

Daily Analysis Runlog For Sequence/QC Batch ID # LB89456

Review By		Review On				
SubDirectory		LB89456		Test : Cyanide		

STD. NAME	STD REF.#
ICAL Standard	WP57204,WP57205,WP57206,WP57207,WP57208,WP57209,WP57210,WP57212
ICV Standard	WP57220
CCV Standard	WP57219
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP57215,WP55355,WP55836

Sr#	SampleID	ClientID	QcType	Date	Comment	Status
1	0.0PPBCN	0.0PPBCN	CAL1	08/14/17 12:22		OK
2	5.0PPBCN	5.0PPBCN	CAL2	08/14/17 12:23		OK
3	10PPBCN	10PPBCN	CAL3	08/14/17 12:23		OK
4	50PPBCN	50PPBCN	CAL4	08/14/17 12:23		OK
5	100PPBCN	100PPBCN	CAL5	08/14/17 12:23		OK
6	250PPBCN	250PPBCN	CAL6	08/14/17 12:23		OK
7	500PPBCN	500PPBCN	CAL7	08/14/17 12:23		OK
8	ICV1	ICV1	ICV	08/14/17 14:06		OK
9	ICB1	ICB1	ICB	08/14/17 14:06		OK
10	CCV1	CCV1	CCV	08/14/17 14:06		OK
11	CCB1	CCB1	CCB	08/14/17 14:06		OK
12	PB101509BL	PB101509BL	MB	08/14/17 14:06		OK
13	PB101509BS	PB101509BS	LCS	08/14/17 14:14		OK
14	LOWPB101509	LOWPB101509	SAM	08/14/17 14:14		OK
15	HIGHPB101509	HIGHPB101509	SAM	08/14/17 14:14		OK
16	I4750-02	B-15(0-10)COMP	SAM	08/14/17 14:14		OK
17	I4750-02DUP	B-15(0-10)COMPDU	DUP	08/14/17 14:14		OK
18	I4750-02MS	B-15(0-10)COMPMS	MS	08/14/17 14:14		OK
19	I4750-02MSD	B-15(0-10)COMPMS	MSD	08/14/17 14:14		OK
20	I4753-01	DRUMS-COMP	SAM	08/14/17 14:14		OK
21	I4754-01	TOPSOIL-MATERIAL	SAM	08/14/17 14:14		OK

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 8922

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SubDirectory		LB89456		Test : Cyanide		
STD. NAME		STD REF.#				
ICAL Standard		WP57204,WP57205,WP57206,WP57207,WP57208,WP57209,WP57210,WP57212				
ICV Standard		WP57220				
CCV Standard		WP57219				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		N/A				
Chk Standard		WP57215,WP55355,WP55836				
22	CCV2	CCV2	CCV	08/14/17 14:14		OK
23	CCB2	CCB2	CCB	08/14/17 14:14		OK
24	I4754-03	30-FINES-COMP	SAM	08/14/17 14:21		OK
25	I4755-01	SA-06-081117-A	SAM	08/14/17 14:21		OK
26	I4755-04	SA-06-081117-B	SAM	08/14/17 14:21		OK
27	I4758-01	SU-02-081117	SAM	08/14/17 14:21		OK
28	I4760-02	SP-1-COMP	SAM	08/14/17 14:21		OK
29	I4761-01	RUSB-01	SAM	08/14/17 14:21		OK
30	I4761-02	RUSB-02	SAM	08/14/17 14:21		OK
31	I4761-03	RUSB-03	SAM	08/14/17 14:22		OK
32	I4761-04	RUSB-04	SAM	08/14/17 14:22		OK
33	I4761-05	RURRSB-05	SAM	08/14/17 14:22		OK
34	CCV3	CCV3	CCV	08/14/17 14:22		OK
35	CCB3	CCB3	CCB	08/14/17 14:27		OK
36	I4761-06	RUSB-06	SAM	08/14/17 14:27		OK
37	CCV4	CCV4	CCV	08/14/17 14:27		OK
38	CCB4	CCB4	CCB	08/14/17 14:27		OK



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Report of Analysis

Client:		Date Collected:	
Project:	LB89456	Date Received:	
Client Sample ID:	HIGHPB101509	SDG No.:	LB89456
Lab Sample ID:	HIGHPB101509	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		08/14/2017	9012B



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Report of Analysis

Client:		Date Collected:	8/11/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	B-15(0-10)COMP	SDG No.:	LB89456
Lab Sample ID:	I4750-02	Matrix:	Solid
Level (low/med):	low	% Solid:	86.4

