

Daily Analysis Runlog For Sequence/QC Batch ID # LB91655

Review By		Review On				
SubDirectory		LB91655		Test : Cyanide		

STD. NAME	STD REF.#
ICAL Standard	WP59714,WP59715,WP59716,WP59717,WP59718,WP59719,WP59720
ICV Standard	W1541
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP58910
Chk Standard	WP55836,WP55355,WP59723

Sr#	SampleId	ClientID	QcType	Date	Comment	Status
1	0.0PPBCN	0.0PPBCN	CAL1	11/17/17 09:55		OK
2	5.0PPBCN	5.0PPBCN	CAL2	11/17/17 09:55		OK
3	10PPBCN	10PPBCN	CAL3	11/17/17 09:55		OK
4	50PPBCN	50PPBCN	CAL4	11/17/17 09:55		OK
5	100PPBCN	100PPBCN	CAL5	11/17/17 09:55		OK
6	250PPBCN	250PPBCN	CAL6	11/17/17 09:55		OK
7	500PPBCN	500PPBCN	CAL7	11/17/17 09:55		OK
8	ICV1	ICV1	ICV	11/17/17 12:22		OK
9	ICB1	ICB1	ICB	11/17/17 12:22		OK
10	CCV1	CCV1	CCV	11/17/17 12:22		OK
11	CCB1	CCB1	CCB	11/17/17 12:22		OK
12	PB104353BL	PB104353BL	MB	11/17/17 12:22		OK
13	PB104353BS	PB104353BS	LCS	11/17/17 12:22		OK
14	LOWPB104353	LOWPB104353	SAM	11/17/17 12:22		OK
15	HIGHPB104353	HIGHPB104353	SAM	11/17/17 12:22		OK
16	I6299-05	OK-01-111617	SAM	11/17/17 12:29		OK
17	I6299-05DUP	OK-01-111617DUP	DUP	11/17/17 12:29		OK
18	I6299-05MS	OK-01-111617MS	MS	11/17/17 12:29		OK
19	I6299-05MSD	OK-01-111617MSD	MSD	11/17/17 12:29		OK
20	I6304-12	CL-01-111617-A	SAM	11/17/17 12:29		OK
21	I6304-14	CL-01-111617-B	SAM	11/17/17 12:29		OK

Daily Analysis Runlog For Sequence/QC Batch ID # LB91655

Review By		Review On				
SubDirectory		Test : Cyanide				
LB91655						
STD. NAME		STD REF.#				
ICAL Standard		WP59714,WP59715,WP59716,WP59717,WP59718,WP59719,WP59720				
ICV Standard		W1541				
CCV Standard		N/A				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		WP58910				
Chk Standard		WP55836,WP55355,WP59723				
22	CCV2	CCV2	CCV	11/17/17 12:29		OK
23	CCB2	CCB2	CCB	11/17/17 12:29		OK
24	I6304-16	CL-01-111617-C	SAM	11/17/17 12:29		OK
25	I6304-18	CL-01-111617-D	SAM	11/17/17 12:29		OK
26	I6304-20	CL-01-111617-E	SAM	11/17/17 12:29		OK
27	I6513-01	SP-1	SAM	11/17/17 12:35		OK
28	I6521-01	MH-(0-12)	SAM	11/17/17 12:35		OK
29	I6521-05	TP-1-(0-5)	SAM	11/17/17 12:35		OK
30	I6521-09	TP-2-(0-5)	SAM	11/17/17 12:36		OK
31	CCV3	CCV3	CCV	11/17/17 12:36		OK
32	CCB3	CCB3	CCB	11/17/17 12:36		OK



