

Daily Analysis Runlog For Sequence/QC Batch ID # LB89566

Review By		Review On				
SubDirectory		LB89566		Test : Cyanide		
STD. NAME		STD REF.#				
ICAL Standard		WP57321,WP57322,WP57323,WP57324,WP57325,WP57326,WP57327,WP57328				
ICV Standard		W1541				
CCV Standard		WP57330				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		WP54521				
Chk Standard		WP57329,WP55355,WP55836				
Sr#	SampleID	ClientID	QcType	Date	Comment	Status
1	0.0PPBCN	0.0PPBCN	CAL1	08/17/17 13:26		OK
2	5.0PPBCN	5.0PPBCN	CAL2	08/17/17 13:26		OK
3	10PPBCN	10PPBCN	CAL3	08/17/17 13:26		OK
4	50PPBCN	50PPBCN	CAL4	08/17/17 13:26		OK
5	100PPBCN	100PPBCN	CAL5	08/17/17 13:26		OK
6	250PPBCN	250PPBCN	CAL6	08/17/17 13:26		OK
7	500PPBCN	500PPBCN	CAL7	08/17/17 13:26		OK
8	ICV1	ICV1	ICV	08/17/17 14:11		OK
9	ICB1	ICB1	ICB	08/17/17 14:11		OK
10	CCV1	CCV1	CCV	08/17/17 14:11		OK
11	CCB1	CCB1	CCB	08/17/17 14:11		OK
12	PB101626BL	PB101626BL	MB	08/17/17 14:11		OK
13	PB101626BS	PB101626BS	LCS	08/17/17 14:11		OK
14	LOWPB101626	LOWPB101626	SAM	08/17/17 14:18		OK
15	HIGHPB101626	HIGHPB101626	SAM	08/17/17 14:19		OK
16	I4848-01	A2882	SAM	08/17/17 14:19		OK
17	I4848-01DUP	A2882DUP	DUP	08/17/17 14:19		OK
18	PB101625BL	PB101625BL	MB	08/17/17 14:19		OK
19	PB101625BS	PB101625BS	LCS	08/17/17 14:19		OK
20	CCV2	CCV2	CCV	08/17/17 14:19		OK
21	CCB2	CCB2	CCB	08/17/17 14:19		OK

Daily Analysis Runlog For Sequence/QC Batch ID # LB89566

Review By		Review On				
SubDirectory		LB89566		Test : Cyanide		
STD. NAME		STD REF.#				
ICAL Standard		WP57321,WP57322,WP57323,WP57324,WP57325,WP57326,WP57327,WP57328				
ICV Standard		W1541				
CCV Standard		WP57330				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		WP54521				
Chk Standard		WP57329,WP55355,WP55836				
22	I4844-01	OR-03-081617	SAM	08/17/17 14:26		OK
23	I4844-01DUP	OR-03-081617 DUP	DUP	08/17/17 14:26		OK
24	I4844-01MS	OR-03-081617 MS	MS	08/17/17 14:26		OK
25	I4844-01MSD	OR-03-081617 MSD	MSD	08/17/17 14:26		OK
26	I4845-01	OK-03-81617	SAM	08/17/17 14:26		OK
27	I4847-01	PVSC-A-COMP	SAM	08/17/17 14:26		OK
28	I4847-06	PVSC-B-COMP	SAM	08/17/17 14:26		OK
29	I4852-01	VNJ-207	SAM	08/17/17 14:26		OK
30	I4852-04	VNJ-242	SAM	08/17/17 14:26		OK
31	CCV3	CCV3	CCV	08/17/17 14:50		OK
32	CCB3	CCB3	CCB	08/17/17 14:50		OK
33	I4848-01MS	A2882MS	MS	08/17/17 15:14		OK
34	I4848-01MSD	A2882MSD	MSD	08/17/17 15:14		OK
35	CCV4	CCV4	CCV	08/17/17 15:14		OK
36	CCB4	CCB4	CCB	08/17/17 15:14		OK



