

Metals**- 2a -****INITIAL AND CONTINUING CALIBRATION VERIFICATION****Client:** LB86031**SDG No.:** LB86031**Contract:** **Lab Code:** CHEM**Case No.:** LB86031 **SAS No.:** LB86031**Initial Calibration Source:** **Continuing Calibration Source:**

Sample ID	Analyte	Result mg/L	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV1	Reactive Cyanide	0.094	0.099	94.9	0	85 - 115		02/24/2017	10:13	LB86031

Metals**- 2a -****INITIAL AND CONTINUING CALIBRATION VERIFICATION****Client:** LB86031**SDG No.:** LB86031**Contract:** _____ **Lab Code:** CHEM**Case No.:** LB86031 **SAS No.:** LB86031**Initial Calibration Source:** _____**Continuing Calibration Source:** _____

Sample ID	Analyte	Result mg/L	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV1	Reactive Cyanide	0.24	0.25	96	0	90 - 110		02/24/2017	10:13	LB86031
CCV2	Reactive Cyanide	0.26	0.25	104	0	90 - 110		02/24/2017	10:34	LB86031



Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB86031

SDG No.: LB86031

Contract:

Lab Code: CHEM

Case No.: LB86031

SAS No.: LB86031

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB1	Reactive Cyanide	0.00098	+/-0.005	U		0.005		02/24/2017	10:13	LB86031



Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: <u>LB86031</u>					SDG No.: <u>LB86031</u>					
Contract: _____		Lab Code: <u>CHEM</u>		Case No.: <u>LB86031</u>			SAS No.: <u>LB86031</u>			
Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB1	Reactive Cyanide	0.0011	+/-0.005	U		0.005		02/24/2017	10:13	LB86031
CCB2	Reactive Cyanide	0.0014	+/-0.005	U		0.005		02/24/2017	10:34	LB86031



Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB86031

SDG No.: LB86031

Contract: Lab Code: CHEM

Case No.: LB86031

SAS No.: LB86031

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
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284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:		Date Collected:	2/22/2017 12:00:00 AM
Project:	LB86031	Date Received:	2/22/2017 12:00:00 AM
Client Sample ID:	TP23-24-COMP17	SDG No.:	LB86031
Lab Sample ID:	I1948-06	Matrix:	Solid
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	-0.0051	U	1	0.025		0.05	mg/Kg	02/23/2017	02/24/2017	9012B



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Report of Analysis

Client:		Date Collected:	2/22/2017 12:00:00 AM
Project:	LB86031	Date Received:	2/22/2017 12:00:00 AM
Client Sample ID:	FRAC-TANK-A2622	SDG No.:	LB86031
Lab Sample ID:	I1956-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	-0.00097	U	1	0.0025		0.005	mg/L	02/23/2017	02/24/2017	9012B



Report of Analysis

Client:		Date Collected:	2/22/2017 12:00:00 AM
Project:	LB86031	Date Received:	2/22/2017 12:00:00 AM
Client Sample ID:	FRAC-TANK-A2622	SDG No.:	LB86031
Lab Sample ID:	I1956-02	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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PREPARATION BLANK SUMMARY

Client: LB86031

SDG No.: LB86031

Instrument: Konelab 20

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	LOD mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB97133BL	SOLID			Batch Number:	PB97133			Prep Date:	02/23/2017	
	Reactive Cyanide	0.0048	<0.05	U		0.05		02/24/2017	10:13	LB86031
Sample ID	Analyte	Result (mg/L)	Acceptance Limit	Conc Qual	LOD mg/L	CRQL mg/L	M	Analysis Date	Analysis Time	Run
PB97134BL	WATER			Batch Number:	PB97134			Prep Date:	02/23/2017	
	Reactive Cyanide	0.00055	<0.005	U		0.005		02/24/2017	10:13	LB86031

Metals

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DUPLICATE SAMPLE SUMMARY

Client: LB86031 **Level:** LOW **SDG No.:** LB86031
Contract: **Lab Code:** CHEM **Case No.:** LB86031 **SAS No.:** LB86031
Matrix: Solid **Sample ID:** I1948-06 **Client ID:** TP23-24-COMP17DUP
Percent Solids for Sample: 100 **Duplicate ID** I1948-06DUP **Percent Solids for Spike Sample:** 100

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Reactive Cyanide	mg/Kg	20	0.025	U	-0.0059	U			

Metals

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DUPLICATE SAMPLE SUMMARY

Client: LB86031 **Level:** LOW **SDG No.:** LB86031
Contract: **Lab Code:** CHEM **Case No.:** LB86031 **SAS No.:** LB86031
Matrix: WATER **Sample ID:** I1956-02 **Client ID:** FRAC-TANK-A2622DUP
Percent Solids for Sample: 0 **Duplicate ID** I1956-02DUP **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Reactive Cyanide	mg/L	20	0.0025	U	-0.00045	U			