

Daily Analysis Runlog For Sequence/QC Batch ID # LB88411

Review By		Review On				
SubDirectory		LB88411		Test : Cyanide		
STD. NAME		STD REF.#				
ICAL Standard		WP55991,WP55992,WP55993,WP55994,WP55995,WP55996				
ICV Standard		WP55997				
CCV Standard		WP55998				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		N/A				
Chk Standard		WP56007,WP55836,WP53945				
Sr#	SampleID	ClientID	QcType	Date	Comment	Status
1	S0.0	S0.0	CAL1	06/28/17 14:23		OK
2	S5.0	S5.0	CAL2	06/28/17 14:23		OK
3	S10.0	S10.0	CAL3	06/28/17 14:23		OK
4	S100.0	S100.0	CAL4	06/28/17 14:23		OK
5	S250.0	S250.0	CAL5	06/28/17 14:23		OK
6	S500.0	S500.0	CAL6	06/28/17 14:23		OK
7	ICV	ICV	ICV	06/28/17 15:16		OK
8	ICB	ICB	ICB	06/28/17 15:16		OK
9	CCV001	CCV001	CCV	06/28/17 15:16		OK
10	CCB001	CCB001	CCB	06/28/17 15:16		OK
11	PB100208BL	PBW005	MB	06/28/17 15:16		OK
12	I3862-04	MDADZ8	SAM	06/28/17 15:16		OK
13	I3862-05	MDADZ9	SAM	06/28/17 15:16		OK
14	I3862-06	MDADZ9D	DUP	06/28/17 15:16		OK
15	PB100209BL	PBW005	MB	06/28/17 15:16		OK
16	I3896-10	ME7FD5	SAM	06/28/17 15:23		OK
17	I3896-11	ME7FD5D	DUP	06/28/17 15:23		OK
18	I3896-12	ME7FD5S	MS	06/28/17 15:23		OK
19	I3896-13	ME7FD6	SAM	06/28/17 15:23		OK
20	I3896-14	ME7FD7	SAM	06/28/17 15:23		OK
21	I3896-15	ME7FD8	SAM	06/28/17 15:23		OK

Daily Analysis Runlog For Sequence/QC Batch ID # LB88411

Review By			Review On			
SubDirectory		LB88411		Test : Cyanide		
STD. NAME		STD REF.#				
ICAL Standard		WP55991,WP55992,WP55993,WP55994,WP55995,WP55996				
ICV Standard		WP55997				
CCV Standard		WP55998				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		N/A				
Chk Standard		WP56007,WP55836,WP53945				
22	I3896-16	ME7FD9	SAM	06/28/17 15:23		OK
23	I3896-17	ME7FE0	SAM	06/28/17 15:24		OK
24	I3896-18	ME7FE1	SAM	06/28/17 15:24		OK
25	I3896-19	ME7FE2	SAM	06/28/17 15:24		OK
26	PB100210BL	PBS006	MB	06/28/17 15:24		OK
27	I3896-01	ME7FC7	SAM	06/28/17 15:31		OK
28	I3896-02	ME7FC8	SAM	06/28/17 15:31		OK
29	I3896-03	ME7FC9	SAM	06/28/17 15:31		OK
30	I3896-04	ME7FD0	SAM	06/28/17 15:31		OK
31	I3896-05	ME7FD0D	DUP	06/28/17 15:31		OK
32	I3896-06	ME7FD0S	MS	06/28/17 15:31		OK
33	I3896-07	ME7FD1	SAM	06/28/17 15:31		OK
34	I3896-08	ME7FD2	SAM	06/28/17 15:31		OK
35	I3896-09	ME7FD3	SAM	06/28/17 15:31		OK
36	I3862-01	MDADY5	SAM	06/28/17 15:31		OK
37	CCV002	CCV002	CCV	06/28/17 15:35		OK
38	CCB002	CCB002	CCB	06/28/17 15:35		OK
39	I3862-07	MDADZ9S	MS	06/28/17 15:35		OK
40	CCV003	CCV003	CCV	06/28/17 15:51		OK
41	CCB003	CCB003	CCB	06/28/17 15:51		OK



