

Daily Analysis Runlog For Sequence/QC Batch ID # LB89897

Review By		Review On				
SubDirectory		LB89897		Test : Cyanide		
STD. NAME		STD REF.#				
ICAL Standard		WP57700,WP5701,WP57702,WP57703,WP57704,WP57705,WP57706,WP57707				
ICV Standard		WP57709				
CCV Standard		WP57708				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		N/A				
Chk Standard		WP57710,WP55355,WP55836				
Sr#	SampleID	ClientID	QcType	Date	Comment	Status
1	0.0PPBCN	0.0PPBCN	CAL1	09/06/17 11:05		OK
2	5.0PPBCN	5.0PPBCN	CAL2	09/06/17 11:05		OK
3	10PPBCN	10PPBCN	CAL3	09/06/17 11:05		OK
4	50PPBCN	50PPBCN	CAL4	09/06/17 11:05		OK
5	100PPBCN	100PPBCN	CAL5	09/06/17 11:05		OK
6	250PPBCN	250PPBCN	CAL6	09/06/17 11:05		OK
7	500PPBCN	500PPBCN	CAL7	09/06/17 11:05		OK
8	ICV1	ICV1	ICV	09/06/17 14:15		OK
9	ICB1	ICB1	ICB	09/06/17 14:15		OK
10	CCV1	CCV1	CCV	09/06/17 14:15		OK
11	CCB1	CCB1	CCB	09/06/17 14:15		OK
12	PB102096BL	PB102096BL	MB	09/06/17 14:15		OK
13	PB102096BS	PB102096BS	LCS	09/06/17 14:15		OK
14	LOWPB102096	LOWPB102096	SAM	09/06/17 14:22		OK
15	HIGHPB102096	HIGHPB102096	SAM	09/06/17 14:22		OK
16	I5105-01	OK-02-090517	SAM	09/06/17 14:22		OK
17	I5105-01DUP	OK-02-090517DUP	DUP	09/06/17 14:22		OK
18	I5105-01MS	OK-02-090517MS	MS	09/06/17 14:51		OK
19	I5105-01MSD	OK-02-090517MSD	MSD	09/06/17 14:51		OK
20	I5110-01	SP-1	SAM	09/06/17 14:51		OK
21	I5110-04	SP-2	SAM	09/06/17 14:51		OK

Daily Analysis Runlog For Sequence/QC Batch ID # LB89897

Review By		Review On				
SubDirectory		LB89897		Test : Cyanide		
STD. NAME		STD REF.#				
ICAL Standard		WP57700,WP5701,WP57702,WP57703,WP57704,WP57705,WP57706,WP57707				
ICV Standard		WP57709				
CCV Standard		WP57708				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		N/A				
Chk Standard		WP57710,WP55355,WP55836				
22	CCV2	CCV2	CCV	09/06/17 14:51		OK
23	CCB2	CCB2	CCB	09/06/17 14:51		OK
24	PB102095BL	PB102095BL	MB	09/06/17 14:51		OK
25	PB102095BS	PB102095BS	LCS	09/06/17 14:51		OK
26	I5109-01	DRUM-1-2-COMP	SAM	09/06/17 14:51		OK
27	I5109-01DUP	DRUM-1-2-COMPDU	DUP	09/06/17 14:51		OK
28	I5109-01MS	DRUM-1-2-COMPMS	MS	09/06/17 14:51		OK
29	I5109-01MSD	DRUM-1-2-COMPMS	MSD	09/06/17 14:55		OK
30	CCV3	CCV3	CCV	09/06/17 14:55		OK
31	CCB3	CCB3	CCB	09/06/17 14:55		OK
32	DOC-1	DOC-1	LCS	09/06/17 15:48		OK
33	DOC-2	DOC-2	LCS	09/06/17 15:48		OK
34	DOC-3	DOC-3	LCS	09/06/17 15:48		OK
35	DOC-4	DOC-4	LCS	09/06/17 15:48		OK
36	CCV4	CCV4	CCV	09/06/17 15:48		OK
37	CCB4	CCB4	CCB	09/06/17 15:48		OK



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

Report of Analysis

Client:		Date Collected:	
Project:	LB89897	Date Received:	
Client Sample ID:	HIGHPB102096	SDG No.:	LB89897
Lab Sample ID:	HIGHPB102096	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		09/06/2017	9012B



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

Report of Analysis

Client:		Date Collected:	9/5/2017 12:00:00 AM
Project:	LB89897	Date Received:	9/5/2017 12:00:00 AM
Client Sample ID:	OK-02-090517	SDG No.:	LB89897
Lab Sample ID:	I5105-01	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	-0.076	U	1	0.035		0.27	mg/Kg	09/06/2017	09/06/2017	9012B



