

Daily Analysis Runlog For Sequence/QC Batch ID # LB91841

Review By		Review On				
SubDirectory		LB91841		Test : Cyanide		
STD. NAME		STD REF.#				
ICAL Standard		WP59948,WP59949,WP59950,WP59951,WP59952,WP59953,WP59954				
ICV Standard		W1541				
CCV Standard		WP59955				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		WP58910				
Chk Standard		WP59956,WP55836,WP55355				
Sr#	SampleID	ClientID	QcType	Date	Comment	Status
1	0.0PPBCN	0.0PPBCN	CAL1	11/29/17 12:17		OK
2	5.0PPBCN	5.0PPBCN	CAL2	11/29/17 12:17		OK
3	10PPBCN	10PPBCN	CAL3	11/29/17 12:17		OK
4	50PPBCN	50PPBCN	CAL4	11/29/17 12:17		OK
5	100PPBCN	100PPBCN	CAL5	11/29/17 12:17		OK
6	250PPBCN	250PPBCN	CAL6	11/29/17 12:17		OK
7	500PPBCN	500PPBCN	CAL7	11/29/17 12:18		OK
8	ICV1	ICV1	ICV	11/29/17 14:18		OK
9	ICB1	ICB1	ICB	11/29/17 14:18		OK
10	CCV1	CCV1	CCV	11/29/17 14:18		OK
11	CCB1	CCB1	CCB	11/29/17 14:18		OK
12	PB104595BL	PB104595BL	MB	11/29/17 14:18		OK
13	PB104595BS	PB104595BS	LCS	11/29/17 14:18		OK
14	LOWPB104595	LOWPB104595	SAM	11/29/17 14:18		OK
15	HIGHPB104595	HIGHPB104595	SAM	11/29/17 14:25		OK
16	I6302-07	HR-06-112817-A	SAM	11/29/17 14:25		OK
17	I6302-07DUP	HR-06-112817-ADUP	DUP	11/29/17 14:25		OK
18	I6302-07MS	HR-06-112817-AMS	MS	11/29/17 14:25		OK
19	I6302-07MSD	HR-06-112817-AMSD	MSD	11/29/17 14:25		OK
20	I6302-09	HR-06-112817-B	SAM	11/29/17 14:25		OK
21	I6302-11	HR-06-112817-C	SAM	11/29/17 14:25		OK

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SubDirectory		LB91841		Test : Cyanide		
STD. NAME		STD REF.#				
ICAL Standard		WP59948,WP59949,WP59950,WP59951,WP59952,WP59953,WP59954				
ICV Standard		W1541				
CCV Standard		WP59955				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		WP58910				
Chk Standard		WP59956,WP55836,WP55355				
22	CCV2	CCV2	CCV	11/29/17 14:25		OK
23	CCB2	CCB2	CCB	11/29/17 14:25		OK
24	I6304-22	CL-02-112817-A	SAM	11/29/17 14:25		OK
25	I6304-24	CL-02-112817-B	SAM	11/29/17 14:25		OK
26	I6304-26	CL-02-112817-C	SAM	11/29/17 14:33		OK
27	I6304-28	CL-02-112817-D	SAM	11/29/17 14:33		OK
28	I6304-30	CL-02-112817-E	SAM	11/29/17 14:33		OK
29	I6306-03	NB-08-112817-A	SAM	11/29/17 14:33		OK
30	I6306-05	NB-08-112817-B	SAM	11/29/17 14:33		OK
31	I6612-01	RT-3460	SAM	11/29/17 14:33		OK
32	I6616-01	P7-LOT-SP1-C	SAM	11/29/17 14:33		OK
33	CCV3	CCV3	CCV	11/29/17 14:33		OK
34	CCB3	CCB3	CCB	11/29/17 14:33		OK



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Report of Analysis

Client:		Date Collected:	
Project:	LB91841	Date Received:	
Client Sample ID:	HIGHPB104595	SDG No.:	LB91841
Lab Sample ID:	HIGHPB104595	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		11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	11/28/2017 12:00:00 AM
Project:	LB91841	Date Received:	11/28/2017 12:00:00 AM
Client Sample ID:	HR-06-112817-A	SDG No.:	LB91841
Lab Sample ID:	I6302-07	Matrix:	Solid
Level (low/med):	low	% Solid:	88.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.015	U	1	0.037		0.28	mg/Kg	11/29/2017	11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	11/28/2017 12:00:00 AM
Project:	LB91841	Date Received:	11/28/2017 12:00:00 AM
Client Sample ID:	HR-06-112817-B	SDG No.:	LB91841
Lab Sample ID:	I6302-09	Matrix:	Solid
Level (low/med):	low	% Solid:	92.4