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Report of Analysis

Client:		Date Collected:	6/13/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/14/2017 12:00:00 AM
Client Sample ID:	MDADY5	SDG No.:	LB88411
Lab Sample ID:	I3862-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	36.9		1	1.5	5	10	ug/L	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/22/2017 12:00:00 AM
Client Sample ID:	MDADZ8	SDG No.:	LB88411
Lab Sample ID:	I3862-04	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	1.5	5	10	ug/L	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/22/2017 12:00:00 AM
Client Sample ID:	MDADZ9	SDG No.:	LB88411
Lab Sample ID:	I3862-05	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	1.0	U	1	1.5	5	10	ug/L	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FC7	SDG No.:	LB88411
Lab Sample ID:	I3896-01	Matrix:	Solid
Level (low/med):	low	% Solid:	46

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.031	U	1	0.12	0.026	1.1	mg/kg	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FC8	SDG No.:	LB88411
Lab Sample ID:	I3896-02	Matrix:	Solid
Level (low/med):	low	% Solid:	53.4

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	0.098	0.022	0.89	mg/kg	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FC9	SDG No.:	LB88411
Lab Sample ID:	I3896-03	Matrix:	Solid
Level (low/med):	low	% Solid:	57.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	0.092	0.021	0.83	mg/kg	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FD0	SDG No.:	LB88411
Lab Sample ID:	I3896-04	Matrix:	Solid
Level (low/med):	low	% Solid:	70

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.14	J	1	0.076	0.017	0.69	mg/kg	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FD1	SDG No.:	LB88411
Lab Sample ID:	I3896-07	Matrix:	Solid
Level (low/med):	low	% Solid:	77.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.001	U	1	0.068	0.016	0.62	mg/kg	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FD2	SDG No.:	LB88411
Lab Sample ID:	I3896-08	Matrix:	Solid
Level (low/med):	low	% Solid:	56.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	0.094	0.021	0.86	mg/kg	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FD3	SDG No.:	LB88411
Lab Sample ID:	I3896-09	Matrix:	Solid
Level (low/med):	low	% Solid:	33.2

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	0.16	0.036	1.4	mg/kg	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FD5	SDG No.:	LB88411
Lab Sample ID:	I3896-10	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	1.5	5	10	ug/L	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FD6	SDG No.:	LB88411
Lab Sample ID:	I3896-13	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	1.5	5	10	ug/L	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FD7	SDG No.:	LB88411
Lab Sample ID:	I3896-14	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	1.5	5	10	ug/L	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FD8	SDG No.:	LB88411
Lab Sample ID:	I3896-15	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	1.5	5	10	ug/L	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FD9	SDG No.:	LB88411
Lab Sample ID:	I3896-16	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	1.5	5	10	ug/L	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FE0	SDG No.:	LB88411
Lab Sample ID:	I3896-17	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	1.5	5	10	ug/L	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/20/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FE1	SDG No.:	LB88411
Lab Sample ID:	I3896-18	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	1.5	5	10	ug/L	06/27/2017	06/28/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FE2	SDG No.:	LB88411
Lab Sample ID:	I3896-19	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	1.5	5	10	ug/L	06/27/2017	06/28/2017	ISM02.4_CN

Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88411	Date Received:	6/23/2017 12:00:00 AM
Client Sample ID:	ME7FE2	SDG No.:	LB88411
Lab Sample ID:	I3896-19	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
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Color Before:

Clarity Before:

Texture:

Color After:

Clarity After:

Artifacts:

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Metals
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SAMPLE PREPARATION SUMMARY

Client: <u>LB88411</u>	SDG No.: <u>LB88411</u>	
Contract: _____	Lab Code: <u>CHEM</u>	Method: _____
	Case No.: <u>LB88411</u>	SAS No.: <u>LB88411</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB100208							
PB100208BL	PBW005	MB	WATER	06/28/2017	50.0	50.0	
I3862-04	MDADZ8	SAM	WATER	06/28/2017	50.0	50.0	
I3862-05	MDADZ9	SAM	WATER	06/28/2017	50.0	50.0	
I3862-06	MDADZ9D	DUP	WATER	06/28/2017	50.0	50.0	
I3862-01	MDADY5	SAM	WATER	06/28/2017	50.0	50.0	
I3862-07	MDADZ9S	MS	WATER	06/28/2017	50.0	50.0	



