

Daily Analysis Runlog For Sequence/QC Batch ID # LB88498

Review By		Review On				
SubDirectory		LB88498		Test : Cyanide		
STD. NAME		STD REF.#				
ICAL Standard		WP56068,WP56073,WP56086,WP56087,WP56088,WP56089				
ICV Standard		WP56090				
CCV Standard		WP56091				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		N/A				
Chk Standard		WP56107,WP55836,WP53945				
Sr#	SampleID	ClientID	QcType	Date	Comment	Status
1	S0.0	S0.0	CAL1	07/03/17 14:00		OK
2	S5.0	S5.0	CAL2	07/03/17 14:00		OK
3	S10.0	S10.0	CAL3	07/03/17 14:00		OK
4	S100.0	S100.0	CAL4	07/03/17 14:00		OK
5	S250.0	S250.0	CAL5	07/03/17 14:00		OK
6	S500.0	S500.0	CAL6	07/03/17 14:00		OK
7	ICV	ICV	ICV	07/03/17 14:35		OK
8	ICB	ICB	ICB	07/03/17 14:35		OK
9	CCV001	CCV001	CCV	07/03/17 14:35		OK
10	CCB001	CCB001	CCB	07/03/17 14:35		OK
11	PB100350BL	PBS006	MB	07/03/17 14:35		OK
12	I3964-01	ME7FB1	SAM	07/03/17 14:35		OK
13	I3964-02	ME7FB2	SAM	07/03/17 14:35		OK
14	I3964-03	ME7FB3	SAM	07/03/17 14:35		OK
15	I3964-04	ME7FB4	SAM	07/03/17 14:35		OK
16	I3964-05	ME7FB4D	DUP	07/03/17 14:35		OK
17	I3964-07	ME7FB5	SAM	07/03/17 14:42		OK
18	I3964-08	ME7FB6	SAM	07/03/17 14:42		OK
19	I3964-09	ME7FB7	SAM	07/03/17 14:42		OK
20	I3964-10	ME7FB8	SAM	07/03/17 14:42		OK
21	I3964-11	ME7FB9	SAM	07/03/17 14:42		OK

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

Daily Analysis Runlog For Sequence/QC Batch ID # LB88498

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SubDirectory		Test : Cyanide				
LB88498						
STD. NAME		STD REF.#				
ICAL Standard		WP56068,WP56073,WP56086,WP56087,WP56088,WP56089				
ICV Standard		WP56090				
CCV Standard		WP56091				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		N/A				
Chk Standard		WP56107,WP55836,WP53945				
22	I3964-12	ME7FC0	SAM	07/03/17 14:42		OK
23	I3964-13	ME7FC1	SAM	07/03/17 14:42		OK
24	I3964-14	ME7FC2	SAM	07/03/17 14:42		OK
25	I3964-15	ME7FC3	SAM	07/03/17 14:43		OK
26	I3964-16	ME7FC4	SAM	07/03/17 14:43		OK
27	I3964-17	ME7FC5	SAM	07/03/17 14:43		OK
28	I3964-18	ME7FC6	SAM	07/03/17 14:47		OK
29	I3964-06	ME7FB4S	MS	07/03/17 15:04		OK
30	CCV002	CCV002	CCV	07/03/17 15:04		OK
31	CCB002	CCB002	CCB	07/03/17 15:04		OK



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FB1	SDG No.:	LB88498
Lab Sample ID:	I3964-01	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	0.061	J	1	0.058	0.013	0.53	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/20/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FB2	SDG No.:	LB88498
Lab Sample ID:	I3964-02	Matrix:	Solid
Level (low/med):	low	% Solid:	59.1

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.006	U	1	0.089	0.02	0.81	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/20/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FB3	SDG No.:	LB88498
Lab Sample ID:	I3964-03	Matrix:	Solid
Level (low/med):	low	% Solid:	62.4

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.017	U	1	0.085	0.019	0.77	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FB4	SDG No.:	LB88498
Lab Sample ID:	I3964-04	Matrix:	Solid
Level (low/med):	low	% Solid:	92.9

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.023	U	1	0.057	0.013	0.52	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/20/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FB5	SDG No.:	LB88498
Lab Sample ID:	I3964-07	Matrix:	Solid
Level (low/med):	low	% Solid:	82.1

