



GENCHEM

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB86085

SDG No.: LB86085

Contract: _____ Lab Code: CHEM

Case No.: LB86085

SAS No.: LB86085

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		02/28/2017	15:27	LB86085



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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB86085

SDG No.: LB86085

Contract: _____ Lab Code: CHEM

Case No.: LB86085

SAS No.: LB86085

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		02/28/2017	15:27	LB86085
CCV2	Reactive Cyanide	0.25	0.25	100	0	90 - 110		02/28/2017	15:27	LB86085



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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB86085 **SDG No.:** LB86085
Contract: **Lab Code:** CHEM **Case No.:** LB86085 **SAS No.:** LB86085

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB1	Reactive Cyanide	-0.00039	+/-0.005	U		0.005		02/28/2017	15:27	LB86085

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB1	Reactive Cyanide	0.0000673	+/-0.005	U		0.005		02/28/2017	15:27	LB86085
CCB2	Reactive Cyanide	-0.00017	+/-0.005	U		0.005		02/28/2017	15:29	LB86085



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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB86085

SDG No.: LB86085

Contract: Lab Code: CHEM

Case No.: LB86085

SAS No.: LB86085

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
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Report of Analysis

Client:		Date Collected:	2/27/2017 12:00:00 AM
Project:	LB86085	Date Received:	2/27/2017 12:00:00 AM
Client Sample ID:	FRAC-TANK-A155	SDG No.:	LB86085
Lab Sample ID:	I2011-02	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	-0.00093	U	1	0.0025		0.005	mg/L	02/28/2017	02/28/2017	9012B



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Report of Analysis

Client:		Date Collected:	2/27/2017 12:00:00 AM
Project:	LB86085	Date Received:	2/27/2017 12:00:00 AM
Client Sample ID:	PRESS-WASTE-WATER-CAKE	SDG No.:	LB86085
Lab Sample ID:	I2014-01	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	-0.0088	U	1	0.025		0.05	mg/Kg	02/28/2017	02/28/2017	9012B



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Report of Analysis

Client:		Date Collected:	2/27/2017 12:00:00 AM
Project:	LB86085	Date Received:	2/27/2017 12:00:00 AM
Client Sample ID:	PRESS-WASTE-WATER-CAKE	SDG No.:	LB86085
Lab Sample ID:	I2014-01	Matrix:	Solid
Level (low/med):	low	% Solid:	100

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



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PREPARATION BLANK SUMMARY

Client: LB86085

SDG No.: LB86085

Instrument: Konelab 20

Sample ID	Analyte	Result (mg/L)	Acceptance Limit	Conc Qual	LOD mg/L	CRQL mg/L	M	Analysis Date	Analysis Time	Run
PB97241BL	WATER			Batch Number:	PB97241			Prep Date:	02/28/2017	
	Reactive Cyanide	-0.00024	<0.005	U		0.005		02/28/2017	15:27	LB86085
Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	LOD mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB97242BL	SOLID			Batch Number:	PB97242			Prep Date:	02/28/2017	
	Reactive Cyanide	-0.0044	<0.05	U		0.05		02/28/2017	15:27	LB86085

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DUPLICATE SAMPLE SUMMARY

Client: LB86085 **Level:** LOW **SDG No.:** LB86085
Contract: _____ **Lab Code:** CHEM **Case No.:** LB86085 **SAS No.:** LB86085
Matrix: WATER **Sample ID:** I2011-02 **Client ID:** FRAC-TANK-A155DUP
Percent Solids for Sample: 0 **Duplicate ID** I2011-02DUP **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	-0.002	U			

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DUPLICATE SAMPLE SUMMARY

Client: LB86085 **Level:** LOW **SDG No.:** LB86085
Contract: **Lab Code:** CHEM **Case No.:** LB86085 **SAS No.:** LB86085
Matrix: Solid **Sample ID:** I2014-01 **Client ID:** PRESS-WASTE-WATER-CAKEDUP
Percent Solids for Sample: 100 **Duplicate ID** I2014-01DUP **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	-0.006	U			