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

Report of Analysis

Client:		Date Collected:	9/5/2017 12:00:00 AM
Project:	LB89897	Date Received:	9/5/2017 12:00:00 AM
Client Sample ID:	DRUM-1-2-COMP	SDG No.:	LB89897
Lab Sample ID:	I5109-01	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	-0.0011	U	1	0.003		0.005	mg/L	09/06/2017	09/06/2017	9012B



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

Report of Analysis

Client:		Date Collected:	9/5/2017 12:00:00 AM
Project:	LB89897	Date Received:	9/5/2017 12:00:00 AM
Client Sample ID:	SP-1	SDG No.:	LB89897
Lab Sample ID:	IS110-01	Matrix:	Solid
Level (low/med):	low	% Solid:	88.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.0072	U	1	0.036		0.27	mg/Kg	09/06/2017	09/06/2017	9012B



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

Report of Analysis

Client:		Date Collected:	9/5/2017 12:00:00 AM
Project:	LB89897	Date Received:	9/5/2017 12:00:00 AM
Client Sample ID:	SP-2	SDG No.:	LB89897
Lab Sample ID:	I5110-04	Matrix:	Solid
Level (low/med):	low	% Solid:	88.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.041	J	1	0.035		0.27	mg/Kg	09/06/2017	09/06/2017	9012B



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

Report of Analysis

Client:		Date Collected:	
Project:	LB89897	Date Received:	
Client Sample ID:	LOWPB102096	SDG No.:	LB89897
Lab Sample ID:	LOWPB102096	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	0.0088		1	0.003		0.005	mg/L		09/06/2017	9012B



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

Report of Analysis

Client:		Date Collected:	
Project:	LB89897	Date Received:	
Client Sample ID:	LOWPB102096	SDG No.:	LB89897
Lab Sample ID:	LOWPB102096	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: LB89897

SDG No.: LB89897

Contract: _____ Lab Code: CHEM

Case No.: LB89897

SAS No.: LB89897

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	0.098	0.099	99	0	85 - 115		09/06/2017	14:15	LB89897



GENCHEM

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB89897

SDG No.: LB89897

Contract: _____ Lab Code: CHEM

Case No.: LB89897

SAS No.: LB89897

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	0.25	0.25	100	0	90 - 110		09/06/2017	14:15	LB89897
CCV2	Cyanide	0.25	0.25	100	0	90 - 110		09/06/2017	14:51	LB89897
CCV3	Cyanide	0.26	0.25	104	0	90 - 110		09/06/2017	14:55	LB89897
CCV4	Cyanide	0.26	0.25	104	0	90 - 110		09/06/2017	15:48	LB89897



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB89897 **SDG No.:** LB89897
Contract: **Lab Code:** CHEM **Case No.:** LB89897 **SAS No.:** LB89897

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB1	Cyanide	-0.0015	+/-0.005	U		0.005		09/06/2017	14:15	LB89897



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB89897

SDG No.: LB89897

Contract:

Lab Code: CHEM

Case No.: LB89897

SAS No.: LB89897

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB1	Cyanide	-0.00084	+/-0.005	U		0.005		09/06/2017	14:15	LB89897
CCB2	Cyanide	-0.00078	+/-0.005	U		0.005		09/06/2017	14:51	LB89897
CCB3	Cyanide	-0.00058	+/-0.005	U		0.005		09/06/2017	14:55	LB89897
CCB4	Cyanide	-0.0014	+/-0.005	U		0.005		09/06/2017	15:48	LB89897



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB89897

SDG No.: LB89897

Contract: Lab Code: CHEM

Case No.: LB89897

SAS No.: LB89897

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: LB89897

SDG No.: LB89897

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
PB102095BL	Cyanide	WATER		Batch Number:		PB102095		Prep Date:	09/06/2017	
		-0.0011	<0.005	U		0.005		09/06/2017	14:51	LB89897
Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	LOD mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB102096BL	Cyanide	SOLID		Batch Number:		PB102096		Prep Date:	09/06/2017	
		-0.044	<0.24	U		0.24		09/06/2017	14:15	LB89897



GENCHEM
- 5a -
MATRIX SPIKE SUMMARY

client: LB89897 level: low sdg no.: LB89897
contract: lab code: CHEM case no.: LB89897 sas no.: LB89897
matrix: Solid sample id: I5105-01 client id: OK-02-090517MS
Percent Solids for Sample: 90.5 Spiked ID: I5105-01MS Percent Solids for Spike Sample: 90.5