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	08/14/2017	08/14/2017	9012B



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Report of Analysis

Client:		Date Collected:	8/11/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	DRUMS-COMP	SDG No.:	LB89456
Lab Sample ID:	I4753-01	Matrix:	Solid
Level (low/med):	low	% Solid:	95

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.014	U	1	0.033		0.25	mg/Kg	08/14/2017	08/14/2017	9012B



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Report of Analysis

Client:		Date Collected:	8/11/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	TOPSOIL-MATERIAL-COMP	SDG No.:	LB89456
Lab Sample ID:	I4754-01	Matrix:	Solid
Level (low/med):	low	% Solid:	85.9

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.0023	U	1	0.037		0.28	mg/Kg	08/14/2017	08/14/2017	9012B



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Report of Analysis

Client:		Date Collected:	8/11/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	30-FINES-COMP	SDG No.:	LB89456
Lab Sample ID:	I4754-03	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	0.015	U	1	0.035		0.27	mg/Kg	08/14/2017	08/14/2017	9012B

Report of Analysis

Client:		Date Collected:	8/11/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	SA-06-081117-A	SDG No.:	LB89456
Lab Sample ID:	I4755-01	Matrix:	Solid
Level (low/med):	low	% Solid:	93.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.067	J	1	0.034		0.26	mg/Kg	08/14/2017	08/14/2017	9012B



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Report of Analysis

Client:		Date Collected:	8/11/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	SA-06-081117-B	SDG No.:	LB89456
Lab Sample ID:	I4755-04	Matrix:	Solid
Level (low/med):	low	% Solid:	95.4

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.0091	U	1	0.034		0.25	mg/Kg	08/14/2017	08/14/2017	9012B



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Report of Analysis

Client:		Date Collected:	8/11/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	SU-02-081117	SDG No.:	LB89456
Lab Sample ID:	I4758-01	Matrix:	Solid
Level (low/med):	low	% Solid:	91.4

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.016	U	1	0.035		0.26	mg/Kg	08/14/2017	08/14/2017	9012B



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Report of Analysis

Client:		Date Collected:	8/11/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	SP-1-COMP	SDG No.:	LB89456
Lab Sample ID:	I4760-02	Matrix:	Solid
Level (low/med):	low	% Solid:	87.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.0078	U	1	0.037		0.28	mg/Kg	08/14/2017	08/14/2017	9012B

Report of Analysis

Client:		Date Collected:	8/10/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	RUSB-01	SDG No.:	LB89456
Lab Sample ID:	I4761-01	Matrix:	Solid
Level (low/med):	low	% Solid:	91.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.00023	U	1	0.034		0.26	mg/Kg	08/14/2017	08/14/2017	9012B



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Report of Analysis

Client:		Date Collected:	8/10/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	RUSB-02	SDG No.:	LB89456
Lab Sample ID:	I4761-02	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	0.057	J	1	0.036		0.27	mg/Kg	08/14/2017	08/14/2017	9012B

Report of Analysis

Client:		Date Collected:	8/10/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	RUSB-03	SDG No.:	LB89456
Lab Sample ID:	I4761-03	Matrix:	Solid
Level (low/med):	low	% Solid:	90.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.0043	U	1	0.036		0.27	mg/Kg	08/14/2017	08/14/2017	9012B



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Report of Analysis

Client:		Date Collected:	8/10/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	RUSB-04	SDG No.:	LB89456
Lab Sample ID:	I4761-04	Matrix:	Solid
Level (low/med):	low	% Solid:	84.1

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.032	U	1	0.038		0.29	mg/Kg	08/14/2017	08/14/2017	9012B



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Report of Analysis

Client:		Date Collected:	8/10/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	RURRSB-05	SDG No.:	LB89456
Lab Sample ID:	I4761-05	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	0.22	J	1	0.037		0.28	mg/Kg	08/14/2017	08/14/2017	9012B

Report of Analysis

Client:		Date Collected:	8/10/2017 12:00:00 AM
Project:	LB89456	Date Received:	8/11/2017 12:00:00 AM
Client Sample ID:	RUSB-06	SDG No.:	LB89456
Lab Sample ID:	I4761-06	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	0.089	J	1	0.035		0.27	mg/Kg	08/14/2017	08/14/2017	9012B