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.006	U	1	0.064	0.015	0.59	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FB6	SDG No.:	LB88498
Lab Sample ID:	I3964-08	Matrix:	Solid
Level (low/med):	low	% Solid:	95.1

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.047	U	1	0.056	0.013	0.51	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FB7	SDG No.:	LB88498
Lab Sample ID:	I3964-09	Matrix:	Solid
Level (low/med):	low	% Solid:	94.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.027	U	1	0.056	0.013	0.51	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/20/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FB8	SDG No.:	LB88498
Lab Sample ID:	I3964-10	Matrix:	Solid
Level (low/med):	low	% Solid:	77.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.042	U	1	0.068	0.016	0.62	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/20/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FB9	SDG No.:	LB88498
Lab Sample ID:	I3964-11	Matrix:	Solid
Level (low/med):	low	% Solid:	74

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.017	U	1	0.07	0.016	0.64	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FC0	SDG No.:	LB88498
Lab Sample ID:	I3964-12	Matrix:	Solid
Level (low/med):	low	% Solid:	83.3

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	0.063	0.014	0.58	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/20/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FC1	SDG No.:	LB88498
Lab Sample ID:	I3964-13	Matrix:	Solid
Level (low/med):	low	% Solid:	73.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.21	J	1	0.072	0.016	0.66	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FC2	SDG No.:	LB88498
Lab Sample ID:	I3964-14	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	U	1	0.059	0.013	0.54	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FC3	SDG No.:	LB88498
Lab Sample ID:	I3964-15	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	U	1	0.063	0.014	0.57	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/21/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FC4	SDG No.:	LB88498
Lab Sample ID:	I3964-16	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	U	1	0.064	0.015	0.58	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/20/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FC5	SDG No.:	LB88498
Lab Sample ID:	I3964-17	Matrix:	Solid
Level (low/med):	low	% Solid:	92

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	0.057	0.013	0.52	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/20/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FC6	SDG No.:	LB88498
Lab Sample ID:	I3964-18	Matrix:	Solid
Level (low/med):	low	% Solid:	51.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0	U	1	0.1	0.024	0.94	mg/kg	06/30/2017	07/03/2017	ISM02.4_CN



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Report of Analysis

Client:		Date Collected:	6/20/2017 12:00:00 AM
Project:	LB88498	Date Received:	6/28/2017 12:00:00 AM
Client Sample ID:	ME7FC6	SDG No.:	LB88498
Lab Sample ID:	I3964-18	Matrix:	Solid
Level (low/med):	low	% Solid:	51.5

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

Metals**- 2a -****INITIAL AND CONTINUING CALIBRATION VERIFICATION****Client:** LB88498**SDG No.:** LB88498**Contract:** _____ **Lab Code:** CHEM**Case No.:** LB88498**SAS No.:** LB88498**Initial Calibration Source:** _____**Continuing Calibration Source:** _____

Sample ID	Analyte	Result	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
		ug/L								
ICV	Cyanide	94.6	99	96	0	85 - 115	CN	07/03/2017	14:35	LB88498



Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB88498

SDG No.: LB88498

Contract: _____ Lab Code: CHEM

Case No.: LB88498

SAS No.: LB88498

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV001	Cyanide	239	250	96	0	85 - 115	CN	07/03/2017	14:35	LB88498
CCV002	Cyanide	255	250	102	0	85 - 115	CN	07/03/2017	15:04	LB88498



Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB88498 **SDG No.:** LB88498
Contract: **Lab Code:** CHEM **Case No.:** LB88498 **SAS No.:** LB88498

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB	Cyanide	0.58	+/-10.0	U	5.0	10.0	CN	07/03/2017	14:35	LB88498



Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB88498

SDG No.: LB88498

Contract:

Lab Code: CHEM

Case No.: LB88498

SAS No.: LB88498

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB001	Cyanide	0.18	+/-10.0	U	5.0	10.0	CN	07/03/2017	14:35	LB88498
CCB002	Cyanide	0.81	+/-10.0	U	5.0	10.0	CN	07/03/2017	15:04	LB88498



Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB88498

SDG No.: LB88498

Contract: Lab Code: CHEM

Case No.: LB88498

SAS No.: LB88498

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

Client: LB88498

SDG No.: LB88498

Instrument: CN

Sample ID	Analyte	Result (mg/kg)	Acceptance Limit	Conc Qual	LOD mg/kg	CRQL mg/kg	M	Analysis Date	Analysis Time	Run
PB100350BL		SOLID		Batch Number:		PB100350		Prep Date:	06/30/2017	
	Cyanide	0.054	<0.49	U	0.012	0.49	CN	07/03/2017	14:35	LB88498



metals
- 5a -
MATRIX SPIKE SUMMARY

client: LB88498 level: low sdg no.: LB88498
contract: lab code: CHEM case no.: LB88498 sas no.: LB88498
matrix: Solid sample id: I3964-04 client id: ME7FB4S
Percent Solids for Sample: 92.9 Spiked ID: I3964-06 Percent Solids for Spike Sample: 92.9

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/kg	75 - 125	4.1		0.52	U	5.1	80		CN

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB88498 **Level:** LOW **SDG No.:** LB88498
Contract: **Lab Code:** CHEM **Case No.:** LB88498 **SAS No.:** LB88498
Matrix: Solid **Sample ID:** I3964-04 **Client ID:** ME7FB4D
Percent Solids for Sample: 92.9 **Duplicate ID** I3964-05 **Percent Solids for Spike Sample:** 92.9

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/kg	20	0.52	U	0.015	U			CN

**Metals
- 13 -**

SAMPLE PREPARATION SUMMARY

Client: <u>LB88498</u>	SDG No.: <u>LB88498</u>	
Contract: _____	Lab Code: <u>CHEM</u>	Method: _____
	Case No.: <u>LB88498</u>	SAS No.: <u>LB88498</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB100350							
PB100350BL	PBS006	MB	SOLID	07/03/2017	1.02	50.0	100.00
I3964-01	ME7FB1	SAM	SOLID	07/03/2017	1.04	50.0	91.20
I3964-02	ME7FB2	SAM	SOLID	07/03/2017	1.05	50.0	59.10
I3964-03	ME7FB3	SAM	SOLID	07/03/2017	1.04	50.0	62.40
I3964-04	ME7FB4	SAM	SOLID	07/03/2017	1.03	50.0	92.90
I3964-05	ME7FB4D	DUP	SOLID	07/03/2017	1.03	50.0	92.90
I3964-07	ME7FB5	SAM	SOLID	07/03/2017	1.04	50.0	82.10
I3964-08	ME7FB6	SAM	SOLID	07/03/2017	1.03	50.0	95.10
I3964-09	ME7FB7	SAM	SOLID	07/03/2017	1.03	50.0	94.60
I3964-10	ME7FB8	SAM	SOLID	07/03/2017	1.04	50.0	77.50
I3964-11	ME7FB9	SAM	SOLID	07/03/2017	1.06	50.0	74.00
I3964-12	ME7FC0	SAM	SOLID	07/03/2017	1.04	50.0	83.30
I3964-13	ME7FC1	SAM	SOLID	07/03/2017	1.03	50.0	73.80
I3964-14	ME7FC2	SAM	SOLID	07/03/2017	1.02	50.0	91.20
I3964-15	ME7FC3	SAM	SOLID	07/03/2017	1.04	50.0	84.10
I3964-16	ME7FC4	SAM	SOLID	07/03/2017	1.03	50.0	83.60
I3964-17	ME7FC5	SAM	SOLID	07/03/2017	1.04	50.0	92.00
I3964-18	ME7FC6	SAM	SOLID	07/03/2017	1.03	50.0	51.50
I3964-06	ME7FB4S	MS	SOLID	07/03/2017	1.05	50.0	92.90

FORM 15-IN
INITIAL CALIBRATION

Lab Name: LB88498 Contract: _____
Lab Code: CHEM Case No.: LB88498 MA No.: _____ SDG No.: LB88498
Instrument ID: CN Start Date: 07/03/2017
Analytical Method: _____ Run Batch: LB88498.mdb
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	0	0	0	5	4.7	-6	10	10.0	0

FORM 15-IN
INITIAL CALIBRATION

Lab Name: LB88498 Contract: _____
Lab Code: CHEM Case No.: LB88498 MA No.: _____ SDG No.: LB88498
Instrument ID: CN Start Date: 07/03/2017
Analytical Method: _____ Run Batch: LB88498.mdb
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	100	99.3	-1	250	252	1	500	499	0