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

Report of Analysis

Client:		Date Collected:	
Project:	LB89566	Date Received:	
Client Sample ID:	HIGHPB101626	SDG No.:	LB89566
Lab Sample ID:	HIGHPB101626	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		08/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	8/16/2017 12:00:00 AM
Project:	LB89566	Date Received:	8/16/2017 12:00:00 AM
Client Sample ID:	OR-03-081617	SDG No.:	LB89566
Lab Sample ID:	I4844-01	Matrix:	Solid
Level (low/med):	low	% Solid:	89.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.077	J	1	0.036		0.27	mg/Kg	08/17/2017	08/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	8/16/2017 12:00:00 AM
Project:	LB89566	Date Received:	8/16/2017 12:00:00 AM
Client Sample ID:	OK-03-81617	SDG No.:	LB89566
Lab Sample ID:	I4845-01	Matrix:	Solid
Level (low/med):	low	% Solid:	94.3

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.048	J	1	0.034		0.25	mg/Kg	08/17/2017	08/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	8/16/2017 12:00:00 AM
Project:	LB89566	Date Received:	8/16/2017 12:00:00 AM
Client Sample ID:	PVSC-A-COMP	SDG No.:	LB89566
Lab Sample ID:	I4847-01	Matrix:	Solid
Level (low/med):	low	% Solid:	83.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.46		1	0.038		0.28	mg/Kg	08/17/2017	08/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	8/16/2017 12:00:00 AM
Project:	LB89566	Date Received:	8/16/2017 12:00:00 AM
Client Sample ID:	PVSC-B-COMP	SDG No.:	LB89566
Lab Sample ID:	I4847-06	Matrix:	Solid
Level (low/med):	low	% Solid:	84.2

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.27		1	0.036		0.27	mg/Kg	08/17/2017	08/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	8/16/2017 12:00:00 AM
Project:	LB89566	Date Received:	8/16/2017 12:00:00 AM
Client Sample ID:	A2882	SDG No.:	LB89566
Lab Sample ID:	I4848-01	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	0.0021	U	1	0.003		0.005	mg/L	08/17/2017	08/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	8/16/2017 12:00:00 AM
Project:	LB89566	Date Received:	8/16/2017 12:00:00 AM
Client Sample ID:	VNJ-207	SDG No.:	LB89566
Lab Sample ID:	I4852-01	Matrix:	Solid
Level (low/med):	low	% Solid:	87.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.014	U	1	0.035		0.26	mg/Kg	08/17/2017	08/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	8/16/2017 12:00:00 AM
Project:	LB89566	Date Received:	8/16/2017 12:00:00 AM
Client Sample ID:	VNJ-242	SDG No.:	LB89566
Lab Sample ID:	I4852-04	Matrix:	Solid
Level (low/med):	low	% Solid:	91.2

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.045	J	1	0.034		0.26	mg/Kg	08/17/2017	08/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	
Project:	LB89566	Date Received:	
Client Sample ID:	LOWPB101626	SDG No.:	LB89566
Lab Sample ID:	LOWPB101626	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	0.01		1	0.003		0.005	mg/L		08/17/2017	9012B



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

Report of Analysis

Client:		Date Collected:	
Project:	LB89566	Date Received:	
Client Sample ID:	LOWPB101626	SDG No.:	LB89566
Lab Sample ID:	LOWPB101626	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: LB89566

SDG No.: LB89566

Contract: _____ Lab Code: CHEM

Case No.: LB89566

SAS No.: LB89566

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		08/17/2017	14:11	LB89566
CCV2	Cyanide	0.25	0.25	100	0	90 - 110		08/17/2017	14:19	LB89566
CCV3	Cyanide	0.25	0.25	100	0	90 - 110		08/17/2017	14:50	LB89566
CCV4	Cyanide	0.26	0.25	104	0	90 - 110		08/17/2017	15:14	LB89566



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB89566 **SDG No.:** LB89566
Contract: **Lab Code:** CHEM **Case No.:** LB89566 **SAS No.:** LB89566

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB1	Cyanide	0.00012	+/-0.005	U		0.005		08/17/2017	14:11	LB89566



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB89566

SDG No.: LB89566

Contract:

Lab Code: CHEM

Case No.: LB89566

SAS No.: LB89566

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB1	Cyanide	0.00028	+/-0.005	U		0.005		08/17/2017	14:11	LB89566
CCB2	Cyanide	0.0006	+/-0.005	U		0.005		08/17/2017	14:19	LB89566
CCB3	Cyanide	-0.00018	+/-0.005	U		0.005		08/17/2017	14:50	LB89566
CCB4	Cyanide	0.00049	+/-0.005	U		0.005		08/17/2017	15:14	LB89566