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.0019	U	1	0.034		0.26	mg/Kg	11/29/2017	11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	11/28/2017 12:00:00 AM
Project:	LB91841	Date Received:	11/28/2017 12:00:00 AM
Client Sample ID:	HR-06-112817-C	SDG No.:	LB91841
Lab Sample ID:	I6302-11	Matrix:	Solid
Level (low/med):	low	% Solid:	98.1

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.019	U	1	0.033		0.25	mg/Kg	11/29/2017	11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	11/28/2017 12:00:00 AM
Project:	LB91841	Date Received:	11/28/2017 12:00:00 AM
Client Sample ID:	CL-02-112817-A	SDG No.:	LB91841
Lab Sample ID:	I6304-22	Matrix:	Solid
Level (low/med):	low	% Solid:	86.9

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.036	U	1	0.037		0.28	mg/Kg	11/29/2017	11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	11/28/2017 12:00:00 AM
Project:	LB91841	Date Received:	11/28/2017 12:00:00 AM
Client Sample ID:	CL-02-112817-B	SDG No.:	LB91841
Lab Sample ID:	I6304-24	Matrix:	Solid
Level (low/med):	low	% Solid:	89.9

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.016	U	1	0.036		0.27	mg/Kg	11/29/2017	11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	11/28/2017 12:00:00 AM
Project:	LB91841	Date Received:	11/28/2017 12:00:00 AM
Client Sample ID:	CL-02-112817-C	SDG No.:	LB91841
Lab Sample ID:	I6304-26	Matrix:	Solid
Level (low/med):	low	% Solid:	89.9

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.051	U	1	0.035		0.26	mg/Kg	11/29/2017	11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	11/28/2017 12:00:00 AM
Project:	LB91841	Date Received:	11/28/2017 12:00:00 AM
Client Sample ID:	CL-02-112817-D	SDG No.:	LB91841
Lab Sample ID:	I6304-28	Matrix:	Solid
Level (low/med):	low	% Solid:	89.9

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.018	U	1	0.036		0.27	mg/Kg	11/29/2017	11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	11/28/2017 12:00:00 AM
Project:	LB91841	Date Received:	11/28/2017 12:00:00 AM
Client Sample ID:	CL-02-112817-E	SDG No.:	LB91841
Lab Sample ID:	I6304-30	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	-0.032	U	1	0.036		0.27	mg/Kg	11/29/2017	11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	11/28/2017 12:00:00 AM
Project:	LB91841	Date Received:	11/28/2017 12:00:00 AM
Client Sample ID:	NB-08-112817-A	SDG No.:	LB91841
Lab Sample ID:	I6306-03	Matrix:	Solid
Level (low/med):	low	% Solid:	92.2

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	-0.026	U	1	0.034		0.26	mg/Kg	11/29/2017	11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	11/28/2017 12:00:00 AM
Project:	LB91841	Date Received:	11/28/2017 12:00:00 AM
Client Sample ID:	NB-08-112817-B	SDG No.:	LB91841
Lab Sample ID:	I6306-05	Matrix:	Solid
Level (low/med):	low	% Solid:	98

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.035	J	1	0.033		0.25	mg/Kg	11/29/2017	11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	11/28/2017 12:00:00 AM
Project:	LB91841	Date Received:	11/28/2017 12:00:00 AM
Client Sample ID:	RT-3460	SDG No.:	LB91841
Lab Sample ID:	I6612-01	Matrix:	Solid
Level (low/med):	low	% Solid:	88.3

