			+/-0.0025			mg/L
G3748-03	MGP-202-42-44			1	S	9/21/15					
Cyanide		PASS	1.479		0.046						mg/Kg
G3748-05	MGP-205-17-19			1	S	9/21/15					
Cyanide		PASS	5.431		0.189						mg/Kg
G3748-04DL	MGP-205-10-12DL			5	S	9/21/15					
Cyanide		PASS	185.125		44.1						mg/Kg
CCV4	CCV4				W	9/21/15					
Cyanide		PASS	251.591		0.25	100.0	90	110			mg/L
CCB4	CCB4				W	9/21/15					
Cyanide		PASS	1.393		0.001			+/-0.0025			mg/L

LB77923

Test results

Aquakem 7.2AQ1

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CHEMTECH
284 Sheffield Street,
Mountainside, NJ 07092
Reviewed by : HM

9/21/2015 15:27

Test: Total CN

Sample Id	<i>type</i> Result	Dil. 1 +	Response	Errors
CCV1	238.508	0.0	0.215	
CCB1	1.206	0.0	0.004	
PB85665BLS	1.127	0.0	0.004	
PB85665BSS	95.403	0.0	0.088	
G3748-01	1.474	0.0	0.004	
G3748-02	1.309	0.0	0.004	
G3748-04	886.611	0.0	0.791	Test limit high
G3748-06	2.858	0.0	0.006	
G3753-02	1.191	0.0	0.004	
G3753-02D	1.265	0.0	0.004	
CCV2	241.964	0.0	0.218	
CCB2	1.263	0.0	0.004	
G3753-02S	14.986	0.0	0.017	
G3753-02SD	15.104	0.0	0.017	
G3753-04	1.502	0.0	0.005	
CCV3	244.466	0.0	0.220	
CCB3	1.557	0.0	0.005	
G3748-03	1.479	0.0	0.004	
G3748-05	5.431	0.0	0.008	
G3748-04 5X	185.125	0.0	0.168	
CCV4	251.591	0.0	0.227	
CCB4	1.393	0.0	0.004	

N	22
Mean	99.855
SD	201.0797
CV%	201.37

Aquakem v. 7.2AQ1

Results from time period:

Mon Sep 21 14:47:22 2015

Mon Sep 21 15:19:45 2015

AM

Sample Id	Sam/Ctr/c/	Test short	Test type	Result	Result unit	Result date and time
0.OPPBCN	A	Total CN	P	-0.0324	µg/l	9/21/2015 9:49:17
5.OPPBCN	A	Total CN	P	5.5896	µg/l	9/21/2015 9:49:18
10PPBCN	A	Total CN	P	10.5007	µg/l	9/21/2015 9:49:19
50PPBCN	A	Total CN	P	48.5716	µg/l	9/21/2015 9:49:20
100PPBCN	A	Total CN	P	100.7543	µg/l	9/21/2015 9:49:21
250PPBCN	A	Total CN	P	249.2801	µg/l	9/21/2015 9:49:22
500PPBCN	A	Total CN	P	500.336	µg/l	9/21/2015 9:49:23
LOW	S	Total CN	P	10.2297	µg/l	9/21/2015 11:06:53
HIGH	S	Total CN	P	517.2168	µg/l	9/21/2015 11:06:54
ICV1	S	Total CN	P	104.806	µg/l	9/21/2015 11:06:55
ICB1	S	Total CN	P	1.7155	µg/l	9/21/2015 11:06:56
CCV1	S	Total CN	P	238.508	µg/l	9/21/2015 14:47:22
CCB1	S	Total CN	P	1.2062	µg/l	9/21/2015 14:47:23
PB85665BLS	S	Total CN	P	1.127	µg/l	9/21/2015 14:47:24
PB85665BSS	S	Total CN	P	95.4027	µg/l	9/21/2015 14:47:25
G3748-01	S	Total CN	P	1.4736	µg/l	9/21/2015 14:47:26
G3748-02	S	Total CN	P	1.3089	µg/l	9/21/2015 14:47:27
G3748-04	S	Total CN	P	886.6111	µg/l	9/21/2015 14:47:29
G3748-06	S	Total CN	P	2.8579	µg/l	9/21/2015 14:47:31
G3753-02	S	Total CN	P	1.1909	µg/l	9/21/2015 14:47:32
G3753-02D	S	Total CN	P	1.2646	µg/l	9/21/2015 14:54:29
CCV2	S	Total CN	P	241.9637	µg/l	9/21/2015 14:54:30
CCB2	S	Total CN	P	1.263	µg/l	9/21/2015 14:54:31
G3753-02S	S	Total CN	P	14.9861	µg/l	9/21/2015 14:54:32
G3753-02SD	S	Total CN	P	15.1035	µg/l	9/21/2015 14:54:33
G3753-04	S	Total CN	P	1.5023	µg/l	9/21/2015 14:54:34
CCV3	S	Total CN	P	244.4658	µg/l	9/21/2015 14:54:35
CCB3	S	Total CN	P	1.5573	µg/l	9/21/2015 14:54:36
G3748-03	S	Total CN	P	1.4788	µg/l	9/21/2015 15:19:41
G3748-05	S	Total CN	P	5.4312	µg/l	9/21/2015 15:19:42
G3748-04 5X	S	Total CN	P	185.1254	µg/l	9/21/2015 15:19:43
CCV4	S	Total CN	P	251.5909	µg/l	9/21/2015 15:19:44
CCB4	S	Total CN	P	1.393	µg/l	9/21/2015 15:19:45

