CHEMTECH

GENCHEM

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: **LB86538**   **SDG No.:** LB86538

Contract: _____   **Lab Code:** CHEM   **Case No.:** LB86538   **SAS No.:** LB86538

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	Cyanide	0.093	0.099	93.9	0	85 - 115		03/24/2017	13:15	LB86538

CHEMTECH

GENCHEM

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: **LB86538**   **SDG No.:**   LB86538

Contract: **Lab Code:**   CHEM   **Case No.:**   LB86538   **SAS No.:**   LB86538

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	Cyanide	0.24	0.25	96	0	90 - 110		03/24/2017	13:15	LB86538
CCV2	Cyanide	0.26	0.25	104	0	90 - 110		03/24/2017	13:39	LB86538

CHEMTECH

GENCHEM

- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB86538   **SDG No.:** LB86538

Contract: _____   **Lab Code:** CHEM   **Case No.:** LB86538   **SAS No.:** LB86538

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB1	Cyanide	0.00054	+/-0.005	U		0.005		03/24/2017	13:15	LB86538

CHEMTECH

GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	LB86538				SDG No.:	LB86538	
Contract:		Lab Code:	CHEM		Case No.:	LB86538	SAS No.: LB86538

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB1	Cyanide	0.00049	+/-0.005	U		0.005		03/24/2017	13:15	LB86538
CCB2	Cyanide	-0.0001	+/-0.005	U		0.005		03/24/2017	13:39	LB86538

GENCHEM

- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB86538   **SDG No.:** LB86538

Contract: **Lab Code:** CHEM **Case No.:** LB86538 **SAS No.:** LB86538

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

CHEMTECH

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:		Date Collected:	3/20/2017 12:00:00 AM
Project:	LB86538	Date Received:	3/21/2017 12:00:00 AM
Client Sample ID:	EFFLUENT-DAY1-1CN	SDG No.:	LB86538
Lab Sample ID:	I2273-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Cyanide	0.0011	J	1	0.001		0.005	mg/L	03/23/2017	03/24/2017	SM4500-CN C,I

CHEMTECH

Report of Analysis

Client:			Date Collected:	
Project:	LB86538		Date Received:	
Client Sample ID:	MIDPB97772		SDG No.:	LB86538
Lab Sample ID:	MIDPB97772		Matrix:	WATER
Level (low/med):	low		% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Cyanide	0.24		1	0.001		0.005	mg/L		03/24/2017	SM4500-CN C,I

Report of Analysis

Client:		Date Collected:	
Project:	LB86538	Date Received:	
Client Sample ID:	MIDPB97772	SDG No.:	LB86538
Lab Sample ID:	MIDPB97772	Matrix:	WATER
Level (low/med):	low	% Solid:	0

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

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

CHEMTECH

<div align="center">

GENCHEM
- 3b -
PREPARATION BLANK SUMMARY

</div>

Client: LB86538   **SDG No.:**   LB86538

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
PB97772BL		**WATER**		**Batch Number:**		**PB97772**		**Prep Date:**	**03/23/2017**	
	Cyanide	0.00079	<0.005	U		0.005		03/24/2017	13:15	LB86538

CHEMTECH

<div align="center">

GENCHEM
- 5a -
MATRIX SPIKE SUMMARY

</div>

client:	LB86538	**level:**	low	**sdg no.:**	LB86538
contract:		**lab code:**	CHEM	**case no.:** LB86538	**sas no.:** LB86538
matrix:	WATER	**sample id:**	I2273-02	**client id:**	EFFLUENT-DAY1-1CNMS

Percent Solids for Sample: 0 **Spiked ID:** I2273-02MS **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/L	75 - 125	0.034		0.0011	J	0.04	82		

CHEMTECH

GENCHEM
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client:	LB86538	**level:**	low	**sdg no.:**	LB86538		
contract:		**lab code:**	CHEM	**case no.:**	LB86538	**sas no.:**	LB86538
matrix:	WATER	**sample id:**	I2273-02	**client id:**	EFFLUENT-DAY1-1CNMSD		

Percent Solids for Sample: 0   **Spiked ID:** I2273-02MSD   **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/L	75 - 125	0.034		0.0011	J	0.04	82		

DUPLICATE SAMPLE SUMMARY

Client:	LB86538	**Level:** LOW	**SDG No.:**	LB86538	
Contract:		**Lab Code:** CHEM	**Case No.:** LB86538	**SAS No.:**	LB86538
Matrix:	WATER	**Sample ID:** I2273-02	**Client ID:**	EFFLUENT-DAY1-1CNDUP	
Percent Solids for Sample:	0	**Duplicate ID** I2273-02DUP	**Percent Solids for Spike Sample:**	0	

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/L	20	0.0011	J	0.00076	U	200.0	*	

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

DUPLICATE SAMPLE SUMMARY

Client:	LB86538	**Level:**	LOW	**SDG No.:**	LB86538
Contract:		**Lab Code:**	CHEM	**Case No.:** LB86538	**SAS No.:** LB86538
Matrix:	WATER	**Sample ID:**	I2273-02MS	**Client ID:**	EFFLUENT-DAY1-1CNMSD
Percent Solids for Sample:	0	**Duplicate ID** I2273-02MSD		**Percent Solids for Spike Sample:**	0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/L	20	0.034		0.034		0		

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

LABORATORY CONTROL SAMPLE SUMMARY

Client: LB86538   **SDG No.:** LB86538

Contract: **Lab Code:** CHEM   **Case No.:** LB86538   **SAS No.:** LB86538

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB97772BS							
Cyanide	mg/L	0.1	0.098		98	85 - 115	