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.011	U	1	0.036		0.27	mg/Kg	11/29/2017	11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	11/28/2017 12:00:00 AM
Project:	LB91841	Date Received:	11/28/2017 12:00:00 AM
Client Sample ID:	P7-LOT-SP1-C	SDG No.:	LB91841
Lab Sample ID:	I6616-01	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	0.053	J	1	0.036		0.27	mg/Kg	11/29/2017	11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	
Project:	LB91841	Date Received:	
Client Sample ID:	LOWPB104595	SDG No.:	LB91841
Lab Sample ID:	LOWPB104595	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	0.0087		1	0.003		0.005	mg/L		11/29/2017	9012B



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Report of Analysis

Client:		Date Collected:	
Project:	LB91841	Date Received:	
Client Sample ID:	LOWPB104595	SDG No.:	LB91841
Lab Sample ID:	LOWPB104595	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: LB91841

SDG No.: LB91841

Contract: _____ Lab Code: CHEM

Case No.: LB91841

SAS No.: LB91841

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		11/29/2017	14:18	LB91841
CCV2	Cyanide	0.25	0.25	100	0	90 - 110		11/29/2017	14:25	LB91841
CCV3	Cyanide	0.25	0.25	100	0	90 - 110		11/29/2017	14:33	LB91841



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB91841 **SDG No.:** LB91841
Contract: **Lab Code:** CHEM **Case No.:** LB91841 **SAS No.:** LB91841

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		11/29/2017	14:18	LB91841



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB91841

SDG No.: LB91841

Contract:

Lab Code: CHEM

Case No.: LB91841

SAS No.: LB91841

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB1	Cyanide	0.0001	+/-0.005	U		0.005		11/29/2017	14:18	LB91841
CCB2	Cyanide	-0.00023	+/-0.005	U		0.005		11/29/2017	14:25	LB91841
CCB3	Cyanide	0	+/-0.005	U		0.005		11/29/2017	14:33	LB91841



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- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB91841

SDG No.: LB91841

Contract: Lab Code: CHEM

Case No.: LB91841

SAS No.: LB91841

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

Client: LB91841 **SDG No.:** LB91841

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
PB104595BL	Cyanide	SOLID -0.0098	<0.25	Batch Number: U		PB104595 0.25		Prep Date: 11/29/2017	11/29/2017 14:18	LB91841

GENCHEM
- 5a -
MATRIX SPIKE SUMMARY

client: LB91841 level: low sdg no.: LB91841
contract: lab code: CHEM case no.: LB91841 sas no.: LB91841
matrix: Solid sample id: I6302-07 client id: HR-06-112817-AMS
Percent Solids for Sample: 88.6 Spiked ID: I6302-07MS Percent Solids for Spike Sample: 88.6

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/Kg	75 - 125	1.7		0.037	U	2.1	81		

GENCHEM
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: LB91841 level: low sdg no.: LB91841
contract: lab code: CHEM case no.: LB91841 sas no.: LB91841
matrix: Solid sample id: I6302-07 client id: HR-06-112817-AMSD
Percent Solids for Sample: 88.6 Spiked ID: I6302-07MSD Percent Solids for Spike Sample: 88.6

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/Kg	75 - 125	1.7		0.037	U	2.2	77.3		

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DUPLICATE SAMPLE SUMMARY

Client: LB91841 **Level:** LOW **SDG No.:** LB91841
Contract: **Lab Code:** CHEM **Case No.:** LB91841 **SAS No.:** LB91841
Matrix: Solid **Sample ID:** I6302-07 **Client ID:** HR-06-112817-ADUP
Percent Solids for Sample: 88.6 **Duplicate ID** I6302-07DUP **Percent Solids for Spike Sample:** 88.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/Kg	20	0.037	U	0.0047	U			

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DUPLICATE SAMPLE SUMMARY

Client: LB91841 **Level:** LOW **SDG No.:** LB91841
Contract: **Lab Code:** CHEM **Case No.:** LB91841 **SAS No.:** LB91841
Matrix: Solid **Sample ID:** I6302-07MS **Client ID:** HR-06-112817-AMSD
Percent Solids for Sample: 88.6 **Duplicate ID** I6302-07MSD **Percent Solids for Spike Sample:** 88.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/Kg	20	1.7		1.7		0		



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LABORATORY CONTROL SAMPLE SUMMARY

Client: LB91841

SDG No.: LB91841

Contract:

Lab Code: CHEM

Case No.: LB91841

SAS No.: LB91841

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB104595BS Cyanide	mg/Kg	4.9	4.7		95.9	85 - 115	