



GENCHEM

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB87537

SDG No.: LB87537

Contract: _____ Lab Code: CHEM

Case No.: LB87537

SAS No.: LB87537

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	0.093	0.099	93.9	0	85 - 115		05/18/2017	14:52	LB87537



GENCHEM

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB87537

SDG No.: LB87537

Contract: _____ Lab Code: CHEM

Case No.: LB87537

SAS No.: LB87537

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		05/18/2017	14:52	LB87537
CCV2	Reactive Cyanide	0.24	0.25	96	0	90 - 110		05/18/2017	15:00	LB87537
CCV3	Reactive Cyanide	0.26	0.25	104	0	90 - 110		05/18/2017	15:21	LB87537



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB87537

SDG No.: LB87537

Contract:

Lab Code: CHEM

Case No.: LB87537

SAS No.: LB87537

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB1	Reactive Cyanide	0.00017	+/-0.005	U		0.005		05/18/2017	14:52	LB87537

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB1	Reactive Cyanide	-0.00025	+/-0.005	U		0.005		05/18/2017	14:52	LB87537
CCB2	Reactive Cyanide	0.00019	+/-0.005	U		0.005		05/18/2017	15:00	LB87537
CCB3	Reactive Cyanide	-0	+/-0.005	U		0.005		05/18/2017	15:21	LB87537



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB87537

SDG No.: LB87537

Contract: Lab Code: CHEM

Case No.: LB87537

SAS No.: LB87537

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



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

Report of Analysis

Client:		Date Collected:	5/15/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/17/2017 12:00:00 AM
Client Sample ID:	SB-04-COMP	SDG No.:	LB87537
Lab Sample ID:	I3199-07	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	-0.00048	U	1	0.025		0.05	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/15/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/17/2017 12:00:00 AM
Client Sample ID:	SB-08-COMP	SDG No.:	LB87537
Lab Sample ID:	I3199-08	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	-0.0055	U	1	0.025		0.05	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/15/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/17/2017 12:00:00 AM
Client Sample ID:	SB-11-COMP	SDG No.:	LB87537
Lab Sample ID:	I3199-09	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	0.0016	U	1	0.025		0.049	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/16/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/16/2017 12:00:00 AM
Client Sample ID:	SB-1COMP	SDG No.:	LB87537
Lab Sample ID:	I3202-15	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	0.00057	U	1	0.025		0.049	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/16/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/16/2017 12:00:00 AM
Client Sample ID:	SB-2COMP	SDG No.:	LB87537
Lab Sample ID:	I3202-16	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	-0.0026	U	1	0.025		0.05	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/16/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/16/2017 12:00:00 AM
Client Sample ID:	SB-3COMP	SDG No.:	LB87537
Lab Sample ID:	I3202-17	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	-0.0039	U	1	0.025		0.05	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/16/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/16/2017 12:00:00 AM
Client Sample ID:	SB-4COMP	SDG No.:	LB87537
Lab Sample ID:	I3202-18	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	-0.0048	U	1	0.025		0.05	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/16/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/16/2017 12:00:00 AM
Client Sample ID:	SB-5COMP	SDG No.:	LB87537
Lab Sample ID:	I3202-19	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	0.0017	U	1	0.025		0.05	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/16/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/16/2017 12:00:00 AM
Client Sample ID:	SB-6COMP	SDG No.:	LB87537
Lab Sample ID:	I3202-20	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	-0.0018	U	1	0.025		0.049	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/16/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/16/2017 12:00:00 AM
Client Sample ID:	SB-7COMP	SDG No.:	LB87537
Lab Sample ID:	I3202-21	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	-0.0016	U	1	0.025		0.05	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/16/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/16/2017 12:00:00 AM
Client Sample ID:	SB-8COMP	SDG No.:	LB87537
Lab Sample ID:	I3202-22	Matrix:	Solid
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	-0.002	U	1	0.025		0.05	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/16/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/16/2017 12:00:00 AM
Client Sample ID:	SB-9COMP	SDG No.:	LB87537
Lab Sample ID:	I3202-23	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	-0.0049	U	1	0.025		0.05	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/16/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/16/2017 12:00:00 AM
Client Sample ID:	SB-10COMP	SDG No.:	LB87537
Lab Sample ID:	I3202-24	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	-0.0035	U	1	0.025		0.05	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/16/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/16/2017 12:00:00 AM
Client Sample ID:	SB-11COMP	SDG No.:	LB87537
Lab Sample ID:	I3202-25	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	-0.0038	U	1	0.025		0.05	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/17/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/17/2017 12:00:00 AM
Client Sample ID:	TP-11-TP-12	SDG No.:	LB87537
Lab Sample ID:	I3207-04	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	-0.0019	U	1	0.025		0.05	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/17/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/17/2017 12:00:00 AM
Client Sample ID:	TP-9-TP-10	SDG No.:	LB87537
Lab Sample ID:	I3207-08	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	-0.0029	U	1	0.025		0.049	mg/Kg	05/18/2017	05/18/2017	9012B



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

Report of Analysis

Client:		Date Collected:	5/17/2017 12:00:00 AM
Project:	LB87537	Date Received:	5/17/2017 12:00:00 AM
Client Sample ID:	TP-9-TP-10	SDG No.:	LB87537
Lab Sample ID:	I3207-08	Matrix:	Solid
Level (low/med):	low	% Solid:	100

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



GENCHEM
- 3b -
PREPARATION BLANK SUMMARY

Client: LB87537

SDG No.: LB87537

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
PB99062BL	Reactive Cyanide	SOLID -0.0016	<0.05	Batch Number: U		PB99062 0.05		Prep Date: 05/18/2017	05/18/2017 14:52	LB87537

GENCHEM

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB87537 **Level:** LOW **SDG No.:** LB87537
Contract: **Lab Code:** CHEM **Case No.:** LB87537 **SAS No.:** LB87537
Matrix: Solid **Sample ID:** I3199-07 **Client ID:** SB-04-COMPDUP
Percent Solids for Sample: 100 **Duplicate ID** I3199-07DUP **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	-0.0049	U			