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/Kg	75 - 125	1.9		0.035	U	2.2	86.4		



GENCHEM
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: LB89897 level: low sdg no.: LB89897
contract: lab code: CHEM case no.: LB89897 sas no.: LB89897
matrix: Solid sample id: I5105-01 client id: OK-02-090517MSD
Percent Solids for Sample: 90.5 Spiked ID: I5105-01MSD Percent Solids for Spike Sample: 90.5

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/Kg	75 - 125	1.9		0.035	U	2.1	90.5		



GENCHEM
- 5a -
MATRIX SPIKE SUMMARY

client: LB89897 level: low sdg no.: LB89897
contract: lab code: CHEM case no.: LB89897 sas no.: LB89897
matrix: WATER sample id: I5109-01 client id: DRUM-1-2-COMPMS
Percent Solids for Sample: 0 Spiked ID: I5109-01MS 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	0.032		0.003	U	0.04	80		



GENCHEM
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: LB89897 level: low sdg no.: LB89897
contract: lab code: CHEM case no.: LB89897 sas no.: LB89897
matrix: WATER sample id: I5109-01 client id: DRUM-1-2-COMPMSD
Percent Solids for Sample: 0 Spiked ID: I5109-01MSD 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		0.003	U	0.04	85		

GENCHEM

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB89897 **Level:** LOW **SDG No.:** LB89897
Contract: **Lab Code:** CHEM **Case No.:** LB89897 **SAS No.:** LB89897
Matrix: Solid **Sample ID:** I5105-01 **Client ID:** OK-02-090517DUP
Percent Solids for Sample: 90.5 **Duplicate ID** I5105-01DUP **Percent Solids for Spike Sample:** 90.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/Kg	20	0.035	U	-0.08	U			

GENCHEM**- 6 -****DUPLICATE SAMPLE SUMMARY**

Client: LB89897 **Level:** LOW **SDG No.:** LB89897
Contract: **Lab Code:** CHEM **Case No.:** LB89897 **SAS No.:** LB89897
Matrix: Solid **Sample ID:** I5105-01MS **Client ID:** OK-02-090517MSD
Percent Solids for Sample: 90.5 **Duplicate ID** I5105-01MSD **Percent Solids for Spike Sample:** 90.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/Kg	20	1.9		1.9		0		

GENCHEM

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB89897 **Level:** LOW **SDG No.:** LB89897
Contract: **Lab Code:** CHEM **Case No.:** LB89897 **SAS No.:** LB89897
Matrix: WATER **Sample ID:** I5109-01 **Client ID:** DRUM-1-2-COMPDU
Percent Solids for Sample: 0 **Duplicate ID** I5109-01DUP **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/L	20	0.003	U	-0.0017	U			

GENCHEM

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB89897 **Level:** LOW **SDG No.:** LB89897
Contract: **Lab Code:** CHEM **Case No.:** LB89897 **SAS No.:** LB89897
Matrix: WATER **Sample ID:** I5109-01MS **Client ID:** DRUM-1-2-COMPMSD
Percent Solids for Sample: 0 **Duplicate ID** I5109-01MSD **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/L	20	0.032		0.034		6		



GENCHEM

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: LB89897

SDG No.: LB89897

Contract:

Lab Code: CHEM

Case No.: LB89897

SAS No.: LB89897

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
DOC-1 Cyanide	mg/L	0.1	0.09		90	85 - 115	



GENCHEM

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: LB89897

SDG No.: LB89897

Contract:

Lab Code: CHEM

Case No.: LB89897

SAS No.: LB89897

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
DOC-2 Cyanide	mg/L	0.1	0.091		91	85 - 115	



GENCHEM

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: LB89897

SDG No.: LB89897

Contract:

Lab Code: CHEM

Case No.: LB89897

SAS No.: LB89897

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
DOC-3 Cyanide	mg/L	0.1	0.092		92	85 - 115	



GENCHEM

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: LB89897

SDG No.: LB89897

Contract:

Lab Code: CHEM

Case No.: LB89897

SAS No.: LB89897

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
DOC-4 Cyanide	mg/L	0.1	0.091		91	85 - 115	



GENCHEM

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: LB89897

SDG No.: LB89897

Contract:

Lab Code: CHEM

Case No.: LB89897

SAS No.: LB89897

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB102095BS Cyanide	mg/L	0.1	0.1		100	85 - 115	



GENCHEM

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: LB89897

SDG No.: LB89897

Contract:

Lab Code: CHEM

Case No.: LB89897

SAS No.: LB89897

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB102096BS Cyanide	mg/Kg	4.9	4.8		98	85 - 115	