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Report of Analysis

Client:		Date Collected:	
Project:	LB89456	Date Received:	
Client Sample ID:	LOWPB101509	SDG No.:	LB89456
Lab Sample ID:	LOWPB101509	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		08/14/2017	9012B



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Report of Analysis

Client:		Date Collected:	
Project:	LB89456	Date Received:	
Client Sample ID:	LOWPB101509	SDG No.:	LB89456
Lab Sample ID:	LOWPB101509	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
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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: LB89456

SDG No.: LB89456

Contract: _____ Lab Code: CHEM

Case No.: LB89456

SAS No.: LB89456

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		08/14/2017	14:06	LB89456
CCV2	Cyanide	0.25	0.25	100	0	90 - 110		08/14/2017	14:14	LB89456
CCV3	Cyanide	0.25	0.25	100	0	90 - 110		08/14/2017	14:22	LB89456
CCV4	Cyanide	0.26	0.25	104	0	90 - 110		08/14/2017	14:27	LB89456



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB89456 **SDG No.:** LB89456
Contract: **Lab Code:** CHEM **Case No.:** LB89456 **SAS No.:** LB89456

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB1	Cyanide	0.0002	+/-0.005	U		0.005		08/14/2017	14:06	LB89456



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB89456

SDG No.: LB89456

Contract:

Lab Code: CHEM

Case No.: LB89456

SAS No.: LB89456

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		08/14/2017	14:06	LB89456
CCB2	Cyanide	0.0039	+/-0.005	J		0.005		08/14/2017	14:14	LB89456
CCB3	Cyanide	0.00037	+/-0.005	U		0.005		08/14/2017	14:27	LB89456
CCB4	Cyanide	0.0004	+/-0.005	U		0.005		08/14/2017	14:27	LB89456



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB89456

SDG No.: LB89456

Contract: Lab Code: CHEM

Case No.: LB89456

SAS No.: LB89456

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
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GENCHEM
- 3b -
PREPARATION BLANK SUMMARY

Client: LB89456

SDG No.: LB89456

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
PB101509BL		SOLID		Batch Number:		PB101509		Prep Date:	08/14/2017	
	Cyanide	0.0097	<0.25	U		0.25		08/14/2017	14:06	LB89456



GENCHEM
- 5a -
MATRIX SPIKE SUMMARY

client: LB89456 level: low sdg no.: LB89456
contract: lab code: CHEM case no.: LB89456 sas no.: LB89456
matrix: Solid sample id: I4750-02 client id: B-15(0-10)COMPMS
Percent Solids for Sample: 86.4 Spiked ID: I4750-02MS Percent Solids for Spike Sample: 86.4

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/Kg	75 - 125	2.1		0.11	J	2.3	87		



GENCHEM
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: LB89456 level: low sdg no.: LB89456
contract: lab code: CHEM case no.: LB89456 sas no.: LB89456
matrix: Solid sample id: I4750-02 client id: B-15(0-10)COMPMSD
Percent Solids for Sample: 86.4 Spiked ID: I4750-02MSD Percent Solids for Spike Sample: 86.4

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/Kg	75 - 125	2.1		0.11	J	2.2	90		

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DUPLICATE SAMPLE SUMMARY

Client: LB89456 **Level:** LOW **SDG No.:** LB89456
Contract: **Lab Code:** CHEM **Case No.:** LB89456 **SAS No.:** LB89456
Matrix: Solid **Sample ID:** I4750-02 **Client ID:** B-15(0-10)COMPDUP
Percent Solids for Sample: 86.4 **Duplicate ID** I4750-02DUP **Percent Solids for Spike Sample:** 86.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/Kg	20	0.11	J	0.092	J	18		

GENCHEM

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DUPLICATE SAMPLE SUMMARY

Client: LB89456 **Level:** LOW **SDG No.:** LB89456
Contract: **Lab Code:** CHEM **Case No.:** LB89456 **SAS No.:** LB89456
Matrix: Solid **Sample ID:** I4750-02MS **Client ID:** B-15(0-10)COMPMSD
Percent Solids for Sample: 86.4 **Duplicate ID** I4750-02MSD **Percent Solids for Spike Sample:** 86.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/Kg	20	2.1		2.1		0		



GENCHEM

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LABORATORY CONTROL SAMPLE SUMMARY

Client: LB89456

SDG No.: LB89456

Contract:

Lab Code: CHEM

Case No.: LB89456

SAS No.: LB89456

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB101509BS Cyanide	mg/Kg	4.9	4.7		95.9	85 - 115	