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

Report of Analysis

Client:		Date Collected:	
Project:	LB91655	Date Received:	
Client Sample ID:	HIGHPB104353	SDG No.:	LB91655
Lab Sample ID:	HIGHPB104353	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	0.48		1	0.003		0.005	mg/L		11/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	11/16/2017 12:00:00 AM
Project:	LB91655	Date Received:	11/16/2017 12:00:00 AM
Client Sample ID:	OK-01-111617	SDG No.:	LB91655
Lab Sample ID:	I6299-05	Matrix:	Solid
Level (low/med):	low	% Solid:	86.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.11	J	1	0.037		0.28	mg/Kg	11/17/2017	11/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	11/16/2017 12:00:00 AM
Project:	LB91655	Date Received:	11/16/2017 12:00:00 AM
Client Sample ID:	CL-01-111617-A	SDG No.:	LB91655
Lab Sample ID:	I6304-12	Matrix:	Solid
Level (low/med):	low	% Solid:	89.2

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.013	U	1	0.036		0.27	mg/Kg	11/17/2017	11/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	11/16/2017 12:00:00 AM
Project:	LB91655	Date Received:	11/16/2017 12:00:00 AM
Client Sample ID:	CL-01-111617-B	SDG No.:	LB91655
Lab Sample ID:	I6304-14	Matrix:	Solid
Level (low/med):	low	% Solid:	90.3

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.026	U	1	0.036		0.27	mg/Kg	11/17/2017	11/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	11/16/2017 12:00:00 AM
Project:	LB91655	Date Received:	11/16/2017 12:00:00 AM
Client Sample ID:	CL-01-111617-C	SDG No.:	LB91655
Lab Sample ID:	I6304-16	Matrix:	Solid
Level (low/med):	low	% Solid:	91.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.0036	U	1	0.034		0.26	mg/Kg	11/17/2017	11/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	11/16/2017 12:00:00 AM
Project:	LB91655	Date Received:	11/16/2017 12:00:00 AM
Client Sample ID:	CL-01-111617-D	SDG No.:	LB91655
Lab Sample ID:	I6304-18	Matrix:	Solid
Level (low/med):	low	% Solid:	89.3

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.0034	U	1	0.036		0.27	mg/Kg	11/17/2017	11/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	11/16/2017 12:00:00 AM
Project:	LB91655	Date Received:	11/16/2017 12:00:00 AM
Client Sample ID:	CL-01-111617-E	SDG No.:	LB91655
Lab Sample ID:	I6304-20	Matrix:	Solid
Level (low/med):	low	% Solid:	89.4

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0	U	1	0.037		0.28	mg/Kg	11/17/2017	11/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	11/15/2017 12:00:00 AM
Project:	LB91655	Date Received:	11/16/2017 12:00:00 AM
Client Sample ID:	SP-1	SDG No.:	LB91655
Lab Sample ID:	I6513-01	Matrix:	Solid
Level (low/med):	low	% Solid:	84.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.053	U	1	0.037		0.28	mg/Kg	11/17/2017	11/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	11/16/2017 12:00:00 AM
Project:	LB91655	Date Received:	11/16/2017 12:00:00 AM
Client Sample ID:	MH-(0-12)	SDG No.:	LB91655
Lab Sample ID:	I6521-01	Matrix:	Solid
Level (low/med):	low	% Solid:	80.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.0065	U	1	0.041		0.31	mg/Kg	11/17/2017	11/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	11/16/2017 12:00:00 AM
Project:	LB91655	Date Received:	11/16/2017 12:00:00 AM
Client Sample ID:	TP-1-(0-5)	SDG No.:	LB91655
Lab Sample ID:	I6521-05	Matrix:	Solid
Level (low/med):	low	% Solid:	90.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.012	U	1	0.035		0.27	mg/Kg	11/17/2017	11/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	11/16/2017 12:00:00 AM
Project:	LB91655	Date Received:	11/16/2017 12:00:00 AM
Client Sample ID:	TP-2-(0-5)	SDG No.:	LB91655
Lab Sample ID:	I6521-09	Matrix:	Solid
Level (low/med):	low	% Solid:	87

