

Daily Analysis Runlog For Sequence/QC Batch ID # LB87650

Review By

Review On

SubDirectory

LB87650

Test :

Cyanide

STD. NAME		STD REF.#				
ICAL Standard		WP55131,WP55130,WP55129,WP55128,WP55127,WP55126				
ICV Standard		WP55132				
CCV Standard		WP55133				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		N/A				
Chk Standard		WP55142,WP53945,WP51626,WP53908				

Sr#	SampleId	ClientID	QcType	Date	Comment	Status
1	S0.0	S0.0	CAL1	05/23/17 15:04		OK
2	S5.0	S5.0	CAL2	05/23/17 15:04		OK
3	S10.0	S10.0	CAL3	05/23/17 15:04		OK
4	S100.0	S100.0	CAL4	05/23/17 15:04		OK
5	S250.0	S250.0	CAL5	05/23/17 15:04		OK
6	S500.0	S500.0	CAL6	05/23/17 15:04		OK
7	ICV	ICV	ICV	05/23/17 15:43		OK
8	ICB	ICB	ICB	05/23/17 15:43		OK
9	CCV001	CCV001	CCV	05/23/17 15:43		OK
10	CCB001	CCB001	CCB	05/23/17 15:43		OK
11	PB99214BL	PBS006	MB	05/23/17 15:43		OK
12	I3213-22	MX2A00	SAM	05/23/17 15:43		OK
13	I3213-23	MX2A00D	DUP	05/23/17 15:43		OK
14	I3213-24	MX2A00S	MS	05/23/17 15:43		OK
15	I3251-01	PTS-02	SAM	05/23/17 15:43		OK
16	PB99215BL	PBW005	MB	05/23/17 15:43		OK
17	I3213-10	MX2996	SAM	05/23/17 15:43		OK
18	I3213-11	MX2996D	DUP	05/23/17 15:49		OK
19	I3213-12	MX2996S	MS	05/23/17 15:49		OK
20	I3289-01	MBD7K3	SAM	05/23/17 15:49		OK
21	I3289-02	MBD7K3D	DUP	05/23/17 15:49		OK

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 8922

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SubDirectory		LB87650		Test : Cyanide		
STD. NAME		STD REF.#				
ICAL Standard		WP55131,WP55130,WP55129,WP55128,WP55127,WP55126				
ICV Standard		WP55132				
CCV Standard		WP55133				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		N/A				
Chk Standard		WP55142,WP53945,WP51626,WP53908				
22	I3289-03	MBD7K3S	MS	05/23/17 15:49		OK
23	CCV002	CCV002	CCV	05/23/17 15:49		OK
24	CCB002	CCB002	CCB	05/23/17 15:49		OK



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Report of Analysis

Client:		Date Collected:	5/17/2017 12:00:00 AM
Project:	LB87650	Date Received:	5/18/2017 12:00:00 AM
Client Sample ID:	MX2996	SDG No.:	LB87650
Lab Sample ID:	I3213-10	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	130		1	1.5	5	10	ug/L	05/23/2017	05/23/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	5/17/2017 12:00:00 AM
Project:	LB87650	Date Received:	5/18/2017 12:00:00 AM
Client Sample ID:	MX2A00	SDG No.:	LB87650
Lab Sample ID:	I3213-22	Matrix:	Solid
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	3.1		1	0.053	0.012	0.49	mg/kg	05/23/2017	05/23/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	5/18/2017 12:00:00 AM
Project:	LB87650	Date Received:	5/19/2017 12:00:00 AM
Client Sample ID:	PTS-02	SDG No.:	LB87650
Lab Sample ID:	I3251-01	Matrix:	Solid
Level (low/med):	low	% Solid:	78.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.26	J	1	0.067	0.015	0.61	mg/kg	05/23/2017	05/23/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	5/19/2017 12:00:00 AM
Project:	LB87650	Date Received:	5/20/2017 12:00:00 AM
Client Sample ID:	MBD7K3	SDG No.:	LB87650
Lab Sample ID:	I3289-01	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	0	U	1	1.5	5	10	ug/L	05/23/2017	05/23/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	5/19/2017 12:00:00 AM
Project:	LB87650	Date Received:	5/20/2017 12:00:00 AM
Client Sample ID:	MBD7K3	SDG No.:	LB87650
Lab Sample ID:	I3289-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
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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>LB87650</u>	SDG No.: <u>LB87650</u>	
Contract: _____	Lab Code: <u>CHEM</u>	Method: _____
	Case No.: <u>LB87650</u>	SAS No.: <u>LB87650</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB99214							
PB99214BL	PBS006	MB	SOLID	05/23/2017	1.02	50.0	100.00
I3213-22	MX2A00	SAM	SOLID	05/23/2017	1.03	50.0	100.00
I3213-23	MX2A00D	DUP	SOLID	05/23/2017	1.04	50.0	100.00
I3213-24	MX2A00S	MS	SOLID	05/23/2017	1.05	50.0	100.00
I3251-01	PTS-02	SAM	SOLID	05/23/2017	1.04	50.0	78.80



Metals
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SAMPLE PREPARATION SUMMARY

Client: LB87650 **SDG No.:** LB87650
Contract: **Lab Code:** CHEM **Method:**
Case No.: LB87650 **SAS No.:** LB87650

						Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Sample ID	Client ID	Sample Type	Matrix	Prep Date				
Batch Number: PB99215								
PB99215BL	PBW005	MB	WATER	05/23/2017		50.0	50.0	
I3213-10	MX2996	SAM	WATER	05/23/2017		50.0	50.0	
I3213-11	MX2996D	DUP	WATER	05/23/2017		50.0	50.0	
I3213-12	MX2996S	MS	WATER	05/23/2017		50.0	50.0	
I3289-01	MBD7K3	SAM	WATER	05/23/2017		50.0	50.0	
I3289-02	MBD7K3D	DUP	WATER	05/23/2017		50.0	50.0	
I3289-03	MBD7K3S	MS	WATER	05/23/2017		50.0	50.0	