Test results

Aquakem 7.2AQ1

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CHEMTECH
284 Sheffield Street,
Mountainside, NJ 07092
Reviewed by : HM

9/21/2015 11:14

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
LOW	10.230	0.0	0.012	
HIGH	517.217	0.0	0.463	Test limit high
ICV1	104.806	0.0	0.096	
ICB1	1.715	0.0	0.005	

N	4
Mean	158.492
SD	243.6707
CV%	153.74

CHEMTECH
 284 Sheffield Street,
 Mountainside, NJ 07092
 Reviewed by : MM

9/21/2015 9:58

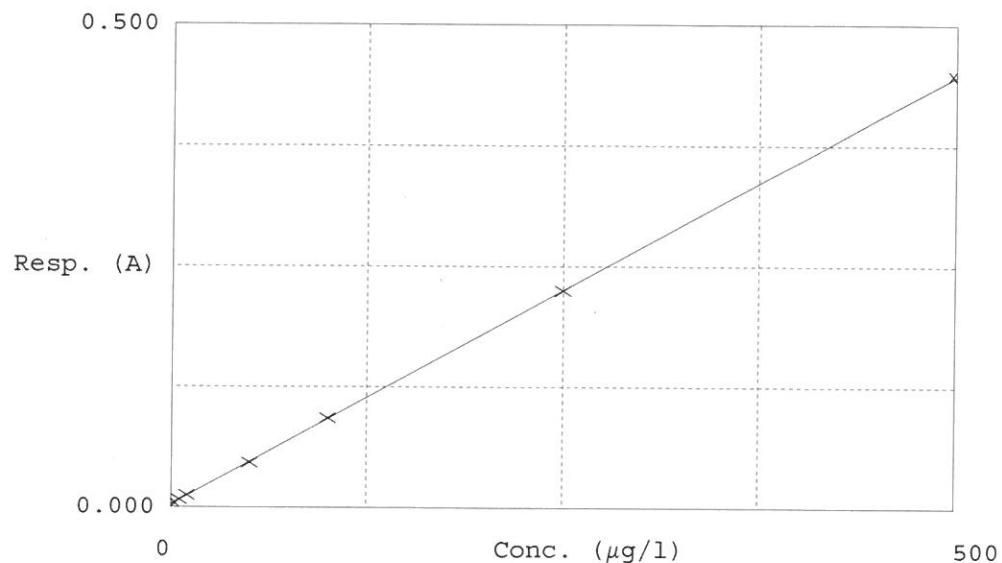
Test Total CN

Accepted 9/21/2015 9:58

Factor 1125
 Bias 0.003

Coeff. of det. 0.999981

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.0PPBCN	0.003	-0.0324	0.0000	
2	5.0PPBCN	0.008	5.5896	5.0000	
3	10PPBCN	0.013	10.5007	10.0000	
4	50PPBCN	0.046	48.5716	50.0000	
5	100PPBCN	0.093	100.7543	100.0000	
6	250PPBCN	0.225	249.2801	250.0000	
7	500PPBCN	0.448	500.3360	500.0000	