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.015	U	1	0.038		0.28	mg/Kg	11/17/2017	11/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	
Project:	LB91655	Date Received:	
Client Sample ID:	LOWPB104353	SDG No.:	LB91655
Lab Sample ID:	LOWPB104353	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	0.0095		1	0.003		0.005	mg/L		11/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	
Project:	LB91655	Date Received:	
Client Sample ID:	LOWPB104353	SDG No.:	LB91655
Lab Sample ID:	LOWPB104353	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



GENCHEM

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB91655

SDG No.: LB91655

Contract: _____ Lab Code: CHEM

Case No.: LB91655

SAS No.: LB91655

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	0.095	0.099	96	0	85 - 115		11/17/2017	12:22	LB91655



GENCHEM

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB91655

SDG No.: LB91655

Contract: _____ Lab Code: CHEM

Case No.: LB91655

SAS No.: LB91655

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		11/17/2017	12:22	LB91655
CCV2	Cyanide	0.24	0.25	96	0	90 - 110		11/17/2017	12:29	LB91655
CCV3	Cyanide	0.25	0.25	100	0	90 - 110		11/17/2017	12:36	LB91655



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB91655

SDG No.: LB91655

Contract:

Lab Code: CHEM

Case No.: LB91655

SAS No.: LB91655

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB1	Cyanide	-0.00048	+/-0.005	U		0.005		11/17/2017	12:22	LB91655

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB1	Cyanide	-0.00029	+/-0.005	U		0.005		11/17/2017	12:22	LB91655
CCB2	Cyanide	-0.00018	+/-0.005	U		0.005		11/17/2017	12:29	LB91655
CCB3	Cyanide	0	+/-0.005	U		0.005		11/17/2017	12:36	LB91655



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB91655

SDG No.: LB91655

Contract: Lab Code: CHEM

Case No.: LB91655

SAS No.: LB91655

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



GENCHEM
- 3b -
PREPARATION BLANK SUMMARY

Client: LB91655

SDG No.: LB91655

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
PB104353BL		SOLID		Batch Number:		PB104353		Prep Date:	11/17/2017	
	Cyanide	-0.016	<0.24	U		0.24		11/17/2017	12:22	LB91655



GENCHEM
- 5a -
MATRIX SPIKE SUMMARY

client: LB91655 level: low sdg no.: LB91655
contract: lab code: CHEM case no.: LB91655 sas no.: LB91655
matrix: Solid sample id: I6299-05 client id: OK-01-111617MS
Percent Solids for Sample: 86.6 Spiked ID: I6299-05MS Percent Solids for Spike Sample: 86.6

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/Kg	75 - 125	1.9		0.11	J	2.2	81		



GENCHEM
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: LB91655 level: low sdg no.: LB91655
contract: lab code: CHEM case no.: LB91655 sas no.: LB91655
matrix: Solid sample id: I6299-05 client id: OK-01-111617MSD
Percent Solids for Sample: 86.6 Spiked ID: I6299-05MSD Percent Solids for Spike Sample: 86.6

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/Kg	75 - 125		2	0.11	J	2.2	86		

GENCHEM

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB91655 Level: LOW SDG No.: LB91655
Contract: _____ Lab Code: CHEM Case No.: LB91655 SAS No.: LB91655
Matrix: Solid Sample ID: I6299-05 Client ID: OK-01-111617DUP
Percent Solids for Sample: 86.6 Duplicate ID I6299-05DUP Percent Solids for Spike Sample: 86.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/Kg	20	0.11	J	0.11	J	0		

GENCHEM

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB91655 Level: LOW SDG No.: LB91655
Contract: _____ Lab Code: CHEM Case No.: LB91655 SAS No.: LB91655
Matrix: Solid Sample ID: I6299-05MS Client ID: OK-01-111617MSD
Percent Solids for Sample: 86.6 Duplicate ID I6299-05MSD Percent Solids for Spike Sample: 86.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/Kg	20	1.9			2	5		



GENCHEM

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: LB91655

SDG No.: LB91655

Contract:

Lab Code: CHEM

Case No.: LB91655

SAS No.: LB91655

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB104353BS Cyanide	mg/Kg	4.9	4.8		98	85 - 115	