FORM 15-IN
INITIAL CALIBRATION

Lab Name: LB87650 Contract: _____
Lab Code: CHEM Case No.: LB87650 MA No.: _____ SDG No.: LB87650
Instrument ID: CN Start Date: 05/23/2017
Analytical Method: _____ Run Batch: LB87650.mdb
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	0	0	0	5	4.9	-2	10	9.7	-3

FORM 15-IN
INITIAL CALIBRATION

Lab Name: LB87650 Contract: _____
Lab Code: CHEM Case No.: LB87650 MA No.: _____ SDG No.: LB87650
Instrument ID: CN Start Date: 05/23/2017
Analytical Method: _____ Run Batch: LB87650.mdb
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	100	101	1	250	250	0	500	500	0



Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB87650

SDG No.: LB87650

Contract: **Lab Code:** CHEM

Case No.: LB87650 **SAS No.:** LB87650

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
		ug/L								
ICV	Cyanide	96.3	99	97	0	85 - 115	CN	05/23/2017	15:43	LB87650



Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB87650

SDG No.: LB87650

Contract: **Lab Code:** CHEM

Case No.: LB87650

SAS No.: LB87650

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	243	250	97	0	85 - 115	CN	05/23/2017	15:43	LB87650
CCV002	Cyanide	243	250	97	0	85 - 115	CN	05/23/2017	15:49	LB87650



Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB87650 **SDG No.:** LB87650
Contract: **Lab Code:** CHEM **Case No.:** LB87650 **SAS No.:** LB87650

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	05/23/2017	15:43	LB87650



Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	<u>LB87650</u>	SDG No.:	<u>LB87650</u>				
Contract:	<u> </u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>LB87650</u>	SAS No.:	<u>LB87650</u>

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB001	Cyanide	0.24	+/-10.0	U	5.0	10.0	CN	05/23/2017	15:43	LB87650
CCB002	Cyanide	0.49	+/-10.0	U	5.0	10.0	CN	05/23/2017	15:49	LB87650



Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB87650

SDG No.: LB87650

Contract: Lab Code: CHEM

Case No.: LB87650

SAS No.: LB87650

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: LB87650

SDG No.: LB87650

Instrument: CN

Sample ID	Analyte	Result (mg/kg)	Acceptance Limit	Conc Qual	LOD mg/kg	CRQL mg/kg	M	Analysis Date	Analysis Time	Run
PB99214BL	SOLID		Batch Number:		PB99214		Prep Date:		05/23/2017	
	Cyanide	0.054	<0.49	U	0.012	0.49	CN	05/23/2017	15:43	LB87650
Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB99215BL	WATER		Batch Number:		PB99215		Prep Date:		05/23/2017	
	Cyanide	0.28	<10	U	5.0	10	CN	05/23/2017	15:43	LB87650



metals
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MATRIX SPIKE SUMMARY

client: LB87650 level: low sdg no.: LB87650
contract: lab code: CHEM case no.: LB87650 sas no.: LB87650
matrix: WATER sample id: I3213-10 client id: MX2996S
Percent Solids for Sample: 0 Spiked ID: I3213-12 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	216		130		100	86		CN



metals
- 5a -
MATRIX SPIKE SUMMARY

client: LB87650 level: low sdg no.: LB87650
contract: lab code: CHEM case no.: LB87650 sas no.: LB87650
matrix: Solid sample id: I3213-22 client id: MX2A00S
Percent Solids for Sample: 100 Spiked ID: I3213-24 Percent Solids for Spike Sample: 100

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/kg	75 - 125	7.6		3.1		4.8	94		CN



metals
- 5a -
MATRIX SPIKE SUMMARY

client: LB87650 level: low sdg no.: LB87650
contract: lab code: CHEM case no.: LB87650 sas no.: LB87650
matrix: WATER sample id: I3289-01 client id: MBD7K3S
Percent Solids for Sample: 0 Spiked ID: I3289-03 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	82.3		10.0	U	100	82		CN



Metals

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DUPLICATE SAMPLE SUMMARY

Client: LB87650 Level: LOW SDG No.: LB87650
Contract: Lab Code: CHEM Case No.: LB87650 SAS No.: LB87650
Matrix: WATER Sample ID: I3213-10 Client ID: MX2996D
Percent Solids for Sample: 0 Duplicate ID I3213-11 Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	ug/L	20	130		135		4		CN

“A control limit of $\pm 20\%$ RPD for each matrix applies for sample values greater than 10 times Detection Limit”

Metals

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DUPLICATE SAMPLE SUMMARY

Client: LB87650 **Level:** LOW **SDG No.:** LB87650
Contract: **Lab Code:** CHEM **Case No.:** LB87650 **SAS No.:** LB87650
Matrix: Solid **Sample ID:** I3213-22 **Client ID:** MX2A00D
Percent Solids for Sample: 100 **Duplicate ID** I3213-23 **Percent Solids for Spike Sample:** 100

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/kg	20	3.1		3.0		3		CN

Metals

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DUPLICATE SAMPLE SUMMARY

Client: LB87650 **Level:** LOW **SDG No.:** LB87650
Contract: **Lab Code:** CHEM **Case No.:** LB87650 **SAS No.:** LB87650
Matrix: WATER **Sample ID:** I3289-01 **Client ID:** MBD7K3D
Percent Solids for Sample: 0 **Duplicate ID** I3289-02 **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	0.087	U			CN