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SAMPLE PREPARATION SUMMARY

Client: LB88411 **SDG No.:** LB88411
Contract: **Lab Code:** CHEM **Method:**
Case No.: LB88411 **SAS No.:** LB88411

					Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Sample ID	Client ID	Sample Type	Matrix	Prep Date			
Batch Number: PB100209							
PB100209BL	PBW005	MB	WATER	06/28/2017	50.0	50.0	
I3896-10	ME7FD5	SAM	WATER	06/28/2017	50.0	50.0	
I3896-11	ME7FD5D	DUP	WATER	06/28/2017	50.0	50.0	
I3896-12	ME7FD5S	MS	WATER	06/28/2017	50.0	50.0	
I3896-13	ME7FD6	SAM	WATER	06/28/2017	50.0	50.0	
I3896-14	ME7FD7	SAM	WATER	06/28/2017	50.0	50.0	
I3896-15	ME7FD8	SAM	WATER	06/28/2017	50.0	50.0	
I3896-16	ME7FD9	SAM	WATER	06/28/2017	50.0	50.0	
I3896-17	ME7FE0	SAM	WATER	06/28/2017	50.0	50.0	
I3896-18	ME7FE1	SAM	WATER	06/28/2017	50.0	50.0	
I3896-19	ME7FE2	SAM	WATER	06/28/2017	50.0	50.0	



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SAMPLE PREPARATION SUMMARY

Client: LB88411 SDG No.: LB88411
Contract: Lab Code: CHEM Method:
Case No.: LB88411 SAS No.: LB88411

					Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Sample ID	Client ID	Sample Type	Matrix	Prep Date			
Batch Number: PB100210							
PB100210BL	PBS006	MB	SOLID	06/28/2017	1.02	50.0	100.00
I3896-01	ME7FC7	SAM	SOLID	06/28/2017	1.04	50.0	46.00
I3896-02	ME7FC8	SAM	SOLID	06/28/2017	1.05	50.0	53.40
I3896-03	ME7FC9	SAM	SOLID	06/28/2017	1.04	50.0	57.70
I3896-04	ME7FD0	SAM	SOLID	06/28/2017	1.03	50.0	70.00
I3896-05	ME7FD0D	DUP	SOLID	06/28/2017	1.03	50.0	70.00
I3896-06	ME7FD0S	MS	SOLID	06/28/2017	1.05	50.0	70.00
I3896-07	ME7FD1	SAM	SOLID	06/28/2017	1.04	50.0	77.50
I3896-08	ME7FD2	SAM	SOLID	06/28/2017	1.03	50.0	56.80
I3896-09	ME7FD3	SAM	SOLID	06/28/2017	1.05	50.0	33.20

FORM 15-IN
INITIAL CALIBRATION

Lab Name: LB88411 Contract: _____
Lab Code: CHEM Case No.: LB88411 MA No.: _____ SDG No.: LB88411
Instrument ID: CN Start Date: 06/28/2017
Analytical Method: _____ Run Batch: LB88411.mdb
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	0	0.2	0	5	4.0	-20	10	9.4	-6

FORM 15-IN
INITIAL CALIBRATION

Lab Name: LB88411 Contract: _____
Lab Code: CHEM Case No.: LB88411 MA No.: _____ SDG No.: LB88411
Instrument ID: CN Start Date: 06/28/2017
Analytical Method: _____ Run Batch: LB88411.mdb
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	100	99.7	0	250	253	1	500	498	0



Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB88411 **SDG No.:** LB88411
Contract: _____ **Lab Code:** CHEM **Case No.:** LB88411 **SAS No.:** LB88411
Initial Calibration Source: _____
Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV	Cyanide	95.7	99	97	0	85 - 115	CN	06/28/2017	15:16	lb88411



Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB88411

SDG No.: LB88411

Contract: _____ Lab Code: CHEM

Case No.: LB88411

SAS No.: LB88411

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV001	Cyanide	242	250	97	0	85 - 115	CN	06/28/2017	15:16	lb88411
CCV002	Cyanide	256	250	102	0	85 - 115	CN	06/28/2017	15:35	lb88411
CCV003	Cyanide	264	250	106	0	85 - 115	CN	06/28/2017	15:51	lb88411



Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB88411 **SDG No.:** LB88411
Contract: **Lab Code:** CHEM **Case No.:** LB88411 **SAS No.:** LB88411