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB89566

SDG No.: LB89566

Contract: Lab Code: CHEM

Case No.: LB89566

SAS No.: LB89566

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: LB89566

SDG No.: LB89566

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
PB101625BL	Cyanide	SOLID		Batch Number:		PB101625		Prep Date:	08/17/2017	
		0.088	<0.25	J		0.25		08/17/2017	14:19	LB89566
Sample ID	Analyte	Result (mg/L)	Acceptance Limit	Conc Qual	LOD mg/L	CRQL mg/L	M	Analysis Date	Analysis Time	Run
PB101626BL	Cyanide	WATER		Batch Number:		PB101626		Prep Date:	08/17/2017	
		0	<0.005	U		0.005		08/17/2017	14:11	LB89566

GENCHEM
- 5a -
MATRIX SPIKE SUMMARY

client: LB89566 level: low sdg no.: LB89566
contract: lab code: CHEM case no.: LB89566 sas no.: LB89566
matrix: Solid sample id: I4844-01 client id: OR-03-081617 MS
Percent Solids for Sample: 89.7 Spiked ID: I4844-01MS Percent Solids for Spike Sample: 89.7

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/Kg	75 - 125	1.5		0.077	J	2.2	65	*	



GENCHEM
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: LB89566 level: low sdg no.: LB89566
contract: lab code: CHEM case no.: LB89566 sas no.: LB89566
matrix: Solid sample id: I4844-01 client id: OR-03-081617 MSD
Percent Solids for Sample: 89.7 Spiked ID: I4844-01MSD Percent Solids for Spike Sample: 89.7

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/Kg	75 - 125	1.5		0.077	J	2.2	65	*	



GENCHEM
- 5a -
MATRIX SPIKE SUMMARY

client: LB89566 level: low sdg no.: LB89566
contract: lab code: CHEM case no.: LB89566 sas no.: LB89566
matrix: WATER sample id: I4848-01 client id: A2882MS
Percent Solids for Sample: 0 Spiked ID: I4848-01MS 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	0.0078		0.003	U	0.04	19.5	*	



GENCHEM
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: LB89566 level: low sdg no.: LB89566
contract: lab code: CHEM case no.: LB89566 sas no.: LB89566
matrix: WATER sample id: I4848-01 client id: A2882MSD
Percent Solids for Sample: 0 Spiked ID: I4848-01MSD 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	0.0081		0.003	U	0.04	20.3	*	

GENCHEM

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB89566 **Level:** LOW **SDG No.:** LB89566
Contract: **Lab Code:** CHEM **Case No.:** LB89566 **SAS No.:** LB89566
Matrix: Solid **Sample ID:** I4844-01 **Client ID:** OR-03-081617 DUP
Percent Solids for Sample: 89.7 **Duplicate ID** I4844-01DUP **Percent Solids for Spike Sample:** 89.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/Kg	20	0.077	J	0.042	J	59	*	

GENCHEM

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB89566 **Level:** LOW **SDG No.:** LB89566
Contract: **Lab Code:** CHEM **Case No.:** LB89566 **SAS No.:** LB89566
Matrix: Solid **Sample ID:** I4844-01MS **Client ID:** OR-03-081617 MSD
Percent Solids for Sample: 89.7 **Duplicate ID** I4844-01MSD **Percent Solids for Spike Sample:** 89.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/Kg	20	1.5		1.5		0		



GENCHEM

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB89566 **Level:** LOW **SDG No.:** LB89566
Contract: **Lab Code:** CHEM **Case No.:** LB89566 **SAS No.:** LB89566
Matrix: WATER **Sample ID:** I4848-01 **Client ID:** A2882DUP
Percent Solids for Sample: 0 **Duplicate ID** I4848-01DUP **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: LB89566 **Level:** LOW **SDG No.:** LB89566
Contract: **Lab Code:** CHEM **Case No.:** LB89566 **SAS No.:** LB89566
Matrix: WATER **Sample ID:** I4848-01MS **Client ID:** A2882MSD
Percent Solids for Sample: 0 **Duplicate ID** I4848-01MSD **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/L	20	0.0078		0.0081		4		

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB101625BS							
Cyanide	mg/Kg	4.9	4.8		98	85 - 115	



GENCHEM

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: LB89566

SDG No.: LB89566

Contract:

Lab Code: CHEM

Case No.: LB89566

SAS No.: LB89566

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB101626BS Cyanide	mg/L	0.1	0.095		95	85 - 115	