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB	Cyanide	0.81	+/-10.0	U	5.0	10.0	CN	06/28/2017	15:16	lb88411



Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: <u>LB88411</u>		SDG No.: <u>LB88411</u>								
Contract: _____		Lab Code: <u>CHEM</u>		Case No.: <u>LB88411</u>			SAS No.: <u>LB88411</u>			
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB001	Cyanide	0.63	+/-10.0	U	5.0	10.0	CN	06/28/2017	15:16	lb88411
CCB002	Cyanide	1.0	+/-10.0	U	5.0	10.0	CN	06/28/2017	15:35	lb88411
CCB003	Cyanide	0.75	+/-10.0	U	5.0	10.0	CN	06/28/2017	15:51	lb88411



Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB88411

SDG No.: LB88411

Contract: Lab Code: CHEM

Case No.: LB88411

SAS No.: LB88411

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: LB88411

SDG No.: LB88411

Instrument: CN

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB100208BL		WATER		Batch Number:		PB100208		Prep Date:	06/27/2017	
	Cyanide	0.34	<10	U	5.0	10	CN	06/28/2017	15:16	lb88411
Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB100209BL		WATER		Batch Number:		PB100209		Prep Date:	06/27/2017	
	Cyanide	1.9	<10	J	5.0	10	CN	06/28/2017	15:16	lb88411
Sample ID	Analyte	Result (mg/kg)	Acceptance Limit	Conc Qual	LOD mg/kg	CRQL mg/kg	M	Analysis Date	Analysis Time	Run
PB100210BL		SOLID		Batch Number:		PB100210		Prep Date:	06/27/2017	
	Cyanide	0.011	<0.49	U	0.012	0.49	CN	06/28/2017	15:24	lb88411



metals
- 5a -
MATRIX SPIKE SUMMARY

client: LB88411 level: low sdg no.: LB88411
contract: lab code: CHEM case no.: LB88411 sas no.: LB88411
matrix: WATER sample id: I3862-05 client id: MDADZ9S
Percent Solids for Sample: 0 Spiked ID: I3862-07 Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	ug/L	75 - 125	81.4		10.0	U	100	81		CN



metals
- 5a -
MATRIX SPIKE SUMMARY

client: LB88411 level: low sdg no.: LB88411
contract: lab code: CHEM case no.: LB88411 sas no.: LB88411
matrix: Solid sample id: I3896-04 client id: ME7FD0S
Percent Solids for Sample: 70 Spiked ID: I3896-06 Percent Solids for Spike Sample: 70

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/kg	75 - 125	7.0		0.14	J	6.8	101		CN



metals
- 5a -
MATRIX SPIKE SUMMARY

client: LB88411 level: low sdg no.: LB88411
contract: lab code: CHEM case no.: LB88411 sas no.: LB88411
matrix: WATER sample id: I3896-10 client id: ME7FD5S
Percent Solids for Sample: 0 Spiked ID: I3896-12 Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	ug/L	75 - 125	77.1		10.0	U	100	77		CN

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB88411 **Level:** LOW **SDG No.:** LB88411
Contract: **Lab Code:** CHEM **Case No.:** LB88411 **SAS No.:** LB88411
Matrix: WATER **Sample ID:** I3862-05 **Client ID:** MDADZ9D
Percent Solids for Sample: 0 **Duplicate ID** I3862-06 **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	ug/L	20	10.0	U	1.1	U			CN

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB88411 **Level:** LOW **SDG No.:** LB88411
Contract: **Lab Code:** CHEM **Case No.:** LB88411 **SAS No.:** LB88411
Matrix: Solid **Sample ID:** I3896-04 **Client ID:** ME7FD0D
Percent Solids for Sample: 70 **Duplicate ID** I3896-05 **Percent Solids for Spike Sample:** 70

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/kg	20	0.14	J	0.16	J	13		CN

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client:	LB88411	Level:	LOW	SDG No.:	LB88411
Contract:		Lab Code:	CHEM	Case No.:	LB88411
Matrix:	WATER	Sample ID:	I3896-10	Client ID:	ME7FD5D
Percent Solids for Sample:	0	Duplicate ID	I3896-11	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	ug/L	20	10.0	U	0	U			CN